

Chapter Composition of TAC Inserts

- ◆ Each page of this chapter is composed so that you can select an appropriate insert for your machining operation.
- ◆ TAC inserts for turning are arranged by shape as follows: C (80°) → D (55°) → S (90°) → T (60°) → W (80°) → V (35°) → Y (25°) → R (360°) → Other shapes
- ◆ In the same shape, inserts are arranged in order of negative to positive. In the negative/positive inserts, they are arranged in order of “with hole” to “without hole” respectively.
- ◆ Chipbreaker types are arranged in order of precision finishing, medium finishing, medium cutting, and heavy cutting or according to the degree of the feed or depth of cut to be applied. No chipbreaker inserts are arranged on the last page of each insert shape

Insert shape

Title name of the chapter

Indicates negative or positive.

Indicates insert and mounting hole sizes.

TAC Inserts, Negative

Rhombic, with hole

80°

CN

CNMG 12 04 04 -

Cutting edge length (L) Thickness (h) Corner radius (r) Chipbreaker symbol

Indicates insert and mounting hole sizes.

Insert grades

Coloured columns indicate applicable material group according to ISO.

P M K N S H

Steel Stainless Cast Iron Non-ferrous Superalloys Heat-treated steels

Applicable TAC toolholders

Main application

Chipbreaker symbol

Cat. No. of TAC insert

Symbols of stock status

2-42

Guideline for applicable range of feed and depth of cut

Reference pages of relating items

Grades (1-1)

TAC inserts Selection guide (2-2)

Relating pages

TAC toolholders (4-1)

TAC tooling toolholders (5-1)

Technical reference (15-1)

Note: Chipbreaker cross sections are for * marked inserts.

● Stocked items
▲ Discontinued items

Ordering information

- When ordering, please specify Cat. No., grade and quantity.
Example: **CNMG120408-TM T9115** 10 pieces.
- Standard packing quantity is 10 pieces.

Guidance

■ TAC insert designation system	2-2
■ Selection system by work material	2-4
■ Chipbreaker overview	2-28
■ TAC inserts navigation system	2-41

2 TAC Inserts

Products

■ TAC inserts, Negative type

Coated, cermet, uncoated and ceramic inserts

● CN□□ 80° Rhombic with hole	2-42	● WN□□ 80° Trigon with hole	2-80
● CN□□ 80° Rhombic without hole	2-51	● VN□□ 35° Rhombic with hole	2-87
● DN□□ 55° Rhombic with hole	2-52	● VNGD 35° Rhombic without hole	2-90
● DN□□ 55° Rhombic without hole	2-60	● YN□□ 25° Polygon with hole	2-91
● SN□□ 90° Square with hole	2-61	● RN□□ Round with hole	2-92
● SN□□ 90° Square without hole	2-69	● RN□□ Round without hole	2-93
● TN□□ 60° Triangular with hole	2-70	● KNMX 55° Parallelogram without hole	2-94
● TN□□ 60° Triangular without hole	2-79	● HNGD 120° Hexagon without hole	2-95

■ TAC inserts, Positive type

Coated, cermet, uncoated and ceramic inserts

● CC□□ 80° Rhombic with hole	2-96	● VB□□ 35° Rhombic with hole	2-133
● CP□□ 80° Rhombic with hole	2-102	● VC□□ 35° Rhombic with hole	2-135
● DC□□ 55° Rhombic with hole ...	2-105	● VP□□ 35° Rhombic with hole	2-137
● EP□□ 75° Rhombic with hole	2-111	● YWMT 25° Rhombic with hole	2-139
● SC□□ 90° Square with hole ...	2-112	● RC□□ Round with hole	2-140
● SP□□ 90° Square with hole ...	2-114	● RC□□ Round without hole	2-141
● SP□□ 90° Square without hole	2-116	● RT□□ Round without hole	2-142
● TC□□ 60° Triangular with hole	2-118		
● TP□□ 60° Triangular with hole ...	2-123		
● TP□□ 60° Triangular without hole	2-130		
● WB□□ 80° Trigon with hole	2-132		
● WP□□ 80° Trigon			

(Dedicated inserts for TurnFeed) with hole · 2-132

■ TAC insert, Special shapes

Coated, cermet, uncoated and ceramic inserts

● JXF□ for front turning	2-144
● JXR□ for reverse turning	2-144
● JXB□ for back turning	2-145
● JTB□ for back turning	2-145
● J10E□ for back turning	2-146
● 10E□ for back turning	2-146

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Designation System for TAC Inserts

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TAC Inserts

● Conforms to “Indexable Inserts for Cutting Tools - Designation” (JIS B4120-1998, and ISO 1832 / AM1-1998)

Symbol	Shape	Nose angle (degree)	Figure
H	Hexagonal	120°	
O	Octagonal	135°	
P	Pentagonal	108°	
S	Square	90°	
T	Triangular	60°	
C	Rhombic	80°	
D		55°	
E		75°	
F		50°	
M		86°	
V		35°	
Y	Y-shape (Tungaloy's symbol)	25°	
W	Trigon	80°	
L	Rectangular	90°	
A	Parallelogram	85°	
B		82°	
K		55°	
R	Round	-	

① Shape

Notes : With respect to the nose angles of rhombic and parallelogram shaped inserts, use the smaller angle respectively.

Symbol	Relief angle
A	3°
B	5°
C	7°
D	15°
E	20°
F	25°
G	30°
N	0°
P	11°
O	Others
X	Special

② Relief angle

Symbol (class)	Tolerance (mm)		
	Corner height (m)	Thickness (s)	I. C. dia. (ød)
A	±0.005	±0.025	±0.025
F	±0.005	±0.025	±0.013
C	±0.013	±0.025	±0.025
H	±0.013	±0.025	±0.013
E	±0.025	±0.025	±0.025
G	±0.025	±0.13	±0.025
J	±0.005	±0.025	±0.005 ~ ±0.13
K	±0.013	±0.025	±0.05 ~ ±0.13
L	±0.025	±0.025	±0.05 ~ ±0.13
M	±0.08 ~ ±0.18	±0.13	±0.05 ~ ±0.13
N	±0.08 ~ ±0.18	±0.025	±0.05 ~ ±0.13
U	±0.13 ~ ±0.38	±0.13	±0.08 ~ ±0.25

③ Accuracy

[Example]

[Example]

①	②	③	④	⑤
T	N	M	G	16
C	C	G	T	09

④ Groove and hole				
Symbol	Hole	Shape of hole	Chip-breaker	Shape
N	Without	-	Without	
R			Single-sided	
F			Double-sided	
A	With	Cylindrical hole	Without	
M			Single-sided	
G			Double-sided	
W		Partly cylindrical hole, single-side 40° ~ 60° Counter sink	Without	
T			Single-sided	
Q			Without	
U			Double-sided	
B		Partly cylindrical hole, single-side 70° ~ 90° Counter sink	Without	
H			Single-sided	
C		Partly cylindrical hole, double-side 70° ~ 90° Counter sink	Without	
J			Double-sided	
X	-	-	-	-

⑤ Cutting edge length																
* (R)		S		C		W		T		D		V		K		I. C. dia. (mm)
Symbol	Length	Symbol	Length	Symbol	Length	Symbol	Length	Symbol	Length	Symbol	Length	Symbol	Length	Symbol	Length	
		03	3.97	03	4.0			06	6.9	04	4.8					3.97
		04	4.76	04	4.8			08	8.2	05	5.8	08	8.3			4.76
*05	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
		05	5.56	05	5.6	03	3.8	09	9.6	06	6.8					5.56
*06	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
		06	6.35	06	6.5	04	4.3	11	11	07	7.8	11	11.2			6.35
		07	7.94	08	8.1	05	5.4	13	13.8	09	9.7					7.94
*08	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
09	9.525	09	9.525	09	9.7	06	6.5	16	16.5	11	11.6	16	16.6	16	19.7	9.525
*10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
*12	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
12	12.7	12	12.7	12	12.9	08	8.7	22	22	15	15.5	22	22.1			12.7
15	15.875	15	15.875	16	16.1	10	10.9	27	27.5	19	19.4					15.875
*16	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
19	19.05	19	19.05	19	19.3	13	13	33	33	23	23.3					19.05
*20	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
		22	22.225	22	22.6			38	38.5	27	27.1					22.225
*25	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25
25	25.4	25	25.4	25	25.8			44	44	31	31					25.4
31	31.75	31	31.75	32	32.2			55	55	38	38.8					31.75
*32	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32

*When M0 is included in the Cat. No., the inscribed-circle diameter is metric size.

● Detailed accuracy for J,K,L,M,N and U classes

For inserts with nose corner angles larger than 55°

Unit: mm

Inscribed circle	Tolerance on inscribed circle dia. (ød)		Tolerance on corner height (m)		Insert shapes applied
	J,K,L,M,N (class)	U (class)	J,K,L,M,N (class)	U (class)	
6.35	±0.05	±0.08	±0.08	±0.13	H W
9.525					
12.7	±0.08	±0.13	±0.13	±0.2	O R
15.875	±0.1	±0.18	±0.15	±0.27	P
19.05					S
25.4	±0.13	±0.25	±0.18	±0.38	T
31.75	±0.15	±0.25	±0.2	±0.38	C,E,M
32					

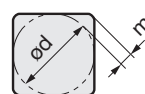
For M-type inserts with nose corner angles of 55° (Shape: D), 35° (Shape: V), 25° (Shape: Y)

Unit: mm

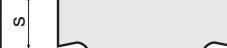
Table 1 (Chapter 1), Table 2 (Chapter 1)			Unit: mm
Inscribed circle	Tolerance on inscribed circle dia. (ød)	Tolerance on corner height (m)	Insert shapes applied
6.35	±0.05	±0.11	D 
9.525			
12.7	±0.08	±0.15	
15.875	±0.1	±0.18	
19.05			
6.35	±0.05	±0.16	V 
9.525			Y 

Note on insert thickness
With regard to the insert thickness for chipbreaker inserts, the thickness (s) drawn in the outlined insert shapes on pages XX to XX is defined as "s" (height from the bottom face to the cutting edge) shown in the figure at right.

Inscribed circle (ød)
Corner height (m)



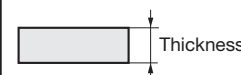
Negative insert



Positive insert

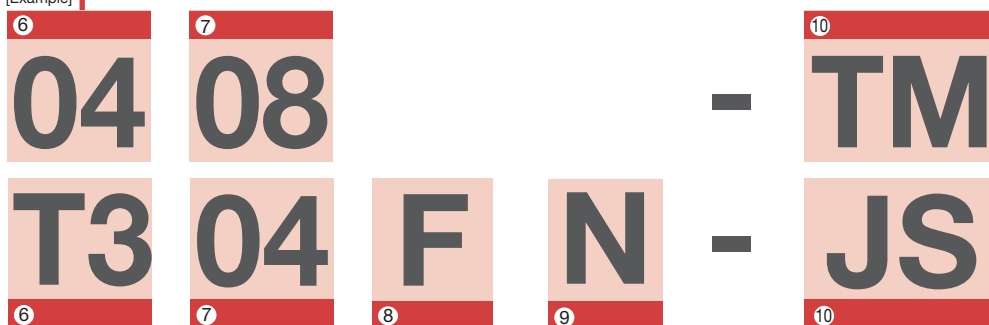


Symbol	Thickness (mm)
X1	1.39
01	1.59
T1	1.79
02	2.38
T2	2.78
03	3.18
T3	3.97
04	4.76
05	5.56
06	6.35
07	7.94
09	9.52



6 Thickness

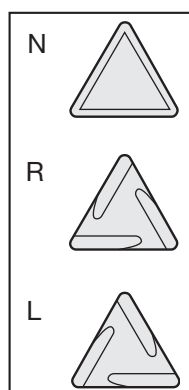
[Example]



7 Corner radius	
Symbol	Corner radius r_ε (mm)
00	0.03
02	0.2
04	0.4
08	0.8
12	1.2
16	1.6
20	2.0
24	2.4
28	2.8
32	3.2

8 Symbols of major cutting edge		
Symbol	Condition of cutting edge	Shape
F	Sharp edge	
E	Honed rounded edge	
W.T	Honed chamfered edge	
S	Combination honed edge	

9 Hand of insert	
Symbol	Hand
R	Right
L	Left
N	Neutral



10 Chipbreakers			
Symbol	Applications	Symbol	Applications
01(TF)	Precision finishing (Basic selection)	C	Finishing (Right and left hand)
TS	Finishing (Basic selection)	D	Finishing (Right and left hand)
TSF	Finishing (Basic selection)	P	Finishing of Aluminium alloys
TM	Medium cutting (Basic selection)	W	Finishing (Angular type)
THS	Medium to heavy cutting (Basic selection)	PSF	Finishing (Positive type)
TRS	Medium to heavy cutting	PSS	Finishing to light cutting (Positive insert)
TUS	Heavy cutting	PS	Finishing to medium cutting (Positive type Basic selection)
DM	Medium cutting	PM	Medium cutting (Positive type)
HMM	Medium cutting	AL	Finishing to medium cutting of aluminium alloys
SF	Finishing of stainless steels	RS	Medium cutting (For round inserts)
SS	Finishing of stainless and mild steels	W□□	Finishing (Angular type)
SM	Medium cutting of stainless steels	H□□	Finishing (Parallel)
S	Medium cutting of stainless steels	11	Finishing
SH	Medium to heavy cutting of stainless steels	61	Small depth of cut and high feed (For round inserts)
SA	For heat-resisting alloys and stainless steels	S1	Finishing (For KNMX type)
ZF	Finishing and copying	J08, J10	For small lathes
ZM	Finishing to medium cutting and copying	JS	For small lathes
NS	Finishing and copying	JRP	For small lathes
NM	Finishing to medium cutting and copying	JPP	For small lathes
AS	Small depth of cut and high feed	JSP	For small lathes
AFW	Small depth of cut and high feed (Wiper type inserts)		
ASW	Small depth of cut and high feed (Wiper type inserts)		
CB	Medium cutting		
CM	Medium cutting of cast irons		
All-round	Medium cutting		
A	Finishing (Right and left hand)		
B	Finishing (Right and left hand)		

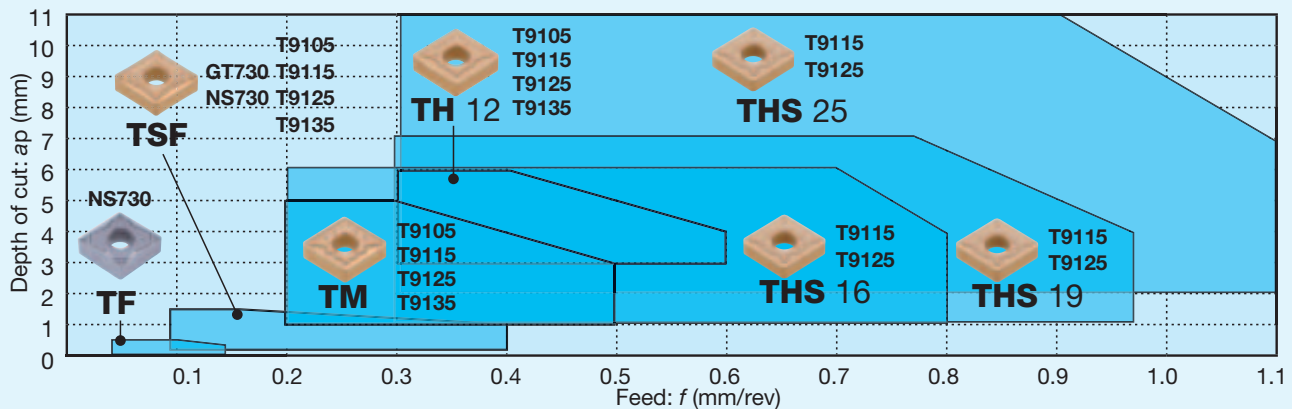
Basic Chipbreakers Negative Inserts

P Steel

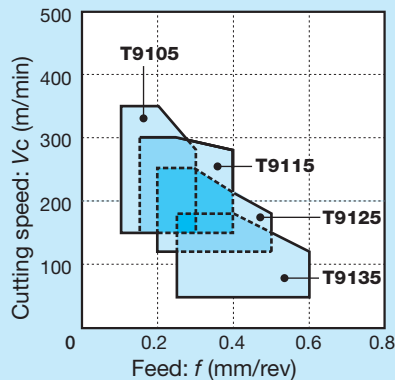
Chipbreaker System for Turning (Negative Inserts)

2

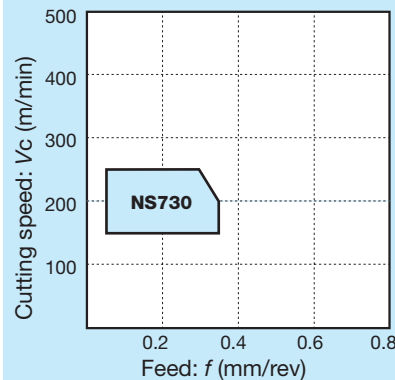
TAC Inserts



CVD coated grades



Coated cermets / Cermets



Chipbreaker	Appearance	Features
TF		The sharp cutting edge and raised projection near corner contribute to excellent chip control at very small depths of cut and low feeds. Economical M-class tolerance and low cost.
TSF		First choice chipbreaker for finishing steels. The dimple structure decreases the contact area between the insert surface and chips, resulting in significant reduction of heat occurrence.

Chipbreaker	Appearance	Features
TM		General purpose chipbreaker used for medium cutting. Unique chipbreaker geometry with sharp edges and large rake angle assures free cutting action in a wide range of cutting conditions.
TH		Double-sided 3-dimensional chipbreaker with a wide land and broad groove used for medium to heavy cutting including interrupted and unfavorable surface conditions. Also performs well in high feed machining.
THS		Excellent chip control in a broad range of depth of cut. Strong cutting edge being suitable for interrupted and high feed operations.

Standard Cutting Conditions

Operation	Work condition	Chip-breaker	Grade	Depth of cut ap (mm)	Feed f (mm/rev)	Cutting speed: Vc (m/min)		
						Low carbon steels, Alloy steels	Medium carbon steels, Alloy steels	High carbon steels, Alloy steels
Precision finishing	Light interrupted	TF	NS730	0.05 - 0.5	0.03 - 0.15	150 - 250	100 - 250	100 - 200
Finishing	Light interrupted	TSF	GT730	0.2 - 1.5	0.08 - 0.4	150 - 300	80 - 250	80 - 200
	Heavy interrupted		T9125			120 - 250	80 - 200	80 - 150
Medium cutting	Continuous to heavy interrupted	TM	T9105	1.0 - 5.0	0.2 - 0.5	180 - 350	180 - 350	180 - 300
			T9115			150 - 300	150 - 300	120 - 250
			T9125			120 - 250	80 - 200	80 - 150
			T9135			50 - 180	50 - 150	50 - 120
Medium to heavy cutting	Continuous to light interrupted	TH	T9105	3.0 - 6.0	0.3 - 0.6	180 - 350	180 - 350	180 - 300
			T9115			150 - 300	150 - 300	120 - 250
			T9125			120 - 250	80 - 200	80 - 150
			T9135			50 - 180	50 - 150	50 - 120

Low carbon steels, Alloy steels: C10E, 15CrMo5, 20Cr4H, etc. Medium carbon steels, Alloy steels: C45, 42CrMo4, etc.
High carbon steels, Alloy steels: 35CrNiMo6, etc.

Selection System **Negative Inserts**

Continuous	Light interrupted	Heavy interrupted

2

TAC Inserts

P Steel

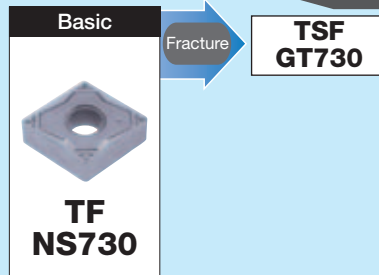
Steel

Precision finishing [$a_p = \sim 0.5 \text{ mm}$]

Continuous

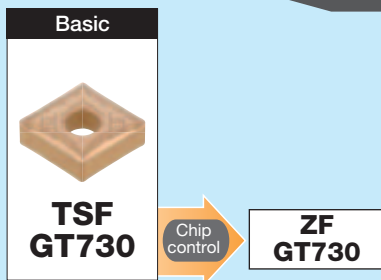


Light interrupted

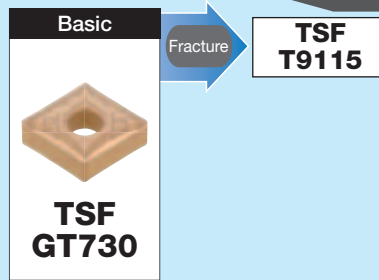


Finishing [$a_p = 0.3 \sim 1.5 \text{ mm}$]

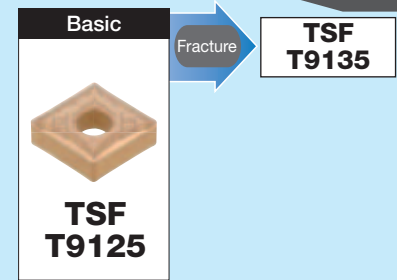
Continuous



Light interrupted

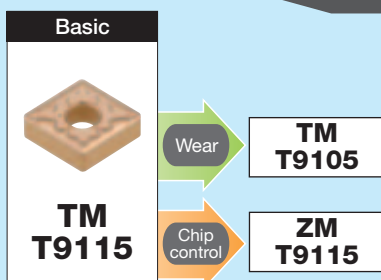


Heavy interrupted

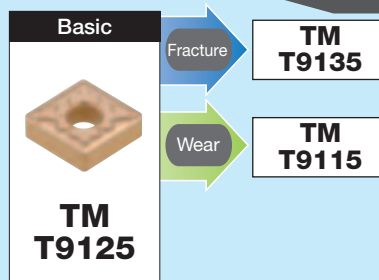


Medium cutting [$a_p = 1.0 \sim 4.0 \text{ mm}$]

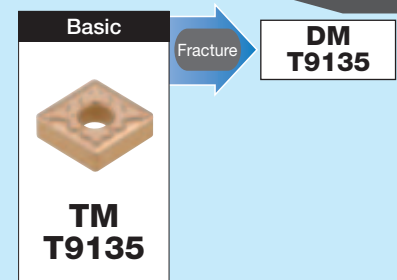
Continuous



Light interrupted

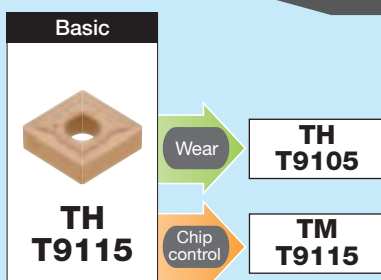


Heavy interrupted

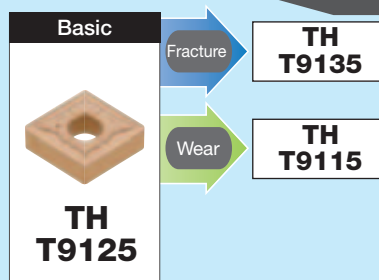


Medium to heavy cutting [$a_p = 3.0 \sim 6.0 \text{ mm}$]

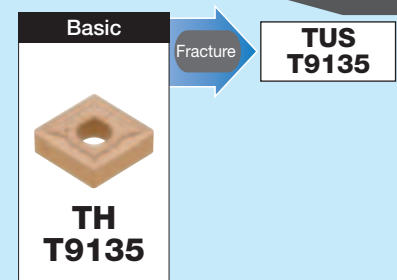
Continuous



Light interrupted



Heavy interrupted



Basic Chipbreakers

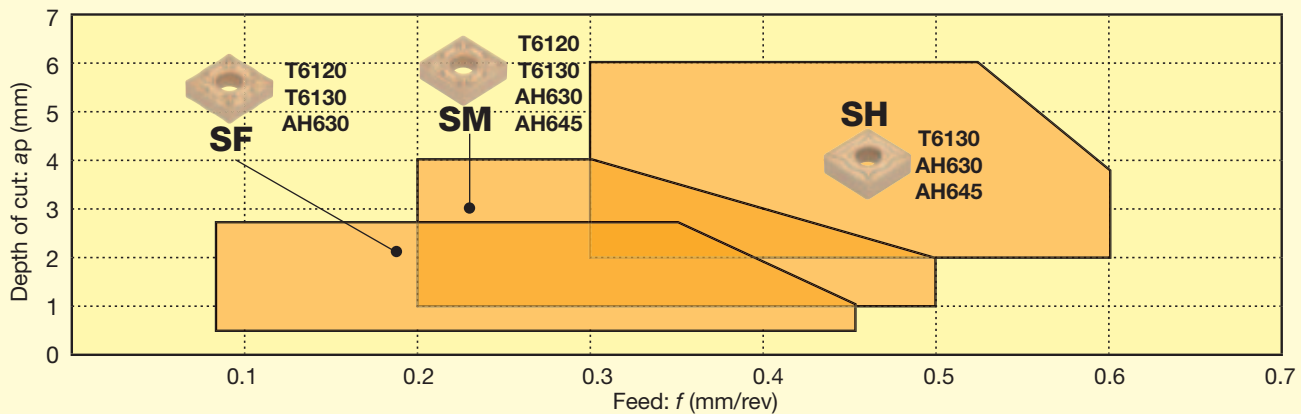
Negative Inserts

M Stainless Steel

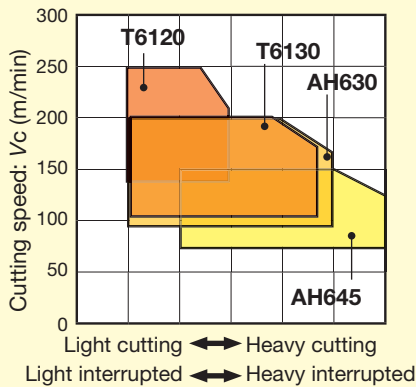
TAC Inserts

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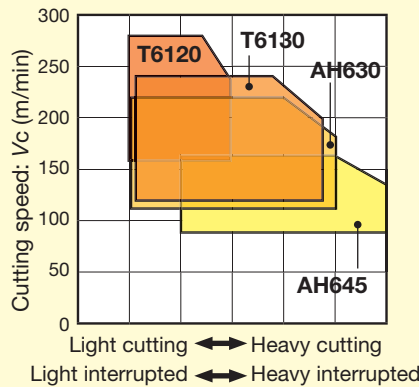
Chipbreaker System for Turning



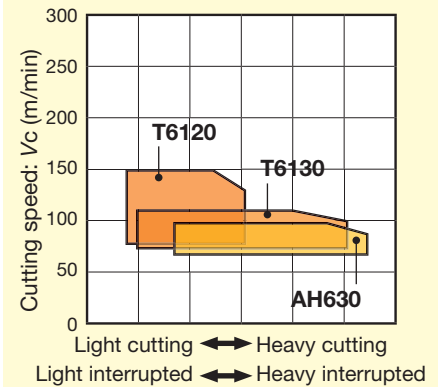
Austenitic stainless steel



Ferritic / martensite stainless steel



Precipitation hardened stainless steel



Chipbreaker	Appearance	Features
SF		Excellent chip control when finish cutting. Outstanding chip control when high feed turning at small depth of cut.
SH		Suitable for roughing operations and interrupted machining with tough cutting edges.

Chipbreaker	Appearance	Features
SM		Applicable to a wide range of cutting condition with sharp edge. Recommended chipbreaker for stainless steel turning.

Standard Cutting Conditions

Operation	Work condition	Chipbreaker	Grade	Depth of cut a_p (mm)	Feed f (mm/rev)	Cutting speed V_c (m/min)
Finishing	Continuous	SF	T6120	0.5 - 2.5	0.08 - 0.45	140 - 240
	Continuous to light interrupted		T6130			100 - 200
	Heavy interrupted		AH630			90 - 190
Medium cutting	Continuous	SM	T6120	1.0 - 4.0	0.2 - 0.5	140 - 240
	Continuous to light interrupted		T6130			100 - 200
	Light interrupted		AH630			90 - 190
	Heavy interrupted		AH645			70 - 150
Medium to heavy cutting	Continuous to light interrupted	SH	T6130	2.0 - 6.0	0.3 - 0.6	100 - 200
	Light interrupted		AH630			90 - 190
	Heavy interrupted		AH645			70 - 150

Stainless steels: X5CrNi18-10, X5CrNiMo17-12-2, etc.

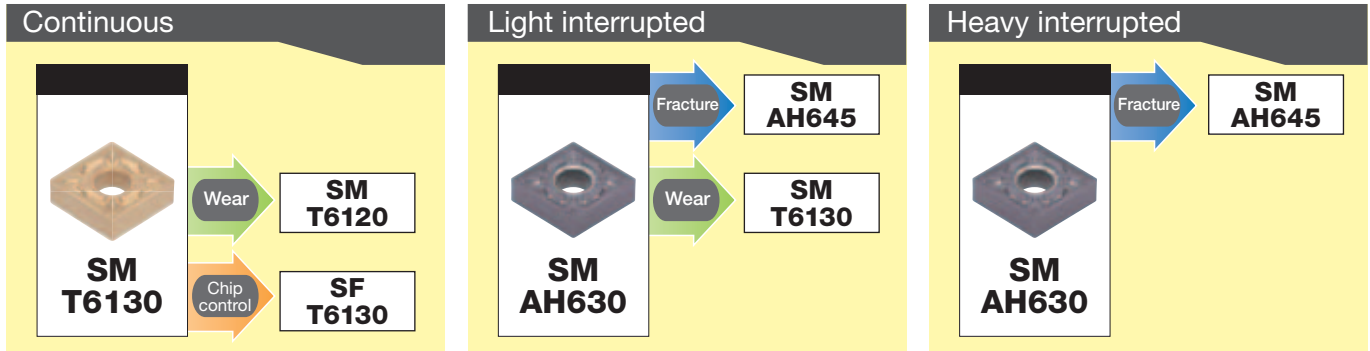
Selection System **Negative Inserts**

Continuous	Light interrupted	Heavy interrupted

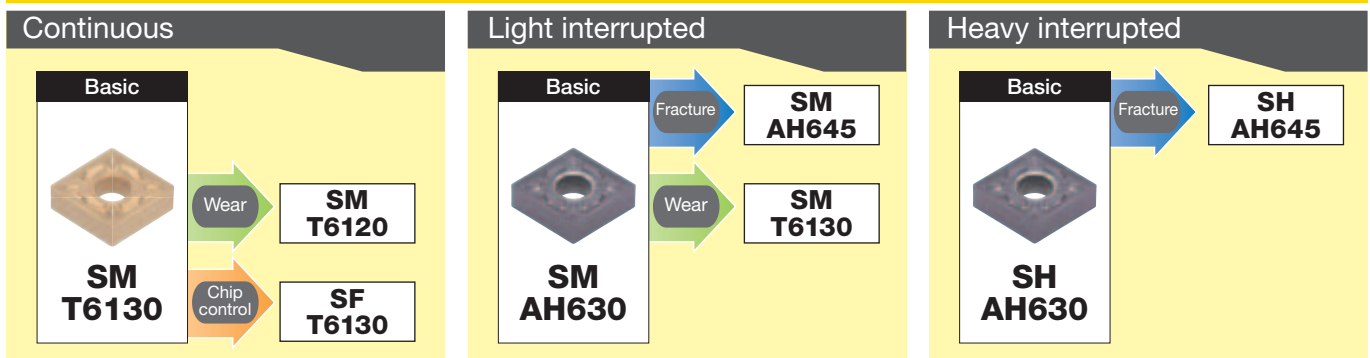
M Stainless Steel

Stainless

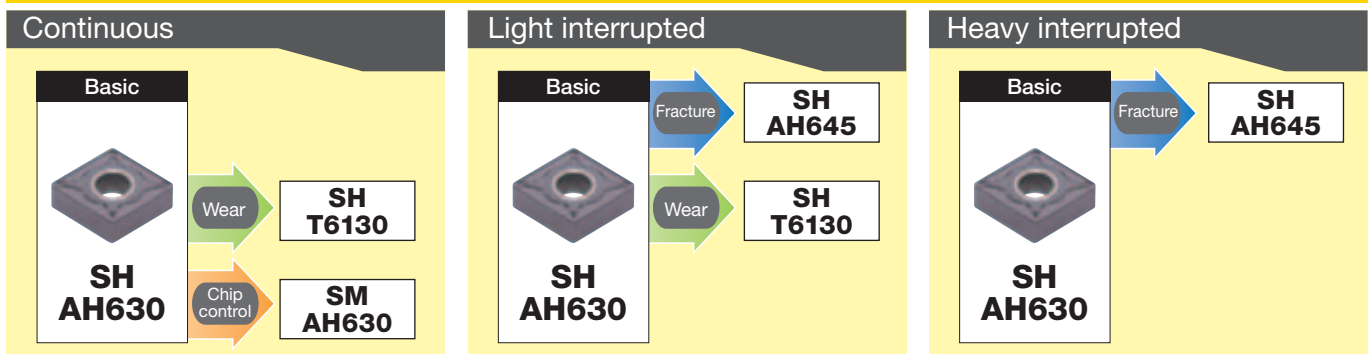
Finishing [$a_p = 0.5 \sim 1.5 \text{ mm}$]



Medium cutting [$a_p = 1.0 \sim 4.0 \text{ mm}$]



Medium to heavy cutting [$a_p = 2.0 \sim 6.0 \text{ mm}$]



2

TAC Inserts

Basic Chipbreakers

Negative Inserts

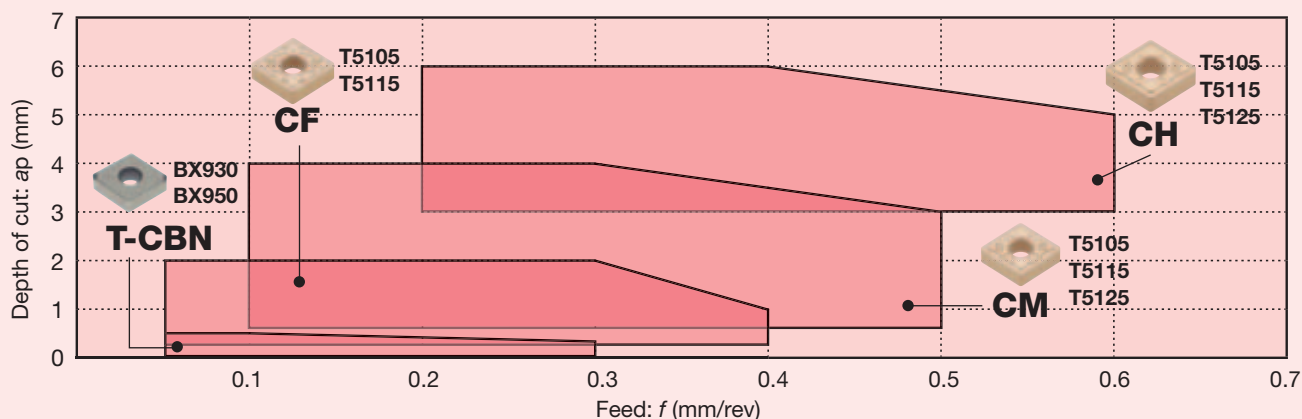


Cast Iron

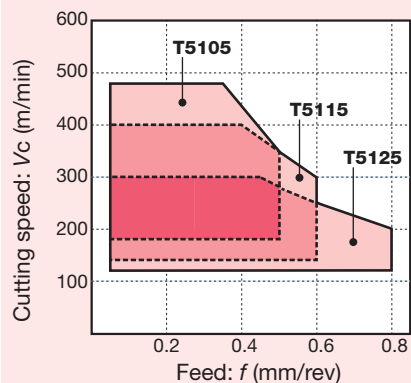
Chipbreaker System for Turning (Negative Inserts)

2

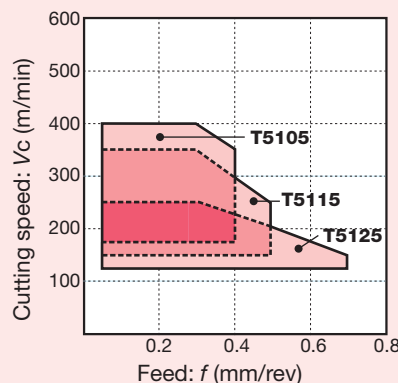
TAC Inserts



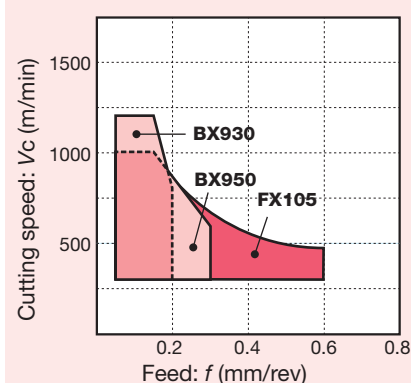
Grey cast irons



Ductile cast irons



High speed cutting: for grey cast irons



Chip-breaker	Appearance	Features
No chip-breaker (T-CBN)		T-CBN inserts. Performs well in high speed finishing of cast iron.
CF		Low cutting force chipbreaker for cast iron. Combined with an arc-shaped concave and a high rake (substantially 20° rake angle), allows drastically reducing cutting forces and suppressing the deformation of thin walled components and burr occurrence.

Chip-breaker	Appearance	Features
CM		First choice chipbreaker for cast iron. An all around chipbreaker, which is applicable for a wide range of cutting conditions from continuous to interrupted machining with the positive land and wide chip pocket
CH		Chipbreaker with reinforced cutting-edge for cast iron. Utilizing the land support and negative land design, features stable insert seating and high cutting edge strength even in heavy cutting.

Standard Cutting Conditions

Operation	Work condition	Chip-breaker	Grade	Depth of cut ap (mm)	Feed f (mm/rev)	Cutting speed: Vc (m/min)	
						Grey cast irons	Ductile cast irons
High speed cutting	Continuous	Without	BX930	0.05 - 0.5	0.05 - 0.2	300 - 1200	100 - 500
	Light interrupted		BX950			300 - 1000	100 - 300
	Continuous		FX105			300 - 1000	-
Finishing	Continuous	CF	T5105	0.5 - 2.0	0.05 - 0.4	180 - 480	180 - 400
	Light interrupted		T5115			140 - 400	140 - 370
	Continuous		T5105			180 - 480	180 - 400
Medium cutting	Light interrupted	CM	T5115	1.0 - 4.0	0.1 - 0.5	140 - 400	140 - 370
	Heavy interrupted		T5125			120 - 300	120 - 250
	Continuous		T5105			180 - 480	180 - 400
Heavy cutting	Light interrupted	CH	T5115	3.0 - 6.0	0.1 - 0.6	140 - 400	140 - 370
	Heavy interrupted		T5125			120 - 300	120 - 250
	Continuous		T5105			180 - 480	180 - 400

Grey cast irons: GG25 etc. Ductile cast irons: GGG45 etc.

Selection System **Negative Inserts**



Continuous	Light interrupted	Heavy interrupted

2

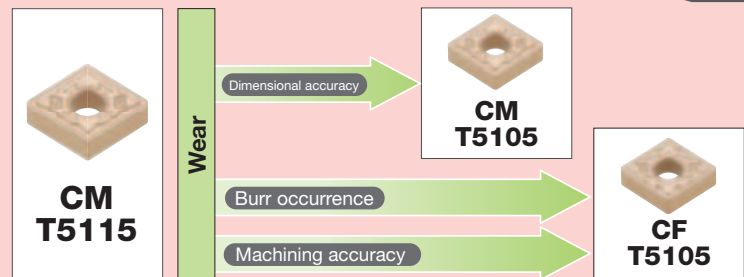
TAC Inserts

For high speed machining

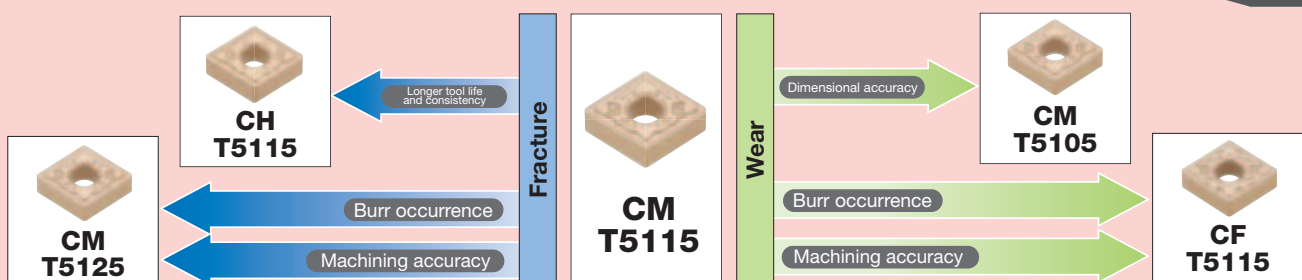
Continuous	Light interrupted
T-CBN BX930	T-CBN BX950

Finishing [$a_p = 0.5 \sim 2.0 \text{ mm}$], **Medium cutting** [$a_p = 1.0 \sim 5.0 \text{ mm}$], **Medium to heavy cutting** [$a_p = 3.0 \sim 6.0 \text{ mm}$]

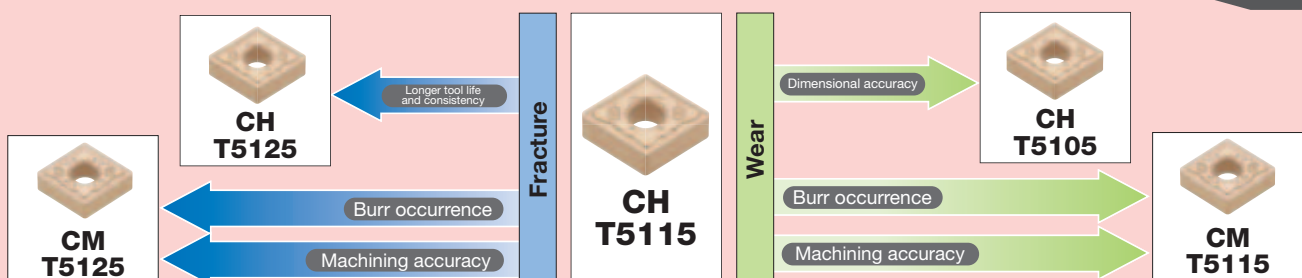
Continuous



Light interrupted



Heavy interrupted



Basic Chipbreakers Negative Inserts

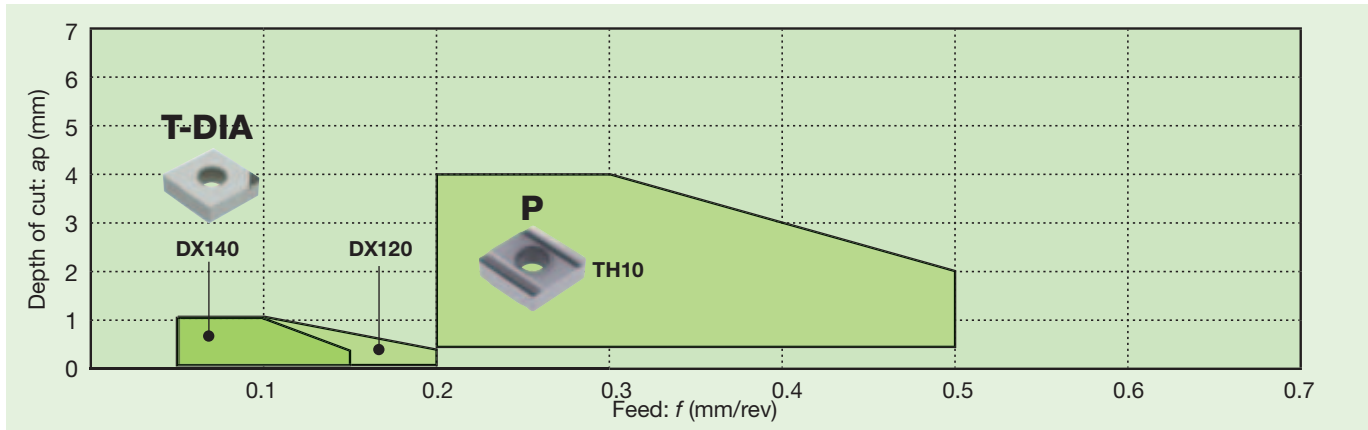


Non-ferrous Metal

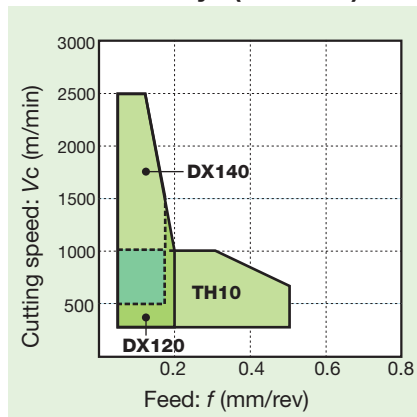
Chipbreaker System for Turning (Negative Inserts)

2

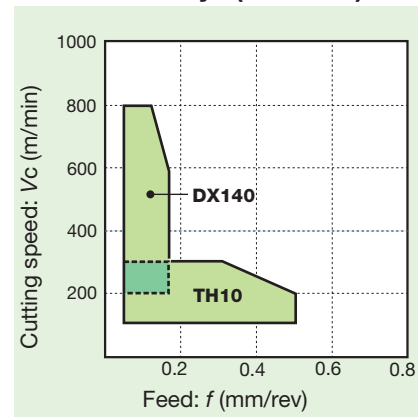
TAC Inserts



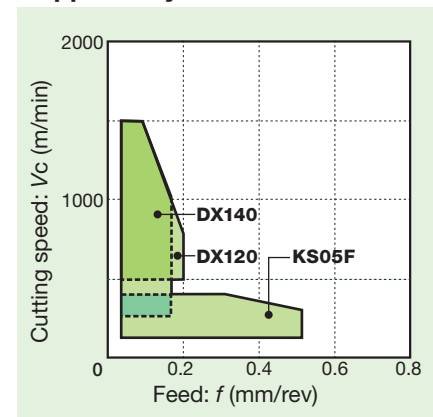
Aluminium alloys (Si < 13%)



Aluminium alloys (Si ≥ 13%)



Copper alloys



Chip-breaker	Appearance	Features
No chip-breaker (T-DIA)		Performs well in high speed finishing of non-ferrous materials.
P		Excels in sharpness of cutting edges and effectively used for machining non-ferrous metals such as aluminium alloys and copper alloys.

Chip-breaker	Appearance	Features
With chip-breaker (T-DIA)		The wide chipbreaker width contributes to excellent chip control.

Standard Cutting Conditions

Operation	Work condition	Chip-breaker	Grade	Depth of cut a_p (mm)	Feed f (mm/rev)	Cutting speed: V_c (m/min)		
						Aluminium alloys (Si < 12%)	Aluminium alloys (Si > 12%)	Copper alloys
Precision finishing	Continuous	Without	DX140	0.05 - 1.0	0.05 - 0.15	500 - 2500	400 - 800	500 - 1500
	Light interrupted	with	DX120	0.05 - 1.0	0.05 - 0.20	300 - 2500	-	500 - 1500
Finishing	Continuous	Without	DX140	0.05 - 1.0	0.05 - 0.15	500 - 2500	400 - 800	500 - 1500
	Light interrupted					300 - 1800	400 - 600	400 - 1200
	Heavy interrupted	P	TH10	0.5 - 4.0	0.2 - 0.5	100 - 500	100 - 200	100 - 200
Medium cutting	Continuous	P	TH10	0.5 - 4.0	0.2 - 0.5	100 - 1000	100 - 300	100 - 300
	Light interrupted					100 - 800	100 - 200	100 - 200
	Heavy interrupted					100 - 500	100 - 200	100 - 200

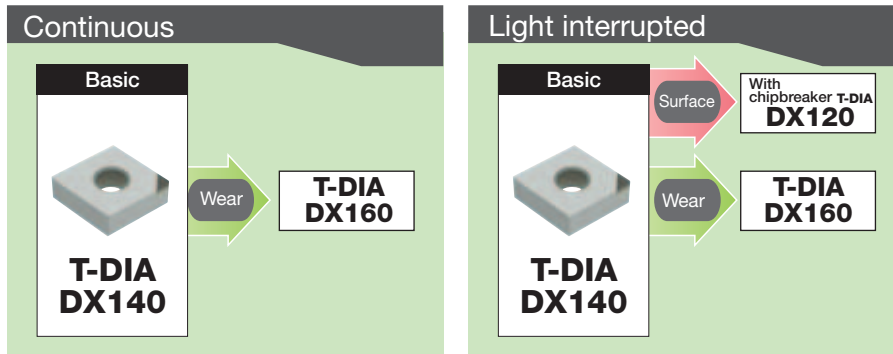
Selection System **Negative Inserts**

Continuous	Light interrupted	Heavy interrupted
		

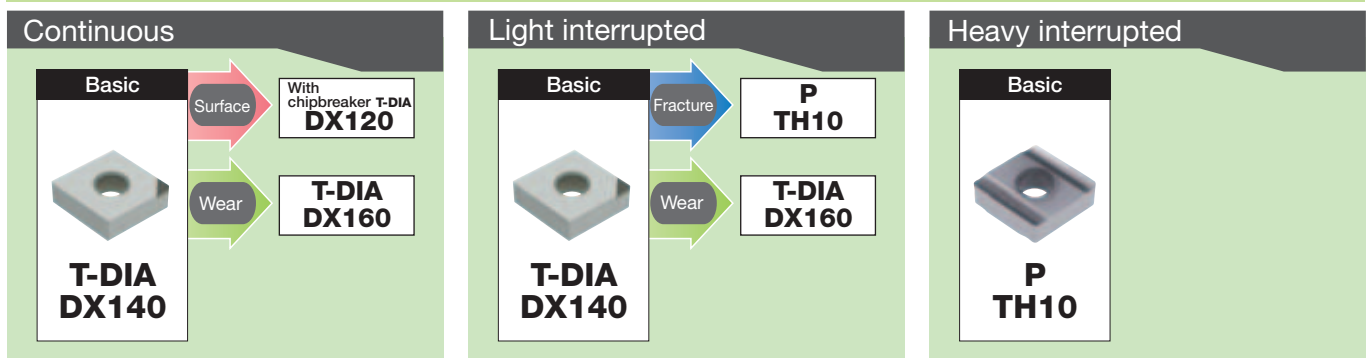
N Non-ferrous Metal

Non-ferrous

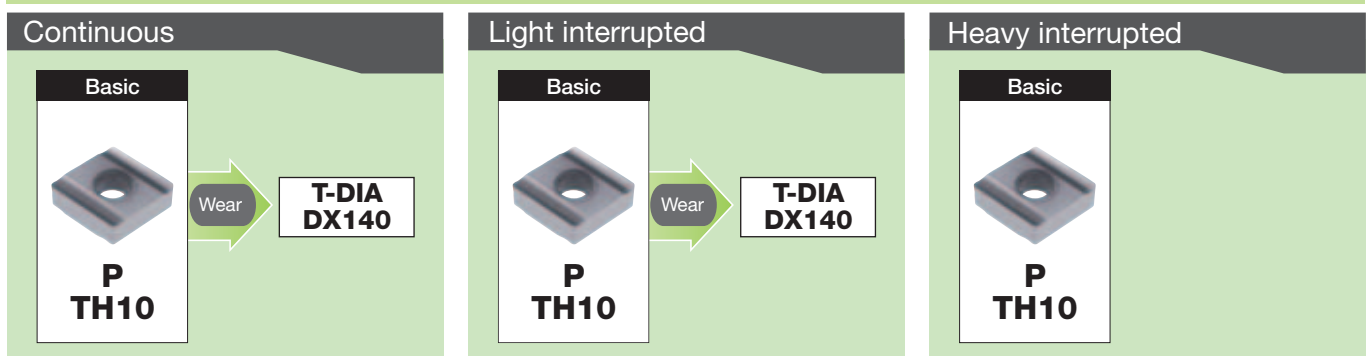
Precision finishing [$a_p = \sim 0.5 \text{ mm}$]



Finishing [$a_p = 0.5 \sim 2.0 \text{ mm}$]



Medium cutting [$a_p = 1.0 \sim 4.0 \text{ mm}$]



2

TAC Inserts

Basic Chipbreakers Negative Inserts

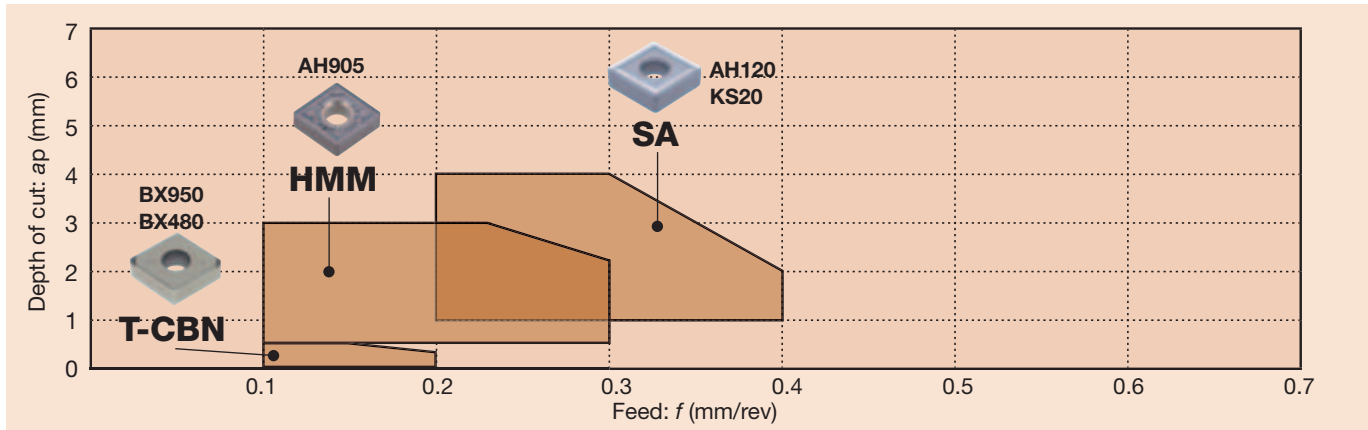


Superalloys and titanium

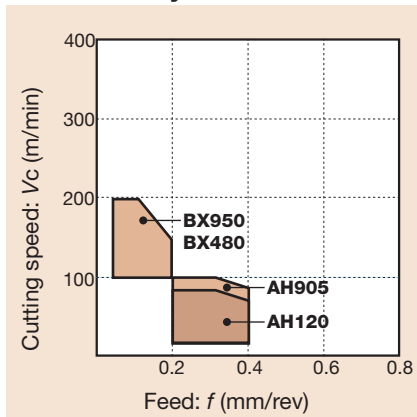
2

TAC Inserts

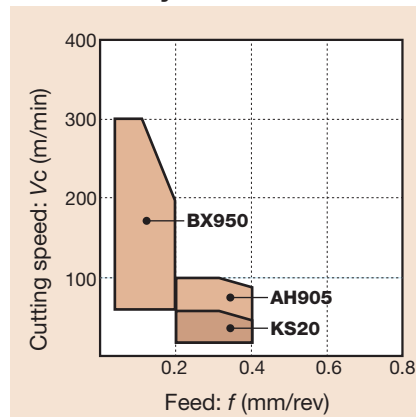
Chipbreaker System for Turning (Negative Inserts)



Titanium alloys



Ni-base alloys



Chipbreaker	Appearance	Features
HMM		Low cutting force chipbreaker for super alloys. Combined with the narrow positive land and uneven dots on the rake face allows a small contact area for chips, reducing cutting forces considerably.

Chipbreaker	Appearance	Features
No chip-breaker (T-CBN)		T-CBN inserts. Performs well in finishing of heat-resistant or titanium alloys.
SA		This chipbreaker is designed its to reduce the contact-area between tool and chip, preventing the insert from raising temperature during cutting.

Standard Cutting Conditions

Operation	Work condition	Chip-breaker	Grade	Depth of cut a_p (mm)	Feed f (mm/rev)	Cutting speed: V_c (m/min)	
						Titanium alloys	Ni-base alloys
Precision finishing	Continuous	Without	BX950	0.1 - 0.5	0.05 - 0.2	100 - 200	70 - 300
	Light interrupted		BX480				-
Finishing to Medium cutting	Continuous	HMM	AH905	0.5 - 3.0	0.1 - 0.3	20 - 100	20 - 100
	Light interrupted					20 - 80	20 - 50
	Heavy interrupted					10 - 60	10 - 40
Medium cutting	Continuous	SA	AH120	1.0 - 4.0	0.2 - 0.4	30 - 80	-
	Light interrupted					30 - 80	20 - 50
	Heavy interrupted					10 - 60	10 - 40

Ni-base alloys: INCONEL718 etc.

Titanium alloys: Ti-6Al-4V etc

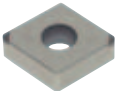
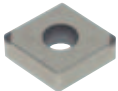
Selection System **Negative Inserts**

Continuous	Light interrupted	Heavy interrupted
		

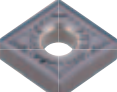
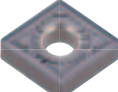
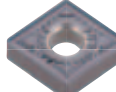
S Superalloys and titanium

Superalloys

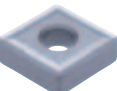
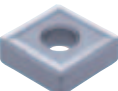
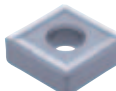
Precision finishing [$a_p = \sim 0.5 \text{ mm}$]

Continuous	Light interrupted
Basic  T-CBN BX950	Basic  T-CBN BX950 Fracture → No chipbreaker TH10

Finishing [$a_p = 0.5 \sim 2.0 \text{ mm}$]

Continuous	Light interrupted	Heavy interrupted
Basic  HMM AH905	Basic  HMM AH905 Fracture → All-round AH120	Basic  HMM AH905 Fracture → All-round AH120

Medium cutting [$a_p = 1.0 \sim 4.0 \text{ mm}$]

Continuous	Light interrupted	Heavy interrupted
Basic  SA AH120 Wear → All-round AH110	Basic  SA AH120 Fracture → All-round AH110 Wear → All-round AH110	Basic  SA AH120 Fracture → All-round AH120

2

TAC Inserts

Basic Chipbreakers

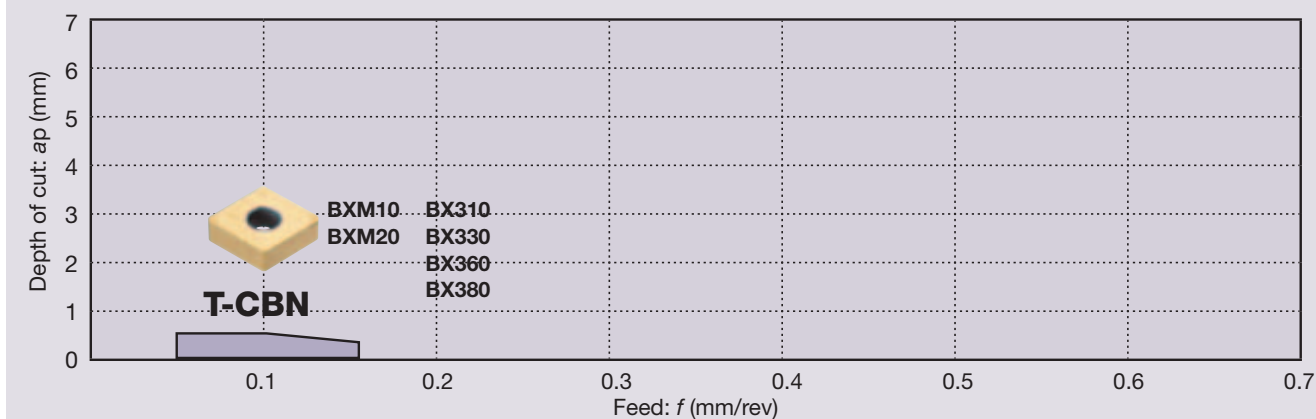
Negative Inserts

H Hard Materials

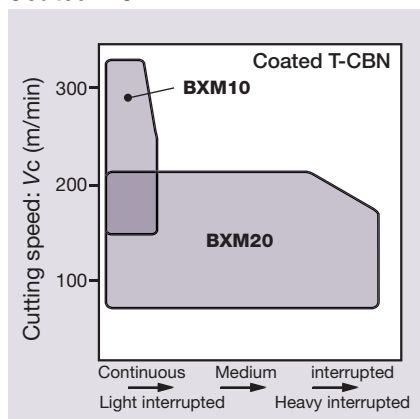
Chipbreaker System for Turning (Negative Inserts)

2

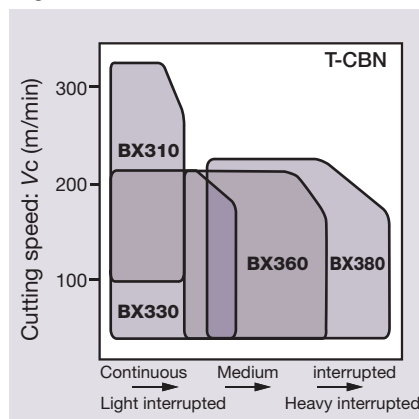
TAC Inserts



Coated T-CBN



T-CBN



Chipbreaker	Appearance	Features
No chip-breaker (T-CBN)		Performs well in finishing of hardened steel.

Chipbreaker	Appearance	Features
HF		When used in removing a carburized layer, excels in chip control at small depth of cut.
HM		When used in removing a carburized layer, excels in chip control at large depth of cut.

Standard Cutting Conditions

Operation	Work condition	Chipbreaker	Grade	Depth of cut a_p (mm)	Feed f (mm/rev)	Cutting speed V_c (m/min)
Precision finishing	Continuous to light interrupted	Without	BXM10	0.05 - 0.3	0.03 - 0.18	150 - 350
Finishing	Continuous to heavy interrupted	Without	BXM20	0.05 - 0.3	0.05 - 0.25	70 - 220
Removing of carburized layer	Continuous	HF	BXM20	0.2 - 0.75	0.05 - 0.2	70 - 220
		HM		0.5 - 1.0		

Hardened steels, Pre-hardened steels: X100CrMoV5, X40CrMoV5-1 etc.

Selection System **Negative Inserts**

Continuous	Light interrupted	Medium interrupted	Heavy interrupted
			

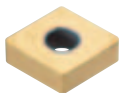
H Hard Materials

Hard Materials

Precision finishing [$a_p = \sim 0.2 \text{ mm}$]

Continuous

Basic



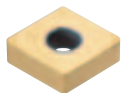
**T-CBN
BXM20**

For high speed
Wear

**T-CBN
BXM10**

Light interrupted

Basic



**T-CBN
BXM20**

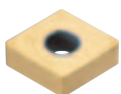
For high speed
Wear

**T-CBN
BXM10**

Finishing [$a_p = \sim 0.5 \text{ mm}$]

Continuous

Basic



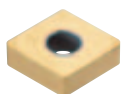
**T-CBN
BXM20**

For high speed
Wear

**T-CBN
BXM10**

Light interrupted

Basic



**T-CBN
BXM20**

For high speed
Wear

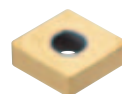
**T-CBN
BXM10**

Fracture

**-H
BXM20**

Medium ~ Heavy interrupted

Basic



**T-CBN
BXM20**

Fracture

**-H
BXM20**

2

TAC Inserts

Basic Chipbreakers

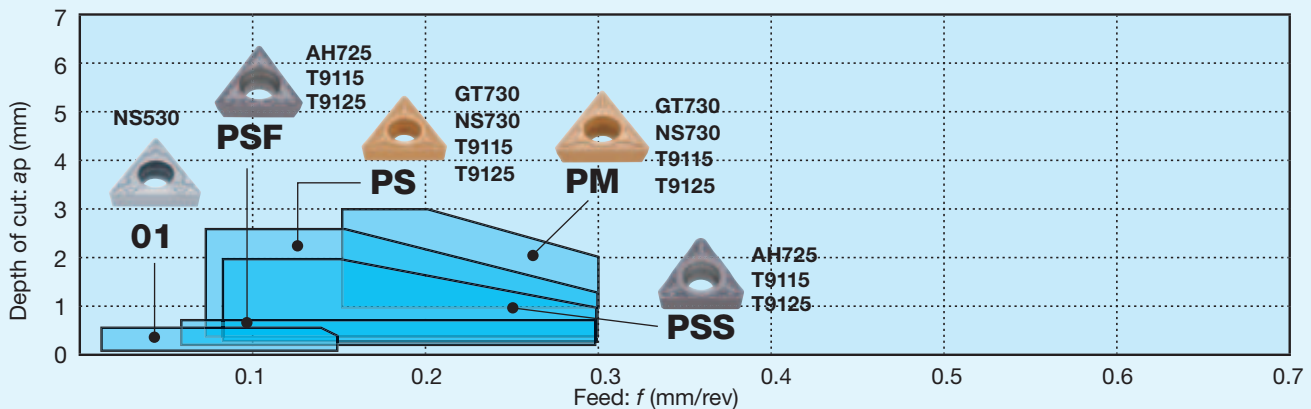
Positive Inserts

P Steel

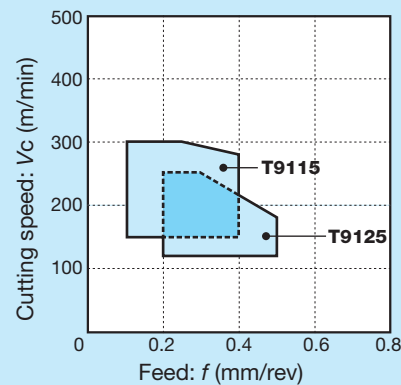
Chipbreaker System for Turning (Positive Inserts)

2

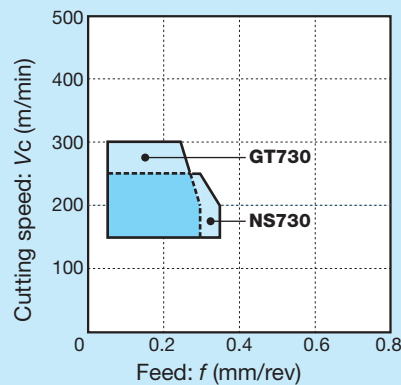
TAC Inserts



CVD coated grades



Coated cermets / Cermets



Chipbreaker	Appearance	Features
01		The sharp cutting edge and raised projection near corner contribute to excellent chip control at very small depth of cut and low feed.
PSF		Developed chipbreaker for finishing at low cutting depths. Optimal chip control due to pre-positioned chipbreaker element.
PSS		3-dimensional chipbreaker designed to have excellent chip control capability and low cutting force in finishing to medium cutting. Low cost, M-class positive insert used for high efficiency boring in a wide range of applications.

Chipbreaker	Appearance	Features
PS		3-dimensional chipbreaker designed to have excellent chip control capability and low cutting force in finishing to medium cutting. Low cost, M-class positive insert used for high efficiency boring in a wide range of applications.
PM		Developed chipbreaker for medium cutting. Excellent chip control due to wide, positive chip flow zone.

Standard Cutting Conditions

Operation	Work condition	Chip-breaker	Grade	Depth of cut ap (mm)	Feed f (mm/rev)	Cutting speed: Vc (m/min)		
						Low carbon steels, Alloy steels	Medium carbon steels, Alloy steels	High carbon steels, Alloy steels
Precision finishing	Continuous	01	GT730	0.05 - 0.5	0.03 - 0.15	150 - 300	80 - 250	80 - 200
	Light interrupted		NS530			150 - 250	80 - 220	80 - 180
Finishing	Continuous	PSF	AH725	0.1 - 0.5	0.05 - 0.3	50 - 180	50 - 180	40 - 150
	Light interrupted					50 - 180	50 - 180	40 - 150
	Heavy interrupted					50 - 150	50 - 150	40 - 120
Finishing to light cutting	Continuous	PSS	AH725	0.3 - 2.0	0.08 - 0.3	50 - 180	50 - 180	40 - 150
	Light interrupted					50 - 180	50 - 180	40 - 150
	Heavy interrupted					50 - 150	50 - 150	40 - 120
Finishing to Medium cutting	Continuous to Heavy interrupted	PS	T9115	0.5 - 2.5	0.08 - 0.3	120 - 250	100 - 200	80 - 180
			T9125			120 - 250	80 - 180	80 - 120
Medium cutting	Continuous to Heavy interrupted	PM	T9115	1.0 - 3.0	0.15 - 0.3	120 - 250	100 - 200	80 - 180
			T9125			120 - 250	80 - 180	80 - 120

Low carbon steels, Alloy steels: C10E, 15CrMo5, 20Cr4H, etc. Medium carbon steels, Alloy steels: C45, 42CrMo4, etc.
High carbon steels, Alloy steels: 35CrNiMo6, etc.

Selection System **Positive Inserts**

2

TAC Inserts

P Steel

Steel

Precision finishing [$a_p = \sim 0.5 \text{ mm}$]

Continuous

Basic



**01
NS530**

Light interrupted

Basic



**01
NS530**

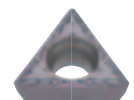
Fracture

**PSF
AH725**

Finishing [$a_p = 0.1 \sim 0.5 \text{ mm}$]

Continuous

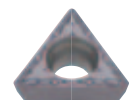
Basic



**PSF
AH725**

Light interrupted

Basic



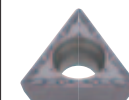
**PSF
AH725**

Fracture

**PSF
T9115**

Heavy interrupted

Basic



**PSF
AH725**

Fracture

**PS
T9125**

Finishing to Medium cutting [$a_p = 0.5 \sim 2.5 \text{ mm}$]

Continuous

Basic



**PSS
T9115**

Light interrupted

Basic



**PS
T9115**

Fracture

**PS
T9125**

Wear

**PS
GT730**

Heavy interrupted

Basic



**PS
T9125**

Fracture

**PM
T9125**

Medium cutting [$a_p = 1.0 \sim 3.0 \text{ mm}$]

Continuous

Basic



**PM
T9115**

Light interrupted

Basic



**PM
T9115**

Fracture

**PM
T9125**

Heavy interrupted

Basic



**PM
T9125**

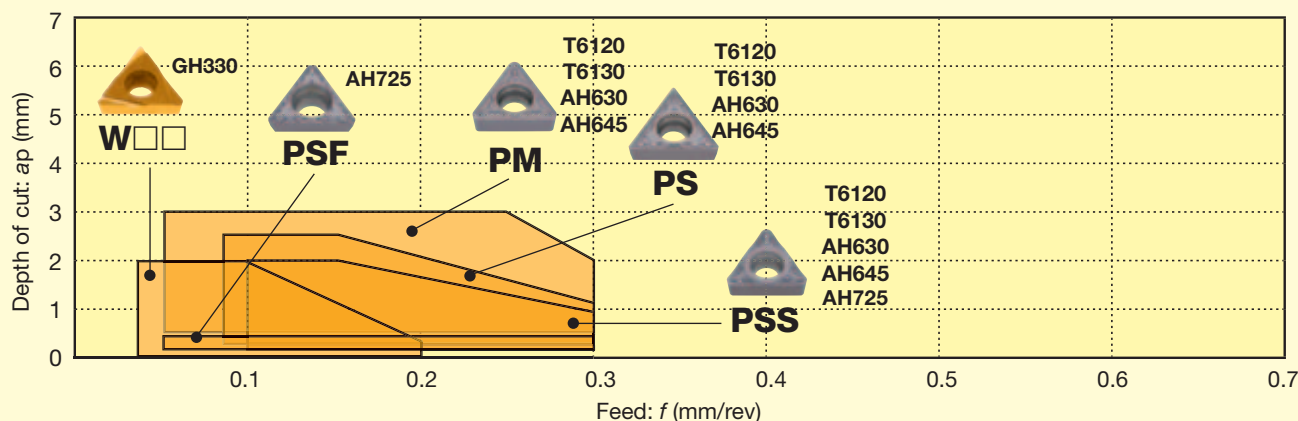
Basic Chipbreakers Positive Inserts

M Stainless Steel

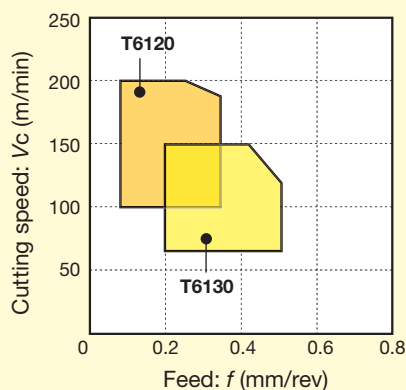
Chipbreaker System for Turning (Positive Inserts)

TAC Inserts

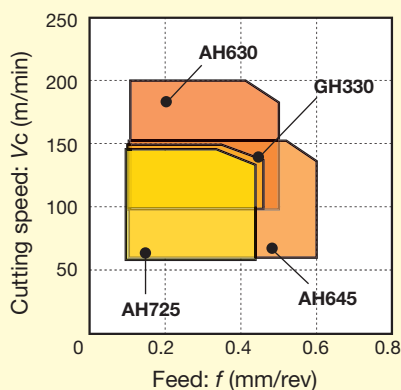
2



CVD coated grades



PVD coated grades



Chipbreaker	Appearance	Features
W		Designed to control the direction of chip flow and used for precision finish boring. Provides excellent chip evacuation which is important to attain a highly accurate bore.
PSF		Developed chipbreaker for finishing at low cutting depths. Optimal chip control due to pre-positioned chipbreaker element.

Chipbreaker	Appearance	Features
PSS		3-dimensional chipbreaker designed to have excellent chip control capability and low cutting force in finishing to medium cutting. Low cost, M-class positive insert used for high efficiency boring in a wide range of applications.
PS		3-dimensional chipbreaker designed to have excellent chip control capability and low cutting force in finishing to medium cutting. Low cost, M-class positive insert used for high efficiency boring in a wide range of applications.
PM		Developed chipbreaker for medium cutting. Excellent chip control due to wide, positive chip flow zone.

Standard Cutting Conditions

Operation	Work condition	Chipbreaker	Grade	Depth of cut a_p (mm)	Feed f (mm/rev)	Cutting speed V_c (m/min)
Precision finishing	Continuous	W	GH330	0.05 - 2.0	0.03 - 0.2	100 - 150
Finishing	Continuous	PSF	AH725	0.1 - 0.5	0.05 - 0.3	50 - 150
	Light interrupted					50 - 150
	Heavy interrupted					50 - 120
	Continuous					50 - 150
Finishing to light cutting	Light interrupted	PSS	AH725	0.3 - 2.0	0.08 - 0.3	50 - 150
	Heavy interrupted					50 - 120
	Continuous					100 - 200
Finishing to medium cutting	Light interrupted	PS	T6130	0.5 - 2.5	0.08 - 0.3	100 - 200
	Heavy interrupted		AH630			100 - 200
	Continuous		AH630			70 - 170
	Continuous		T6130			100 - 200
Medium cutting	Light interrupted	PM	AH630	1.0 - 3.0*	0.15 - 0.3	100 - 200
	Heavy interrupted		AH630			50 - 100
	Continuous		AH630			50 - 100

*For CCMT0602 and DCMT0702 type inserts, $a_p = 0.5 - 2.5$
Stainless steels: X5CrNi18-10, X5CrNiMo17-12-2, etc.

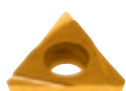
M Stainless Steel

Stainless

Precision finishing [$a_p = \sim 0.5 \text{ mm}$]

Continuous

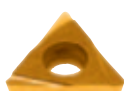
Basic



W
GH330

Light interrupted

Basic



W
GH330

Finishing [$a_p = 0.3 \sim 1.5 \text{ mm}$]

Continuous

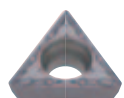
Basic



PSF
AH725

Light interrupted

Basic



PSF
AH725

Fracture

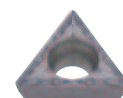
PS
AH645

Wear

PS
AH630

Heavy interrupted

Basic



PSF
AH725

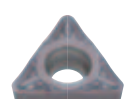
Fracture

PS
AH645

Finishing to Medium cutting [$a_p = 0.5 \sim 2.5 \text{ mm}$]

Continuous

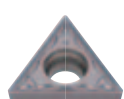
Basic



PSS
AH630

Light interrupted

Basic



PS
AH630

Fracture

PM
AH645

Wear

PS
T6130

Heavy interrupted

Basic



PS
AH630

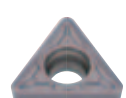
Fracture

PM
AH645

Medium cutting [$a_p = 1.0 \sim 3.0 \text{ mm}$]

Continuous

Basic



PM
AH630

Wear

PM
T6120

Light interrupted

Basic



PM
AH630

Fracture

PM
AH645

Wear

PM
T6130

Heavy interrupted

Basic



PM
AH630

Fracture

PM
AH645

Basic Chipbreakers Positive Inserts

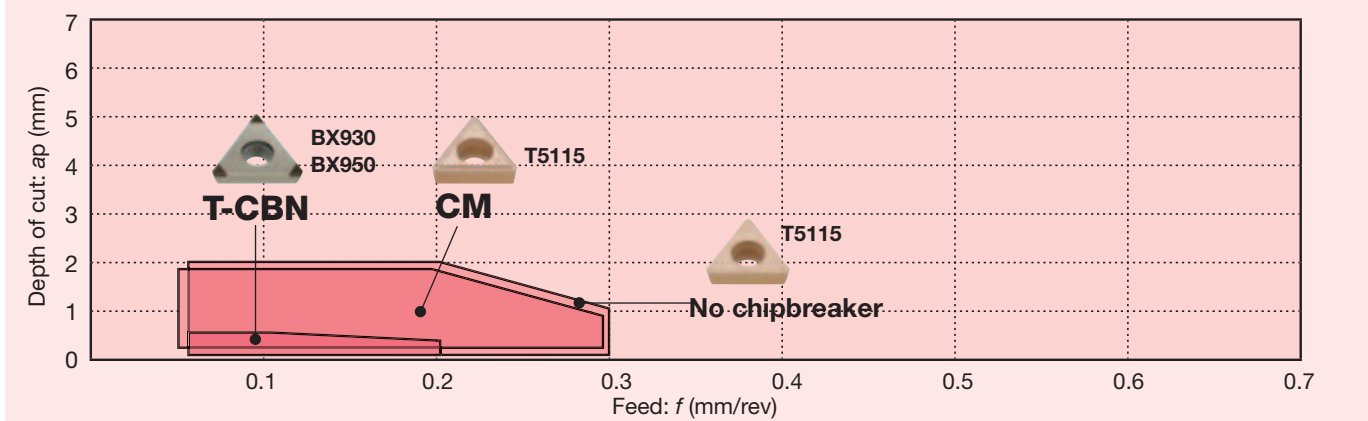


Cast Iron

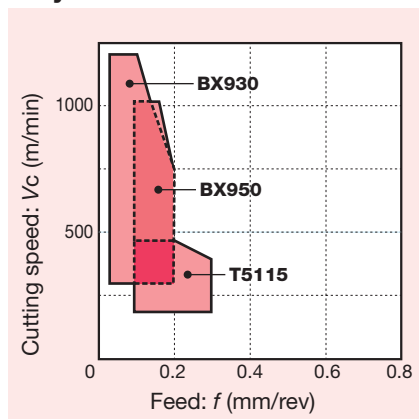
2

TAC Inserts

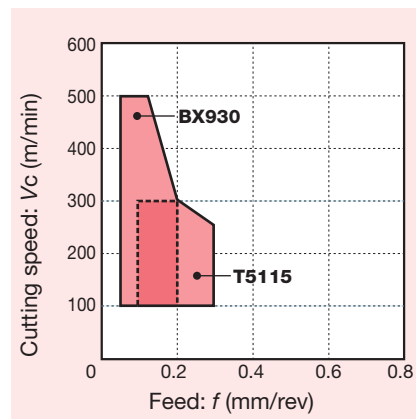
Chipbreaker System for Turning (Positive Inserts)



Grey cast irons



Ductile cast irons



Chipbreaker	Appearance	Features
No chip-breaker (T-CBN)		Performs well in high speed finishing of cast iron.
No chip-breaker		Can cover a wide range of applications from finishing to roughing of cast irons. Excels in cutting edge strength.

Chipbreaker	Appearance	Features
CM		All-around chipbreaker for general purpose cutting, provides low cutting forces and excellent performance in finishing to medium cutting.

Standard Cutting Conditions

Operation	Work condition	Chip-breaker	Grade	Depth of cut a_p (mm)	Feed f (mm/rev)	Cutting speed: V_c (m/min)	
						Grey cast irons	Ductile cast irons
Precision finishing	Continuous	Without	BX930	0.05 - 0.5	0.05 - 0.2	300 - 1200	100 - 500
	Light interrupted		BX950			300 - 800	100 - 300
Finishing	Continuous	CM	T5115	0.05 - 2.0	0.05 - 0.3	150 - 450	100 - 300
	Light interrupted					100 - 300	100 - 250
	Heavy interrupted					100 - 200	100 - 200
Medium cutting	Continuous	Without	T5115	0.05 - 2.0	0.05 - 0.3	150 - 450	100 - 300
	Light interrupted					100 - 300	100 - 250
	Heavy interrupted					100 - 200	100 - 200

Grey cast irons: GG25 etc.

Ductile cast irons: GGG45 etc.

Selection System **Positive Inserts**



2

TAC Inserts

For high speed machining

Continuous

Light interrupted



**T-CBN
BX930**



**T-CBN
BX950**

Finishing to Medium cutting [$a_p = 0.5 \sim 3.0 \text{ mm}$]

Continuous

Basic



**CM
T5115**

Wear

**T-CBN
BX930**

Light interrupted

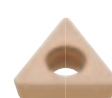
Basic



**CM
T5115**

Heavy interrupted

Basic



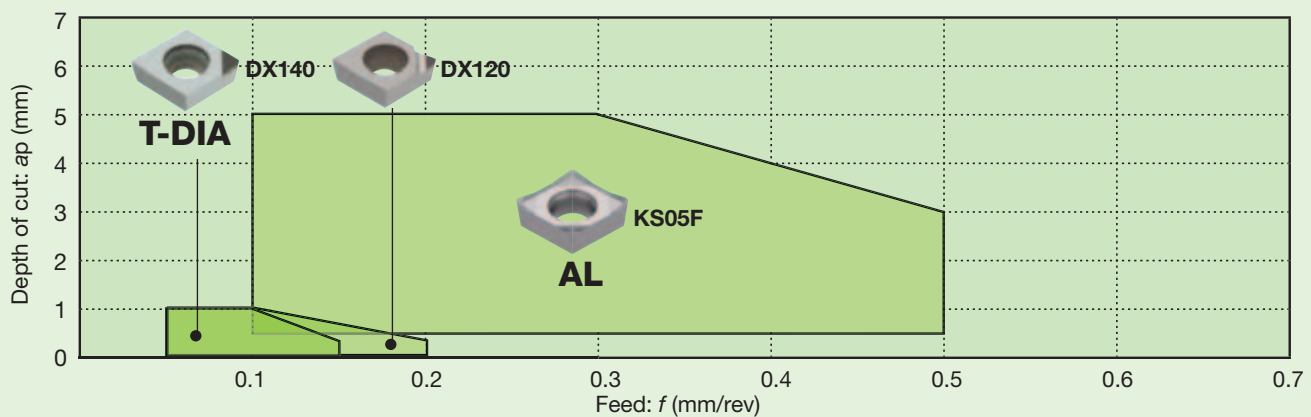
No
chipbreaker
T5115

Basic Chipbreakers Positive Inserts

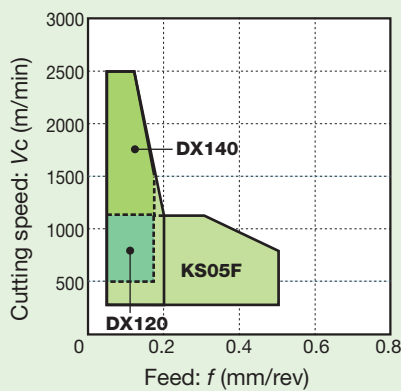


Non-ferrous Metal

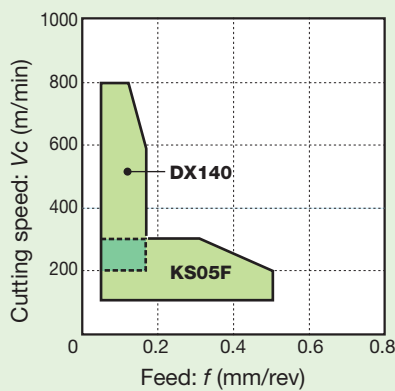
Chipbreaker System for Turning (Positive Inserts)



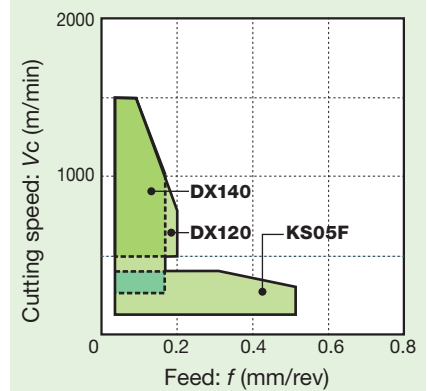
Aluminium alloys (Si < 12%)



Aluminium alloys (Si ≥ 12%)



Copper alloys



Chipbreaker	Appearance	Features
No chip-breaker (T-DIA)		Performs well in high speed finishing of non-ferrous materials.
AL		Extremely sharp cutting edge. Polished surface. Excellent chip forming at high cutting feeds. Low power consumption.

Chipbreaker	Appearance	Features
With chip-breaker (T-DIA)		The wide chipbreaker width contributes to excellent chip control.

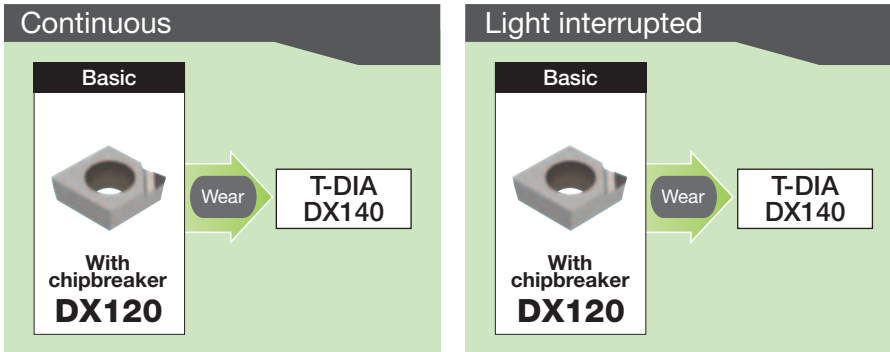
Standard Cutting Conditions

Operation	Work condition	Chip-breaker	Grade	Depth of cut ap (mm)	Feed f (mm/rev)	Cutting speed: Vc (m/min)		
						Aluminium alloys (Si < 12%)	Aluminium alloys (Si > 12%)	Copper alloys
Precision finishing	Continuous	Without	DX140	0.05 - 1.0	0.05 - 0.15	500 - 2500	400 - 800	500 - 1500
	Light interrupted	with	DX120	0.05 - 1.0	0.05 - 0.2	300 - 2500	-	500 - 1500
Finishing	Continuous	Without	DX140	0.05 - 1.0	0.05 - 0.15	500 - 2500	400 - 800	500 - 1500
	Light interrupted					300 - 1800	400 - 600	400 - 1200
	Heavy interrupted	AL	KS05F	0.5 - 5.0	0.1 - 0.5	100 - 600	100 - 200	-
Medium cutting	Continuous	AL	KS05F	0.5 - 5.0	0.1 - 0.5	100 - 1200	100 - 300	100 - 300
	Light interrupted					100 - 900	100 - 200	100 - 200
	Heavy interrupted					100 - 600	100 - 200	-

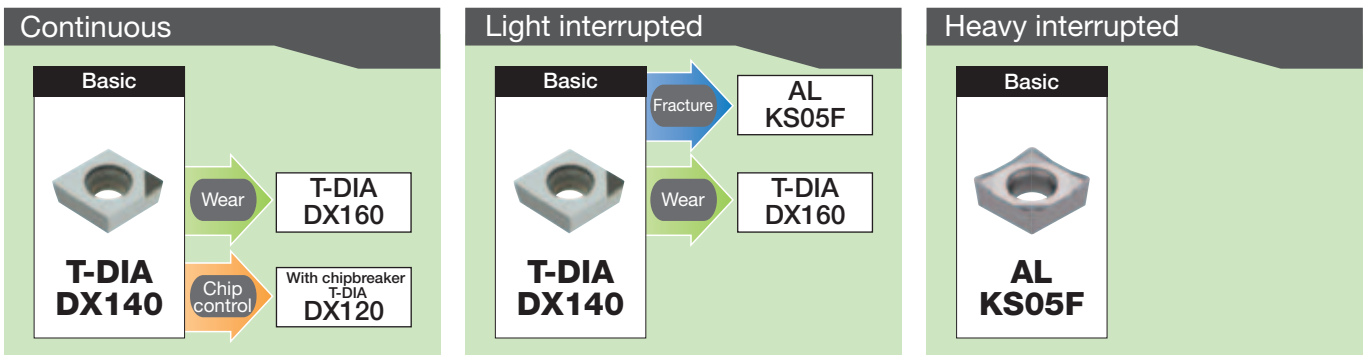
N Non-ferrous Metal

Non-ferrous

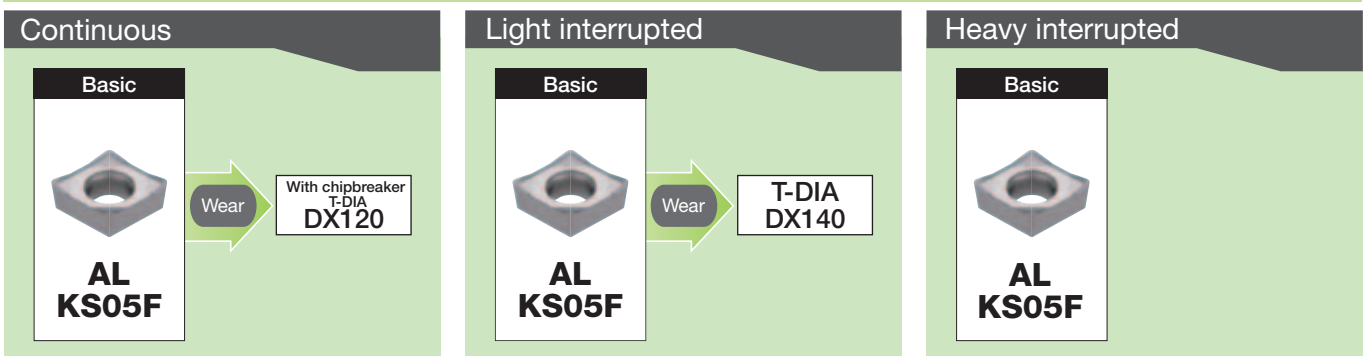
Precision finishing [$a_p = \sim 0.5 \text{ mm}$]



Finishing [$a_p = 0.5 \sim 2.0 \text{ mm}$]



Medium cutting [$a_p = 1.0 \sim 5.0 \text{ mm}$]



Basic Chipbreakers

Positive Inserts

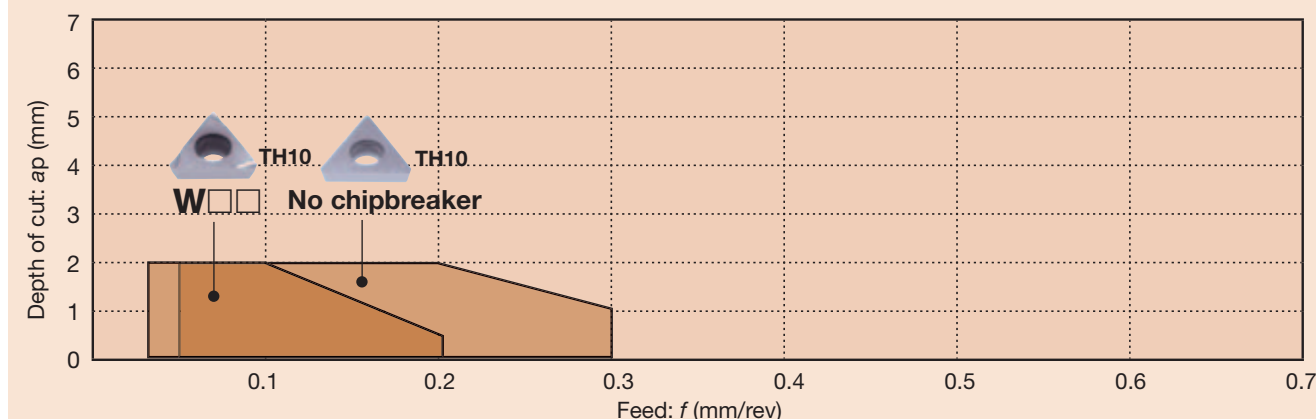


Superalloys and titanium

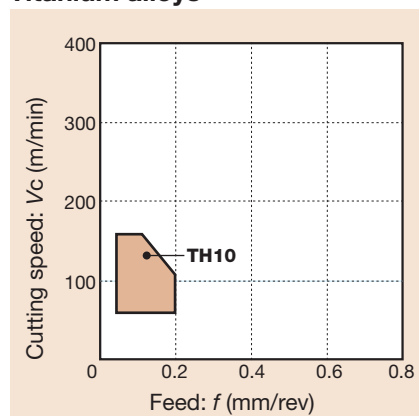
2

TAC Inserts

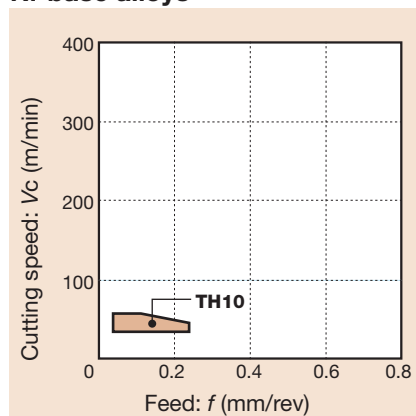
Chipbreaker System for Turning (Positive Inserts)



Titanium alloys



Ni-base alloys



Chipbreaker	Appearance	Features
W		Designed to control the direction of chip flow and used for precision-finish boring. Provides excellent chip evacuation which is important to attain a highly accurate bore.
No chip-breaker		Can cover a wide range of applications from finishing to roughing. Excels in cutting edge strength.

Standard Cutting Conditions

Operation	Work condition	Chip-breaker	Grade	Depth of cut ap (mm)	Feed f (mm/rev)	Cutting speed: Vc (m/min)	
						Titanium alloys	Ni-base alloys
Precision finishing	Continuous	W	TH10	0.05 - 2.0	0.03 - 0.2	50 - 150	10 - 50
	Light interrupted					50 - 100	10 - 30
Finishing	Continuous	No chipbreaker	TH10	0.05 - 2.0	0.05 - 0.3	50 - 150	10 - 50
	Light interrupted					50 - 100	10 - 30
	Heavy interrupted					30 - 80	10 - 30

Ni-base alloys: INCONEL718 etc.

Titanium alloys: Ti-6Al-4V etc.

S Superalloys and titanium

Superalloys

Precision finishing [$a_p = \sim 0.5 \text{ mm}$]

Continuous

Basic



W□□
TH10



T-CBN
BX950

Light interrupted

Basic



W□□
TH10



T-CBN
BX950

Finishing [$a_p = 0.5 \sim 2.0 \text{ mm}$]

Continuous

Basic



W□□
TH10

Light interrupted

Basic



W□□
TH10



No chipbreaker
TH10

Heavy interrupted

Basic



W□□
TH10



No chipbreaker
TH10

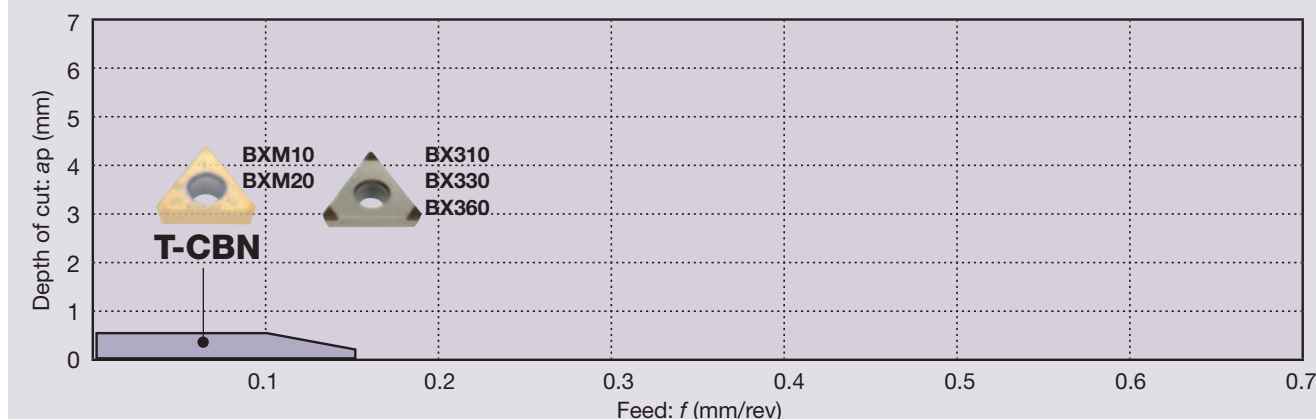
Basic Chipbreakers Positive Inserts

H Hard Materials

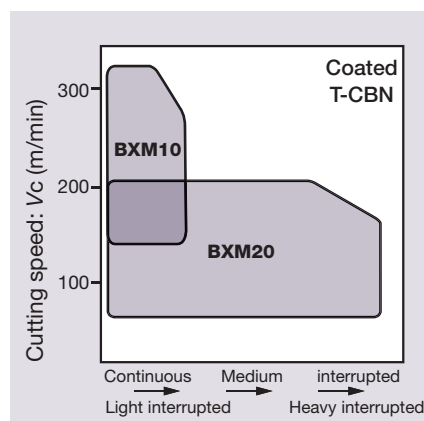
Chipbreaker System for Turning (Positive Inserts)

2

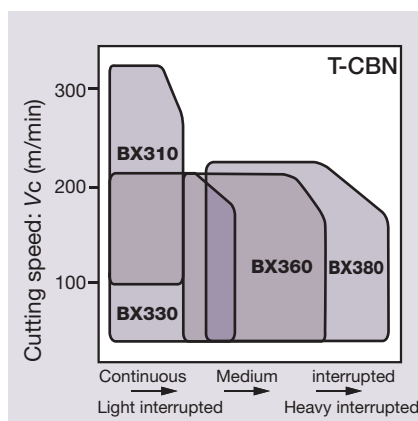
TAC Inserts



Coated T-CBN



T-CBN



Chipbreaker	Appearance	Features
No chip-breaker (T-CBN)		Performs well in finishing of hardened steel.

Standard Cutting Conditions

Operation	Work condition	Chipbreaker	Grade	Depth of cut a_p (mm)	Feed f (mm/rev)	Cutting speed V_c (m/min)
Precision finishing	Continuous	No chipbreaker (T-CBN)	BXM10	0.05 - 0.3	0.03 - 0.15	150 - 350
	Light interrupted		BXM20			70 - 220
Finishing	Continuous ~ interrupted	No chipbreaker (T-CBN)	BXM20	0.07 - 0.5	0.05 - 0.3	70 - 220

Hardened steels, Pre-hardened steels: X100CrMoV5, X40CrMoV5-1 etc.

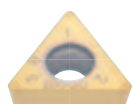
H Hard Materials

Hard
Materials

Finishing [$a_p = \sim 0.3 \text{ mm}$]

Continuous

Basic



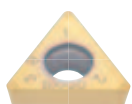
**T-CBN
BXM20**



**T-CBN
BXM10**

Light interrupted

Basic



**T-CBN
BXM20**

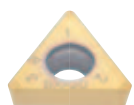


**T-CBN
BXM10**

Finishing [$a_p = \sim 0.3 \text{ mm}$]

Continuous

Basic



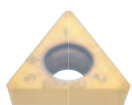
**T-CBN
BXM20**



**T-CBN
BXM10**

Light interrupted

Basic



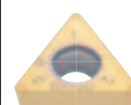
**T-CBN
BXM20**



**T-CBN
BXM10**

Medium ~ Heavy interrupted

Basic



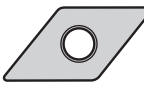
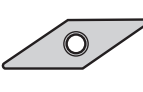
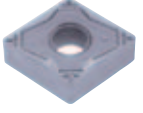
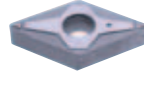
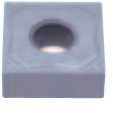
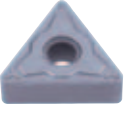
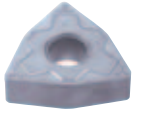
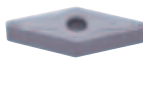
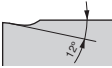
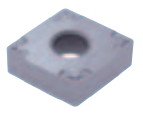
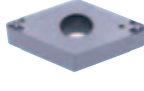
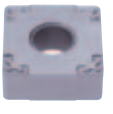
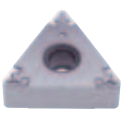
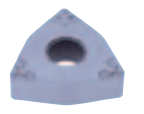
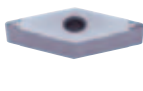
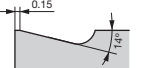
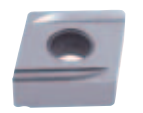
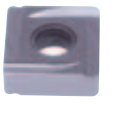
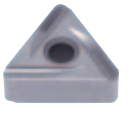
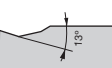
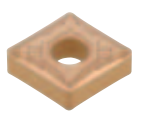
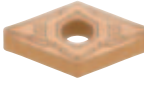
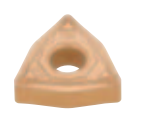
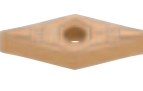
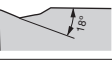
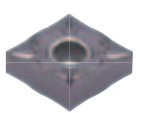
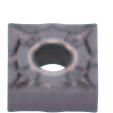
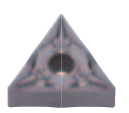
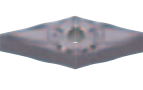
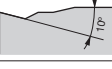
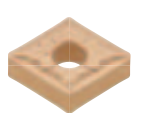
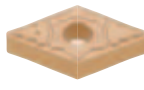
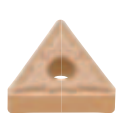
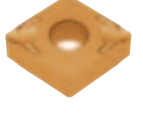
**T-CBN
BXM20**

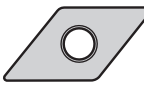
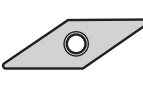
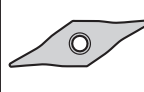
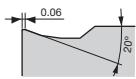
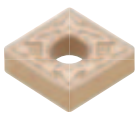
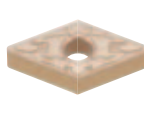
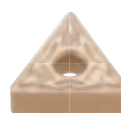
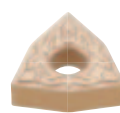
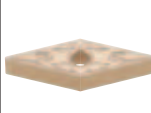
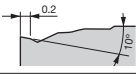
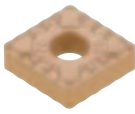
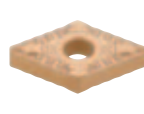
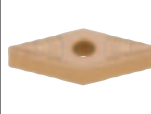
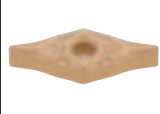
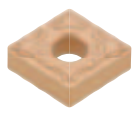
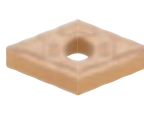
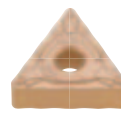
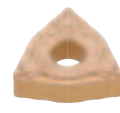
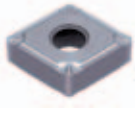
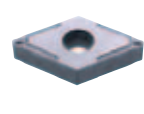
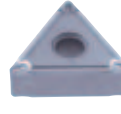
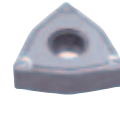
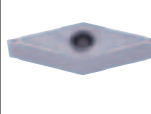
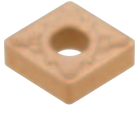
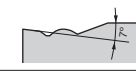
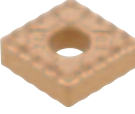
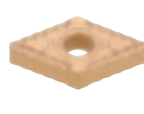
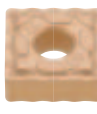
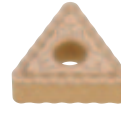
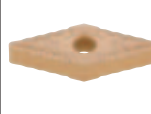
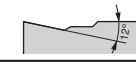
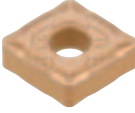
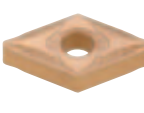
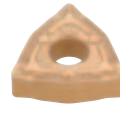
Chipbreaker Overview

TAC Negative Inserts for General Turning with hole

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TAC Inserts

Application	Chipbreaker	C	D	S	T	W	V	
Precision finishing	Negative							
		80° Negative	55° Negative	90° Negative	60° Negative	80° Negative	35° Negative	
	TF (M) 	 2-42	 2-52	 2-61	 2-70	 2-80	 2-87	
	01 (G) 	 2-42	 2-52	 2-61	 2-70	 2-80	 2-87	
	A~D (G) 	 2-42		 2-61	 2-70			
	W (G) 				 2-71			
	TSF (M) 	 2-42	 2-52	 2-61	 2-71	 2-80	 2-87	
	SF (M) 	 2-42	 2-52	 2-62	 2-71	 2-80	 2-87	
	TS (M) 	 2-43	 2-52	 2-62	 2-71	 2-80	 2-87	
	SS (M) 	 2-43	 2-53	 2-62	 2-71	 2-81	 2-88	
Finishing								

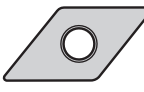
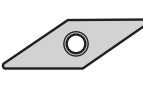
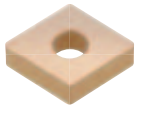
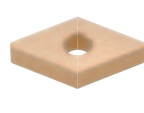
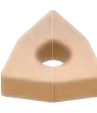
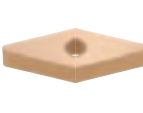
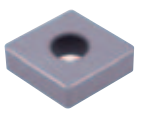
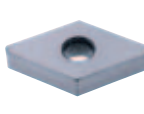
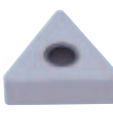
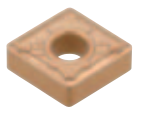
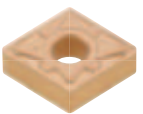
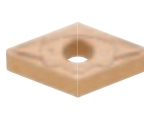
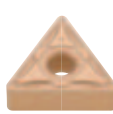
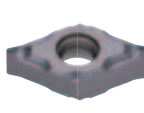
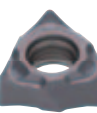
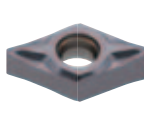
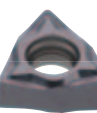
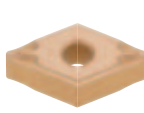
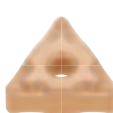
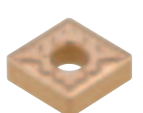
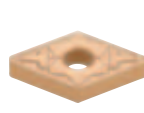
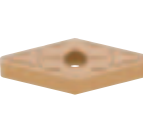
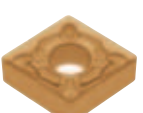
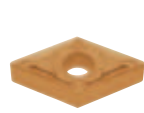
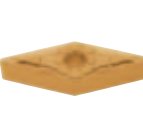
Application	Chipbreaker	C	D	S	T	W	V	Y
	Negative							
		80° Negative	55° Negative	90° Negative	60° Negative	80° Negative	35° Negative	25° Negative
Finishing	CF (M) 	 2-43	 2-53	 2-62	 2-72	 2-81	 2-88	
	ZF (M) 	 2-43	 2-53	 2-62	 2-72	 2-81	 2-88	 2-91
	NS (M) 	 2-43	 2-53	 2-63	 2-72	 2-81		
	11 (M) 	 2-44	 2-53	 2-63	 2-72	 2-82	 2-88	
	AFW (M) 	 2-44				 2-81		
	ZM (M) 	 2-45	 2-54	 2-63	 2-73	 2-83	 2-88	 2-91
Finishing to medium cutting	NM (M) 	 2-45	 2-55	 2-64	 2-73	 2-83		

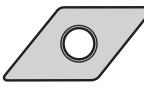
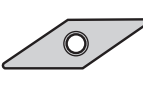
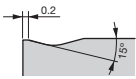
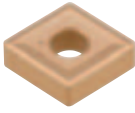
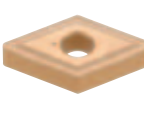
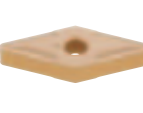
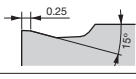
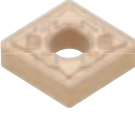
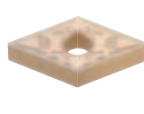
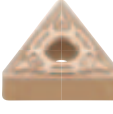
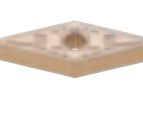
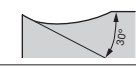
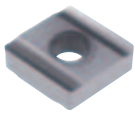
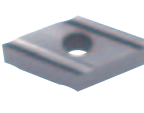
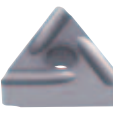
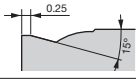
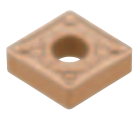
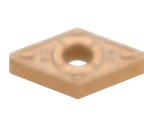
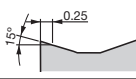
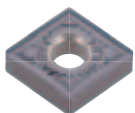
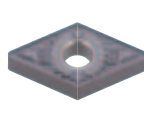
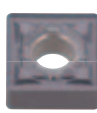
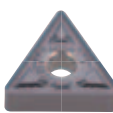
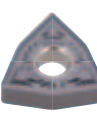
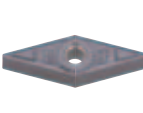
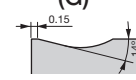
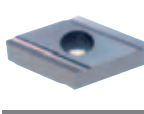
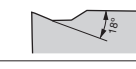
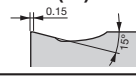
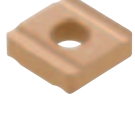
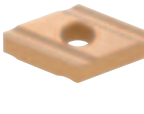
Chipbreaker Overview

TAC Negative Inserts for General Turning with hole

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TAC Inserts

Application	Chipbreaker	C	D	S	T	W	V	R
	Negative							
		80° Negative	55° Negative	90° Negative	60° Negative	80° Negative	35° Negative	Negative
Finishing to medium cutting	I (M)	 2-50	 2-59	 2-68	 2-78	 2-86	 2-90	
	I (G)	 2-50	 2-59	 2-68	 2-78			 2-92
High feed, small depth of cut	ASW (M)	 2-44				 2-82		
	AS (M)	 2-44	 2-54	 2-64	 2-73	 2-82		
Boring (Double sided)	SS (G)		 2-59			 2-86		
	TS (G)		 2-59			 2-86		
	CB (M)	 2-45	 2-54		 2-73	 2-82		
Medium cutting	TM (M)	 2-45	 2-55	 2-64	 2-74	 2-83	 2-89	
	SM (M)	 2-46	 2-55	 2-64	 2-74	 2-83	 2-89	

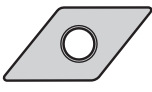
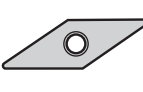
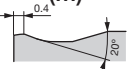
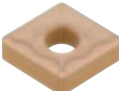
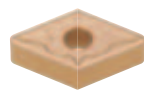
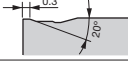
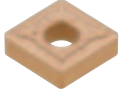
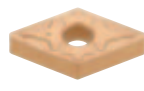
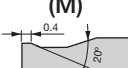
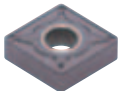
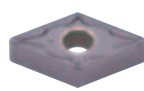
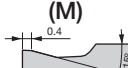
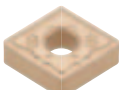
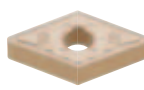
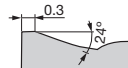
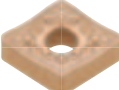
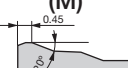
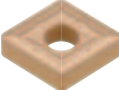
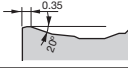
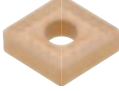
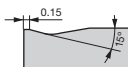
Appli- cation	Chipbreaker	C	D	S	T	W	V	R
	Negative							
		80° Negative	55° Negative	90° Negative	60° Negative	80° Negative	35° Negative	Negative
Medium cutting	All-round (M) 	 2-46	 2-55	 2-65	 2-74	 2-84	 2-89	
	CM (M) 	 2-46	 2-56	 2-65	 2-75	 2-84	 2-89	
	P (G) 	 2-48	 2-58	 2-66	 2-77			
	DM (M) 	 2-46	 2-56	 2-65	 2-75	 2-84	 2-89	
	HMM (M) 	 2-47	 2-56	 2-65	 2-75	 2-84	 2-90	
	Parallel (G) 		 2-57					
	SA (M) 	 2-48		 2-66	 2-76	 2-85		
	S (M) 	 2-48	 2-58	 2-66	 2-77			

Chipbreaker Overview

TAC Negative Inserts for General Turning with hole

2

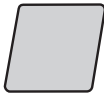
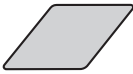
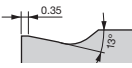
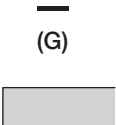
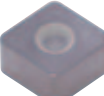
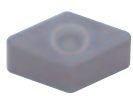
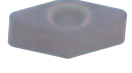
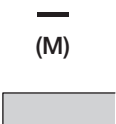
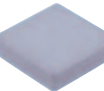
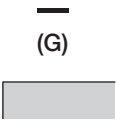
TAC Inserts

Application	Chipbreaker	C	D	S	T	W	V	R
	Negative							
		80° Negative	55° Negative	90° Negative	60° Negative	80° Negative	35° Negative	Negative
Medium to heavy cutting	THS (M) 	 2-48	 2-58	 2-67	 2-77	 2-85		
	TH (M) 	 2-48	 2-58	 2-67	 2-77	 2-85		
	SH (M) 	 2-49	 2-58	 2-67		 2-85		
	CH (M) 	 2-49	 2-58	 2-67	 2-77	 2-86		
Medium to heavy cutting (Single sided)	TRS (M) 	 2-49		 2-67				
Heavy cutting	TUS (M) 	 2-49		 2-68				
	TU (M) 	 2-49		 2-68				
	61 (M) 							 2-92

Chipbreaker Overview

TAC Negative Inserts
for General Turning

without
hole

Appli- cation	Chipbreaker	C	D	S	T	V	R	KNMX	H
	Negative								
		80° Negative	55° Negative	90° Negative	60° Negative	35° Negative	Negative	55° Negative	120° Negative
Finishing	S1 (M) 							 2-94	
Finishing to medium cutting		 2-51	 2-60	 2-69		 2-90			 2-95
		 2-51		 2-69					
		 2-51	 2-60	 2-69	 2-79		 2-93		
Finishing to roughing		 2-51	 2-60	 2-69					

2

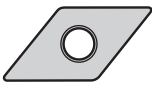
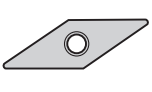
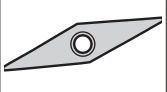
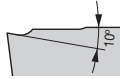
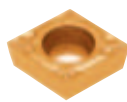
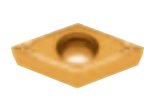
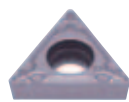
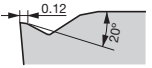
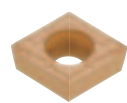
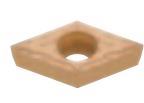
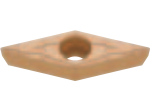
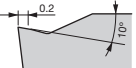
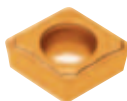
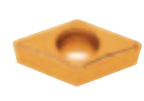
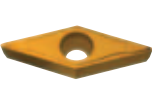
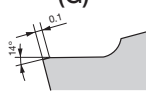
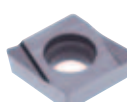
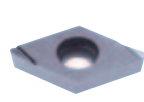
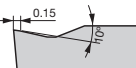
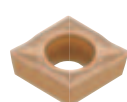
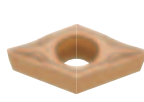
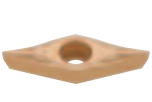
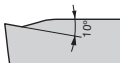
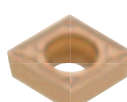
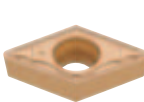
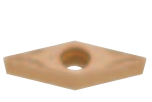
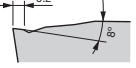
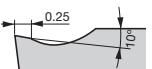
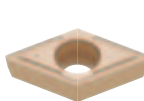
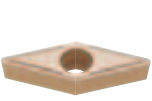
TAC Inserts

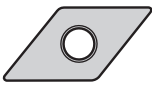
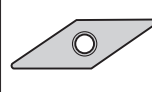
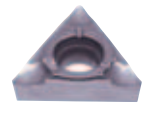
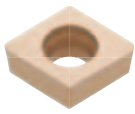
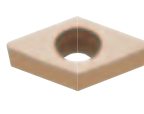
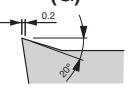
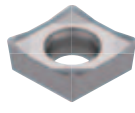
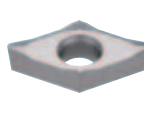
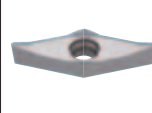
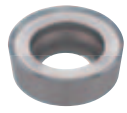
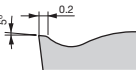
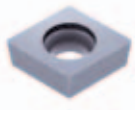
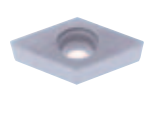
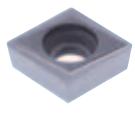
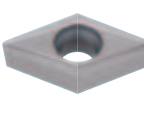
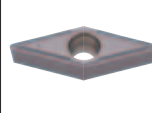
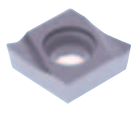
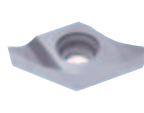
Chipbreaker Overview

TAC Positive Inserts for General Turning with hole

2

TAC Inserts

Application	Chipbreaker	C	D	S	T	V	Y	R
	Positive 7°							
		80° Positive 7°	55° Positive 7°	90° Positive 7°	60° Positive 7°	35° Positive 7°	25° Positive 7°	Positive 7°
Precision finishing	01 (G) 	 2-96	 2-105		 2-118			
	PSF (M) 	 2-96	 2-105		 2-118	 2-135		
Finishing	PF (M) 	 2-96	 2-105	 2-112		 2-135		
	W (G) 	 2-96	 2-105		 2-118			
Finishing to light cutting	PSS (M) 	 2-97	 2-106		 2-118	 2-135		
Finishing to medium cutting	PS (M) 	 2-97	 2-106	 2-112	 2-119	 2-135		
	ZF (M) 						 2-139	
	CM (M) 	 2-97	 2-106	 2-112	 2-119	 2-135		 2-140
	ZM (M) 						 2-139	

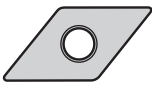
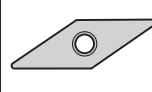
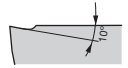
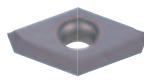
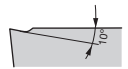
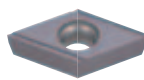
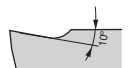
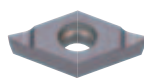
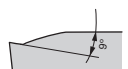
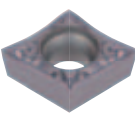
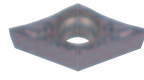
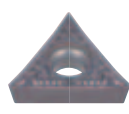
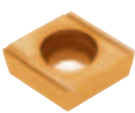
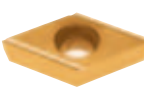
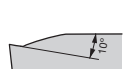
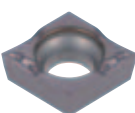
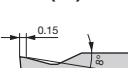
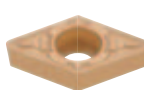
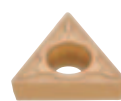
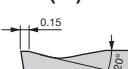
Application	Chipbreaker	C	D	S	T	V	R
	Positive 7°						
		80° Positive 7°	55° Positive 7°	90° Positive 7°	60° Positive 7°	35° Positive 7°	Positive 7°
Finishing to medium cutting	SS (G) 				 2-119		
	— (M) 	 2-101	 2-110				
	AL (G) 	 2-98	 2-106		 2-120	 2-136	 2-140
	RS (M) 						 2-140
	— (G) 	 2-101	 2-110				
	— (with hand) (G) 				 2-121		
	All-round (G) 	 2-100	 2-107			 2-136	
	Angular (G) 	 2-100	 2-107				

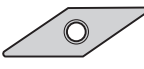
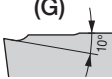
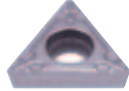
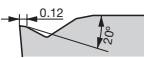
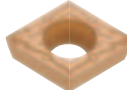
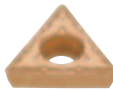
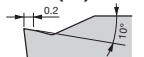
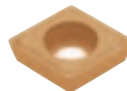
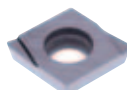
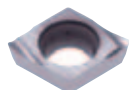
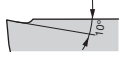
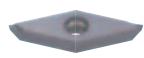
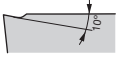
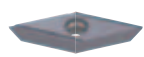
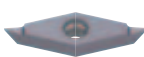
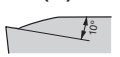
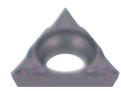
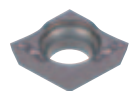
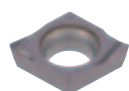
Chipbreaker Overview

TAC Positive Inserts
for General Turning with hole

2

TAC Inserts

Application	Chipbreaker	C	D	S	T	V	R
	Positive 7°						
		80° Positive 7°	55° Positive 7°	90° Positive 7°	60° Positive 7°	35° Positive 7°	Positive 7°
For external turning on small lathes (Sharp edges)	JRP (E) 		 2-107				
	JPP (E) 		 2-108				
	JSP (E) 		 2-108				
	JS (G) 	 2-99	 2-108		 2-120		
	J (G) 	 2-99	 2-109		 2-120		
	JS (G) 	 2-99					
For internal turning on small lathes							
Medium cutting	PM (M) 	 2-100	 2-109	 2-112	 2-122		
Heavy cutting	61 (M) 						 2-141

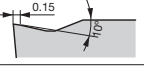
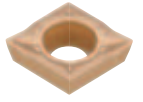
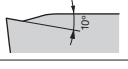
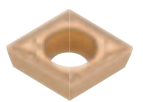
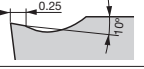
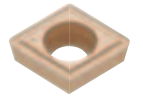
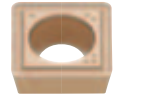
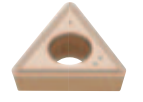
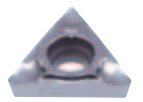
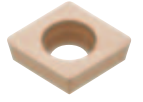
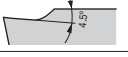
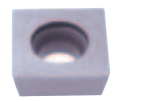
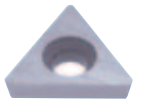
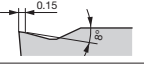
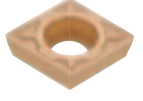
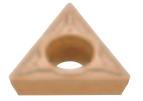
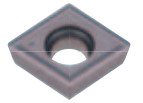
Appli- cation	Chipbreaker	C	S	T	E	V
	Positive 11°					
		80° Positive 11°	90° Positive 11°	60° Positive 11°	75° Positive 11°	35° Positive 11°
Precision finishing	01 (G) 			 2-123		
	PSF (M) 	 2-102		 2-123		
	PF (M) 	 2-102		 2-123		
	W (G) 	 2-102	 2-114	 2-124	 2-111	
For external turning on small lathes (Sharp edges)	JRP (E) 					 2-137
	JPP (E) 					 2-137
	JSP (E) 					 2-138
For internal turning on small lathes	JS (G) 			 2-124	 2-111	
	J08 (G) 				 2-111	
Finishing	— (with hand) (G) 		 Former Tungaloy-standard hole Not ISO 2-114			
	— (with hand) (G) 			 Former Tungaloy-standard hole Not ISO 2-127		

Chipbreaker Overview

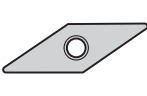
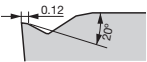
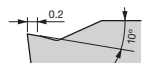
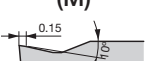
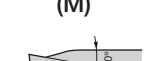
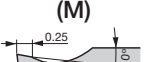
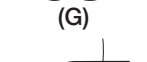
TAC Positive Inserts for General Turning with hole

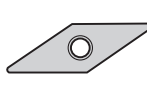
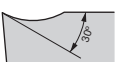
2

TAC Inserts

Application	Chipbreaker	C	S	T
	Positive 11°	 80° Positive 11°	 90° Positive 11°	 60° Positive 11°
Finishing to light cutting	PSS (M) 	 2-102		 2-125
	PS (M) 	 2-103	 2-114	 2-126
	CM (M) 	 2-103	 2-114	 2-126
	SS (G) 			 2-126
	I (M) 	 2-104	 2-115	 2-128
	H (G) 			 2-127
	I (G) 		 2-115	 2-128
Medium cutting	PM (M) 	 2-103		 2-128
	All-round (M) 	 2-103		

Application	Chipbreaker	W
	Positive 11°	 Positive 11°
Super high feed	ML (M) 	 2-132

Application	Chipbreaker	W	V
	Positive 5°		
		80° Positive 5°	35° Positive 5°
Finishing	PSF (M) 		 2-133
	PF (M) 		 2-133
	W08 (G) 	 2-132	
	W11 (G) 	 2-132	
Finishing to light cutting	PSS (M) 		 2-133
Finishing to medium cutting	PS (M) 		 2-133
	CM (M) 		 2-133
For external turning on small lathes (Sharp edges)	JS (G) 		 2-134
	J10 (G) 		 2-134
For internal turning on small lathes	JS (G) 	 2-132	

Application	Chipbreaker	W	V
	Positive 5°		
		80° Positive 5°	35° Positive 5°
For external turning on small lathes (Honed edges)	J10 (G) 		 2-134

Application	Chipbreaker	JXF
	Positive	 Positive
Front-turning Inserts	—	 2-144

Application	Chipbreaker	JXR
	Positive	 Positive
Reverse-turning Inserts	—	 2-144

Application	Chipbreaker	JXB
	Positive	 Positive
Back-turning Inserts	—	 2-145

Application	Chipbreaker	JTB
	Positive	 Positive
Back-turning Inserts	—	 2-145

Application	Chipbreaker	J10E
	Positive	 Positive
Back-turning Inserts	—	 2-146

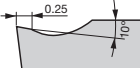
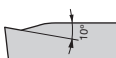
Chipbreaker Overview

TAC Positive Inserts
for General Turning

without
hole

2

TAC Inserts

Appli- cation	Chipbreaker	S	T	R
	Positive 11°			
		90° Positive 11°	60° Positive 11°	Positive 11°
Finishing	 (G)	 2-116		
	 (with hand) (G)	 2-116	 2-130	
Finishing to medium cutting	CM (M) 	 2-116	 2-130	
	 (M)	 2-117	 2-131	
	 (G)		 2-131	
	PS (M) 		 2-130	

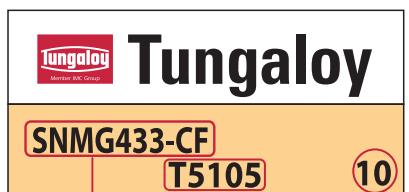
Appli- cation	Chipbreaker	RT 
	Round	 Special round inserts
Medium cutting		 2-142

TAC Insert Navigation System

TAC insert navigation system indicates the proper work material and cutting conditions for the insert grade.

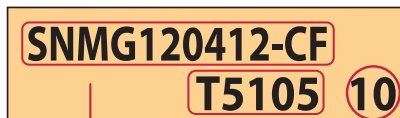
Label indication on insert case

◆ Upside of case



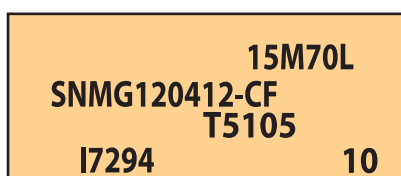
AISI identification (Cat. No. in inch system)

◆ Side of case



ISO identification (Cat. No. in metric system)

◆ Underside of case



K:Cast Iron
f=0.3(0.1-0.4)mm/rev
.012(.004-.016)ipr
Vc= 330(180-480)m/min
1083(591-1575)sfm

Indicates the proper work material for the grade.

Indicates the proper feed rate for the chipbreaker.
Upper position: ISO (Metric system)
Lower position: Inch system

Indicates the proper cutting speed for the grade.
Upper position: ISO (Metric system)
Lower position: Inch system

0.3(0.1 - 0.4)mm/rev

①

②

① Recommended feed

② Applicable feed range

330(180 - 480)m/min

①

②

① Recommended speed

② Recommended speed range



Barcode

EAN (European Article Number) code and UPC (Universal Product Code) are printed.
EAN is called JAN (Japanese Article Number) in Japan.

Work material classification system

- P** Steel : Low carbon steels, alloy steels (180HB) S10C, SCM415, SCr420H / C10E, 15CrMo5, 20Cr4H, etc.
- M** Stainless Steel : Austenitic JIS SUS304 / X5CrNi18-10, etc.
- K** Cast Iron : Grey cast irons JIS FC200 / GG20, etc.
- N** Non-ferrous Metal : Aluminium alloys
- S** Superalloys and titanium : Ni-base alloys INCONEL718, etc.
- H** Hard Materials : Hardened steels (60HRC) SKD11 / X100CrMoV5, etc.

Note: For details, refer to page 15-3 (Technical reference)

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

H

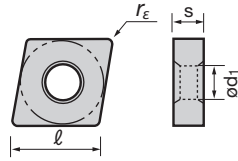
Rhombic, with hole

80°



Negative

CN

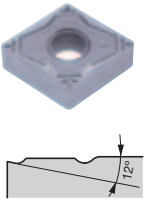
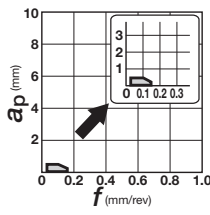
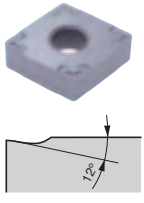
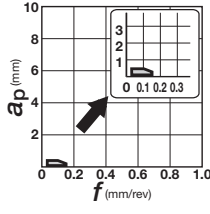
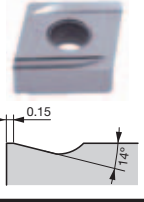
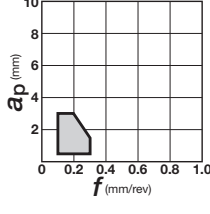
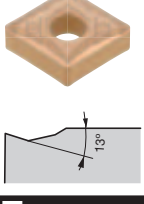
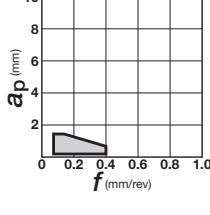
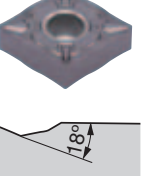
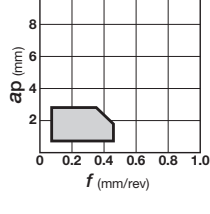


CNMG 12 04 04 -



Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

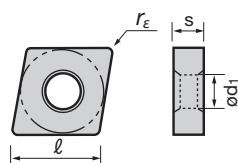
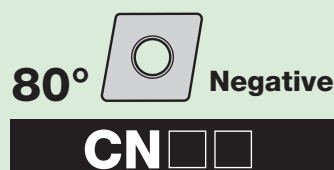
CN	0903	1204	1606	1906	2509
ød1 (mm)	3.81	5.16	6.35	7.93	9.12

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)						
	Appearance (Cross section)			Coated												Coated cermet	Cermet	Un-coated								
Precision finishing	TF (M)			CNMG120404-TF																						TAC External Toolholders (4-14 ~)
				* CNMG120408-TF																						TAC Internal Toolholders (5-33 ~)
	01 (G)			CNMG120404-TF																						TAC External Toolholders (4-14 ~, 4-86)
				CNMG120408-TF																						TAC Internal Toolholders (5-33 ~)
				CNMG120402-01																						J-series (8-20)
				CNMG120404-01																						
				* CNMG120408-01																						
	C (G)			CNMG120404R-C																						TAC External Toolholders (4-14 ~)
				CNMG120404L-C																						TAC Internal Toolholders (5-33 ~)
				* CNMG120408R-C																						
				CNMG120408L-C																						
Finishing	TSF (M)			CNMG120404-TSF	●	●	●			●										●		●				
				* CNMG120408-TSF	●	●	●	●	●											●		●				
				CNMG120412-TSF	●	●																				
	SF (M)			CNMG120404-TSF							●	●	●													TAC External Toolholders (4-14 ~, 4-86)
				CNMG120408-TSF							●	●	●													TAC Internal Toolholders (5-33 ~)
				CNMG120404-SF							●	●	●													
				* CNMG120408-SF							●	●	●													J-series (8-20)
				CNMG120412-SF							●	●	●													

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole



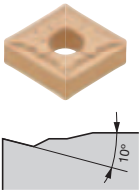
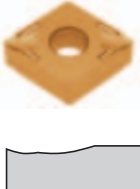
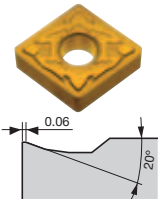
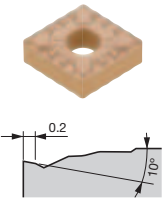
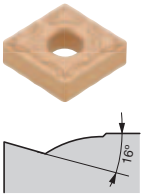
CNMG 12 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

CN	0903	1204	1606	1906	2509
ød1 (mm)	3.81	5.16	6.35	7.93	9.12

2

TAC Inserts

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)									
	Appearance (Cross section)			Coated										Coated cermet		Cermet										
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	T5105	T5115	T5125	GH330	GT720	GT730	GT530	NS730	NS520	NS530			
Finishing	TS (M)		CNMG120404-TS *CNMG120408-TS CNMG120412-TS	●	●	●	●	▲												●			▲	●	TAC External Toolholders (4-14 ~ TAC Internal Toolholders (5-33 ~	
	SS (M)		CNMG120404-SS *CNMG120408-SS CNMG120412-SS					●	●	●	●	●	●				●									
	CF (M)		CNMG120404-CF CNMG120408-CF *CNMG120412-CF											●	●											
	ZF (M)		CNMG120404-ZF *CNMG120408-ZF CNMG120412-ZF	●	●														●	●		●				
	NS (M)		CNMG120404-NS *CNMG120408-NS		●	●																		●	●	

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

C

D

S

T

W

V

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K

H

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

H

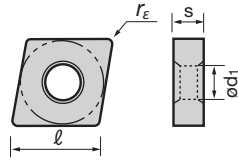
Rhombic, with hole

80°



Negative

CN



CNMG 12 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

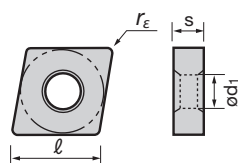
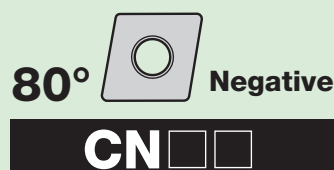
CN	0903	1204	1606	1906	2509
ød1 (mm)	3.81	5.16	6.35	7.93	9.12

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)						
	Appearance (Cross section)			Coated						Coated cermet		Cermet			Uncoated					
				T9105	T9115	T9125	T9135	T6120	T6130	GH330		GT720	GT730		NS730	NS530		TH10		
Finishing	AFW (M)		CNMG120404-AFW	●	●	●							●			●				
			* CNMG120408-AFW	●	●	●	●						●							
	11 (M)		CNMG120404-11						▲							▲	●		●	
			* CNMG120408-11										●			▲	●		●	
Finishing of mild steels	17 (M)		CNMG120404-17														●			
			* CNMG120408-17														●			
	ASW (M)		* CNMG120408-ASW	●	●	●											●			
			CNMG120412-ASW	●	●	●											●			
High feed, small depth of cutting	AS (M)		CNMG120404-AS	●	●	●											●			
			* CNMG120408-AS	●	●	●	●										●			
			CNMG120412-AS		●	●	●													

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole



CNMG 12 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

CN	0903	1204	1606	1906	2509
ød1 (mm)	3.81	5.16	6.35	7.93	9.12

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades											Applicable toolholders (pages)		
	Appearance (Cross section)			Coated						Coated cermet	Cermet						
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	GT730	GT530	NS530			
Boring (Double sided chipbreaker)	CB (M) 		CNMG090304-CB												●	TAC External Toolholders (4-15 ~)	
	*CNMG090308-CB											●				TAC Internal Toolholders (5-33 ~)	
Finishing to medium cutting	ZM (M) 		*CNMG120408-ZM	●	●	●						●	●			TAC External Toolholders (4-14 ~)	
	CNMG120412-ZM		●	●	●						●	●				TAC Internal Toolholders (5-33 ~)	
	CNMG120416-ZM		●	●													
	27 (M) 		CNMG120404-27											●			
	*CNMG120408-27												●				
	NM (M) 		CNMG120408-NM	●	●	●	●							●			
	*CNMG120412-NM		●	●	●												
Medium cutting	TM (M) 		CNMG090304-TM	●	●											TAC External Toolholders (4-14 ~, 4-86)	
	CNMG090308-TM		●	●	●											TAC Internal Toolholders (5-33 ~)	
	CNMG120404-TM		●	●	●	●	●									J-series (8-20)	
	*CNMG120408-TM		●	●	●	●	●										
	CNMG120412-TM		●	●	●	●	●										
	CNMG120416-TM		●	●	●	●	●										
	CNMG160612-TM		●	●	●	●											
	CNMG190608-TM		●	●	●	●											
	CNMG190612-TM		●	●	●	●											

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

S

T

W

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TAC Inserts, Negative

2

TAC Inserts

C

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H

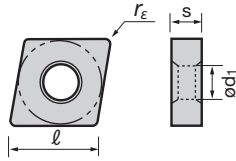
Rhombic, with hole

80°



Negative

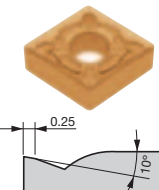
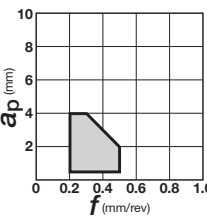
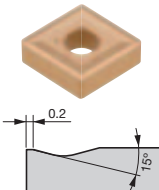
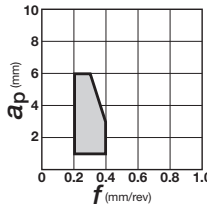
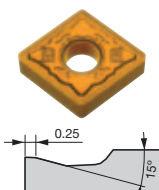
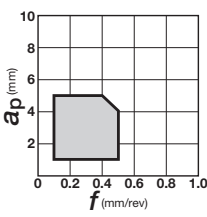
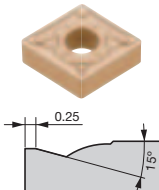
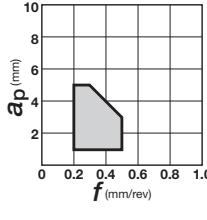
CN



CNMG 12 04 04 -

Cutting edge length (ℓ) Thickness (s) Corner radius (r_E) Chipbreaker symbol

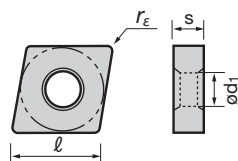
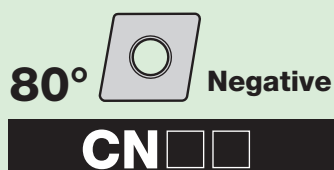
CN	0903	1204	1606	1906	2509
ød1 (mm)	3.81	5.16	6.35	7.93	9.12

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)						
	Appearance (Cross section)			Coated												Coated cermet	Cermet	Un-coated								
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	T5105	T5115	T5125	AH110	AH120	GT720		GT730	NS730	NS520	NS530	TH10	
Medium cutting	SM (M)			CNMG120404-SM					●	●	●	●	●													TAC External Toolholders (4-14 ~)
				*CNMG120408-SM					●	●	●	●	●													TAC Internal Toolholders (5-33 ~)
				CNMG120412-SM					●	●	●	●	●													
	All-round (M)			CNMG090304	●	●													●		●		●			TAC External Toolholders (4-14 ~, 4-86)
				CNMG090308	●	●	●	●											●	●		●		●		TAC Internal Toolholders (5-33 ~)
				CNMG120404	●	●	●	●							●	●	●	●	●		●		●	●	●	
				*CNMG120408	●	●	●	●							●	●	●	●	●		●	▲	●	●	●	J-series (8-20)
				CNMG120412	●	●	●	●							●	●	●	●	●			▲		●	●	
				CNMG120416	●	●	●	●							●	●	●									
				CNMG160608	●	●	●	●							●	●	●									
				CNMG160612	●	●	●	●							●	●	●									
				CNMG160616	●	●	●	●							●	●	●									
				CNMG190608		●	●	●																		
				CNMG190612	●	●	●	●							●	●	●									
				CNMG190616		●	●	●							●	●	●									
		CM (M)			CNMG120404-CM										●	●	●									TAC External Toolholders (4-14 ~)
					CNMG120408-CM										●	●	●									TAC Internal Toolholders (5-33 ~)
					*CNMG120412-CM										●	●	●									
				CNMG160608-CM										●	●	●										
				CNMG160612-CM										●	●	●										
	DM (M)			CNMG120404-DM	●	●																				
				*CNMG120408-DM	●	●	●	●																		
				CNMG120412-DM	●	●	●	●																		
				CNMG120416-DM																						

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

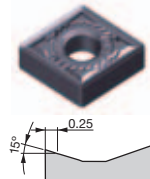
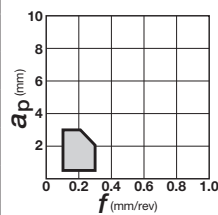
Rhombic, with hole



CNMG 12 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

CN	0903	1204	1606	1906	2509
ød1 (mm)	3.81	5.16	6.35	7.93	9.12

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	Appearance (Cross section)			Coated					Coated cermet	Cermet		Uncoated																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
				T6120	T6130	T5105	T5115	AH110	AH905	GH330	GT720	NS520	NS530		TH10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Medium cutting	HMM (M) 		CNMG120404-HMM *CNMG120408-HMM CNMG120412-HMM CNMG160608-HMM CNMG160612-HMM CNMG160616-HMM																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

S

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W

V

Y

R

K

H

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

H

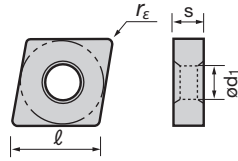
Rhombic, with hole

80°



Negative

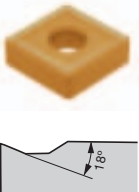
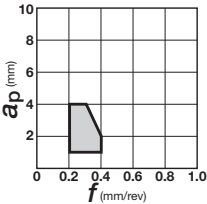
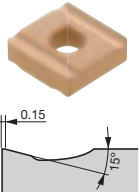
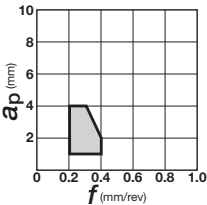
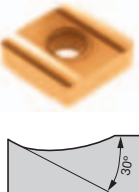
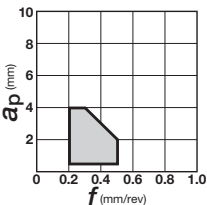
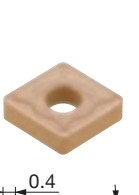
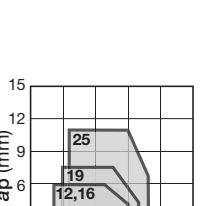
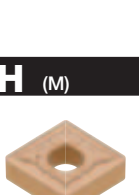
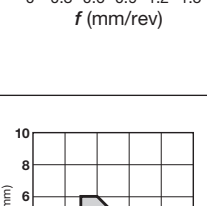
CN



CNMG 12 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

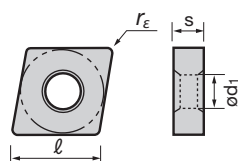
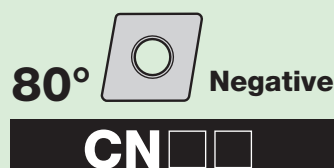
CN	0903	1204	1606	1906	2509
ød1 (mm)	3.81	5.16	6.35	7.93	9.12

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)					
	Appearance (Cross section)			Coated										Coated cermet	Cermet	Un-coated						
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	AH120	GH110	GH330		GT720	GT730	NS530		TH10
Medium cutting	SA (M) 		CNMG120404-SA *CNMG120408-SA CNMG120412-SA CNMG190612-SA CNMG190616-SA						●	●	●	●	●	●							●	
	S (M) 		CNMG120404R-S CNMG120404L-S *CNMG120408R-S CNMG120408L-S		●	●			●	●	●	●	●		●		●				●	
	P (G) 		CNMG120404R-P CNMG120404L-P *CNMG120408R-P CNMG120408L-P											●			●			●		
	THS (M) 		CNMG120408-THS CNMG120412-THS CNMG120416-THS *CNMG160612-THS CNMG160616-THS CNMG190612-THS CNMG190616-THS CNMG190624-THS CNMG250924-THS	●	●	●																
	TH (M) 		*CNMG120408-TH CNMG120412-TH CNMG120416-TH CNMG160612-TH CNMG160616-TH CNMG190612-TH CNMG190616-TH	●	●	●	●		●													

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole



CNMG 12 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

CN	0903	1204	1606	1906	2509
ød1 (mm)	3.81	5.16	6.35	7.93	9.12

Application	Chipbreaker	$f \sim ap$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)		
	Appearance (Cross section)			Coated												
				T9105	T9115	T9125	T9135	T6120	T6130	AH630	AH645	T5105	T5115	T5125		
Medium to heavy cutting	SH (M)		CNMG120408-SH						●	●						TAC External Toolholders (4-14 ~) TAC Internal Toolholders (5-33 ~)
			CNMG120412-SH						●	●	●					
			CNMG120416-SH						●	●	●					
			*CNMG160612-SH						●	●	●					
			CNMG160616-SH						●	●	●					
			CNMG190612-SH						●	●	●					
			CNMG190616-SH						●	●	●					
			CNMG190612-SH						●	●	●					
Medium to heavy cutting	CH (M)		CNMG120404-CH									●	●	●		TAC External Toolholders (4-14 ~) TAC Internal Toolholders (5-33 ~)
			CNMG120408-CH									●	●	●		
			*CNMG120412-CH									●	●	●		
			CNMG160612-CH									●	●	●		
			CNMG160616-CH									●	●	●		
			CNMG190612-CH									●	●	●		
			CNMG190616-CH									●	●	●		
			CNMG190612-CH									●	●	●		
Medium to heavy cutting (Single sided)	TRS (M)		CNMM120408-TRS	●	●	●										TAC External Toolholders (4-14 ~) TAC Internal Toolholders (5-33 ~)
			CNMM120412-TRS	●	●	●										
			*CNMM160612-TRS	●	●	●										
			CNMM160616-TRS	●	●	●										
			CNMM190616-TRS	●	●	●										
			CNMM190624-TRS	●	●	●										
			CNMM250924-TRS	●	●	●										
			CNMM250924-TRS	●	●	●										
Heavy cutting (Single sided)	TUS (M)		*CNMM190608-TUS	●	●											TAC External Toolholders (4-14 ~)
			CNMM190612-TUS	●	●	●										
			CNMM190616-TUS	●	●	●										
			CNMM190624-TUS	●	●	●										
			CNMM190632-TUS	●	●											
			CNMM250916-TUS	●	●	●										
			CNMM250924-TUS	●	●	●										
			CNMM250932-TUS	●	●											
Heavy cutting (Single sided)	TU (M)		CNMM190612-TU		●	●										TAC External Toolholders (4-14 ~)
			*CNMM190616-TU		●	●										
			CNMM190624-TU	●	●	●										
			CNMM250724-TU													
			CNMM250924-TU		●	●										

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, Negative

2

TAC Inserts

C

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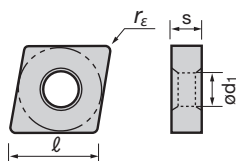
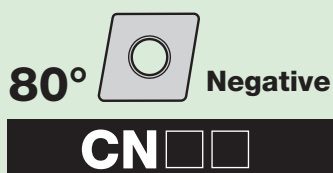
Y

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K

H

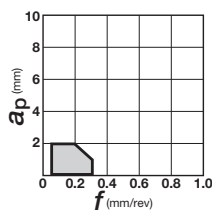
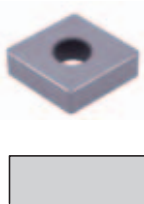
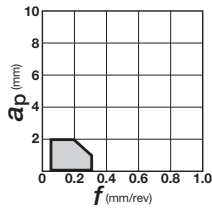
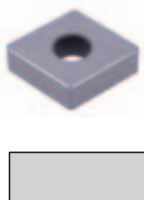
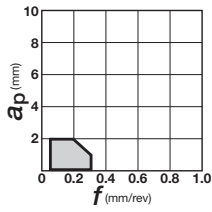
Rhombic, with hole



CNMA 12 04 04

Cutting edge length (l) Thickness (s) Corner radius (rE)

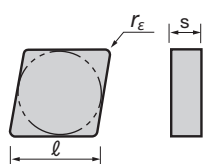
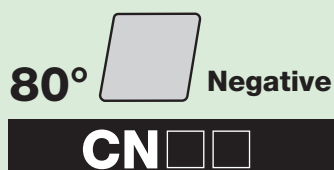
CN	0903	1204	1606	1906	2509
ød1 (mm)	3.81	5.16	6.35	7.93	9.12

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades														Applicable toolholders (pages)					
	Appearance (Cross section)			Coated						Cermet		Uncoated		Ceramics									
				T9105	T9115	T9125	T9135	T5105	T5115	T5125			NS520	NS530		TH10			FX105	LX21	LX11		
Finishing to medium cutting	- (M)			CNMA120404				●	●	●						●				●			TAC External Toolholders (4-14 ~) TAC Internal Toolholders (5-33 ~)
				CNMA120408	●				●	●	●			▲			●			●			
				CNMA120412	●				●	●	●						●			●			
				CNMA120416	●				●	●	●						●						
				CNMA160608					●	●	●												
				CNMA160612					●	●	●												
				CNMA160616					●	●	●												
				CNMA190612					●	●	●												
				CNMA190616					●	●	●												
	Wiper (M)			CNMA120408W																	●		
				CNMA120412W																	●		
				CNMA120416W																	●		
	- (G)			CNGA120404											●						●	●	
				CNGA120408										●							●	●	
				CNGA120412																	●	●	
				CNGA120416																	●	●	
				CNGA120420																		●	

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, without hole



CN MN 12 04 04

Cutting edge length (l) Thickness (s) Corner radius (r_e)

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades														Applicable toolholders (pages)
	Appearance (Cross section)			Ceramics														
Finishing to medium cutting	(G)		CNGD120712	●	●	●	●											TAC External Toolholders (4-36)
		CNGD120716	●	●	●	●												
	(M)		CNMN120408	●	●	●	●											TAC External Toolholders (4-46)
		CNMN120412	●	●	●	●												
	(G)		CNGN120404				●											
		CNGN120408	●	●														
		CNGN120412	●	●														
		CNGN120416	●	●	●													
		CNGN120420	●															
		CNGN120708	●	●														
		CNGN120712	●	●														
		CNGN120716	●	●														
CNGN120720			●															
Finishing to roughing	(G)		CNGX120708	●														
		CNGX120712	●															
		CNGX120716	●		●													

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

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TAC Inserts, Negative

2

TAC Inserts

C

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V

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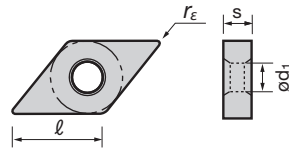
K

H

Rhombic, with hole

55° Negative

DN



DNMG 15 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

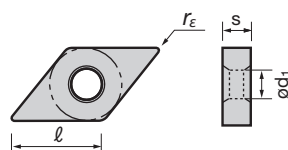
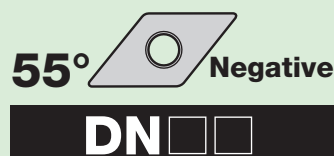
DN	1104	1504	1506
od1 (mm)	3.81	5.16	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)				
	Appearance (Cross section)			Coated										Coated cermet	Cermet	Uncoated								
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	GH110	GH330	GT720	GT730	GT530	NS730		NS520	NS530	TH10	KS20
Precision finishing	TF (M)		DNMG150404-TF *DNMG150408-TF																					TAC External Toolholders (4-18 ~) TAC Internal Toolholders (5-34 ~)
	01 (G)		DNMG110402-01 DNMG110404-01 DNMG110408-01 DNMG150402-01 DNMG150404-01 *DNMG150408-01																					TAC External Toolholders (4-18 ~, 4-86) TAC Internal Toolholders (5-34 ~) J-series (8-20)
	TSF (M)		DNMG150404-TSF *DNMG150408-TSF DNMG150412-TSF DNMG150604-TSF DNMG150608-TSF DNMG150612-TSF																					TAC External Toolholders (4-18 ~) TAC Internal Toolholders (5-34 ~)
	SF (M)		DNMG150404-SF *DNMG150408-SF DNMG150604-SF DNMG150608-SF																					
	TS (M)		DNMG150404-TS *DNMG150408-TS DNMG150412-TS DNMG150604-TS DNMG150608-TS DNMG150612-TS																					
Finishing																								

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole



DNMG 15 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

DN 	1104 	1504 	1506
ød1 (mm)	3.81	5.16	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)						
	Appearance (Cross section)			Coated										Coated cermet	Cermet	Un- coated										
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	T5105	T5115	T5125	GH330	GT730	GT530		NS730	NS520	NS530	TH10	KS20	
Finishing	SS (M)	 	 a_p (mm) f (mm/rev)	DNMG150404-SS						●	●	●	●	●					●							TAC External Toolholders (4-18 ~)
				DNMG150408-SS						●	●	●	●	●					●						●	TAC Internal Toolholders (5-34 ~)
				*DNMG150412-SS						●	●	●	●	●												
				DNMG150604-SS						●	●	●	●	●					●							
				DNMG150608-SS						●	●	●	●	●					●							
				DNMG150612-SS						●	●	●	●	●												
				DNMG150404-CF											●	●										
				DNMG150408-CF											●	●										
				*DNMG150412-CF											●	●										
				DNMG150604-CF											●	●										
				DNMG150608-CF											●	●										
				DNMG150612-CF											●	●										
				DNMG150404-ZF		●	●	●										●	●		●					
				*DNMG150408-ZF		●	●	●										●	●		●					
				DNMG150412-ZF		●	●	●																		
				DNMG150604-ZF		●	●																			
				DNMG150608-ZF		●	●	●																		
				DNMG150612-ZF		●	●																			
				DNMG150404-NS				●																●		
				*DNMG150408-NS		●	●	●															●			
				DNMG150604-NS																						
				DNMG150608-NS																						
			DNMG110404-11																	●	●					
			DNMG110408-11																	●	●					
			*DNMG150404-11													●				●	●	●	●			
			DNMG150408-11																	●	●					

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, Negative

2

TAC Inserts

C

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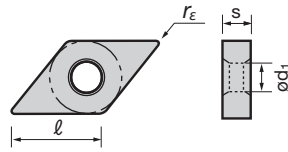
K

H

Rhombic, with hole

55° Negative

DN



DNMG 15 04 04 -



Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

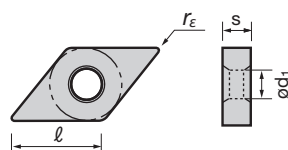
DN	1104	1504	1506
ød1 (mm)	3.81	5.16	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)									
	Appearance (Cross section)			Coated					Coated cermet	Cermet													
				T9105	T9115	T9125	T9135	T6120	T6130			GT730	GT530		NS730	NS530							
Finishing of mild steels	17 (M)		DNMG150404-17 * DNMG150408-17														●						TAC External Toolholders (4-18 ~) TAC Internal Toolholders (5-34 ~)
																	●						
High feed, small depth of cut	AS (M)		DNMG150404-AS * DNMG150408-AS DNMG150412-AS DNMG150604-AS DNMG150608-AS DNMG150612-AS	●		●											●						
				●		●	●										●						
				●		●	●										●						
				●													●						
				●	●												●						
				●	●												●						
Boring (Double sided chipbreaker)	CB (M)		DNMG110404-CB * DNMG110408-CB		●												●						TAC External Toolholders (4-18 ~, 4-86) TAC Internal Toolholders (5-34 ~) J-series (8-20)
				●													●						
Finishing to medium cutting	ZM (M)		* DNMG150408-ZM DNMG150412-ZM DNMG150416-ZM DNMG150608-ZM DNMG150612-ZM DNMG150616-ZM	●	●	●						●	●										TAC External Toolholders (4-18 ~) TAC Internal Toolholders (5-34 ~)
				●	●	●						●											
				●	●	●																	
				●	●	●																	
				●	●																		
				●	●																		
Finishing to medium cutting	27 (M)		DNMG150404-27 * DNMG150408-27														●						
																	●						

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

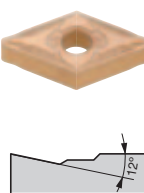
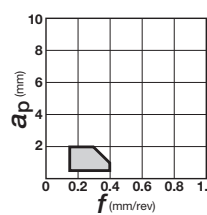
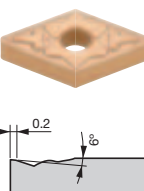
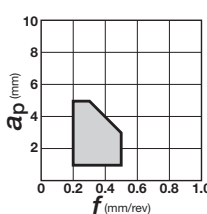
Rhombic, with hole



DNMG 15 04 04 -

Cutting edge length (ℓ) Thickness (s) Corner radius (r_e) Chipbreaker symbol

DN	1104	1504	1506
ød1 (mm)	3.81	5.16	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)								
	Appearance (Cross section)			Coated										Coated cermet	Cermet	Un-coated												
Finishing to medium cutting	NM (M)			* DNMG150408-NM	T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	T5105	T5115	T5125	AH110	AH120	GT730			NS730	NS520	NS530	TH10	TAC External Toolholders (4-18 ~) TAC Internal Toolholders (5-34 ~)	
				DNMG150412-NM																								
				DNMG150608-NM																								
				DNMG150612-NM																								
Medium cutting	TM (M)			DNMG110404-TM																							TAC External Toolholders (4-18 ~, 4-86) TAC Internal Toolholders (5-34 ~)	
				DNMG110408-TM																								
				DNMG150404-TM																								
				* DNMG150408-TM																							J-series (8-20)	
				DNMG150412-TM																								
				DNMG150416-TM																								
				DNMG150604-TM																								
				DNMG150608-TM																								
				DNMG150612-TM																								
				DNMG150616-TM																								
				DNMG150404-SM																							TAC External Toolholders (4-18 ~) TAC Internal Toolholders (5-34 ~)	
				* DNMG150408-SM																								
				DNMG150412-SM																								
				DNMG150604-SM																								
				DNMG150608-SM																								
				DNMG150612-SM																								
				DNMG110404																							TAC External Toolholders (4-18 ~, 4-86) TAC Internal Toolholders (5-34 ~)	
				DNMG110408																								
				DNMG150404																								
			* DNMG150408																							J-series (8-20)		
			DNMG150412																									
			DNMG150416																									
			DNMG150604																									
			DNMG150608																									
			DNMG150612																									
			DNMG150616																									

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, Negative

2

TAC Inserts

C

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W

V

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R

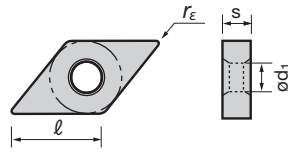
K

H

Rhombic, with hole

55° Negative

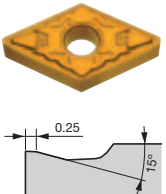
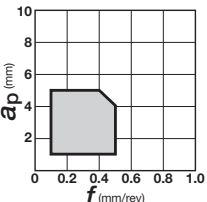
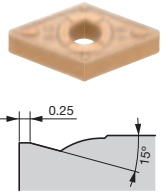
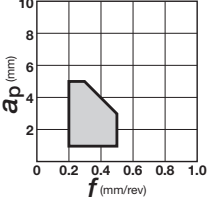
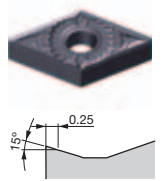
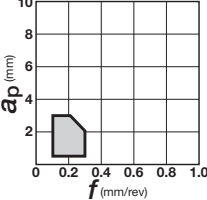
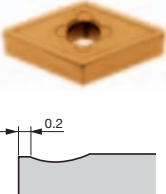
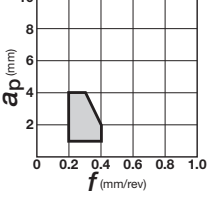
DN



DNMG 15 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

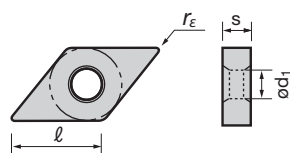
DN	1104	1504	1506
ød1 (mm)	3.81	5.16	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)				
	Appearance (Cross section)			Coated										Cermet		Uncoated					
				T9105	T9115	T9125	T9135	T6120	T6130	T5105	T5115	T5125	AH110	AH905	GH110	GH330		NS530			TH10
Medium cutting	CM (M)			DNMG150404-CM																	TAC External Toolholders (4-18 ~) TAC Internal Toolholders (5-34 ~)
			DNMG150408-CM																		
			DNMG150412-CM																		
			DNMG150604-CM																		
			DNMG150608-CM																		
			DNMG150612-CM																		
	DM (M)			DNMG150404-DM																	
			*DNMG150408-DM																		
			DNMG150412-DM																		
			DNMG150416-DM																		
			DNMG150604-DM																		
			DNMG150608-DM																		
			DNMG150612-DM																		
			DNMG150616-DM																		
	HMM (M)			DNMG150404-HMM																	
			*DNMG150408-HMM																		
			DNMG150412-HMM																		
	33 (M)			DNMG150404-33																	
			*DNMG150408-33																		

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

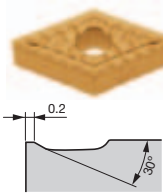
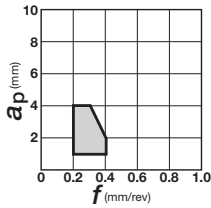
Rhombic, with hole



DNMG 15 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

DN	1104	1504	1506
ød1 (mm)	3.81	5.16	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades								Applicable toolholders (pages)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Appearance (Cross section)			Coated		Coated cermet	Cermet																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Medium cutting	37 (M)			DNMG150404-37	T6120	T6130	GH330				GT530		NS730	NS530																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

H

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

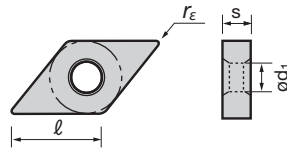
H

Rhombic, with hole

55°

Negative

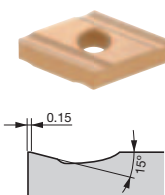
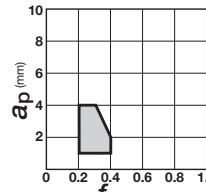
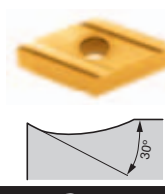
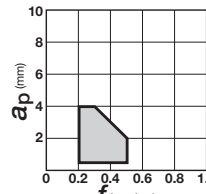
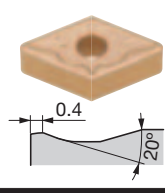
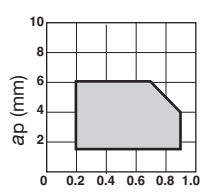
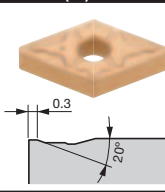
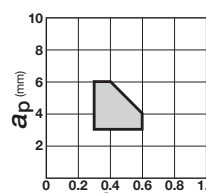
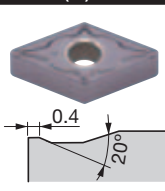
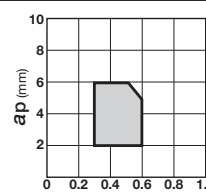
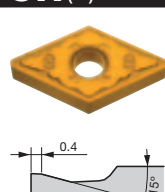
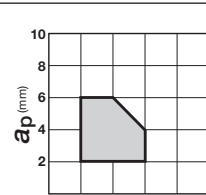
DN



DNMG 15 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

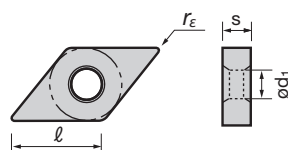
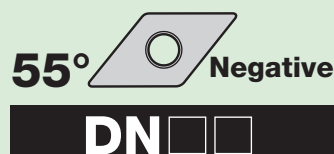
DN	1104	1504	1506
od1 (mm)	3.81	5.16	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)					
	Appearance (Cross section)			Coated										Coated cermet	Cermet	Un- coated						
				T9105	T9115	T9125	T9135	T6030	T6120	T6130	AH630	AH645	T5105	T5115	T5125	GH110		GH330	GT730		NS730	NS630
Medium cutting	S (M) 		DNMG150404R-S DNMG150404L-S *DNMG150408R-S DNMG150408L-S DNMG150604R-S DNMG150604L-S DNMG150608R-S DNMG150608L-S	●	●	●	●	●	●	●					●		●		●			TAC External Toolholders (4-18 ~) TAC Internal Toolholders (5-34 ~)
	P (G) 		DNGG150402R-P DNGG150402L-P *DNGG150404R-P DNGG150404L-P DNGG150408R-P DNGG150408L-P										●								●	
	THS (M) 		DNMG150408-THS DNMG150412-THS DNMG150416-THS DNMG150608-THS *DNMG150612-THS DNMG150616-THS	●	●	●																
	TH (M) 		*DNMG150408-TH DNMG150412-TH DNMG150416-TH DNMG150608-TH DNMG150612-TH DNMG150616-TH	●	●	●	●															
	SH (M) 		DNMG150408-SH *DNMG150412-SH DNMG150416-SH DNMG150608-SH DNMG150612-SH					●	●	●												
	CH (M) 		DNMG150404-CH DNMG150408-CH *DNMG150412-CH DNMG150604-CH DNMG150608-CH DNMG150612-CH								●	●	●									

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole



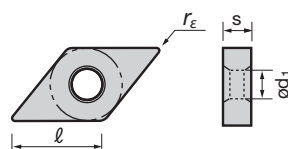
DNMA 15 04 04

Cutting edge length (l) Thickness (s) Corner radius (r_e)

DN	1104	1504	1506
ød1 (mm)	3.81	5.16	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades												Applicable toolholders (pages)							
	Appearance (Cross section)			Coated			Coated cermet		Cermet		Uncoated		Ceramics										
Finishing to medium cutting	(M)		DNMA150404	T5105	T5115	T5125				GT720	GT730		NS730	NS520		TH10				FX105	LX21	LX11	TAC External Toolholders (4-18 ~) TAC Internal Toolholders (5-34 ~)
			DNMA150408	●	●	●				●						●							
			DNMA150412	●	●	●																	
			DNMA150604	●	●	●																	
			DNMA150608	●	●	●																	
			DNMA150612	●	●	●																	
	(G)		DNGA150404																				
			DNGA150408																				
			DNGA150412																				
			DNGA150416																				
			DNGA150608																				
			DNGA150612																				
			DNGA150616																				
			DNGA150620																				

Rhombic, with hole



DXGU 07 03 02 R -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Hand Chipbreaker symbol

DXGU	0703
ød1 (mm)	2.7

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)
	Appearance (Cross section)			Coated	Coated cermet	Cermet								
Finishing (low cutting forces)	SS (G)		DXGU070302R-SS	●	●	●								TAC Internal Toolholders (5-31)
			DXGU070302L-SS	●	●	●								
			DXGU070304R-SS	●	●	●								
			* DXGU070304L-SS	●	●	●								
Finishing to medium cutting	TS (G)		DXGU070302R-TS	●	●	●								
			DXGU070302L-TS	●	●	●								
			DXGU070304R-TS	●	●	●								
			* DXGU070304L-TS	●	●	●								
			DXGU070308R-TS	●	●	●								
			DXGU070308L-TS	●	●	●								

● : Stocked items
▲ : Discontinued items

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

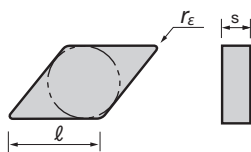
H

Rhombic, without hole

55°

Negative

DN



DNGN 15 04 04

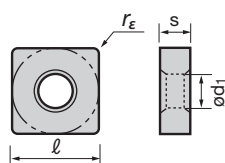
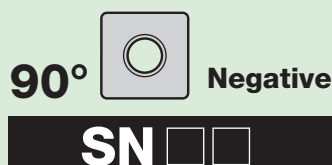
Cutting edge length (l) Thickness (s) Corner radius (r_e)

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades														Applicable toolholders (pages)
	Appearance (Cross section)			Ceramics														
Finishing to medium cutting			DNGD150708	●	●	●												TAC External Toolholders (4-36 ~)
	DNGD150712		●	●	●													
	DNGD150716		●	●	●													
			DNGN150404			●												
	DNGN150408				●													
	DNGN150412		●	●														
	DNGN150416		●	●														
	DNGN150708			●														
	DNGN150712			●														
	DNGN150716			●														
			DNGX120712	●	●	●												
	DNGX150708																	
	DNGX150712		●	●	●													
	DNGX150716																	

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

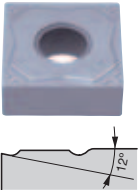
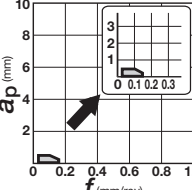
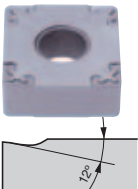
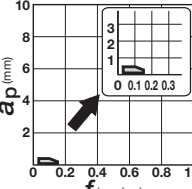
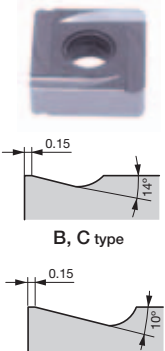
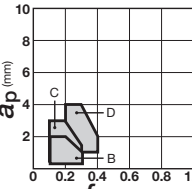
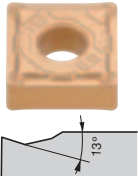
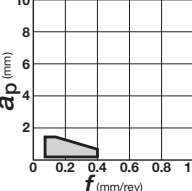
Square, with hole



SNMG 12 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

SN	0903	1204	1506	1906	2507(09)	3109
ød1 (mm)	3.81	5.16	6.35	7.93	9.12	8.80

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades												Applicable toolholders (pages)				
	Appearance (Cross section)			Coated						Coated cermet		Cermet								
				T9105	T9115	T9125	T9135	T6120	T6130			GT730	GT530		NS730	NS520	NS530	X407		
Precision finishing	TF (M)		SNMG120404-TF									●				●	●			TAC External Toolholders (4-25 ~)
			* SNMG120408-TF									●				●	●			TAC Internal Toolholders (5-36 ~)
	01 (G)		SNMG120404-01																	
			SNMG120408-01																	
			SNMG120404-01																	
			SNMG120408-01																	
			SNMG120404-01																	
			SNMG120408-01																	
			SNMG120404-01																	
			SNMG120408-01																	
	B ~ D (G)		SNMG120404-B									●				●	●			
			SNMG120408-B									●				●	●			
			SNMG120404-C									●				●	●			
			SNMG120408-C									●				●	●			
			SNMG120404-D									●				●	●			
			SNMG120408-D									●				●	●			
			SNMG120404-B									●				●	●			
			SNMG120408-B									●				●	●			
			SNMG120404-C									●				●	●			
			SNMG120408-C									●				●	●			
Finishing	TSF (M)		SNMG120404-TSF	●	●							●								
			* SNMG120408-TSF	●	●							●				●				
			SNMG120412-TSF	●	●															

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

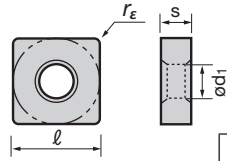
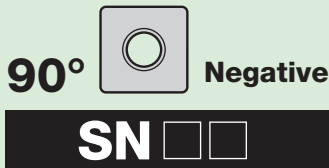
Y

R

K

H

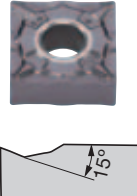
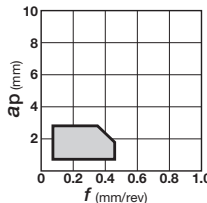
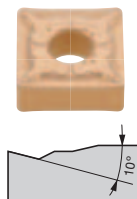
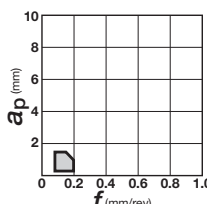
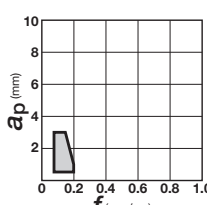
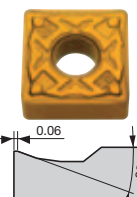
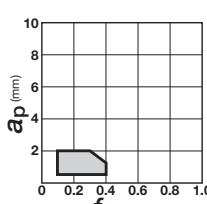
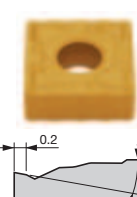
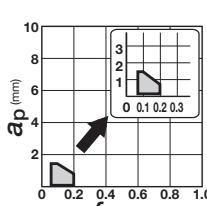
Square, with hole



SNMG 12 04 04 -

Cutting edge length (ℓ) Thickness (s) Corner radius (r_ε) Chipbreaker symbol

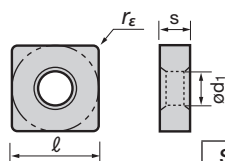
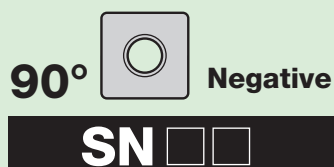
SN	0903	1204	1506	1906	2507(09)	3109
ød1 (mm)	3.81	5.16	6.35	7.93	9.12	8.80

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																	Applicable toolholders (pages)		
	Appearance (Cross section)			Coated													Coated cermet		Cermet				
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	T5105	T5115	T5125	GH330	GT730	GT530	NS730		NS520	NS530
Finishing	SF (M)	 	SNMG120404-SF * SNMG120408-SF																				TAC External Toolholders (4-25 ~) TAC Internal Toolholders (5-36 ~)
	TS (M)	 	SNMG120404-TS * SNMG120408-TS SNMG120412-TS																				
	SS (M)	 	SNMG120404-SS * SNMG120408-SS SNMG120412-SS																				
	CF (M)	 	SNMG120408-CF * SNMG120412-CF																				
	ZF (M)	 	SNMG120404-ZF * SNMG120408-ZF SNMG120412-ZF																				

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

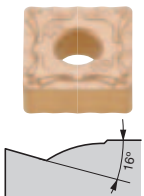
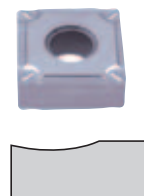
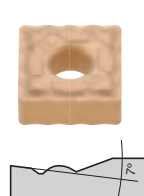
Square, with hole



SNMG 12 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

SN	0903	1204	1506	1906	2507(09)	3109
ød1 (mm)	3.81	5.16	6.35	7.93	9.12	8.80

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)					
	Appearance (Cross section)			Coated				Coated cermet	Cermet		Uncoated								
Finishing	NS (M)		SNMG120404-NS * SNMG120408-NS SNMG120412-NS	T9105	T9115	T9125	T9135					GT730		NS730	NS520	NS530	TH10		TAC External Toolholders (4-25 ~) TAC Internal Toolholders (5-36 ~)
	11 (M)		SNMG120404-11 SNMG120408-11 * SNMG120412-11																
	ZM (M)		* SNMG120408-ZM SNMG120412-ZM SNMG120416-ZM																
	27 (M)		* SNMG120408-27																

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

H

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

H

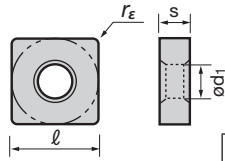
Square, with hole

90°



Negative

SN

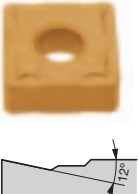
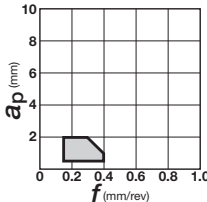
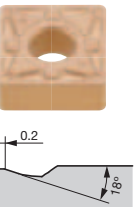
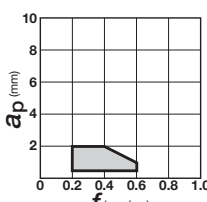
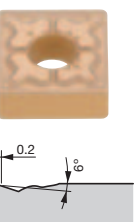
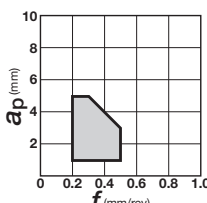
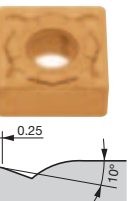
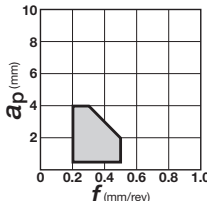


SNMG 12 04 04 -



Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

SN	0903	1204	1506	1906	2507(09)	3109
ød1 (mm)	3.81	5.16	6.35	7.93	9.12	8.80

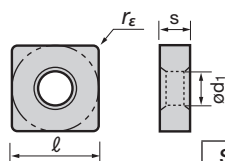
Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)						
	Appearance (Cross section)			Coated												Coated cermet	Cermet	Un- coated								
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	T5105	T5115	T5125	AH110	AH120	GT720		GT730		NS730	NS520	NS530	TH10
Finishing to medium cutting	NM (M)			* SNMG120412-NM																						TAC External Toolholders (4-25 ~) TAC Internal Toolholders (5-36 ~)
High feed, small depth of cut	AS (M)			SNMG120404-AS																						
				* SNMG120408-AS			●	●																●		
				SNMG120412-AS																						
Medium cutting	TM (M)			SNMG090304-TM			●	●	●																	
				SNMG090308-TM			●	●	●																	
				SNMG120404-TM			●	●		●																
				* SNMG120408-TM			●	●	●	●	●															
				SNMG120412-TM			●	●	●	●	●															
				SNMG120416-TM			●	●	●	●	●															
				SNMG150608-TM			●																			
				SNMG150612-TM			●																			
				SNMG190608-TM			●																			
				SNMG190612-TM			●																			
		SM (M)			* SNMG120408-SM						●	●	●	●	●	●										
				SNMG120412-SM						●	●	●	●	●	●											

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

90° Negative

SN

SNMG 12 04 04 -

Cutting edge length (ℓ) Thickness (s) Corner radius (r_E) Chipbreaker symbol

SN□□	0903□□	1204□□	1506□□	1906□□	2507(09)□□	3109□□
ød1 (mm)	3.81	5.16	6.35	7.93	9.12	8.80

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

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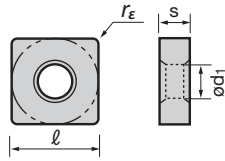
Square, with hole

90°



Negative

SN



SNMG 12 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

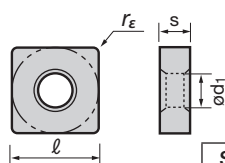
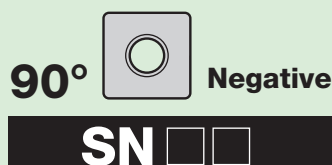
SN	0903	1204	1506	1906	2507(09)	3109
ød1 (mm)	3.81	5.16	6.35	7.93	9.12	8.80

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)					
	Appearance (Cross section)			Coated										Coated cermet		Cermet		Un-coated				
				T9015	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	AH120	GH110	GH330		GT720	GT730	NS530		TH10
Medium cutting	37 (M)			SNMG120404-37														●				TAC External Toolholders (4-25 ~)
				* SNMG120408-37									●					●				TAC Internal Toolholders (5-36 ~)
	SA (M)			* SNMG120404-SA				●	●	●	●	●	●									
				SNMG120408-SA				●	●	●	●	●	●								●	
				SNMG120412-SA				●	●	●	●	●	●									
				SNMG190612-SA																	●	
	S (M)			SNMG120404R-S		●	●		●	●	●							●				
				SNMG120404L-S		●	●		●	●	●							●				
				* SNMG120408R-S		●	●		●	●	●		●					●				
				SNMG120408L-S		●	●		●	●	●		●					●				
				SNMG120412R-S																		
				SNMG120412L-S																		
	P (G)			SNGG090304R-P									●							●		
				SNGG090304L-P									●							●		
				* SNGG090308R-P									●	●				●		●		
				SNGG090308L-P																●		
			SNGG120404R-P									●							●			
			SNGG120404L-P									●							●			
			SNGG120408R-P									●							●			
			SNGG120408L-P									●							●			

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Square, with hole



SNMG 12 04 08 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

SN	0903	1204	1506	1906	2507(09)	3109
od1 (mm)	3.81	5.16	6.35	7.93	9.12	8.80

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																	Applicable toolholders (pages)			
	Appearance (Cross section)			Coated													Cermet	Uncoated						
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	T5105	T5115	T5125		GH110	GH330	NS530				TH10
Medium to heavy cutting	THS (M)			SNMG120408-THS	●	●	●																	TAC External Toolholders (4-25 ~) TAC Internal Toolholders (5-36 ~)
				SNMG120412-THS	●	●	●																	
				SNMG150612-THS	●	●																		
				SNMG150616-THS	●	●																		
				*SNMG190608-THS	●	●	●																	
				SNMG190612-THS	●	●	●																	
				SNMG190616-THS	●	●	●																	
				SNMG190624-THS	●	●	●																	
				SNMG250716-THS	●	●	●																	
				SNMG250724-THS	●	●	●																	
Medium to heavy cutting	TH (M)			*SNMG120408-TH	●	●	●		●															
				SNMG120412-TH		●	●	●		●														
				SNMG150612-TH	●	●	●			●														
				SNMG150616-TH	●	●	●			●														
				SNMG190612-TH	●	●	●	●		●														
				SNMG190616-TH	●	●	●	●		●														
Medium to heavy cutting	SH (M)			SNMG120408-SH							●	●	●											
				SNMG120412-SH							●	●	●											
				*SNMG150612-SH							●	●	●											
				SNMG150616-SH							●	●	●											
				SNMG190612-SH							●	●	●											
				SNMG190616-SH							●	●	●											
Medium to heavy cutting	CH (M)			SNMG120408-CH										●	●	●								
				*SNMG120412-CH										●	●	●								
				SNMG120416-CH										●	●	●								
Heavy cutting (Single sided)	TRS (M)			SNMM150612-TRS	●	●	●																TAC External Toolholders (4-25 ~)	
				SNMM150616-TRS	●	●	●																	
				*SNMM190616-TRS	●	●	●																	
				SNMM190624-TRS	●	●	●																	
				SNMM250924-TRS	●	●	●																	

● : Stocked items
▲ : Discontinued items

Note: Chipbreaker cross sections are of * marked inserts.

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

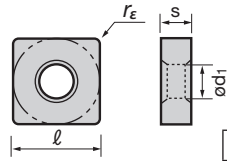
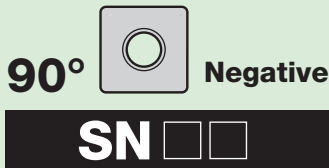
Y

R

K

H

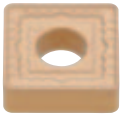
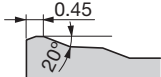
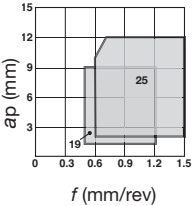
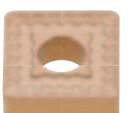
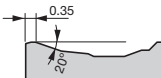
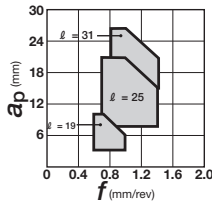
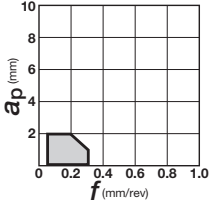
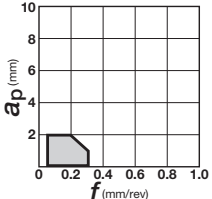
Square, with hole



SNMA 12 04 04

Cutting edge length (l) Thickness (s) Corner radius (r_E)

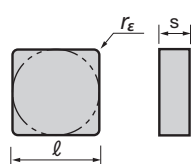
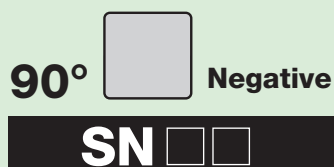
SN	0903	1204	1506	1906	2507(09)	3109
ød1 (mm)	3.81	5.16	6.35	7.93	9.12	8.80

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades														Applicable toolholders (pages)	
	Appearance (Cross section)			Coated					Coated cermet		Cermet		Uncoated		Ceramics				
				T9105	T9115	T9125	T9135	T5105	T5115	T5125	GT720	GT730	NS520	NS530	TH10		FX105		LX21
Heavy cutting (Single sided)	TUS (M)	 		* SNMM190612-TUS	●	●	●												TAC External Toolholders (4-25 ~)
				SNMM190616-TUS	●	●	●												
				SNMM190624-TUS	●	●	●												
				SNMM250724-TUS	●	●	●												
				SNMM250732-TUS	●	●													
				SNMM250924-TUS	●	●	●												
				SNMM250932-TUS	●	●													
Heavy cutting (Double sided)	TU (M)	 		SNMM190612-TU															
				* SNMM190616-TU			●												
				SNMM190624-TU		●	●												
				SNMM250724-TU		●	●												
				SNMM250924-TU	●	●													
				SNMM310924-TU															
Finishing to medium cutting	- (M)	 		SNMA090308									●					TAC External Toolholders (4-25 ~) TAC Internal Toolholders (5-36 ~)	
				SNMA120404				●	●	●									
				SNMA120408				●	●	●					●				
				SNMA120412				●	●	●					●				
				SNMA120416				●	●	●									
	Finishing to fine cutting	- (G)	 		SNGA090304									●					
					SNGA120404				●				●		●			●	
					SNGA120408								●		●		●	●	
					SNGA120412									●		●	●	●	
					SNGA120416											●	●		

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Square, without hole



SNGN 12 04 04

Cutting edge length (l) Thickness (s) Corner radius (r₂)

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades						Applicable toolholders (pages)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Appearance (Cross section)			Uncoated		Ceramics																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
				TH10	KS20		FX105	LX21	LX11	CX710																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

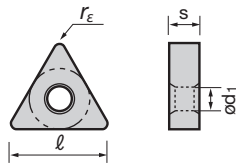
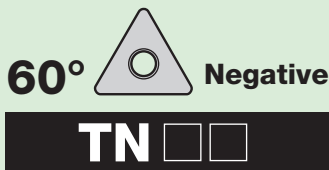
Y

R

K

H

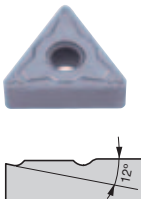
Triangular, with hole



TNMG 16 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

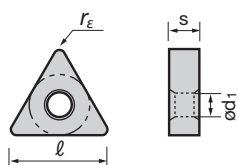
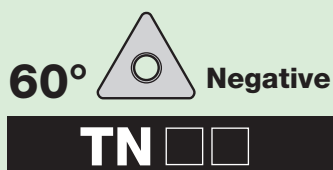
TN	1103	1603	1604	2204
$\phi d1$ (mm)	2.26	3.81	3.81	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades															Applicable toolholders (pages)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Appearance (Cross section)			Coated								Coated cermet		Cermet			Uncoated																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
				T9105 T9115 T9125 T9135 T6120 T6130 GH110 GH330								GT720 GT530		NS730 NS520 NS530 X407		TH10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Precision finishing	TF (M)		TNMG160404-TF *TNMG160408-TF TNMG160412-TF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

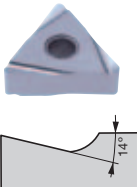
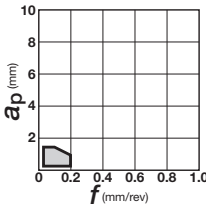
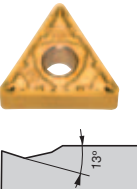
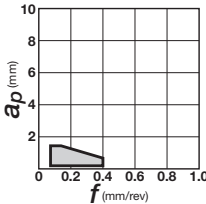
Triangular, with hole



TNMG 16 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

TN	1103	1603	1604	2204
ød1 (mm)	2.26	3.81	3.81	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)					
	Appearance (Cross section)			Coated						Coated cermet	Cermet			Uncoated											
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	GH330	GT730	GT530		NS730	NS520	NS530	TH10	KS20			
Precision finishing	W (G)		TNGG160404R-D TNGG160404L-W * TNGG160408R-W TNGG160408L-W																	●	●			TAC External Toolholders (4-22 ~, 4-86) TAC Internal Toolholders (5-36 ~) J-series (8-20)	
																				●	●				
Finishing	TSF (M)		TNMG160402-TSF TNMG160404-TSF * TNMG160408-TSF TNMG160412-TSF			●	●	●	●							●			●	●					
						●	●	●	●							●			●	●					
						●	●	●	●							●			●	●					
						●	●	●	●							●			●	●					

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

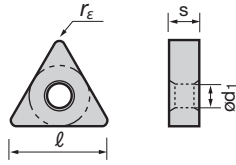
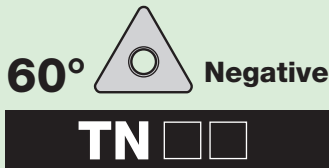
Y

R

K

H

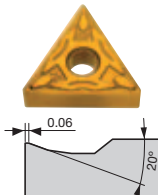
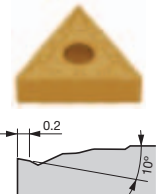
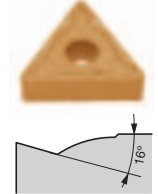
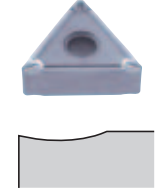
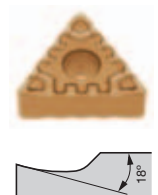
Triangular, with hole



TNMG 16 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

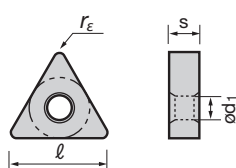
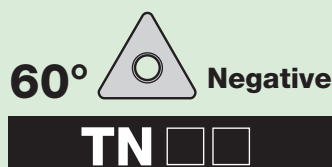
TN	1103	1603	1604	2204
$\phi d1$ (mm)	2.26	3.81	3.81	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)					
	Appearance (Cross section)			Coated						Coated cermet	Cermet		Uncoated									
				T9105	T9115	T9125	T9135	T6120	T6130	T5105	T5115	T5125	GH330	GT730		NS730	NS520	NS530	TH10			
Finishing	CF (M)		TNMG160404-CF *TNMG160408-CF																			TAC External Toolholders (4-22 ~, 4-86) TAC Internal Toolholders (5-36 ~) J-series (8-20)
	ZF (M)		TNMG160404-ZF *TNMG160408-ZF TNMG160412-ZF																			
	NS (M)		TNMG160404-NS *TNMG160408-NS																			
	11 (M)		TNMG110304-11 TNMG110308-11 TNMG160402-11 TNMG160404-11 *TNMG160408-11 TNMG160412-11 TNMG220404-11 TNMG220408-11																			
Finishing of mild steels	17 (M)		TNMG160404-17 *TNMG160408-17																			

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

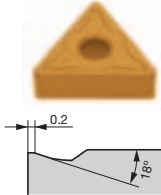
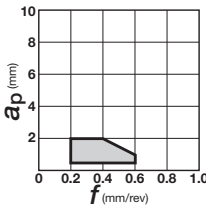
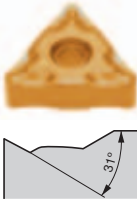
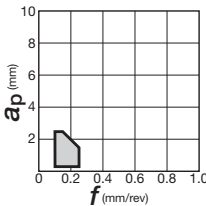
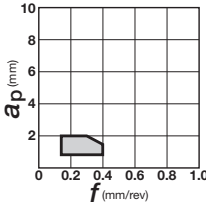
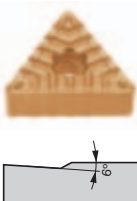
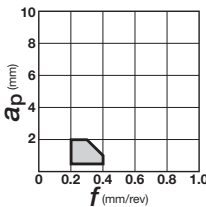
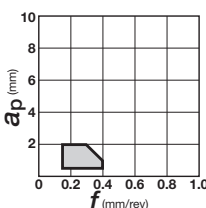
Triangular, with hole



TNMG 16 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

TN ☐	1103 ☐	1603 ☐	1604 ☐	2204 ☐
$\phi d1$ (mm)	2.26	3.81	3.81	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)						
	Appearance (Cross section)			Coated					Coated cermet	Cermet										
				T9105	T9115	T9125	T9135	T6120	T6130			GT730		NS520	NS530					
High feed, small depth of cut	AS (M)		TNMG160404-AS			●	●									●				TAC External Toolholders (4-22 ~, 4-86) TAC Internal Toolholders (5-36 ~) J-series (8-20)
			*TNMG160408-AS	●	●	●	●									●				
			TNMG160412-AS	●	●	●														
Boring (Double sided chipbreaker)	CB (M)		TNMG110304-CB		●											●				TAC External Toolholders (4-54 ~) TAC Internal Toolholders (5-36 ~)
			*TNMG110308-CB		●											●				
Finishing to medium cutting	ZM (M)		TNMG160404-ZM		●	●	●						●							TAC External Toolholders (4-22 ~, 4-86) TAC Internal Toolholders (5-36 ~) J-series (8-20)
			TNMG160408-ZM		●	●	●						●							
			*TNMG160412-ZM		●	●	●													
			TNMG220408-ZM																	
			TNMG220412-ZM			●														
	27 (M)		*TNMG160408-27													●				
			TNMG220408-27													●				
	NM (M)		*TNMG160408-NM			●										●				
			TNMG160412-NM		●	●														

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

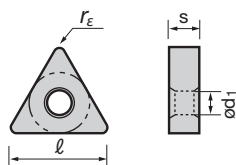
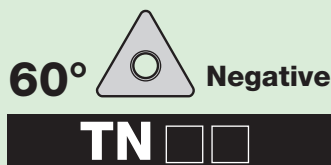
Y

R

K

H

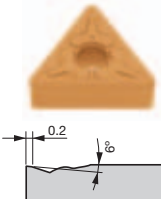
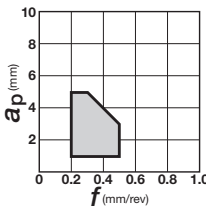
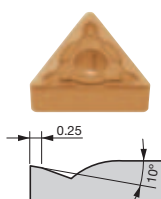
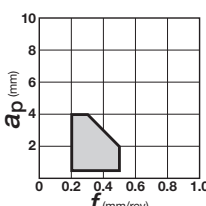
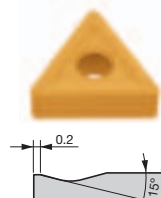
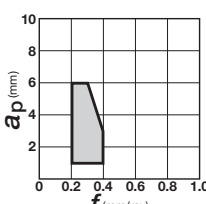
Triangular, with hole



TNMG 16 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

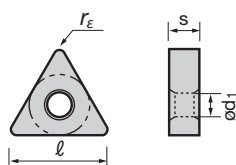
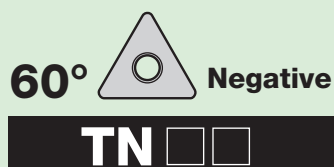
TN	1103	1603	1604	2204
$\phi d1$ (mm)	2.26	3.81	3.81	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)			
	Appearance (Cross section)			Coated												Coated cermet	Cermet	Un- coated					
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	T5105	T5115	T5125	AH110	AH120	GT720		GT730	NS730	NS520
Medium cutting	TM (M)  	TNMG110304-TM	●	●	●																	●	TAC External Toolholders (4-22 ~, 4-86) TAC Internal Toolholders (5-36 ~) J-series (8-20)
	TNMG110308-TM	●	●	●																			
	TNMG160404-TM	●	●	●		●																	
	*TNMG160408-TM	●	●	●		●																	
	TNMG160412-TM	●	●	●		●										●							
	TNMG220408-TM	●	●	●		●																	
	TNMG220412-TM	●	●	●		●																	
	TNMG220416-TM	●	●																				
	SM (M)  	TNMG160404-SM					●	●	●	●	●	●											
	*TNMG160408-SM					●	●	●	●	●	●												
	TNMG160412-SM					●	●	●	●	●	●												
	TNMG220408-SM						●	●	●	●	●												
	TNMG220412-SM						●	●	●	●	●												
	All-round (M)  	TNMG110304	●	●								●	●	●			●	●	●	●	●	●	●
	TNMG110308	●	●									●	●	●			●	●	●	●	●	●	●
	TNMG160304																			●	●	●	●
	TNMG160308																				●	●	●
	TNMG160404	●	●	●								●	●	●	●	●	●	●	●	●	●	●	●
	*TNMG160408	●	●	●								●	●	●	●	●	●	●	●	●	●	●	●
	TNMG160412	●	●	●								●	●	●	●	●			●	●	●	●	●
	TNMG160416		●	●								●	●	●									●
	TNMG160420		●	●																			
	TNMG220408	●	●	●								●	●	●									●
	TNMG220412	●	●	●								●	●	●									●
	TNMG220416		●	●								●	●	●									●

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

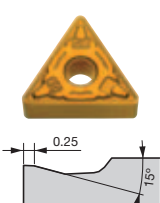
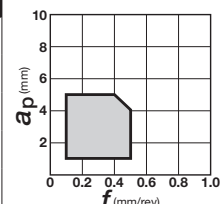
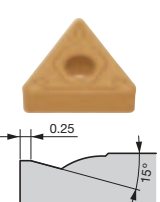
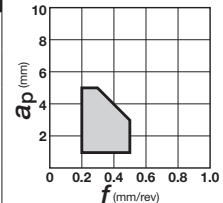
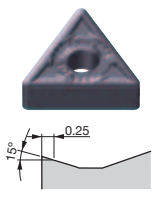
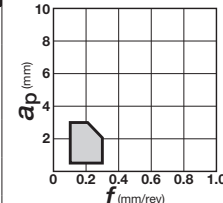
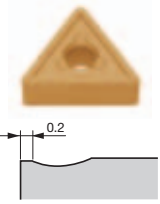
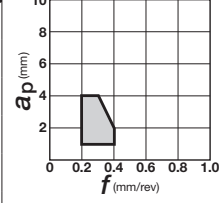
Triangular, with hole



TNMG 16 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

TN	1103	1603	1604	2204
ød1 (mm)	2.26	3.81	3.81	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades														Applicable toolholders (pages)
	Appearance (Cross section)			Coated										Coated cermet	Uncoated			
				T9105	T9115	T9125	T9135	T6120	T6130	T5105	T5115	T5125	AH905	GH110	GH330	GT720	TH10	
Medium cutting	CM (M)		TNMG160404-CM								●	●	●				TAC External Toolholders (4-22 ~, 4-86) TAC Internal Toolholders (5-36 ~) J-series (8-20)	
			TNMG160408-CM								●	●	●					
			*TNMG160412-CM								●	●	●					
			TNMG220408-CM								●	●	●					
			TNMG220412-CM								●	●	●					
	DM (M)		TNMG160404-DM															
			*TNMG160408-DM	●	●	●	●											
			TNMG160412-DM			●	●											
			TNMG220408-DM															
			TNMG220412-DM															
			TNMG220416-DM															
	HMM (M)		TNMG160404-HMM										●					
			*TNMG160408-HMM										●					
			TNMG160412-HMM										●					
	33 (M)		TNMG160404-33														●	
			*TNMG160408-33														●	
			TNMG220404-33													●		

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

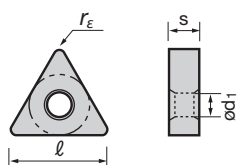
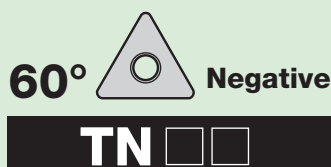
Y

R

K

H

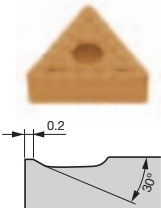
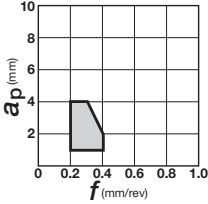
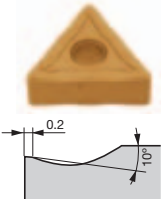
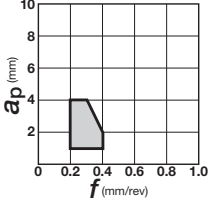
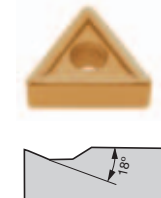
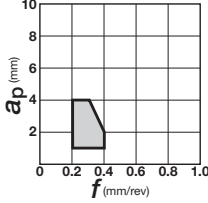
Triangular, with hole



TNMG 16 04 04 -

Cutting edge length (ℓ) Thickness (s) Corner radius (r_ϵ) Chipbreaker symbol

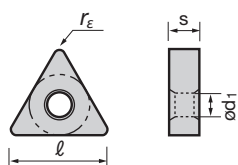
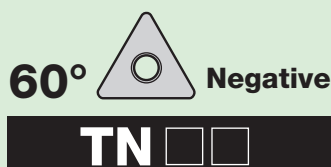
TN	1103	1603	1604	2204
$\phi d1$ (mm)	2.26	3.81	3.81	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades												Applicable toolholders (pages)								
	Appearance (Cross section)			Coated				Cermet		Uncoated														
Medium cutting	37 (M)			TNMG160404-37	T6020	T6030	T6120	T6130	AH630	AH645	AH120	GH330	NS520	NS530		KS20	UX25							TAC External Toolholders (4-22 ~, 4-86)
				*TNMG160408-37																				TAC Internal Toolholders (5-36 ~)
																								J-series (8-20)
	38 (M)			TNMG160404-38																				
				*TNMG160408-38																				
	SA (M)			TNMG160404-SA																				
				*TNMG160408-SA																				
				TNMG160412-SA																				
				TNMG220408-SA																				
				TNMG220412-SA																				

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

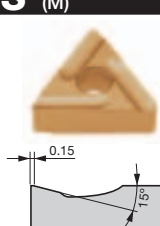
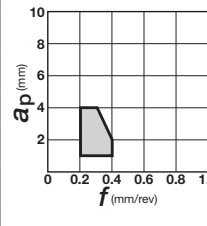
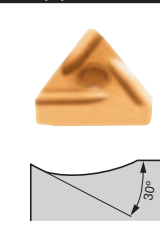
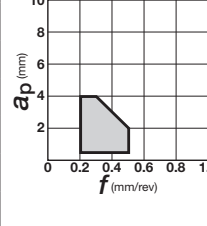
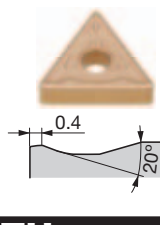
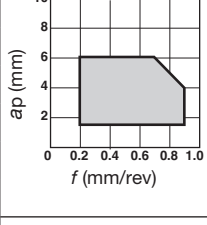
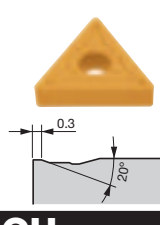
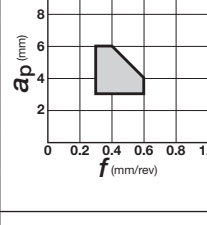
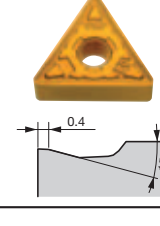
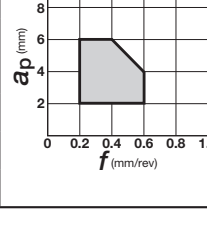
Triangular, with hole



TNMG 16 04 04 -

Cutting edge length (ℓ) Thickness (s) Corner radius (r_ε) Chipbreaker symbol

TN	1103	1603	1604	2204
Ød1 (mm)	2.26	3.81	3.81	5.16

Application	Chipbreaker Appearance (Cross section)	$f - a_p$	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)							
				Coated										Cermets		Uncoated								
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	T5105	T5115	T5125	GH110	GH330	NS520	NS530	UX25	TH10		
Medium cutting	S (M)			TNMG160404R-S		●	●	●	●	●	●	●	●					●	●	●	●	▲		TAC External Toolholders (4-22 ~, 4-86)
				TNMG160404L-S		●	●	●	●	●	●	●	●					●	●	●	●			TAC Internal Toolholders (5-36 ~)
				*TNMG160408R-S		●	●	●	●	●	●	●	●					●	●	●	●			J-series (8-20)
				TNMG160408L-S		●	●	●	●	●	●	●	●					●	●	●	●			
				TNMG220404R-S		●	●	●	●	●	●	●	●					●	●	●	●			
				TNMG220404L-S		●	●	●	●	●	●	●	●					●	●	●	●			
				TNMG220408R-S		●	●	●	●	●	●	●	●					●	●	●	●			
				TNMG220408L-S		●	●	●	●	●	●	●	●					●	●	●	●			
Medium to heavy cutting	P (G)			TNGG160402R-P														●	●	●	●			
				TNGG160402L-P														●	●	●	●			
				TNGG160404R-P														●	●	●	●			
				TNGG160404L-P														●	●	●	●			
				*TNGG160408R-P														●	●	●	●			
				TNGG160408L-P														●	●	●	●			
	THS (M)			TNMG220408-THS	●	●	●																	TAC External Toolholders (4-22)
				*TNMG220412-THS	●	●	●																	
	TH (M)			*TNMG220408-TH	●	●	●	●																
				TNMG220412-TH	●	●	●	●																
	CH (M)			TNMG160404-CH										●	●	●								TAC External Toolholders (4-22 ~, 4-86)
				TNMG160408-CH										●	●	●								TAC Internal Toolholders (5-36 ~)
				*TNMG160412-CH										●	●	●								J-series (8-20)
				TNMG220408-CH										●	●	●								
				TNMG220412-CH										●	●	●								
				TNMG220416-CH										●	●	●								

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

H

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

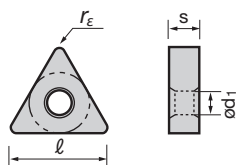
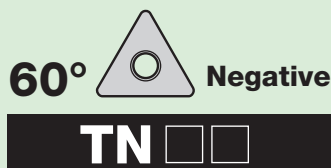
Y

R

K

H

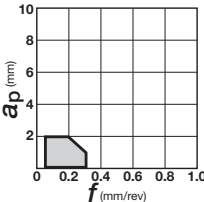
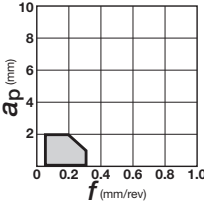
Triangular, with hole



TNMA 16 04 04

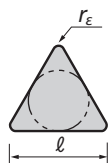
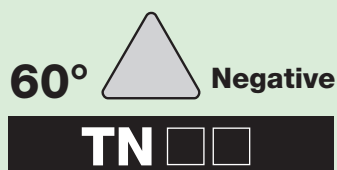
Cutting edge length (l) Thickness (s) Corner radius (r_e)

TN□□	1103□□	1603□□	1604□□	2204□□
ød1 (mm)	2.26	3.81	3.81	5.16

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)		
	Appearance (Cross section)			Coated						Coated cermet	Cermet		Uncoated		Ceramics							
				T9115	T9125	T6120	T6130	T5105	T5115	T5125	GH110	GT720		NS520	NS530		TH03	TH10			FX105	LX21
Finishing to medium cutting	- (M)	 		TNMA160404					●	●	●						●					TAC External Toolholders (4-22 ~, 4-86) TAC Internal Toolholders (5-36 ~) J-series (8-20)
		TNMA160408					●	●	●		●				●		●					
		TNMA160412					●	●	●									●				
		TNMA160416					●	●	●													
		TNMA160420					●	●	●													
		TNMA220404					●	●	●													
		TNMA220408					●	●	●													
		TNMA220412					●	●	●													
		TNMA220416					●	●	●													
		- (G)	 		TNGA110304												●					
			TNGA110308														●					
		TNGA160304														●						
		TNGA160308														●						
		TNGA160404								●			●	●		●	●		●	●		
		TNGA160408								●			●			●	●	●	●	●		
		TNGA160412										●				●		●	●	●		
		TNGA160416														●		●	●			
		TNGA220408														●						

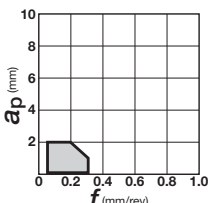
● : Stocked items
▲ : Discontinued items

Triangular, without hole



TNGN 16 04 04

Cutting edge length (l) Thickness (s) Corner radius (r_c)

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades														Applicable toolholders (pages)	
	Appearance (Cross section)			Uncoated		Ceramics													
Finishing to medium cutting	- (G)		TNGN160404	TH10			FX105	LX21	LX11										TAC External Toolholders (4-47 ~)
			TNGN160408	●			●	●	●										
			TNGN160412	●			●	●	●										
			TNGN160416				●		●										
			TNGN160420				●												
			TNGN160708						●										
			TNGN160712						●										

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

H

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

Y

R

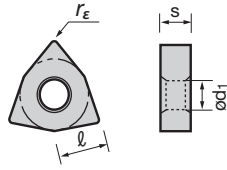
K

H

Trigon, with hole

80° Negative

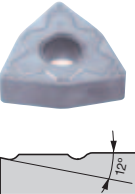
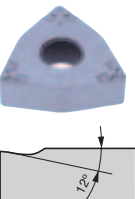
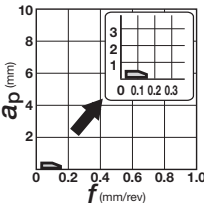
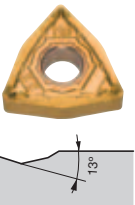
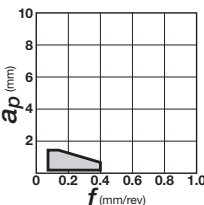
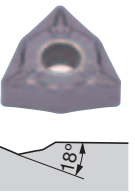
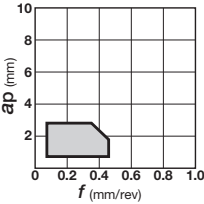
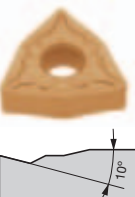
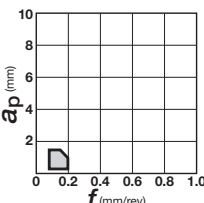
WN



WNMG 08 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

WN	0604	0804	1006	1306
ød1 (mm)	3.81	5.16	6.35	7.93

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades												Applicable toolholders (pages)									
	Appearance (Cross section)			Coated						Coated cermet		Cermet													
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	GH330	GT720	GT730	GT530	NS730	NS520	NS530					
Precision finishing	TF (M)		WNGMG080404-TF * WNGMG080408-TF																●	●					TAC External Toolholders (4-17 ~) TAC Internal Toolholders (5-38 ~)
	01 (G)		WNGG060402-01 * WNGG060404-01 WNGG080402-01 WNGG080404-01 WNGG080408-01																	●	●				
																									
Finishing	TSF (M)		WNGMG060404-TSF * WNGMG060408-TSF WNGMG080404-TSF WNGMG080408-TSF WNGMG080412-TSF	●	●																				
				●	●																				
				●	●	●		●								●			●						
				●	●	●		●								●			●						
				●	●	●																			
	SF (M)		WNGMG060404-SF WNGMG060408-SF WNGMG080404-SF * WNGMG080408-SF						●	●	●														
									●	●	●														
	TS (M)		WNGMG080404-TS * WNGMG080408-TS WNGMG080412-TS	●	●	●		▲								●			▲	●					
				●	●	●		▲								●			▲	●					
				●	●	●													▲	●					

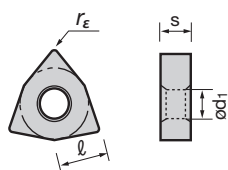
Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Trigon, with hole



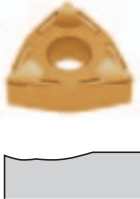
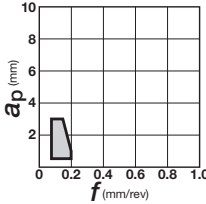
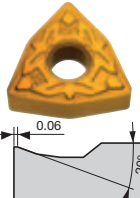
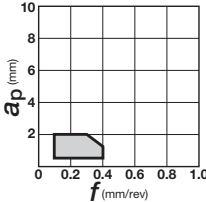
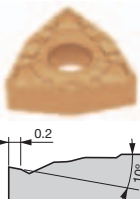
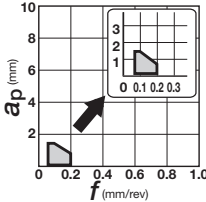
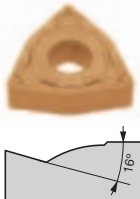
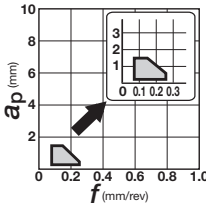
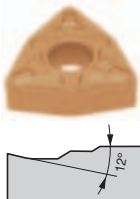
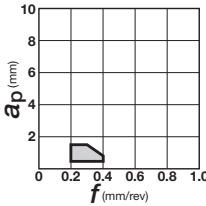
WN



WNMG 08 04 04 -

Cutting edge length (ℓ) Thickness (s) Corner radius (r_e) Chipbreaker symbol

WN	0604	0804	1006	1306
ød1 (mm)	3.81	5.16	6.35	7.93

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																		Applicable toolholders (pages)		
	Appearance (Cross section)			Coated										Coated cermet		Cermet								
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	GH330	T5105	T5115	T5125	GT720	GT730	GT530	NS730		NS530	
Finishing	SS (M) 		WNMG080404-SS * WNMG080408-SS WNMG080412-SS						●	●	●	●	●	●										TAC External Toolholders (4-17 ~)
	CF (M) 		WNMG080404-CF WNMG080408-CF * WNMG080412-CF												●	●								TAC Internal Toolholders (5-38 ~)
	ZF (M) 		WNMG060404-ZF WNMG060408-ZF WNMG080404-ZF * WNMG080408-ZF WNMG080412-ZF	●	●															●		●		
	NS (M) 		WNMG080404-NS * WNMG080408-NS	●	●																	●		
	AFW (M) 		WNMG060404-AFW WNMG060408-AFW WNMG080404-AFW * WNMG080408-AFW	●	●	●	●															●	●	

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

H

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

Y

R

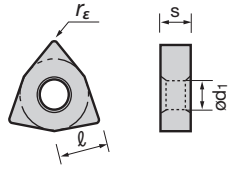
K

H

Trigon, with hole

80° Negative

WN



WNMG 08 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

WN	0604	0804	1006	1306
ød1 (mm)	3.81	5.16	6.35	7.93

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)			
	Appearance (Cross section)			Coated					Cermet								
				T9105	T9115	T9125	T9135			NS730	NS530						
Finishing	11 (M)		WNMG080404-11								●						TAC External Toolholders (4-17 ~) TAC Internal Toolholders (5-38 ~)
			* WNMG080408-11								●						
Finishing of mild steels	17 (M)		WNMG080404-17								●						
			* WNMG080408-17								●						
High feed, small depth of cut	ASW (M)		WNMG060408-ASW	●	●	●											
			WNMG060412-ASW	●	●	●	●										
			* WNMG080408-ASW	●	●	●	●										
			WNMG080412-ASW	●	●	●	●										
	AS (M)		WNMG080404-AS	●							●						
			* WNMG080408-AS	●	●	●	●				●						
			WNMG080412-AS	●	●	●	●				●						
Boring (Double sided chipbreaker)	CB (M)		WNMG060404-CB		●						●						
			* WNMG060408-CB		●						●						

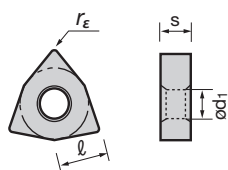
Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Trigon, with hole



WN



WNMG 08 04 04 -

Cutting edge length (ℓ) Thickness (s) Corner radius (r_e) Chipbreaker symbol

WN	0604	0804	1006	1306
ød1 (mm)	3.81	5.16	6.35	7.93

Application	Chipbreaker Appearance (Cross section)	f - a _p	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)
				Coated										Coated cermet	Cermet	Un- coated	
Finishing to medium cutting	ZM (M)		WNMG060408-ZM	●	●	●											TAC External Toolholders (4-17 ~) TAC Internal Toolholders (5-38 ~)
			WNMG060412-ZM	●	●	●											
			*WNMG080408-ZM	●	●	●							●	●			
			WNMG080412-ZM	●	●	●											
			WNMG080416-ZM	●	●												
Medium cutting	NM (M)		*WNMG080408-NM	●	●	●											
			WNMG080412-NM	●	●	●											
			WNMG060404-TM	●	●	●											
			WNMG060408-TM	●	●	●											
			WNMG080404-TM	●	●	●	●										
			*WNMG080408-TM	●	●	●	●										
			WNMG080412-TM	●	●	●	●										
			WNMG080416-TM	●	●	●											
			WNMG080404-SM				●	●	●	●	●						
			*WNMG080408-SM				●	●	●	●	●						
			WNMG080412-SM				●	●	●	●	●						

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

S

T

W

V

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R

K

H

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

Y

R

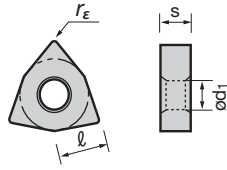
K

H

Trigon, with hole

80° Negative

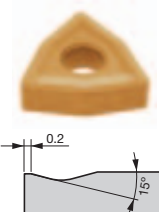
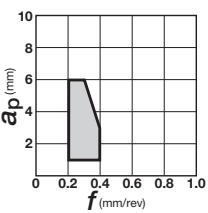
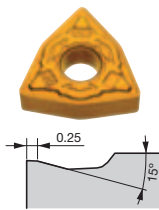
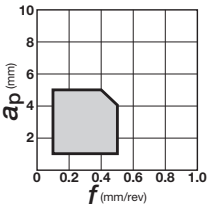
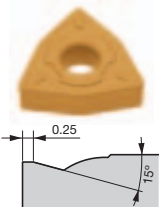
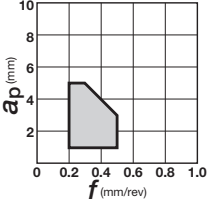
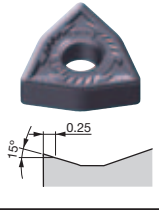
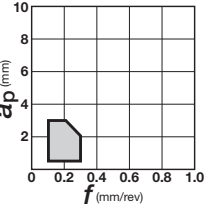
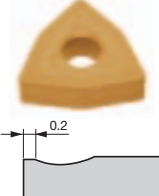
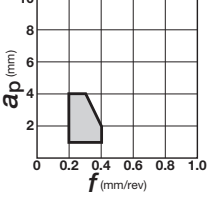
WN



WNMG 08 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

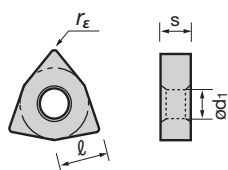
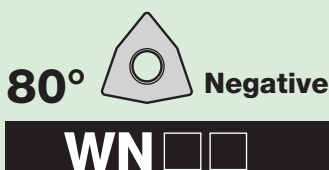
WN	0604	0804	1006	1306
ød1 (mm)	3.81	5.16	6.35	7.93

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)				
	Appearance (Cross section)			Coated										Coated cermet		Cermet		Uncoated			
				T9105	T9115	T9125	T9135	T5105	T5115	T5125	AH110	AH120	AH905	GT720	GT730	NS730		NS520	NS530	TH10	
Medium cutting	All-round (M)			WNMG060404	●	●			●	●	●										TAC External Toolholders (4-17 ~) TAC Internal Toolholders (5-38 ~)
			WNMG060408	●	●			●	●	●											
			WNMG080404	●	●	●	●	●	●	●	●		●		▲		●	●	●		
			* WNMG080408	●	●	●	●	●	●	●	●		●		▲	▲	●	●	●		
			WNMG080412	●	●	●	●	●	●	●	●						●		●		
			WNMG080416	●	●	●	●	●	●												
	CM (M)			WNMG080408-CM					●	●	●										
			* WNMG080412-CM					●	●	●											
	DM (M)			WNMG080404-DM																	
			* WNMG080408-DM	●	●	●	●														
			WNMG080412-DM	●	●	●	●														
HMM (M)			WNMG080404-HMM								●										
		* WNMG080408-HMM									●										
		WNMG080412-HMM									●										
33 (M)			WNMG080404-33									●									
		* WNMG080408-33																●			

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Trigon, with hole



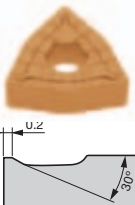
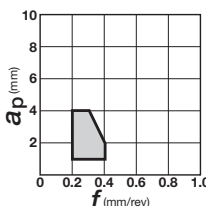
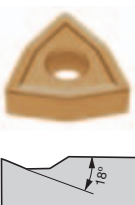
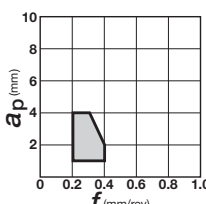
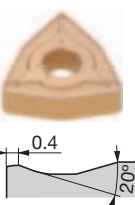
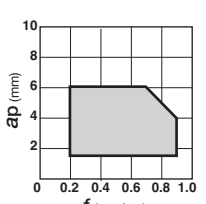
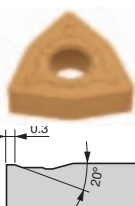
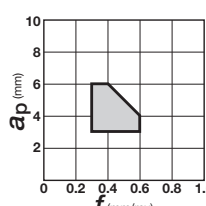
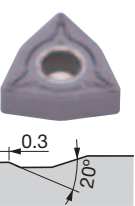
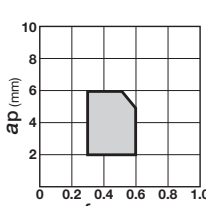
WNMG 08 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (re) Chipbreaker symbol

WN	0604	0804	1006	1306
ød1 (mm)	3.81	5.16	6.35	7.93

2

TAC Inserts

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)							
	Appearance (Cross section)			Coated										Cermet	Uncoated									
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	T5105	T5115	T5125		GH330	NS530			KS20		
Medium cutting	37 (M) 		WNMG080404-37 * WNMG080408-37														●						TAC External Toolholders (4-17 ~) TAC Internal Toolholders (5-38 ~)	
	SA (M) 		* WNMG080408-SA WNMG080412-SA					●	●	●	●	●								●				
Medium to heavy cutting	THS (M) 		WNMG080408-THS * WNMG080412-THS WNMG080416-THS WNMG100612-THS WNMG100616-THS	●	●	●	●																	
	TH (M) 		* WNMG080408-TH WNMG080412-TH WNMG080416-TH WNMG100612-TH WNMG100616-TH	●	●	●	●	●		●														
	SH (M) 		WNMG080408-SH * WNMG080412-SH								●	●	●											
											●	●	●											

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

C
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TAC Inserts, Negative

2

TAC Inserts

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Y

R

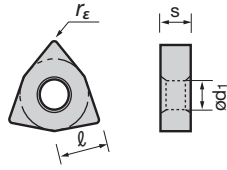
K

H

Trigon, with hole

80° Negative

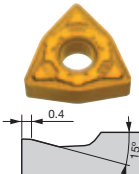
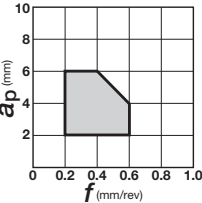
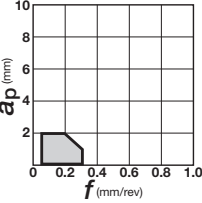
WN



WNMM 08 04 08 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

WN	0604	0804	1006	1306
ød1 (mm)	3.81	5.16	6.35	7.93

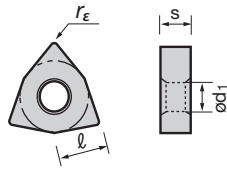
Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)	
	Appearance (Cross section)			Coated					Coated cermet	Cermet	Uncoated				
Medium to heavy cutting	CH (M) 		WNMG080408-CH		●	●	●								TAC External Toolholders (4-17 ~) TAC Internal Toolholders (5-38 ~)
	*WNMG080412-CH			●	●	●									
Finishing to medium cutting	- (M) 		WNMA080404		●	●	●							●	
	WNMA080408		●	●	●					▲			●		
	WNMA080412		●	●	●										
	WNMA080416		●	●	●										

TAC External Toolholders (4-17 ~)
TAC Internal Toolholders (5-38 ~)

Trigon, with hole

80° Negative

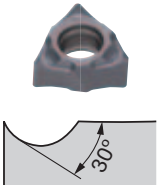
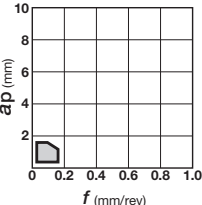
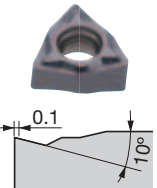
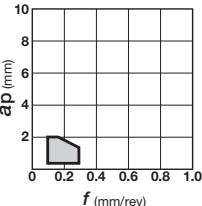
WXGU



WXGU 04 03 02 R -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Hand Chipbreaker symbol

DXGU	0403
ød1 (mm)	2.7

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)		
	Appearance (Cross section)			Coated				Coated cermet	Cermet							
Finishing (low cutting force)	SS (G)		WXGU040302R-SS	●					●		●					TAC Internal Toolholders (5-31)
			WXGU040302L-SS	●					●		●					
			WXGU040304R-SS	●					●		●					
			* WXGU040304L-SS	●					●		●					
Finishing to medium cutting	TS (G)		WXGU040302R-TS	●					●		●					
			WXGU040302L-TS	●					●		●					
			WXGU040304R-TS	●					●		●					
			* WXGU040304L-TS	●					●		●					
			WXGU040308R-TS	●					●		●					
			WXGU040308L-TS	●					●		●					

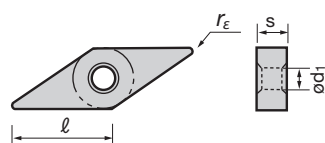
Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole

35° Negative

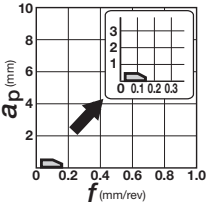
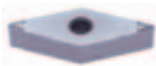
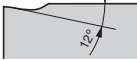
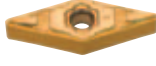
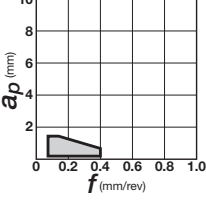
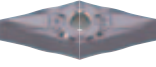
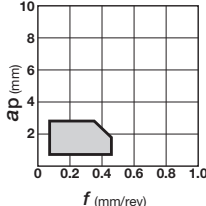
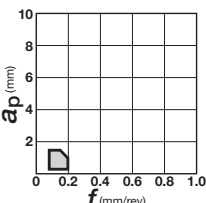
VN



VNMG 16 04 04 -

Cutting edge length (ℓ) Thickness (s) Corner radius (r_e) Chipbreaker symbol

VN	1604
ød1 (mm)	3.81

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)		
	Appearance (Cross section)			Coated						Coated cermet		Cermet		Uncoated								
				T9105	T9115	T9125	T9135	T6120	T6130	AH630	AH645	GH110	GH330	GT720	GT730	GT530	NS730	NS520	NS530	TH10		
Precision finishing	TF (M)	 	VNMG160404-TF * VNMG160408-TF															●	●			
																		●	●			
	01 (G)	 	VNGG160402-01 * VNGG160404-01 VNGG160408-01										●						●	●	●	
Finishing	TSF (M)	 	VNMG160402-TSF VNMG160404-TSF * VNMG160408-TSF VNMG160412-TSF		●	●	●								●			●				
				●	●	●								●			●					
	SF (M)	 	VNMG160404-SF * VNMG160408-SF					●	●	●												
								●	●	●												
	TS (M)	 	VNMG160404-TS * VNMG160408-TS VNMG160412-TS		●	●	●									●		▲	●			
					●	●	●								●			▲	●			

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

S

T

W

V

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R

K

H

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

Y

R

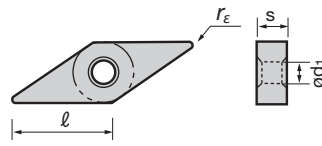
K

H

Rhombic, with hole

35° Negative

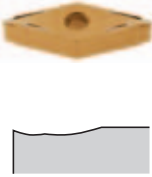
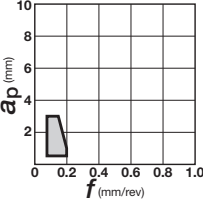
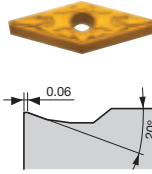
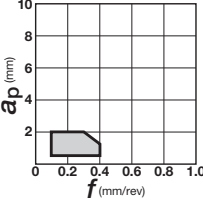
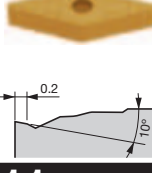
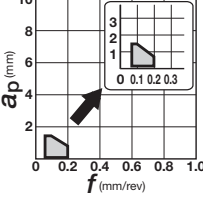
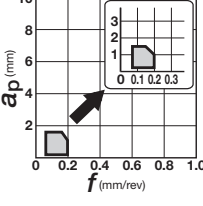
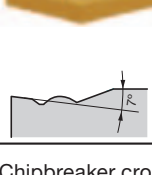
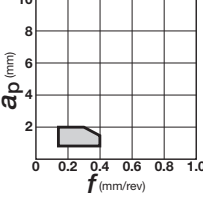
VN



VNMG 16 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

VN	1604
od1 (mm)	3.81

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)	
	Appearance (Cross section)			Coated										Coated cermet	Cermet		Uncoated				
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	T5105	T5115	GH330	GT730	NS730	NS530		TH10
Finishing	SS (M) 		* VNMG160404-SS VNMG160408-SS VNMG160412-SS						●	●	●	●	●		●						TAC External Toolholders (4-30 ~) TAC Internal Toolholders (5-37 ~)
	CF (M) 		VNMG160404-CF * VNMG160408-CF									●	●								
	ZF (M) 		VNMG160404-ZF * VNMG160408-ZF VNMG160412-ZF	●	●	●									●		●				
	11 (M) 		* VNMG160404-11 VNMG160408-11 VNMG160412-11												●		▲	●	●		
	ZM (M) 		* VNMG160408-ZM VNMG160412-ZM	●	●	●									●						

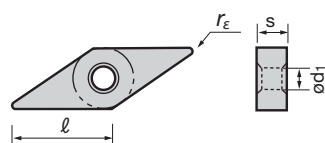
Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole

35° Negative

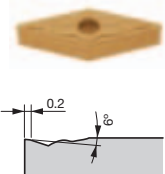
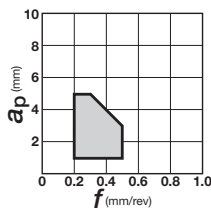
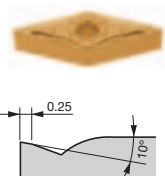
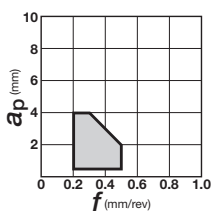
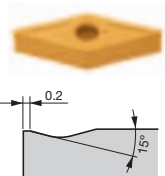
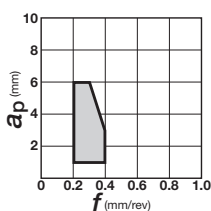
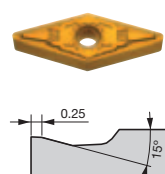
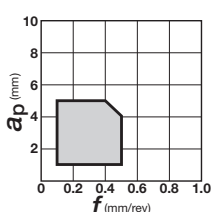
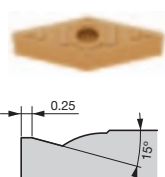
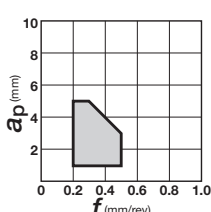
VN



VNMG 16 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

VN	1604
ød1 (mm)	3.81

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																	Applicable toolholders (pages)		
	Appearance (Cross section)			Coated										Coated cermet	Cermet	Un-coated							
				T9105	T9115	T9125	T9135	T6020	T6030	T6120	T6130	AH630	AH645	T5105	T5115	T5125	AH110	AH120	GT730			NS730	NS530
Medium cutting	TM (M)			VNMG160404-TM	●	●	●	●	●														TAC External Toolholders (4-30 ~)
				* VNMG160408-TM	●	●	●	●	●	●													TAC Internal Toolholders (5-37 ~)
				VNMG160412-TM	●	●	●	●	●														
	SM (M)			VNMG160404-SM						●	●	●	●	●									
				* VNMG160408-SM					●	●	●	●	●	●									
				VNMG160412-SM						●	●	●	●	●									
	All-round (M)			VNMG160404	●	●	●	●						●	●	●	●	●		●	●	●	
				* VNMG160408	●	●	●	●						●	●	●	●	●		●	●	●	
				VNMG160412		●	●							●	●	●				●	●		
	CM (M)			VNMG160408-CM										●	●	●							
				* VNMG160412-CM										●	●	●							
	DM (M)			VNMG160404-DM																			
				* VNMG160408-DM	●	●	●	●															
				VNMG160412-DM		●	●	●															

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

H

TAC Inserts, Negative

2

TAC Inserts

C

D

S

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W

V

Y

R

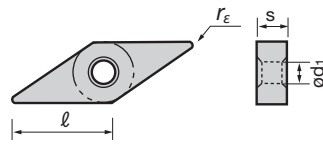
K

H

Rhombic, with hole

35° Negative

VN



VNMG 16 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

VN	1604
ød1 (mm)	3.81

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)					
	Appearance (Cross section)			Coated						Coated cermet	Cermet		Uncoated						
				T6120	T6130	T5105	T5115	T5125	AH110	AH905				NS520	NS530		TH10		
Medium cutting	HMM (M)		VNMG160404-HMM							●									TAC External Toolholders (4-30 ~)
			* VNMG160408-HMM							●									TAC Internal Toolholders (5-37 ~)
			VNMG160412-HMM							●									
Medium cutting	33 (M)		VNMG160404-33					●										●	
			* VNMG160408-33															●	
Finishing to medium cutting	- (M)		VNMA160402															●	
			VNMA160404			●	●	●						▲				●	
			VNMA160408			●	●	●						▲				●	

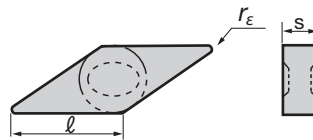
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, without hole

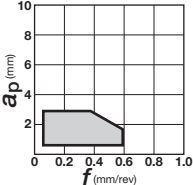
35° Negative

VNGD



VNGD 16 07 12

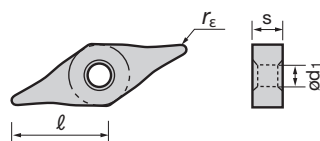
Cutting edge length (l) Thickness (s) Corner radius (r_e)

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	Appearance (Cross section)			Ceramics																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Finishing to medium cutting	- (G)		VNGD160712	FX105																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

Y-shape, with hole

25° Negative

YN



YNMG 16 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

YNMG	1604
ød ₁ (mm)	3.81

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)					
	Appearance (Cross section)			Coated						Coated cermet									
				T9105	T9115	T9125	T9135	T6120	T6130			GT730							
Finishing to medium cutting	ZF (M)			YNMG160404-ZF			●	●					●						TAC External Toolholders (4-30 ~)
				* YNMG160408-ZF			●	●					●						TAC Internal Toolholders (5-37 ~)
	ZM (M)			YNMG160404-ZM			●	●					●						
				* YNMG160408-ZM			●	●					●						

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

H

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

Y

R

K

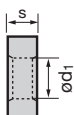
H

Round, with hole



Negative

RN



RNMG 12 04 00 -



Cutting edge length (l) Thickness (s) Corner radius (r_c) Chipbreaker symbol

RN	090300	120400	150600	190600	250900	310900
ød1 (mm)	3.81	5.16	6.43	7.93	9.22	12.78

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades												Applicable toolholders (pages)		
	Appearance (Cross section)			Coated				Uncoated	Ceramics									
				T9105	T9115	T9125	T9135					TH10		FX105	LX11			
Finishing to medium cutting	- (G)		RNGA120400															TAC External Toolholders (4-32 ~)
		61 (M)		RNMG090300-61		●	●											
Heavy cutting		* RNMG120400-61	●	●	●	●						●						
		RNMG150600-61		●	●													
		RNMG190600-61		●	●	●												
		RNMG250900-61		●	●													
		RNMG310900-61																

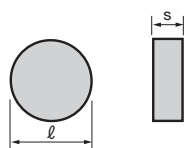
Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Round, without hole

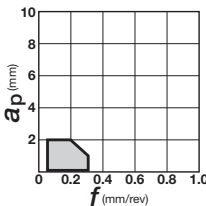


RN



RNGN 12 04 00

Cutting edge length (ℓ) Thickness (s) Corner radius (r_e)

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	Appearance (Cross section)			Ceramics																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Finishing to medium cutting	- (G)		RNGN120400	FX105	LX11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

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W

V

Y

R

K

H

TAC Inserts, Negative

2

TAC Inserts

C

D

S

T

W

V

Y

R

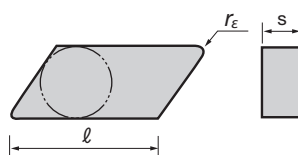
K

H

Parallelogram,
without hole

55° Negative

KNMX



KNMX 16 04 05 R -



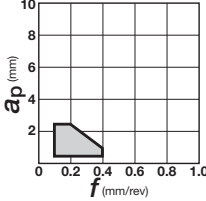
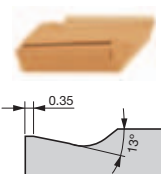
Cutting edge
length (l)

Thickness (s)

Corner
radius (r_E)

Hand of
insert

Chipbreaker
symbol

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)
	Appearance (Cross section)			Coated																
Finishing	S1 (M)		KNMX160405R-S1	●															TAC External Toolholders (4-61 ~)	
			KNMX160405L-S1	●																
			* KNMX160410R-S1																	
			KNMX160410L-S1																	

Note: Chipbreaker crosssections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Hexagon

120°

Negative

HNGD

HNGD 05 07 12

Cutting edge length (ℓ)

Thickness (s)

Corner radius (r_c)

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	FX105	Stocked grades																Applicable toolholders (pages)
	Appearance (Cross section)				Ceramics																
Finishing to medium cutting	- (G)		HNGD050712	●																TAC External Toolholders (4-37)	
			HNGD050716	●																	

Note: Chipbreaker cross sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

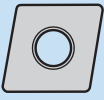
Y

R

Special

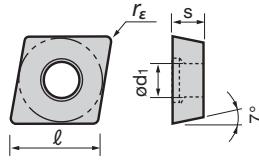
Rhombic, with hole

80°



Positive
7°

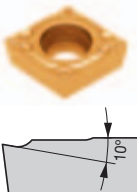
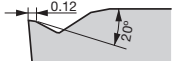
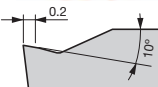
CC



CCGT 06 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

CC T(W)	03X1	04T1	0602	09T3	1204
ød1 (mm)	1.9	2.3	2.8	4.4	5.5

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades														Applicable toolholders (pages)								
	Appearance (Cross section)			Coated								Coated cermet		Cermet		Uncoated										
Precision finishing	01 (G)		CCGT060202-01 *CCGT09T302-01	T9105	T9115	T9125	T9135	T6120	T6130	T6020	T6030	AH725	GH110	GH330	GH730	J740	SH730	GT730	AT530	GT530	J530	NS730	NS530	TH10	UX30	TAC External Toolholders (4-63 ~, 4-75 ~) TAC Internal Toolholders (5-12 ~) J-series (8-9)
	PSF (M)		CCMT060202-PSF CCMT060204-PSF CCMT09T302-PSF CCMT09T304-PSF *CCMT09T308-PSF																							
	PF (M)		CCMT060202-PF CCMT060204-PF CCMT060208-PF CCMT09T302-PF CCMT09T304-PF *CCMT09T308-PF																							
	W08 (G)		CCGT03X100R-W08 CCGT03X100L-W08 CCGT03X101R-W08 CCGT03X101L-W08 CCGT03X102R-W08 CCGT03X102L-W08 CCGT03X104R-W08 CCGT03X104L-W08 CCGT04T100R-W08 CCGT04T100L-W08 CCGT04T101R-W08 CCGT04T101L-W08 *CCGT04T102R-W08 CCGT04T102L-W08 CCGT04T104R-W08 CCGT04T104L-W08																							TAC Internal Toolholders (5-12 ~) J-series (8-36)

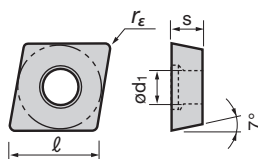
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole

80° Positive 7°

CC



CCGT 06 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (rE) Chipbreaker symbol

CC(T)(W)	03X1	04T1	0602	09T3	1204
ød1 (mm)	1.9	2.3	2.8	4.4	5.5

2

TAC Inserts

Application	Chipbreaker Appearance (Cross section)	f - ap	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)			
				Coated																			
Finishing	W15 (G)			CCGT060200R-W15																TAC External Toolholders (4-63 ~, 4-75 ~) TAC Internal Toolholders (5-12 ~) J-series (8-9)			
				CCGT060200L-W15																			
				CCGT060202R-W15																			
				CCGT060202L-W15																			
				* CCGT060204R-W15																			
				CCGT060204L-W15																			
				CCGT060208L-W15																			
	W20 (G)			CCGT09T302R-W20																			
				CCGT09T302L-W20																			
				* CCGT09T304R-W20																			
				CCGT09T304L-W20																			
				CCGT09T308R-W20																			
Finishing to light cutting	PSS (M)			CCMT060204-PSS																			
				CCMT060208-PSS																			
				* CCMT09T304-PSS																			
				CCMT09T308-PSS																			
				CCMT120404-PSS																			
				CCMT120408-PSS																			
Finishing to medium cutting	PS (M)			CCMT120412-PSS																			
				CCMT060202-PS																			
				CCMT060204-PS																			
				* CCMT060208-PS																			
				CCMT09T302-PS																			
				CCMT09T304-PS																			
				CCMT09T308-PS																			
				CCMT120404-PS																			
	CM (M)			CCMT120408-PS																			
				CCMT120412-PS																			
				CCMT060204-CM																			
				CCMT060208-CM																			
				CCMT09T304-CM																			
				CCMT09T308-CM																			
				* CCMT09T312-CM																			
				CCMT120404-CM																			
				CCMT120408-CM																			

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

C

D

E

S

T

W

V

Y

R

Special

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

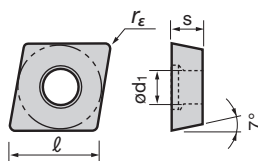
Rhombic, with hole

80°



Positive
7°

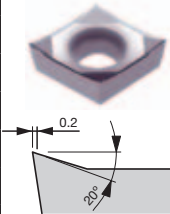
CC



CCGT 06 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

CC T(W)	03X1	04T1	0602	09T3	1204
ød1 (mm)	1.9	2.3	2.8	4.4	5.5

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)						
	Appearance (Cross section)			Coated								Coated cermet		Cermet		Uncoated										
				T9105	T9115	T9125	T9135	T6120	T6130	T5115	AH725					GT730	AT530	GT530	J530		NS730	NS530	KS05F	TH10		
Finishing to medium cutting	AL (G)		CCGT060202-AL																			●			TAC External Toolholders (4-63 ~, 4-75 ~) TAC Internal Toolholders (5-12 ~) J-series (8-9)	
		CCGT060204-AL																				●				
		*CCGT09T302-AL																					●			
		CCGT09T304-AL																					●			
		CCGT09T308-AL																					●			
		CCGT120402-AL																					●			
		CCGT120404-AL																					●			
		CCGT120408-AL																					●			

Note: Chipbreaker cross-sections are of * marked inserts.

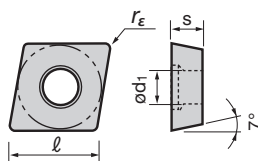
● : Stocked items
▲ : Discontinued items

Rhombic, with hole

80°



Positive 7°

CCGT 06 02 02 - Cutting edge length (ℓ) Thickness (s) Corner radius (r_f) Chipbreaker

CC□T(W)	03X1□□	04T1□□	0602□□	09T3□□	1204□□
ød1 (mm)	1.9	2.3	2.8	4.4	5.5

2

TAC Inserts

[illegible]

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

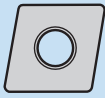
Y

R

Special

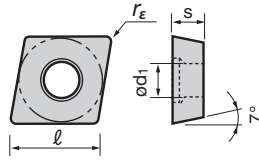
Rhombic, with hole

80°



Positive
7°

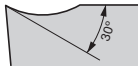
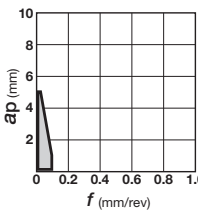
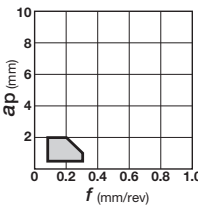
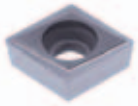
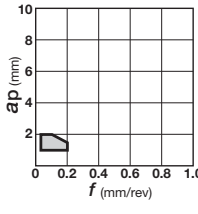
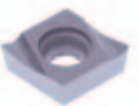
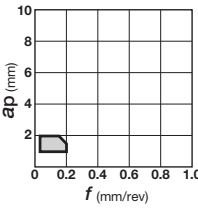
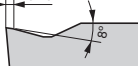
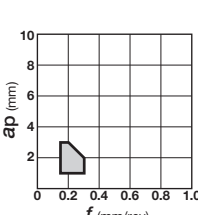
CC



CCGT 06 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

CC T(W)	03X1	04T1	0602	09T3	1204
ød1 (mm)	1.9	2.3	2.8	4.4	5.5

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																	Applicable toolholders (pages)								
	Appearance (Cross section)			Coated										Coated cermet	Cermet	Uncoated													
				T9115	T9125	T6120	T6130	T6020	T6030	T5115	AH725	AH630	AH645	GH730	SH730	GT730	AT530	GT530	J530	NS730		NS530	KS05F	TH10					
On small lathes (Honed edges)	J10 (G)  		CCGT060201R-J10 CCGT060201L-J10 CCGT060202R-J10 CCGT060202L-J10 CCGT09T301R-J10 CCGT09T301L-J10 *CCGT09T302R-J10 CCGT09T302L-J10																						TAC External Toolholders (4-63 ~, 4-75 ~) TAC Internal Toolholders (5-12 ~) J-series (8-9)				
	23 (M)  		CCMT060202-23 CCMT060204-23 *CCMT09T304-23 CCMT09T308-23																										
		All-round (G)  		CCGT060202 CCGT060204 CCGT09T302 *CCGT09T304 CCGT09T308																									
			Angular (G)  		CCGT060200R CCGT060202R CCGT060202L CCGT060204L CCGT09T302R CCGT09T302L *CCGT09T304R CCGT09T304L																								
				PM (M)  		CCMT060204-PM CCMT060208-PM CCMT09T304-PM *CCMT09T308-PM CCMT09T312-PM CCMT120408-PM CCMT120412-PM																							

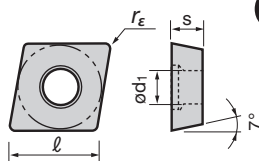
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole

80° Positive
7°

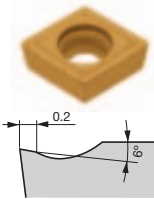
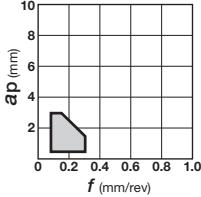
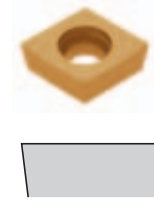
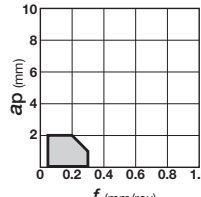
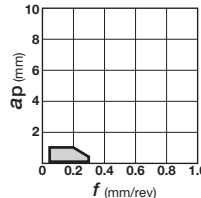
CC



CCMW 06 02 04 -

Cutting edge length (l) Thickness (s) Corner radius (rE) Chipbreaker symbol

CC T(W)	03X1	04T1	0602	09T3	1204
ød1 (mm)	1.9	2.3	2.8	4.4	5.5

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)						
	Appearance (Cross section)			Coated								Coated cermet		Cermet	Uncoated											
Medium cutting	24 (M)	 	CCMT060202-24	T9115	T9125	T6120	T6130	T5115	AH725	GH110	GH330	GH730	J740	SH730		GT730	AT530	GT530	J530	NS730	NS530		TH10		TAC External Toolholders 4-63 ~, 4-75 ~ TAC Internal Toolholders (5-12 ~) J-series (8-9)	
			CCMT060204-24																		●					
			CCMT060208-24																		●					
			CCMT09T302-24																		●					
			*CCMT09T304-24																		●					
			CCMT09T308-24																		●					
			CCMT120408-24																		●					
Finishing to medium cutting	- (M)	 	CCMW060204						●																	
			CCMW060208						●																	
			*CCMW09T304						●																	
			CCMW09T308						●																	
	- (G)	 	CCGW060202																				●			
			*CCGW060204																				●			
			CCGW09T304							●														●		

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

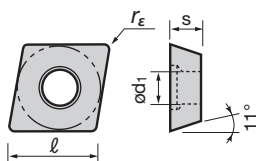
Rhombic, with hole

80°



Positive
11°

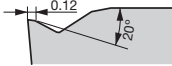
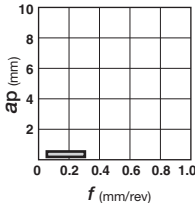
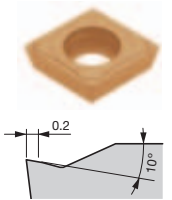
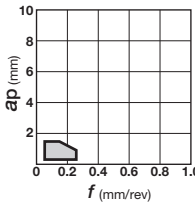
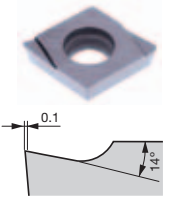
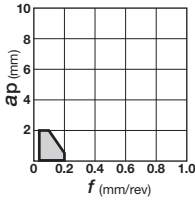
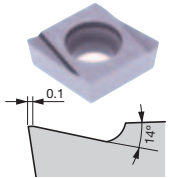
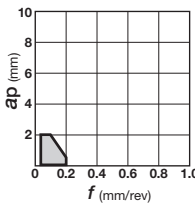
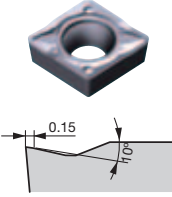
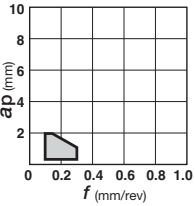
CP



CPGT 05 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

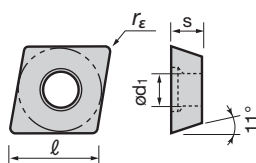
CP T(W)	0502	0602	0802	0903
ϕd_1 (mm)	2.5	2.8	3.4	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)			
	Appearance (Cross section)			Coated								Coated cermet		Cermet		Un-coated							
Finishing	PSF (M)			CPMT060202-PSF																		TAC Internal Toolholders (5-14 ~)	
				CPMT060204-PSF	●	●						●											
				CPMT080202-PSF								●											
				CPMT080204-PSF	●	●						●											
				CPMT090302-PSF								●											
				*CPMT090304-PSF	●	●						●											
				CPMT09T302-PSF								●											
				CPMT09T304-PSF	●	●						●											
	PF (M)			CPMT090302-PF					●	●					●			●	●				
				*CPMT090304-PF					●	●					●			●	●				
CPMT090308-PF								●	●								●	●					
W15 (G)			CPGT050202R-W15															●	●				
			CPGT050202L-W15																●	●			
			CPGT050204R-W15																	●			
			CPGT050204L-W15																	●			
			CPGT080202R-W15																	●		●	
			CPGT080202L-W15																	●		●	
			*CPGT080204R-W15																	●	●		
			CPGT080204L-W15																	●		●	
W20 (G)			CPGT090302R-W20															●	●				
			CPGT090302L-W20																●	●			
			*CPGT090304R-W20																	●	●		
			CPGT090304L-W20																	●	●		
Finishing to light cutting	PSS (M)			CPMT060204-PSS	●	●						●											
				CPMT080204-PSS	●	●	●	●				●	●	●									
				CPMT080208-PSS	●	●	●	●				●	●	●									
				*CPMT090304-PSS	●	●	●	●				●	●	●									
				CPMT090308-PSS	●	●	●	●				●	●	●									
				CPMT09T304-PSS	●	●						●											
				CPMT09T308-PSS	●	●						●											

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

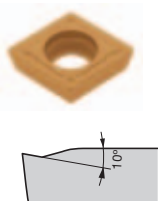
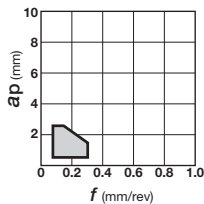
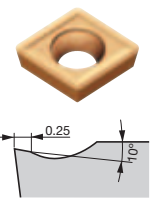
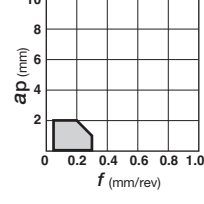
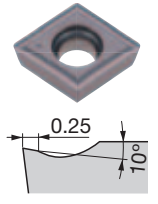
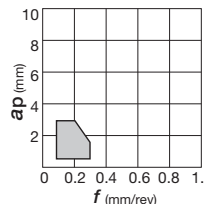
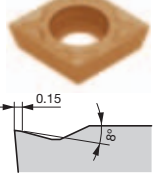
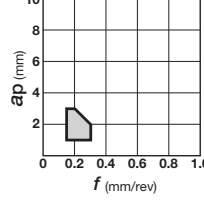
Rhombic, with hole



CPMT 06 02 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

CP T(W)	0502	0602	0802	0903
ød1 (mm)	2.5	2.8	3.4	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)	
	Appearance (Cross section)			Coated					Coated cermet	Cermet		Uncoated						
Finishing to medium cutting	PS (M)	 	CPMT060202-PS	●	●					●	●			●	●			TAC Internal Toolholders (5-14 ~)
		CPMT060204-PS	●	●						●	●	▲		●	●			
		CPMT080202-PS	●	●	●	●	●		●	●	▲		●	●				
		CPMT080204-PS	●	●	●	●	●		●	●	▲		●	●				
		CPMT080208-PS	●	●	●	●	●		●	●	▲		●	●				
		*CPMT090304-PS	●	●	●	●	●		●	●	▲		●	●				
		CPMT090308-PS	●	●	●	●	●		●	●	▲		●	●				
		CPMT09T302-PS	●	●					●									
		CPMT09T304-PS	●	●					●									
		CPMT09T308-PS	●	●					●									
Finishing to medium cutting	CM (M)	 	CPMT060204-CM														TAC Internal Toolholders (5-14 ~)	
		CPMT060208-CM																
		CPMT080204-CM																
		CPMT080208-CM																
		CPMT090304-CM																
		*CPMT090308-CM																
		CPMT09T304-CM																
		CPMT09T308-CM																
		CPMT09T312-CM																
		CPMT120408-CM																
	CPMT120412-CM																	
Medium cutting	All-round (M)	 	*CPMT120408														TAC Internal Toolholders (5-14 ~)	
Medium cutting	PM (M)	 	CPMT060204-PM		●	●	●	●		●	●	●		●	●		TAC Internal Toolholders (5-14 ~)	
		CPMT060208-PM	●	●	●	●	●		●	●	●		●	●				
		*CPMT090304-PM	●	●	●	●	●		●	●	●		●	●				
		CPMT090308-PM	●	●	●	●	●		●	●	●		●	●				

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

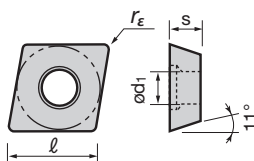
Rhombic, with hole

80°



Positive
11°

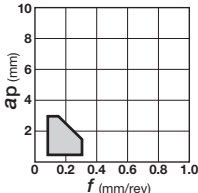
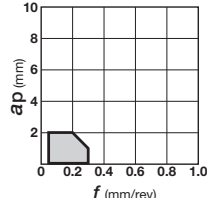
CP



CPMW 08 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

CP T(W)	0502	0602	0802	0903
Ød1 (mm)	2.5	2.8	3.4	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades												Applicable toolholders (pages)
	Appearance (Cross section)			Coated					Coated cermet	Cermet	Uncoated					
				T6120 T6130 T5115 AH725 GH730						GT730		NS730 NS530		TH10		
Medium cutting	24 (M)	 	CPMT080202-24													TAC Internal Toolholders (5-14 ~)
		CPMT090302-24								●						
		CPMT120408-24								●						
		CPMT160508-24								●						
		CPMT160512-24								●						
	- (M)	 	CPMW080202													
		CPMW080204			●					●						
		CPMW080208			●											
		CPMW090302														
		*CPMW090304			●											
		CPMW090308			●											

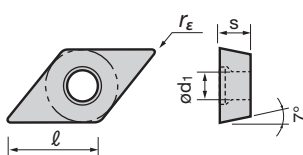
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole

55° Positive
7°

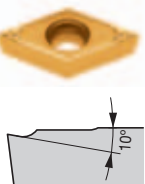
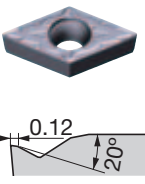
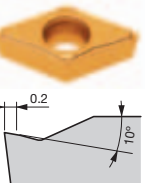
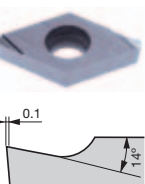
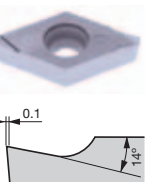
DC



DCGT 07 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

DC(T(W)	0702	11T3
od1 (mm)	2.8	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)						
	Appearance (Cross section)			Coated										Coated cermet	Cermet	Uncoated										
Precision finishing	01 (G)		DCGT070202-01 *DCGT11T302-01	T9105	T9115	T9125	T9135	T6120	T6130	T6020	T6030	T5115	AH725	AH905	GH330	GH730	J740	GT730	AT530	GT530	J530	NS730	NS530	TH10	TAC External Toolholders (4-63 ~) TAC Internal Toolholders (5-17 ~) J-series (8-12)	
Finishing	PSF (M)		DCMT070202-PSF DCMT070204-PSF DCMT11T302-PSF *DCMT11T304-PSF DCMT11T308-PSF																							
	PF (M)		DCMT070202-PF DCMT070204-PF DCMT070208-PF DCMT11T302-PF DCMT11T304-PF *DCMT11T308-PF																							
	W10 (G)		DCGT070200R-W10 DCGT070200L-W10 DCGT070202R-W10 DCGT070202L-W10 *DCGT070204R-W10 DCGT070204L-W10 DCGT070208L-W10																							
	W15 (G)		DCGT11T302R-W15 DCGT11T302L-W15 *DCGT11T304R-W15 DCGT11T304L-W15 DCGT11T308R-W15 DCGT11T308L-W15																							

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

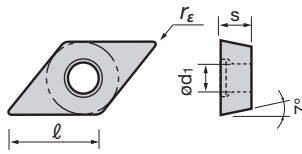
R

Special

Rhombic, with hole

55° Positive 7°

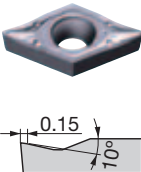
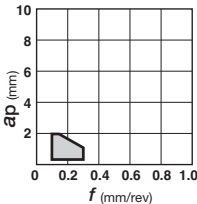
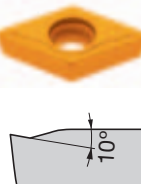
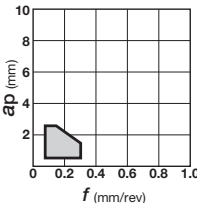
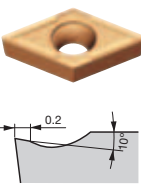
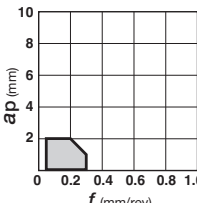
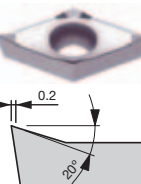
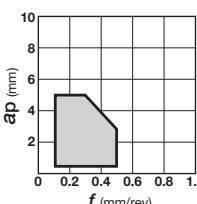
DC



DCGT 07 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

DC T(W)	0702	11T3
ød1 (mm)	2.8	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)								
	Appearance (Cross section)			Coated										Coated cermet		Cermet		Uncoated										
Finishing to Light cutting	PSS (M) 		DCMT070204-PSS	T9115	T9125	T6120	T6130	T6020	T6030	T5115	AH725	AH630	AH645	AH905	GH330	GH730	J740	GT730	AT530	GT530	J530	NS730	NS530	KS05F	TH10	TAC External Toolholders (4-63 ~) TAC Internal Toolholders (5-17 ~) J-series (8-12)		
			DCMT070208-PSS	●	●	●	●					●	●	●														
			*DCMT11T304-PSS	●	●	●	●					●	●	●	●													
			DCMT11T308-PSS	●	●	●	●					●	●	●	●													
			DCMT11T312-PSS	●	●	●	●					●	●	●	●													
Finishing to medium cutting	PS (M) 		DCMT070202-PS	●	●	●	●	●	●		●	●	●					●	▲				●	●				
			*DCMT070204-PS	●	●	●	●	●	●			●	●	●					●	▲				●	●			
			DCMT070208-PS	●	●														●					●	●			
			DCMT11T302-PS	●	●	●	●	●	●			●	●	●					●	▲				●	●			
			*DCMT11T304-PS	●	●	●	●	●	●			●	●	●	●				●	▲				●	●			
			DCMT11T308-PS	●	●	●	●	●	●			●	●	●	●				●	▲				●	●			
	CM (M) 		DCMT070204-CM								●																	
			DCMT070208-CM									●																
			*DCMT11T304-CM									●																
			DCMT11T308-CM									●																
			DCMT11T312-CM									●								●					●			
	AL (G) 		DCGT070202-AL																						●			
			DCGT070204-AL																							●		
			*DCGT11T302-AL																							●		
			DCGT11T304-AL																							●		
DCGT11T308-AL																									●			

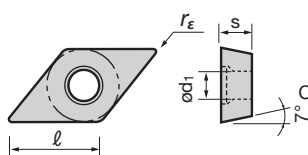
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole

55° Positive
7°

DC



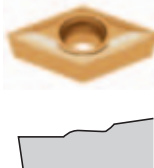
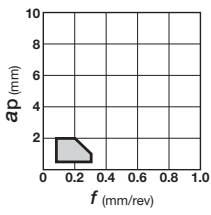
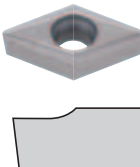
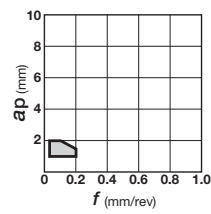
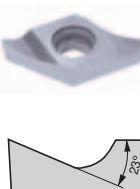
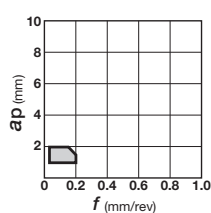
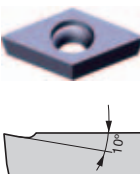
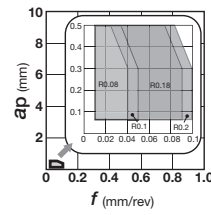
DCGT 07 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

DC T(W)	0702	11T3
ϕd_1 (mm)	2.8	4.4

2

TAC Inserts

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)			
	Appearance (Cross section)			Coated			Coated cermet	Cermet		Uncoated							
Finishing to medium cutting	23 (M)	 	DCMT070204-23 *DCMT11T304-23 DCMT11T308-23	T6120	T6130	GH110	SH730				GT730		NS730	NS530	KS05F	TH10	TAC External Toolholders (4-63 ~) TAC Internal Toolholders (5-17 ~) J-series (8-12)
	All-round (G)	 	DCGT070202 *DCGT070204 DCGT11T302 DCGT11T304 *DCGT11T308														
	Angular (G)	 	DCGT070202R DCGT070202L *DCGT070204R DCGT070204L DCGT11T302R DCGT11T302L DCGT11T304R DCGT11T304L														
	JRP (E)	 	DCET0702008MFR-JRP DCET0702008MFL-JRP DCET070201 MFR-JRP DCET070201 MFL-JRP DCET0702018MFR-JRP DCET0702018MFL-JRP DCET070202 MFR-JRP DCET070202 MFL-JRP DCET11T3008MFR-JRP DCET11T3008MFL-JRP DCET11T301 MFR-JRP DCET11T301 MFL-JRP DCET11T3018MFR-JRP DCET11T3018MFL-JRP *DCET11T302 MFR-JRP DCET11T302 MFL-JRP														

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

C

D

E

S

T

W

V

Y

R

Special

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

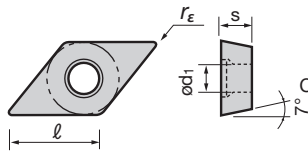
R

Special

Rhombic, with hole

55° Positive 7°

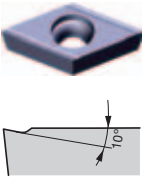
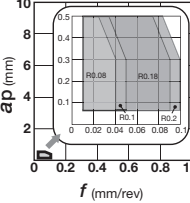
DC



DCGT 07 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

DC T(W)	0702	11T3
ød1 (mm)	2.8	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades														Applicable toolholders (pages)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	Appearance (Cross section)			Coated										Cermet		Uncoated																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
				T9105	T9115	T9125	T9135	T6120	T6130	AH725	GH110	GH730	J740	SH730	NS730	NS530	TH10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
For external turning on small lathes (Sharp edges)	JPP (E)			DCET0702008MFR-JPP																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

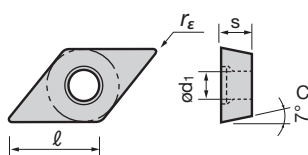
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole

55° **Positive**
7°

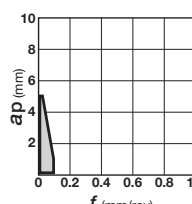
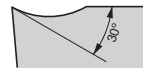
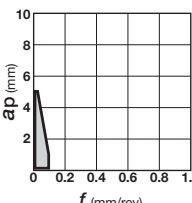
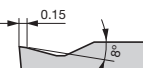
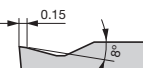
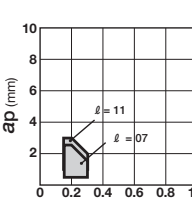
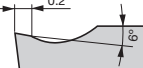
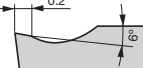
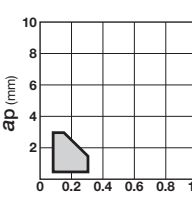
DC



DCGT 07 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

DC T(W)	0702 	11T3
ϕd_1 (mm)	2.8	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)			
	Appearance (Cross section)			Coated							Coated cermet	Cermet	Uncoated										
				T9115	T9125	T6120	T6130	T6020	T6030	T5115	AH725	AH630	AH645	GH730	J740	GT730	J530	NS730	NS530	TH10			
For external turning on small lathes (Sharp edges)	J10 (G)	 		*DCGT070200FR-J10												●					●	TAC External Toolholders (4-63 ~) TAC Internal Toolholders (5-17 ~) J-series (8-12)	
				DCGT070200FL-J10												●					●		
				DCGT070201FR-J10												●					●		
				DCGT070201FL-J10												●			▲	●	●		
				DCGT070202FR-J10												●				●	●		
				DCGT070202FL-J10												●			▲	●	●		
				DCGT11T300FR-J10												●					●		
				DCGT11T300FL-J10												●					●		
				DCGT11T301FR-J10												●				●	●		
				DCGT11T301FL-J10												●				●	●		
				DCGT11T302FR-J10												●				●	●		
				DCGT11T302FL-J10												●				●	●		
On small lathes (Honed edges)	J10 (G)	 		*DCGT070201R-J10																			
				DCGT070201L-J10																			
				DCGT070202R-J10																			
				DCGT070202L-J10																			
				DCGT11T301R-J10																			
				DCGT11T301L-J10																			
				*DCGT11T302R-J10																			
				DCGT11T302L-J10																			
Medium cutting	PM (M)	  		DCMT070204-PM	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
				DCMT070208-PM	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
				DCMT11T304-PM	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
				*DCMT11T308-PM	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
				DCMT11T312-PM	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	24 (M)	  		DCMT070202-24																●			
				DCMT070204-24																●			
				DCMT070208-24																●			
				DCMT11T302-24																●			
				*DCMT11T304-24																●			
				DCMT11T308-24																●			

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

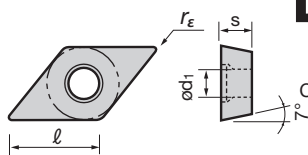
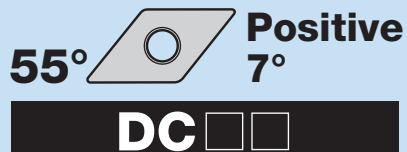
V

Y

R

Special

Rhombic, with hole



DCGW 07 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

DC□T(W)	0702□□	11T3□□
ød1 (mm)	2.8	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades												Applicable toolholders (pages)	
	Appearance (Cross section)			Coated						Coated cermet		Cermet		Uncoated			
				T6120	T6130	T5115	AH725	GH110	GH730	GT730	J530	NS730	NS530	TH10			
Medium cutting	- (M)	DCMW070204			●											TAC External Toolholders (4-63 ~)	
	DCMW070208			●													TAC Internal Toolholders (5-17 ~)
	*DCMW11T304			●											J-series (8-12)		
	DCMW11T308			●													
	- (G)	DCGW070202												●			
	DCGW070204				●									●			
	*DCGW11T304													●			
	DCGW11T308													●			

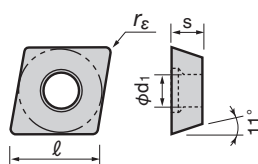
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole

75° **Positive**
11°

EPGT



EPGT 04 01 00 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

EPGT	03X1	0401
ød1 (mm)	1.9	2.3

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades														Applicable toolholders (pages)					
	Appearance (Cross section)			Coated							Coated cermet		Cermet		Uncoated								
Finishing	W08 (G)		EPGT03X100R-W08	T9105	T9115	T9125	T9135	T6120	T6130	GH110	J740	SH730		GT730	GT530		NS730	NS530	TH10	UX30	TAC Internal Toolholders (5-28 ~) J-series (8-39)		
			EPGT03X100L-W08																				
			EPGT03X101R-W08																				
			EPGT03X101L-W08																				
			*EPGT03X102R-W08																				
			EPGT03X102L-W08																				
			EPGT03X104R-W08																				
			EPGT03X104L-W08																				
			EPGT040100R-W08																				
			EPGT040100L-W08																				
			EPGT040101R-W08																				
			EPGT040101L-W08																				
			EPGT040102R-W08																				
			EPGT040102L-W08																				
			EPGT040104R-W08																				
	EPGT040104L-W08																						
	J08 (G)		EPGT040100L-J08																				
			*EPGT040102L-J08																				
			EPGT040104L-J08																				
For internal turning on small lathes	JS (G)		EPGT03X101-JS																				
			EPGT03X102-JS																				
			EPGT03X104-JS																				
			*EPGT040101-JS																				
			EPGT040102-JS																				
			EPGT040104-JS																				

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

2

TAC Inserts

C

D

E

S

T

W

V

Y

P

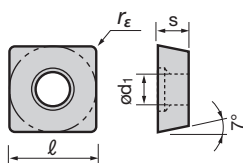
Special

2

90°

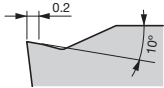
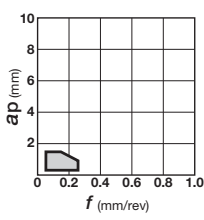
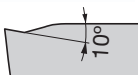
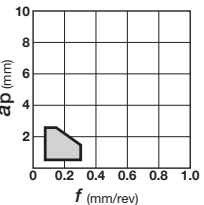
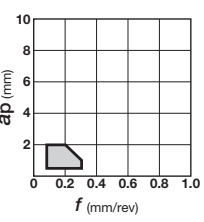
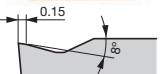
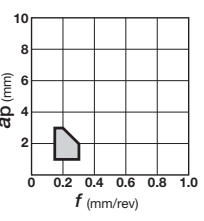


Positive 7°

SC ☐ ☐SCMT 12 04 04 -

Cutting edge length (ℓ)	Thickness (s)	Corner radius (r_ϵ)	Chipbreaker symbol
--------------------------------	---------------	--------------------------------	--------------------

SC□T(W)	0702□□	09T3□□	1204□□
ød1 (mm)	3.4	4.4	5.5

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades												Applicable toolholders (pages)						
	Appearance (Cross section)			Coated								Coated cermet	Cermet									
Finishing	PF (M)			*SCMT09T304-PF																	TAC External Toolholders (4-66 ~)	
				SCMT09T308-PF																		
Finishing to medium cutting	PS (M)			*SCMT09T304-PS				●	●	●	●		●	●	●			●	●			
				SCMT09T308-PS				●	●	●	●		●	●	●	▲			●	●		
				SCMT120404-PS				●	●	●	●		●	●	●				●	●		
				SCMT120408-PS				●	●	●	●		●	●	●				●	●		
				SCMT09T304-CM								●										
				*SCMT09T308-CM								●										
				SCMT09T312-CM								●										
			SCMT120404-CM								●											
			SCMT120408-CM								●											
Medium cutting	23 (M)			SCMT09T302-23																●		
				SCMT09T308-23								●							●	●		
				*SCMT120408-23								●							●			
	PM (M)			*SCMT09T304-PM				●	●	●	●		●	●	●				●	●		
				SCMT09T308-PM				●	●	●	●		●	●	●				●	●		
				SCMT120408-PM				●	●	●	●		●	●	●				●	●		
				SCMT120412-PM				●	●	●	●		●	●	●				●	●		

● : Stocked items
▲ : Discontinued items

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

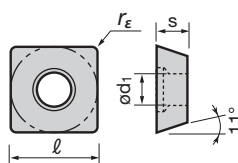
Square, with hole

90°



Positive
11°

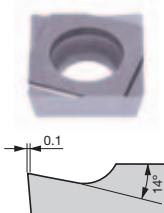
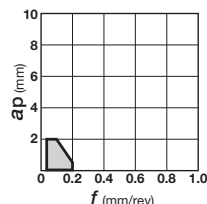
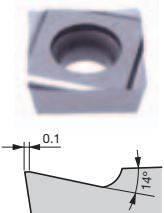
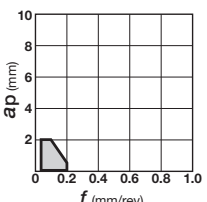
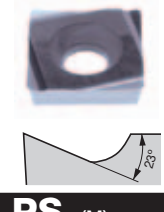
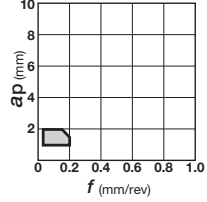
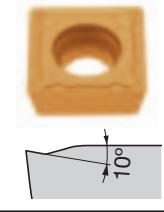
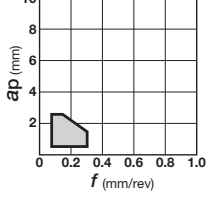
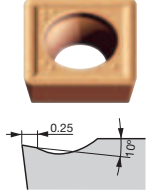
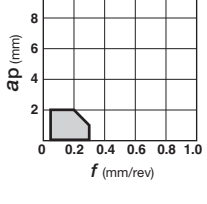
SP



SPGT 09 03 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

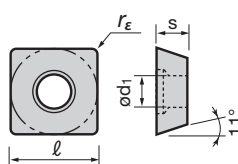
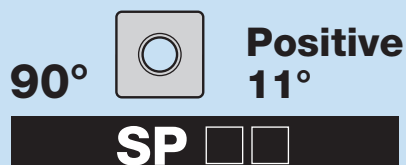
SP T(W)	0903	1204	SPGM(A)	0903	1203
ød1 (mm)	4.4	5.5	ød1 (mm)	4.0	5.0

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)
	Appearance (Cross section)			Coated								Coated cermet		Cermet		Uncoated				
Finishing	W15 (G)			SPGT090302R-W15	T9115	T9125	T6120	T6130	T6020	T6030	AH725	AH630	AH645	T5115	GT730	AT530	NS730	NS530	TH10	TAC Internal Toolholders (5-18 ~)
				SPGT090302L-W15																
				*SPGT090304R-W15																
				SPGT090304L-W15																
				SPGT090308R-W15																
				SPGT090308L-W15																
Finishing to medium cutting	W20 (G)			*SPGT120404R-W20																
				SPGT120404L-W20																
				SPGT120408R-W20																
				SPGT120408L-W20																
Finishing to medium cutting	- (with hand) (G) (Tungaloy's standard hole)			SPGM090304L																
				SPGM120304L																
				*SPGM120308L																
Finishing to medium cutting	PS (M)			SPMT090304-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●		TAC Internal Toolholders (5-18 ~)
				SPMT090308-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●		
				SPMT120404-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●		
				*SPMT120408-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●		
Finishing to medium cutting	CM (M)			SPMT090304-CM										●						
				*SPMT090308-CM										●						
				SPMT120404-CM										●						
				SPMT120408-CM										●						

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Square, with hole



SPMT 09 03 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

SP T(W)	0903	1204	SPGM(A)	0903	1203
ϕd_1 (mm)	4.4	5.5	ϕd_1 (mm)	4.0	5.0

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades												Applicable toolholders (pages)						
	Appearance (Cross section)			Coated					Cermet		Uncoated											
				T9105	T9115	T9125	T9135	T6120	T6130	AH725	T5115		NS730	NS530		TH10						
Finishing to medium cutting	23 (M)																					TAC External Toolholders (5-18 ~)
Medium cutting	24 (M)																					
Finishing to medium cutting	- (M)																					
	- (G)																					
- (G) (Tungaloy's standard hole)																						

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

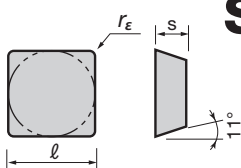
Square, without hole

90°



Positive
11°

SP



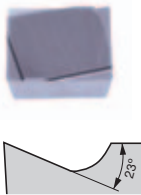
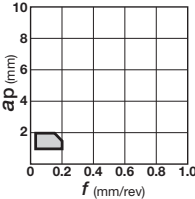
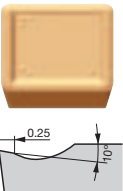
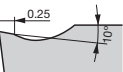
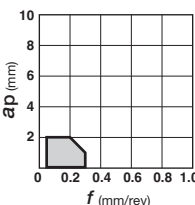
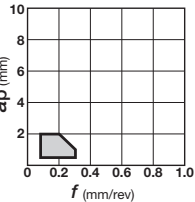
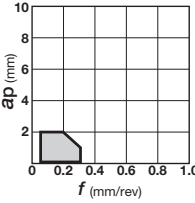
SPMR 09 03 04 -

Cutting edge length (l)

Thickness (s)

Corner radius (r_e)

Chipbreaker symbol

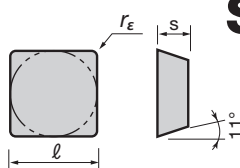
Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)				
	Appearance (Cross section)			Coated				Cermet		Uncoated	Ceramics							
				T9115	T9125	T6120	T6130	T5115			NS730	NS530	TH10		LX11			
Finishing to medium cutting	- (with hand) (G)		*SPGR090304L									●					TAC External Toolholders (4-73 ~) TAC Internal Toolholders (5-59)	
																		
	CM (M)		SPMR090304-CM					●										
			*SPMR090308-CM					●										
			SPMR120304-CM					●										
			SPMR120308-CM					●										
			SPMR120312-CM					●										
	23 (M)		SPMR090304-23									●						
			SPMR090308-23									●						
			SPMR120304-23									●						
			*SPMR120308-23									●						
			SPMR120312-23															
	- (G)		SPGN090304											●		●		
			SPGN090308											●		●		
			SPGN120302															
			*SPGN120304											●		●		
			SPGN120308											●		●		
			SPGN120312								●	●				●		
		SPGN120408											●					

Note: Chipbreaker cross-sections are of * marked inserts.

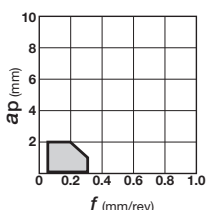
● : Stocked items
▲ : Discontinued items

Square, without hole

90°  Positive 11°
SP  



SPMN 09 03 04 - 
Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)					
	Appearance (Cross section)			Coated	Cermet		Uncoated		Ceramics										
Finishing to medium cutting	- (M)		SPMN090304	T5115				NS730	NS530	TH10	UX30	LX11							TAC External Toolholders (4-73 ~)
			SPMN090308																TAC Internal Toolholders (5-59)
			*SPMN120304																
			SPMN120308																
			SPMN120312																
			SPMN120408																
			SPMN120412																

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

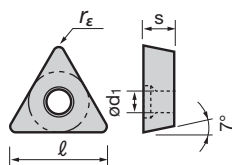
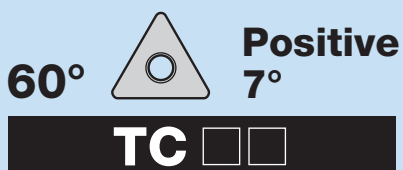
V

Y

R

Special

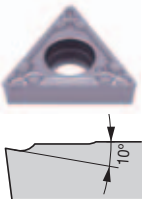
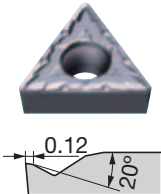
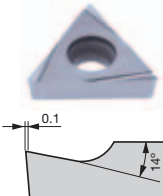
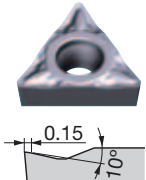
Triangular, with hole



TCGT 09 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (rε) Chipbreaker symbol

TC□T	0801□□	0802□□-J08	0902□□	1102□□	16T3□□
φd1 (mm)	2.7	2.3	2.5	2.8	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																		Applicable toolholders (pages)						
	Appearance (Cross section)			Coated							Coated cermet		Cermet		Un-coated													
				T9105	T9115	T9125	T9135	T6120	T6130	T5115	AH725	GH730	J740			GT730	AT530	GT530	J530	NS730	NS520	NS530	KS05F	TH10				
Precision finishing	01 (G)		TCGT090202-01																							TAC External Toolholders (4-65, 4-82)		
			*TCGT090204-01														●		●			●	●	●	●	●	TAC Internal Toolholders (5-19 ~)	
			TCGT110202-01										●							●			●				J-series (8-16)	
			TCGT110204-01																●				●	●	●	●		
			TCGT110208-01																				●			●		
			TCGT16T304-01																●					●	●	●		
		TCGT16T308-01																					●	●	●			
Finishing	PSF (M)		TCMT090202-PSF									●															TAC External Toolholders (4-65)	
			TCMT090204-PSF	●	●							●																TAC Internal Toolholders (5-19)
			TCMT110202-PSF									●																
			*TCMT110204-PSF	●	●							●																
			TCMT110302-PSF									●																
			TCMT110304-PSF	●	●							●																
			TCMT16T304-PSF	●	●							●																
		W15 (G)		TCGT16T302L-W15																				●	●	●	TAC External Toolholders (4-65)	
			*TCGT16T304L-W15																					●	●	●	TAC Internal Toolholders (5-19)	
			TCGT16T308L-W15																					●	●	●		
Finishing to light cutting	PSS (M)		TCMT090204-PSS	●	●							●															TAC External Toolholders (4-65, 4-82)	
			TCMT090208-PSS	●	●							●															TAC Internal Toolholders (5-19 ~)	
			*TCMT110204-PSS	●	●							●															J-series (8-16)	
			TCMT110208-PSS	●	●							●																
			TCMT110304-PSS	●	●							●																
			TCMT110308-PSS	●	●							●																
			TCMT16T304-PSS	●	●							●																
			TCMT16T308-PSS	●	●							●																
			TCMT16T312-PSS	●	●							●																

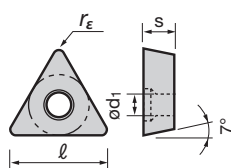
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Triangular, with hole

60°  Positive
7°

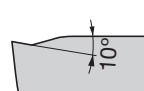
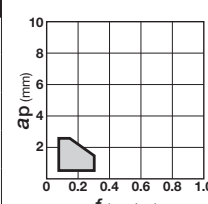
TC 



TCMT 09 02 04 - 

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

TC 	0801 	0802 	0902 	1102 	16T3 
ød1 (mm)	2.7	2.3	2.5	2.8	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)					
	Appearance (Cross section)			Coated								Coated cermet	Cermet		Uncoated										
				T9115 T9125 T6120 T6130 T6020 T6030 T5115 AH725 AH630 AH645 GH730 J740	GT730 AT530 GT530 NS730 NS520 NS530 KS05F TH10																				
Finishing to medium cutting	PS (M)	 		TCMT090204-PS																					TAC External Toolholders (4-65, 4-82) TAC Internal Toolholders (5-19 ~) J-series (8-16)
				TCMT090208-PS																					
				TCMT110202-PS	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
				*TCMT110204-PS	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
				TCMT110208-PS	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
				TCMT110302-PS	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
				TCMT110304-PS	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
				TCMT110308-PS	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
				TCMT16T302-PS	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
				TCMT16T304-PS	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
				TCMT16T308-PS	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
				TCMT090204-CM																					
				TCMT090208-CM																					
				TCMT110204-CM																					
				TCMT110208-CM																					
				*TCMT110304-CM																					
				TCMT110308-CM																					
				TCMT16T304-CM																					
				TCMT16T308-CM																					
				TCMT16T312-CM																					
			TCGT110202-SS																						
			TCGT110204-SS																						
			*TCGT110208-SS																						
			TCGT16T304-SS																						
			TCGT16T308-SS																						

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

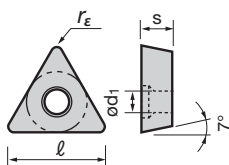
Triangular, with hole

60°



Positive
7°

TC

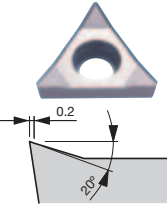
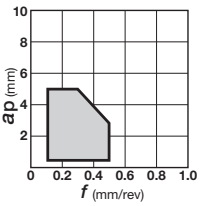
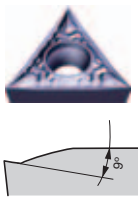
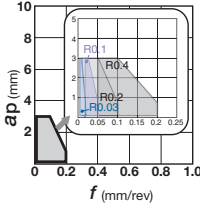
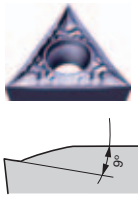
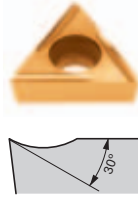
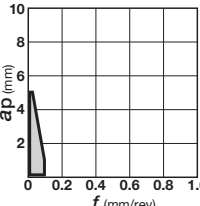
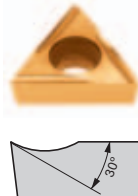
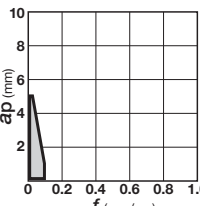


TCGT 11 02 02 -



Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

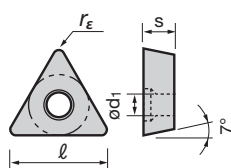
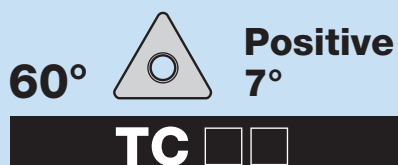
TC	T	0801	0802	0902	1102	16T3
ød1 (mm)		2.7	2.3	2.5	2.8	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades														Applicable toolholders (pages)					
	Appearance (Cross section)			Coated								Coated cermet	Cermet		Uncoated								
				T9105	T9115	T9125	T9135	T6120	T6130	AH725	GH730	J740	SH730	J530		NS730	NS530		KS05F	TH10			
Finishing to medium cutting	AL (G)		TCGT110202-AL TCGT110204-AL *TCGT16T302-AL TCGT16T304-AL TCGT16T308-AL																	●		TAC External Toolholders (4-65, 4-82) TAC Internal Toolholders (5-19 ~) J-series (8-16)	
																			●				
	JS (G)		TCGT110200FN-JS *TCGT110201FN-JS TCGT110202FN-JS TCGT110204FN-JS										●										
													●										
	JS (G)		*TCGT110201N-JS TCGT110202N-JS TCGT110204N-JS										●										
For external turning on small lathes (Sharp edges)	J08 (G)		TCGT080200FR-J08 TCGT080200FL-J08 TCGT080201FR-J08 TCGT080201FL-J08 *TCGT080202FR-J08 TCGT080202FL-J08										●								●		
													●							●			
	J08 (G)		TCGT080201R-J08 TCGT080201L-J08 *TCGT080202R-J08 TCGT080202L-J08											●							●		
														●							●		
	On small lathes (Honed edges)																						

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

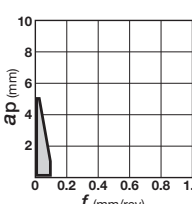
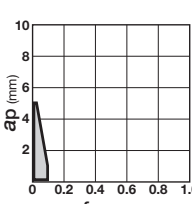
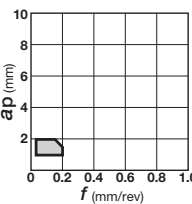
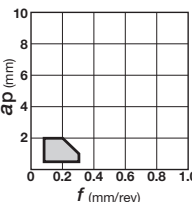
Triangular, with hole



TCGT 09 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

TC□T	0801□□	0802□□-J08	0902□□	1102□□	16T3□□
ød1 (mm)	2.7	2.3	2.5	2.8	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)
	Appearance (Cross section)			Coated				Coated cermet		Cermet		Uncoated		
				T6120	T6130	AH725	GH730	J740	GT730	J530	NS730	NS530	TH10	
On small lathes (Sharp edges)	J10 (G)  		TCGT110200FR-J10					●				●		TAC External Toolholders (4-65, 4-82) TAC Internal Toolholders (5-19) J-series (8-16)
			TCGT110200FL-J10					●						
			TCGT110201FR-J10					●						
			TCGT110201FL-J10					●						
			TCGT110202FR-J10					●				●	●	
			TCGT110202FL-J10					●				●		
			TCGT110300FR-J10					●				●		
			TCGT110300FL-J10					●						
			TCGT110301FR-J10					●				●		
			TCGT110301FL-J10					●						
			*TCGT110302FR-J10					●				●		
			TCGT110302FL-J10					●				●		
On small lathes (Honed edges)	J10 (G)  		TCGT110201R-J10								▲			
			TCGT110201L-J10								▲			
			TCGT110202R-J10						●					
			TCGT110202L-J10						●					
			*TCGT110301R-J10						●					
			TCGT110301L-J10						●					
			TCGT110302R-J10						●					
			TCGT110302L-J10						●					
Finishing	- (with hand) (G)  		*TCGT080102R									●	●	
Finishing to medium cutting	23 (M)  		TCMT090202-23									●		TAC External Toolholders (4-65, 4-82) TAC Internal Toolholders (5-19 ~) J-series (8-16)
			TCMT090204-23									●		
			TCMT110202-23									●		
			*TCMT110204-23									●		
			TCMT110208-23									●		
			TCMT16T304-23									●		
			TCMT16T308-23									▲	●	

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

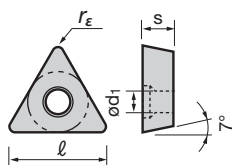
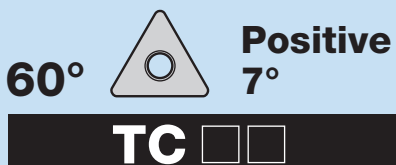
V

Y

R

Special

Triangular, with hole



TCMT 09 02 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

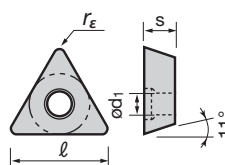
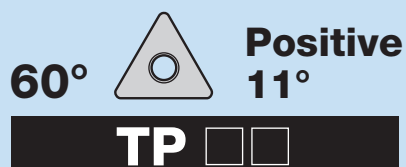
TC□T	0801□□	0802□□-J08	0902□□	1102□□	16T3□□
ød1 (mm)	2.7	2.3	2.5	2.8	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)					
	Appearance (Cross section)			Coated										Coated cermet		Cermet		Uncoated				
				T9105	T9115	T9125	T9135	T6120	T6130	T6020	T6030	AH725	AH630	AH645	GT730	J530			NS730	NS530		TH10
Medium cutting	PM (M)			TCMT110202-PM						●	●	●	●	●	●			●				TAC External Toolholders (4-65, 4-82) TAC Internal Toolholders (5-19 ~) J-series (8-16)
		TCMT110204-PM	●	●			●	●	●	●	●	●	●	●			●	●				
		TCMT110208-PM	●	●			●	●	●	●	●	●	●	●			●	●				
		TCMT110302-PM					●	●	●	●	●	●	●	●			●					
		TCMT110304-PM					●	●	●	●	●	●	●	●			●					
		TCMT110308-PM					●	●	●	●	●	●	●	●			●					
		*TCMT16T304-PM	●	●			●	●	●	●	●	●	●	●			●	●				
		TCMT16T308-PM	●	●			●	●	●	●	●	●	●	●			●	●				
		TCMT16T312-PM	●	●			●	●	●	●	●	●	●	●			●	●				
		TCMT090202-24															▲	●				
		TCMT090204-24																●				
		*TCMT110202-24																●				
		TCMT110204-24																●				
		TCMT110208-24																●				
		TCMT16T304-24																●				
		TCMT16T308-24																●				

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

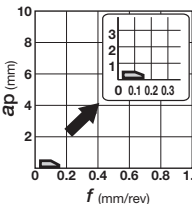
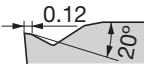
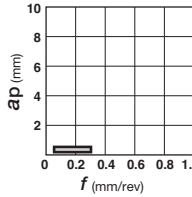
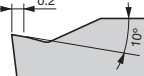
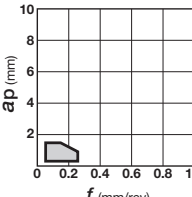
Triangular, with hole



TPGT 09 02 02 -

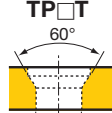
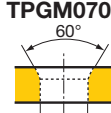
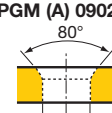
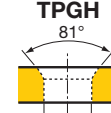
Cutting edge length (ℓ) Thickness (s) Corner radius (r_E) Chipbreaker symbol

	0701	0802	0902	1102	1103	1303	1603	16T3
TP□T(W)	-	2.3	2.5	2.8	3.4	3.4	-	4.4
TPGM(A)	2.7	-	3.2	3.0	3.0	-	4.0	-
TPGH	-	2.3	3.0	3.4	3.4	-	4.5	-

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)										
	Appearance (Cross section)			Coated						Coated cermet	Cermet		Uncoated														
Precision finishing	01 (G)	 		TPGT090202-01	T9105	T9115	T9125	T9135	T6120	T6130	T6020	T6030	GH110	GH330	GH730	AH725	SH730	GT720	GT730	GT530	NS730	NS520	NS530	TH10	UX30	TAC External Toolholders (5-20)	
	*TPGT090204-01																										
	TPGT110202-01																										
	TPGT110204-01																										
	TPGT110208-01																										
	TPGT130302-01																										
	TPGT130304-01																										
	TPGT130308-01																										
	TPGT16T304-01																										
	TPGT16T308-01																										
Finishing	PSF (M)	 		TPMT090202-PSF																							
	TPMT090204-PSF																										
	TPMT110202-PSF																										
	*TPMT110204-PSF																										
	TPMT110302-PSF																										
	TPMT110304-PSF																										
	TPMT130304-PSF																										
	TPMT16T304-PSF																										
	PF (M)	 		TPMT110204-PF																							
	TPMT110208-PF																										
	TPMT110302-PF																										
	TPMT110304-PF																										
	TPMT130304-PF																										
	TPMT130308-PF																										
	*TPMT16T304-PF																										
	TPMT16T308-PF																										

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Mounting hole specifications	TP□T 60° 	TPGM0701 60° 	TPGM (A) 0902~1603 80° 	TPGH 81° 
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TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

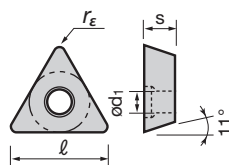
Triangular, with hole

60°



Positive
11°

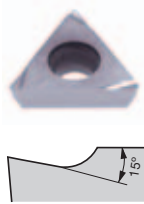
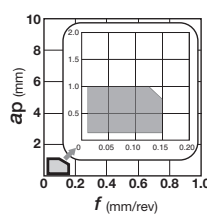
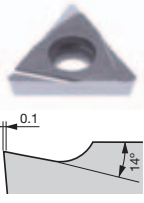
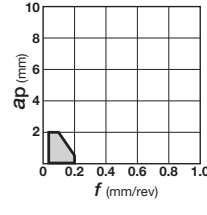
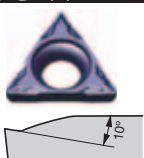
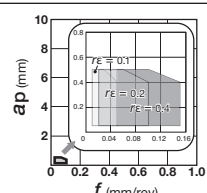
TP



TPGT 08 02 02L -

Cutting edge length (l) Thickness (s) Corner radius (rE) Chipbreaker symbol

	0701	0802	0902	1102	1103	1303	1603	16T3
TP(TW)	-	2.3	2.5	2.8	3.4	3.4	-	4.4
TPGM(A)	2.7	-	3.2	3.0	3.0	-	4.0	-
TPGH	-	2.3	3.0	3.4	3.4	-	4.5	-

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades														Applicable toolholders (pages)						
	Appearance (Cross section)			Coated							Coated cermet		Cermet		Uncoated									
				T9105	T9115	T9125	T9135	T6120	T6130	GH110	GH330	GH730	SH730	GT730	GT530		NS730	NS520	NS530	TH10	UX30			
Finishing	W08 (G)			TPGT070100R-W08										●							●		TAC Internal Toolholders (5-21 ~) J-series (8-37 ~)	
			TPGT070100L-W08										●								●			
			TPGT070101R-W08										●								●			
			TPGT070101L-W08										●								●			
			TPGT070102R-W08										●								●			
			TPGT070102L-W08										●								●			
			TPGT070104R-W08										●								●			
			TPGT070104L-W08										●								●			
			TPGT080200L-W08												●	●				●				
			TPGT080202L-W08								●					●				●		●		
			*TPGT080204L-W08								●					●				●		●		
		W15 (G)			TPGT090202R-W15																●		J-series (5-20 ~)	
			TPGT090202L-W15													●				●		●		
			*TPGT090204R-W15																	●				
			TPGT090204L-W15								●	●				●				●		●		
			TPGT110202R-W15																	●				
			TPGT110202L-W15													●				●				
			*TPGT110204R-W15																	●				
			TPGT110204L-W15								●	●				●				●		●		
			TPGT110208R-W15																	●				
			TPGT110208L-W15																	●		●		
			TPGT110302L-W15																	●				
			TPGT110304R-W15																	●				
			TPGT110304L-W15																	●				
			TPGT110308L-W15																	●				
			TPGT130302R-W15																	●				
			TPGT130302L-W15													●				●		●		
			TPGT130304R-W15								●									●				
			TPGT130304L-W15								●	●				●				●		●		
			TPGT130308R-W15																	●				
			TPGT130308L-W15												●					●		●		
			TPGT16T302R-W15																	●				
			TPGT16T302L-W15													●				●		●		
			TPGT16T304R-W15																	●		●		
			TPGT16T304L-W15								●	●				●				●		●		
			*TPGT16T308R-W15																	●				
			TPGT16T308L-W15																	●		●		
For internal turning on small lathes	JS (G)			*TPGT070101-JS									●											
			TPGT070102-JS										●											
			TPGT070104-JS										●											

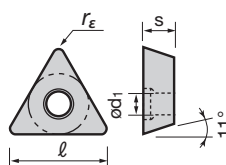
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Triangular, with hole

60°  Positive 11°

TP 



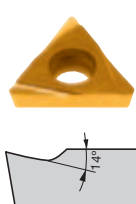
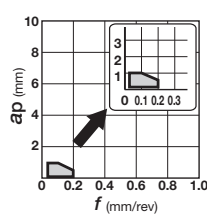
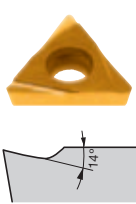
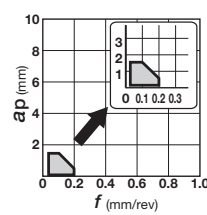
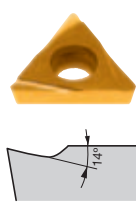
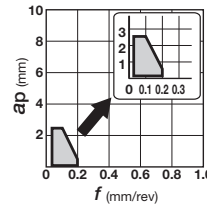
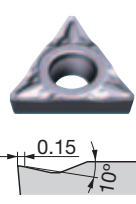
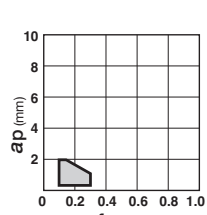
TPGH 09 02 02L -

Cutting edge length (ℓ) Thickness (s) Corner radius (r_E) Chipbreaker symbol

	0701	0802	0902	1102	1103	1303	1603	16T3
TP  T(W)	-	2.3	2.5	2.8	3.4	3.4	-	4.4
TPGM(A)	2.7	-	3.2	3.0	3.0	-	4.0	-
TPGH	-	2.3	3.0	3.4	3.4	-	4.5	-

2

TAC Inserts

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)				
	Appearance (Cross section)			Coated										Coated cermet		Cermet		Uncoated						
Finishing	W10 (G)			*TPGH080202R-W10	T9105	T9115	T9125	T9135	T6120	T6130	AH725	AH630	AH645	GH110	GH330	GH730	GT730	AT530	NS730	NS530		TH10	UX30	J-series (5-20 ~)
				TPGH080202L-W10													●							
				TPGH080204R-W10														●						
				TPGH080204L-W10														●						
				TPGH090202R-W10																				
				TPGH090202L-W10																				
				TPGH090204R-W10																				
				TPGH090204L-W10														●						
Finishing	W13 (G)			*TPGH110202R-W13																				J-series (5-20 ~)
				TPGH110202L-W13																				
				TPGH110204R-W13														●						
				TPGH110204L-W13														●						
				TPGH110302R-W13															●					
				TPGH110302L-W13														●						
				TPGH110304R-W13																				
				TPGH110304L-W13														●						
Finishing to light cutting	W18 (G)			*TPGH160302R-W18																				
				TPGH160302L-W18																				
				TPGH160304R-W18																				
				TPGH160304L-W18																				
Finishing to light cutting	PSS (M)			TPMT090204-PSS	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	
				TPMT090208-PSS	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	
				*TPMT110204-PSS	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	
				TPMT110208-PSS	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	
				TPMT110304-PSS	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	
				TPMT110308-PSS	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	
				TPMT130304-PSS	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	
				TPMT130308-PSS	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	
				TPMT16T304-PSS	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	
				*TPMT16T308-PSS	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

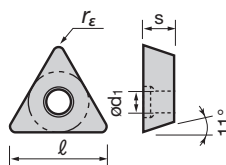
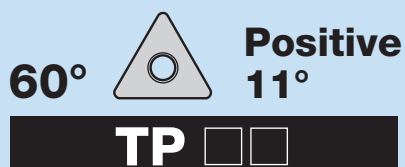
V

Y

R

Special

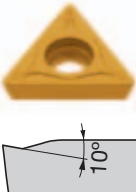
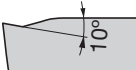
Triangular, with hole



TPGT 11 02 02 - 

Cutting edge length (ℓ) Thickness (s) Corner radius (r_E) Chipbreaker symbol

	0701	0802	0902	1102	1103	1303	1603	16T3
TP T(W)	-	2.3	2.5	2.8	3.4	3.4	-	4.4
TPGM(A)	2.7	-	3.2	3.0	3.0	-	4.0	-
TPGH	-	2.3	3.0	3.4	3.4	-	4.5	-

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades															Applicable toolholders (pages)	
	Appearance (Cross section)			Coated										Coated cermet	Cermet		Uncoated			
				T9115	T9125	T6120	T6130	T6020	T6030	T5115	AH725	AH630	AH645	GH330	GH730	GT730	AT530	NS730		NS530
Finishing to medium cutting	PS (M)		TPMT090202-PS	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	TAC External Toolholders (5-20 ~)
			TPMT090204-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●	●	●	
			TPMT090208-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●	●	●	
			TPMT110202-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●	●	●	
			*TPMT110204-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●	●	●	
			TPMT110208-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●	●	●	
			TPMT110304-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●	●	●	
			TPMT110308-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●	●	●	
			TPMT130302-PS	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
			TPMT130304-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●	●	●	
			TPMT130308-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●	●	●	
			TPMT16T304-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●	●	●	
			TPMT16T308-PS	●	●	●	●	●	●	●	●	●	●	●	▲	●	●	●	●	
			TPMT090204-CM						●											
			TPMT090208-CM						●											
			TPMT110204-CM						●											
			TPMT110208-CM						●											
			*TPMT110304-CM						●											
			TPMT110308-CM						●											
			TPMT130304-CM						●											
			TPMT130308-CM						●											
			TPMT16T304-CM						●											
			TPMT16T308-CM						●											
			TPMT16T312-CM						●											
			TPMT090202-23														●			
			TPMT090204-23														●			
			TPMT110204-23														●			
			TPMT110208-23														●			
			TPMT130304-23														●			
			TPMT130308-23														●			
			TPMT16T304-23														●			
			TPMT16T308-23														●			
			TPMT16T308-23														●			
			TPGT110202-SS														●			
			*TPGT110204-SS									●					●			
			TPGT110208-SS														●			
			TPGT130302-SS														●			
			TPGT130304-SS									●					●			
			TPGT130308-SS														●			
			TPGT16T304-SS									●					●			
		TPGT16T308-SS														●				

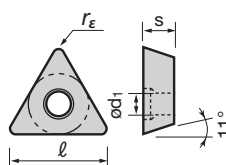
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Triangular, with hole

60°  Positive 11°

TP 



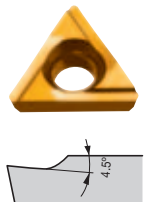
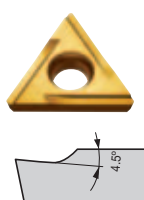
TPGH 11 03 02R -

Cutting edge length (ℓ) Thickness (s) Corner radius (r_E) Chipbreaker symbol

	0701	0802	0902	1102	1103	1303	1603	16T3
TP T(W)	-	2.3	2.5	2.8	3.4	3.4	-	4.4
TPGM(A)	2.7	-	3.2	3.0	3.0	-	4.0	-
TPGH	-	2.3	3.0	3.4	3.4	-	4.5	-

2

TAC Inserts

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)		
	Appearance (Cross section)			Coated								Coated cermet		Cermet		Uncoated						
				T9105	T9115	T9125	T9135	T6120	T6130	T5115	AH725	GH330	GH730	GT730	AT530		NS730	NS530		TH10	UX30	
Finishing to medium cutting	H11 (G)		*TPGH110302R-H11 TPGH110302L-H11 TPGH110304R-H11 TPGH110304L-H11																			
	H13 (G)		*TPGH160304R-H13 TPGH160304L-H13																			
	- (with hand) (G)		*TPGM070102R TPGM070102L TPGM070104R TPGM070104L TPGM090202R TPGM090202L TPGM090204L TPGM110202R *TPGM110202L TPGM110204R TPGM110204L TPGM110302R TPGM110302L TPGM110302L-2 TPGM110304R TPGM110304L TPGM110304L-2 TPGM160302L TPGM160304R TPGM160304L *TPGM160304L-2																			

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

C

D

E

S

T

W

V

Y

R

Special

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

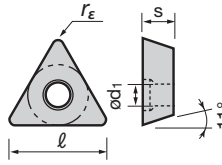
Triangular, with hole

60°



Positive
11°

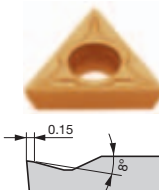
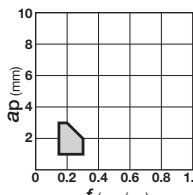
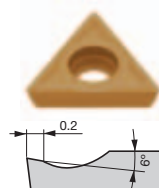
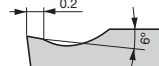
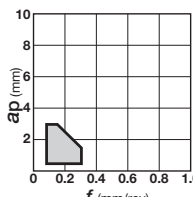
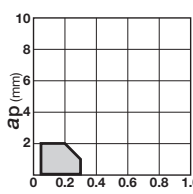
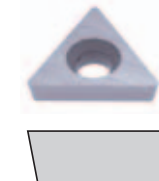
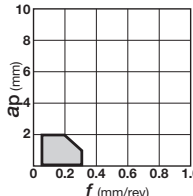
TP



TPMT 09 02 04 -

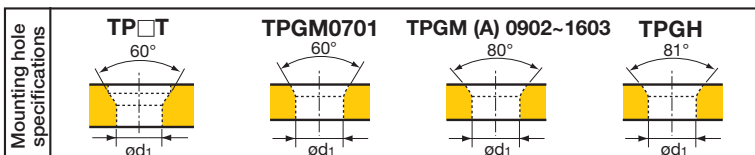
Cutting edge length (l) Thickness (s) Corner radius (rE) Chipbreaker symbol

	0701	0802	0902	1102	1103	1303	1603	16T3
TP(T(W))	-	2.3	2.5	2.8	3.4	3.4	-	4.4
TPGM(A)	2.7	-	3.2	3.0	3.0	-	4.0	-
TPGH	-	2.3	3.0	3.4	3.4	-	4.5	-

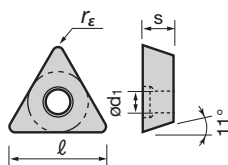
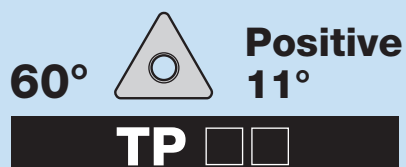
Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades														Applicable toolholders (pages)		
	Appearance (Cross section)			Coated										Coated cermet	Cermet		Uncoated			
				T9115	T9125	T6120	T6130	T6020	T6030	T5115	AH725	AH630	AH645	GH330	GT730	AT530	NS730		NS530	TH10
Medium cutting	PM (M)  		TPMT090204-PM																	TAC Internal Toolholders (5-20 ~)
	TPMT090208-PM																			
	TPMT110204-PM																			
	TPMT110208-PM																			
	TPMT110304-PM																			
	TPMT110308-PM																			
	TPMT130304-PM																			
	TPMT130308-PM																			
	*TPMT16T304-PM																			
	TPMT16T308-PM																			
TPMT16T312-PM																				
	24 (M)  		TPMT090202-24																	
	TPMT090204-24																			
	TPMT110204-24																			
	*TPMT110208-24																			
	TPMT130304-24																			
	TPMT130308-24																			
	TPMT16T304-24																			
	TPMT16T308-24																			
Finishing to medium cutting	- (M)  		TPMW110204																	
	TPMW110208																			
	*TPMW130304																			
	TPMW130308																			
	TPMW16T304																			
	TPMW16T308																			
	- (G) Tungaloy-standard hole  		TPGA090204																	
	TPGA110202																			
	*TPGA110204																			
	TPGA110302																			
	TPGA110304																			
	TPGA160304																			
	TPGA160308																			

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items



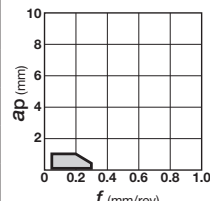
Triangular, with hole



TPGW 09 02 02

Cutting edge length (l) Thickness (s) Corner radius (rε)

TPGW	0902	1102	1103	1303	16T3
ød1 (mm)	2.5	2.8	3.4	3.4	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades													Applicable toolholders (pages)	
	Appearance (Cross section)			Coated							Coated cermet	Cermet		Un-coated				
				T9105	T9115	T9125	T9135	T6120	T6130	T5115	GH110		GT730		NS730	NS530		
Finishing to medium cutting	- (G)  		TPGW090202															TAC Internal Toolholders (5-20 ~)
	TPGW090204																	
	TPGW110202																	
	TPGW110204								●									
	*TPGW110304																	
	TPGW130304																	
	TPGW16T304								●									
	TPGW16T308																	

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

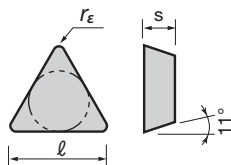
Triangular, without hole

60°



Positive
11°

TP



TPMR 11 03 04 -



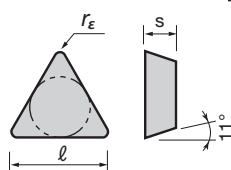
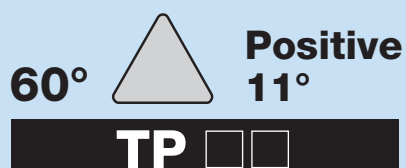
Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)						
	Appearance (Cross section)			Coated						Coated cermet	Cermet		Un-coated							
				T9105	T9115	T9125	T9135	T6120	T6130	T5115	GH110		GT730		NS730	NS530		TH10		
Finishing to medium cutting	(with hand) (G)		TPGR110302L																	TAC External Toolholders (4-73)
			*TPGR110304L																	TAC Internal Toolholders (5-50)
			TPGR160304R																	
			TPGR160304L																	
			TPGR160308L																	
	PS (M)		*TPMR110304-PS																	
			TPMR110308-PS																	
			TPMR160304-PS																	
			TPMR160308-PS																	
	CM (M)		TPMR110304-CM																	
			*TPMR110308-CM																	
			TPMR160304-CM																	
			TPMR160308-CM																	
			TPMR160312-CM																	
	23 (M)		*TPMR110304-23																	
			TPMR110308-23																	
			TPMR160304-23																	
			TPMR160308-23																	
			TPMR160312-23																	

Note: Chipbreaker cross-sections are of * marked inserts.

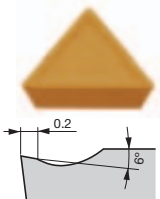
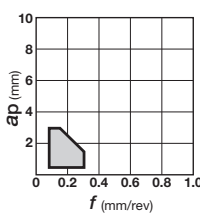
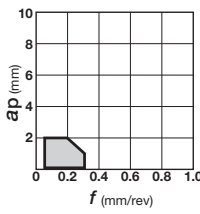
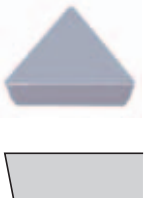
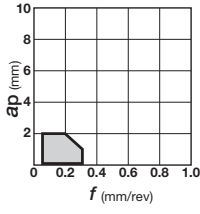
● : Stocked items
▲ : Discontinued items

Triangular, without hole



TPGN 16 03 12

Cutting edge length (l) Thickness (s) Corner radius (r_E)

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)				
	Appearance (Cross section)			Coated					Cermet	Uncoated		Ceramics						
				T9115	T9125	T6120	T6130	T5115	GH110	NS530		TH10	UX30		LX21	LX11		
Medium cutting	24 (M)		TPMR090204-24							●								TAC External Toolholders (4-73)
			*TPMR110304-24							●								TAC Internal Toolholders (5-50)
			TPMR110308-24							●								
			TPMR160304-24							●								
			TPMR160308-24							●								
Finishing to medium cutting	- (M)		TPMN110304					●				●						
			TPMN110308					●										
			*TPMN160304					●				●						
			TPMN160308					●				●	●					
			TPMN160312					●										
			TPMN220408										●					
	- (G)		TPGN110302									●						
			TPGN110304					●				●				●	●	
			TPGN110308									●					●	
			TPGN160302									●						
			*TPGN160304						●		●	●				●		
			TPGN160308						●	●	●	●				●		
			TPGN160312													●		
		TPGN220404									●							

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

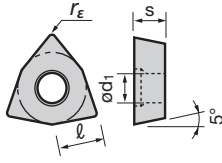
Trigon, with hole

80°



Positive
5°

WBGT

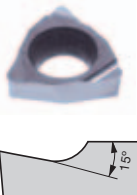
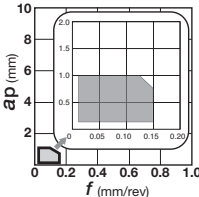
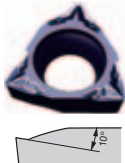
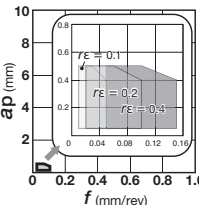


WBGT 03 01 02 -



Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

WBGT	0301	0601	0802
phi_d1 (mm)	2.3	2.3	2.3

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)							
	Appearance (Cross section)			Coated					Coated cermet	Cermet											
Finishing	W08 (G)	 	WBGT030100R-W08	T9105	T9115	T9125	T9135	GH110	SH730				NS530		TH10	UX30					TAC Internal Toolholders (5-29 ~)
			WBGT030100L-W08																		
			WBGT030101R-W08																		
			WBGT030101L-W08																		
			*WBGT030102R-W08																		
			WBGT030102L-W08																		
			WBGT030104R-W08																		
			WBGT030104L-W08																		
			WBGT060102L-W11																		
			WBGT060104L-W11																		
			WBGT080202L-W11																		
		*WBGT080204L-W11																			
For internal turning on small lathes	JS (G)	 	*WBGT030101R-JS																		
			WBGT030101L-JS																		
			WBGT030102R-JS																		
			WBGT030102L-JS																		
			WBGT030104R-JS																		
			WBGT030104L-JS																		

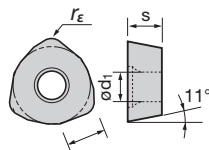
Trigon, with hole

80°



Positive
11°

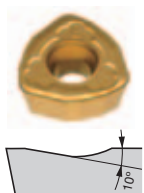
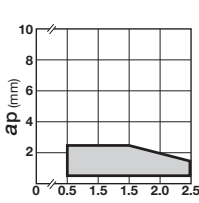
WPMT



WPMT 09 07 25ZPR - ML

Cutting edge length (l) Thickness (s) Corner radius (r_E) Chipbreaker symbol

WPMT	090725
phi_d1 (mm)	5.5

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Appearance (Cross section)			Coated																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Heavy	ML (M)	 	*WPMT090725ZPR-ML	T9105	T9115	T9125	T9135	AH120																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

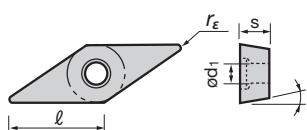
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole

35° **Positive**
5°

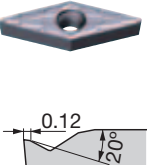
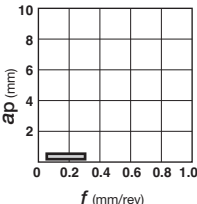
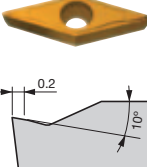
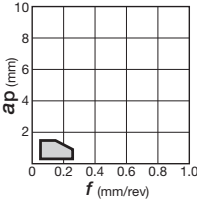
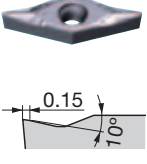
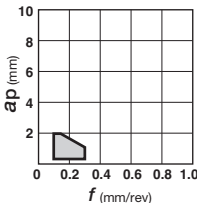
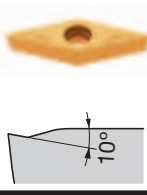
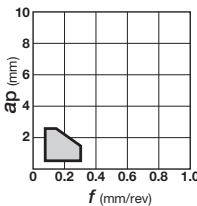
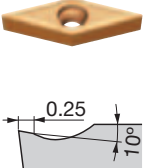
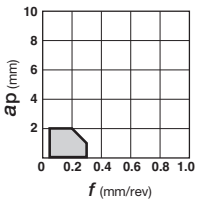
VB



VBMT 11 03 02 -

Cutting edge length (ℓ) Thickness (s) Corner radius (r_e) Chipbreaker symbol

VB□T	1103□□	1604□□
ød1 (mm)	2.8	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)		
	Appearance (Cross section)			Coated						Coated cermet	Cermet		Uncoated									
Finishing	PSF (M)	 	VBMT110302-PSF VBMT110304-PSF VBMT160402-PSF *VBMT160404-PSF	T9105	T9115	T9125	T9135	T6120	T6130	T6020	T6030	T5115	AH725	AH630	AH645	GT730	AT530	J530	NS730	NS530	TH10	TAC Internal Toolholders (5-22 ~) J-series (8-17 ~)
	PF (M)	 	VBMT110302-PF VBMT110304-PF *VBMT110308-PF VBMT160404-PF VBMT160408-PF																			
	PSS (M)	 	VBMT110304-PSS VBMT110308-PSS *VBMT160404-PSS VBMT160408-PSS VBMT160412-PSS																			
	PS (M)	 	*VBMT110302-PS VBMT110304-PS VBMT110308-PS VBMT160402-PS VBMT160404-PS VBMT160408-PS																			
	CM (M)	 	VBMT110304-CM VBMT110308-CM *VBMT160404-CM VBMT160408-CM VBMT160412-CM																			

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

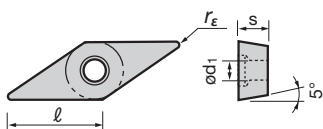
R

Special

Rhombic, with hole

35° Positive 5°

VB

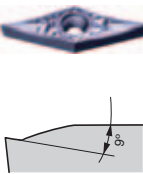
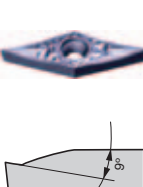
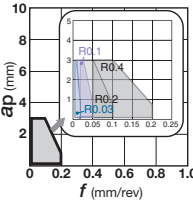
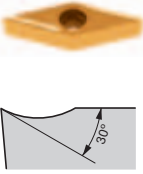
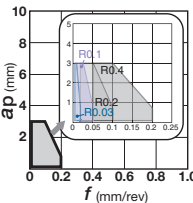
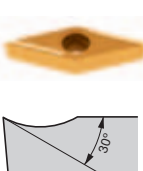
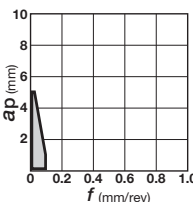
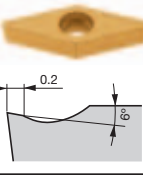
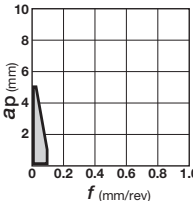
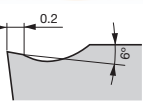
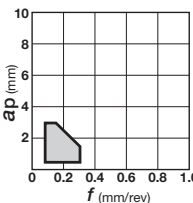


VBGT 11 03 02 -



Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

VB□T	1103□□	1604□□
ød1 (mm)	2.8	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades																Applicable toolholders (pages)		
	Appearance (Cross section)			Coated					Coated cermet		Cermet		Uncoated									
				T9105	T9115	T9125	T9135	T6120	T6130	T5115	AH725	J740	SH730	GT730	AT530	J530	NS730	NS530		TH10		
For external turning on small lathes (Sharp edges)	JS (G)		VBGT110300FN-JS VBGT110301FN-JS VBGT110302FN-JS *VBGT110304FN-JS										●									
													●									
														●								
														●								
On small lathes	JS (G)		VBGT110301N-JS VBGT110302N-JS *VBGT110304N-JS																			
																						
For external turning on small lathes (Sharp edges)	J10 (G)		*VBGT110300FR-J10 VBGT110300FL-J10 VBGT110301FR-J10 VBGT110301FL-J10 VBGT110302FR-J10 VBGT110302FL-J10 VBGT110304FR-J10 VBGT110304FL-J10										●								●	
														●							●	
														●						●		
														●						●		
														●						●		
														●						●		
														●						●		
														●						●		
For external turning on small lathes (Honed edges)	J10 (G)		VBGT110301R-J10 VBGT110301L-J10 *VBGT110302R-J10 VBGT110302L-J10 VBGT110304R-J10 VBGT110304L-J10													●						
																●						
																●						
																●						
																●						
																●						
																●						
Medium cutting	24 (M)		* VBMT160404-24 VBMT160408-24															●				
																		●				

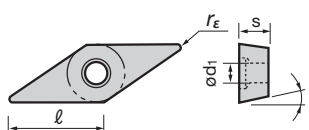
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole

35° Positive
7°

VC



VCMT 11 03 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

VC□□	0802□□	1103□□	1604□□	2205□□
ød1 (mm)	2.3	2.8	4.4	5.5

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades															Applicable toolholders (pages)		
	Appearance (Cross section)			Coated						Coated cermet		Cermet		Uncoated							
Finishing	PSF (M)			VCMT080202-PSF	T9115	T9125	T6120	T6130	T6020	T6030	T5115	AH725	AH630	AH645	AH905	GT730	AT530	NS730	NS530	KS05F	TAC External Toolholders (4-65 ~)
				VCMT080204-PSF	●	●						●									TAC Internal Toolholders (5-22)
				VCMT110302-PSF								●									
				VCMT110304-PSF	●	●						●									
				*VCMT160404-PSF	●	●						●			●						
				VCMT160408-PSF	●	●						●			●						
Finishing to light cutting	PF (M)			VCMT080202-PF					●	●							●		●		
				VCMT080204-PF					●	●							●		●		
				VCMT160404-PF					●	●							●		●		
				*VCMT160408-PF					●	●							●		●		
Finishing to medium cutting	PSS (M)			VCMT110304-PSS	●	●	●	●				●	●	●							
				VCMT110308-PSS	●	●	●	●				●	●	●							
				*VCMT160404-PSS	●	●	●	●				●	●	●	●						
				VCMT160408-PSS	●	●	●	●				●	●	●	●						
Finishing to medium cutting	PS (M)			VCMT110302-PS	●	●	●	●	●	●		●	●	●			●	▲	●	●	
				VCMT110304-PS	●	●	●	●	●	●		●	●	●			●	▲	●	●	
				*VCMT110308-PS	●	●	●	●	●	●		●	●	●			●	▲	●	●	
				VCMT160404-PS	●	●	●	●	●	●		●	●	●			●	▲	●	●	
				VCMT160408-PS	●	●	●	●	●	●		●	●	●			●	▲	●	●	
	CM (M)			VCMT080204-CM								●									
				*VCMT160404-CM								●									
				VCMT160408-CM								●									
				VCMT160412-CM								●									

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

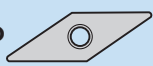
Y

R

Special

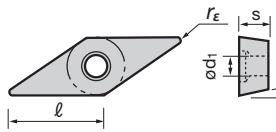
Rhombic, with hole

35°



Positive
7°

VC



VCGT 16 04 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

VC	T	0802	1103	1604	2205
ød1 (mm)		2.3	2.8	4.4	5.5

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades								Applicable toolholders (pages)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	Appearance (Cross section)			Coated			Cermet	Uncoated																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
				T6120	T6130	T5115	AH905	NS530			KS05F																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Finishing to medium cutting	AL (G)			VCGT160404-AL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	</

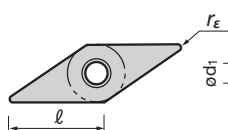
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole

35° **Positive**
11°

VP



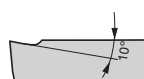
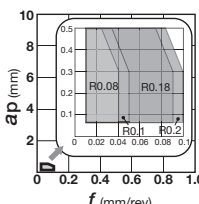
VPET 11 03 02 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

VPET	0802 	1103
ød1 (mm)	2.3	2.8

2

TAC Inserts

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades								Applicable toolholders (pages)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	Appearance (Cross section)			Coated				Cermet	Uncoated																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
				T6120	T6130	T5115	SH730	NS530	KS05F																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
For external turning on small lathes (Sharp edges)	JRP (E)	  	VPET0802008MFR-JRP				●																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

C

D

E

S

T

W

V

Y

R

Special

TAC Inserts, positive

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

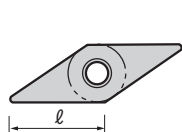
Rhombic, with hole

35°



**Positive
11°**

VP



VPET 11 03 02 -



Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

VPET	0802	1103
$\phi d1$ (mm)	2.3	2.8

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades				Applicable toolholders (pages)
	Appearance (Cross section)			Coated	Cermet	Uncoated		
For external turning on small lathes (Sharp edges)	JSP (E)		VPET0802008MFN-JSP	●				J-series (8-19)
			VPET080201 MFN-JSP	●				
			VPET0802018MFN-JSP	●				
			VPET080202 MFN-JSP	●				
			VPET1103008MFN-JSP	●				
			VPET110301 MFN-JSP	●				
			VPET1103018MFN-JSP	●				
			*VPET110302 MFN-JSP	●				

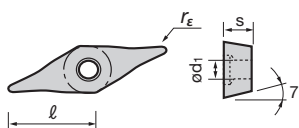
Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

Rhombic, with hole

25° Positive
7°

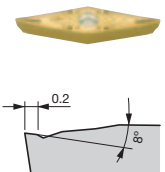
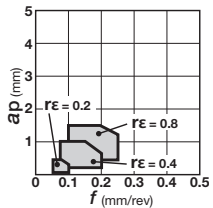
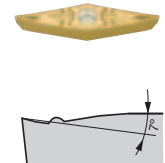
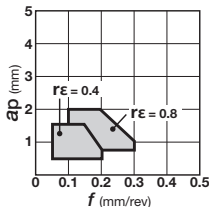
YWMT



YWMT 16 T3 04 -

Cutting edge length (l) Thickness (s) Corner radius (r_e) Chipbreaker symbol

YWMT	11T2	16T3
ød1 (mm)	2.3	2.86

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades												Applicable toolholders (pages)	
	Appearance (Cross section)			Coated						Coated cermet		Cermet		Uncoated			
				T9105	T9115	T9125	T9135	T6120	T6130	AH725	GT730	AT530	NS730	NS530	KS05F		
Finishing to medium cutting	ZF (M)			YWMT11T202-ZF													TAC External Toolholders (4-43)
	ZM (M)			YWMT11T204-ZM													TAC Internal Toolholders (5-30)

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

E

S

T

W

V

Y

R

Special

TAC Inserts, positive

2

TAC Inserts

C

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Y

R

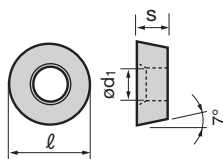
Special

Round, with hole



**Positive
7°**

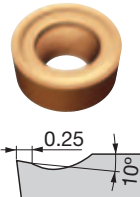
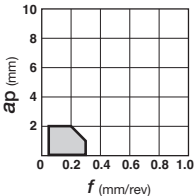
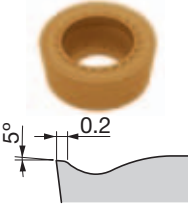
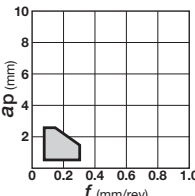
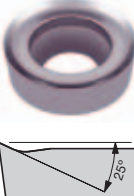
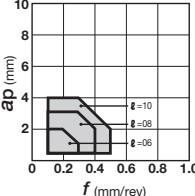
RC



RCGT 06 02 M0 -



Cutting edge length (l) Thickness (s) Corner radius (r_c) Chipbreaker symbol
Hole dia. ($\phi d1$) : See as below.

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades												Applicable toolholders (pages)		
	Appearance (Cross section)			Coated						Cermet		Uncoated						
				T9105	T9115	T9125	T9135	T5115	AH905	NS730	NS530	KS05F	TH10					
Finishing to medium cutting	CM (M)			RCMT0502M0-CM						●							TAC External Toolholders (4-61, 4-62)	
			RCMT0602M0-CM						●									
			*RCMT0803M0-CM						●									
	RS (M)			RCMT10T3M0-RS	●	●				●								
			RCMT1204M0-RS	●	●				●									
			*RCMT1606M0-RS	●	●													
			RCMT2006M0-RS		●													
			RCMT2507M0-RS		●													
	AL (G)			RCGT0602M0-AL										●			TAC External Toolholders (4-61, 4-62)	
			RCGT0803M0-AL											●				
			*RCGT1003M0-AL											●				

Note: Chipbreaker cross-sections are of * marked inserts.

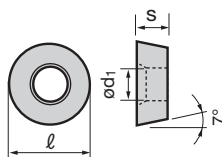
● : Stocked items
▲ : Discontinued items

Round, with hole



**Positive
7°**

RC



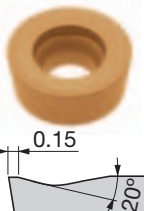
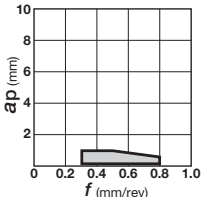
RCMT 06 02 M0 -



Cutting edge length (l) Thickness (s) Corner radius (r_c) Chipbreaker symbol
Hole dia. ($\phi d1$) : See as below.

2

TAC Inserts

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Appearance (Cross section)			Coated					Cermet		Uncoated																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Heavy cutting	61 (M)			RCMT0502M0-61	T9105	T9115	T9125	T9135	T5115	AH905																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

Note: Chipbreaker cross-sections are of * marked inserts.

● : Stocked items
▲ : Discontinued items

$\phi d1$ (mm)	Cat. No.	0502M0	0602M0	0803M0	1003M0	10T3M0	1204M0	1606M0	2006M0	2507M0
	RC□T	2.5	2.8	3.4	4.4	4.4	4.4	5.5	6.5	7.6
	RCMM	-	-	-	3.6	-	4.2	5.2	6.5	7.2

C

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Special

TAC Inserts, positive

2

TAC Inserts

C

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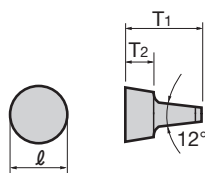
Special

Special Round Inserts



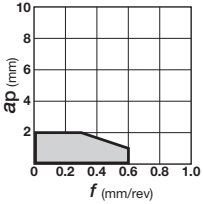
Positive

RT



RT 05

Corner radius (r_c)

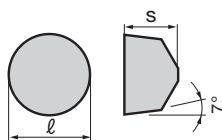
Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Dimensions (mm)			Applicable toolholders (pages)
	Appearance (Cross section)			Uncoated										l	T_1	T_2	
Medium cutting	-		RT05	●										5	6.5	2.5	TAC External Toolholders (4-65)
			RT06	●	●									6	7.7	3.0	
			RT08	●										8	10.3	4.2	

Round, without hole



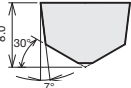
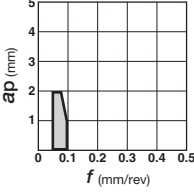
Positive
7°

RC



RCGX 09 08 00

Cutting edge length (l) Thickness (s) Corner radius (r_c)

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades										Applicable toolholders (pages)						
	Appearance (Cross section)			Coated					Ceramics											
Finishing	- (G) 		RCGX090800	T9115	T9125	T9005	T9015	T9025	T9035	T5115					LX11					
	RCGX120800																			

Note: Chipbreaker cross-sections are of * marked inserts.

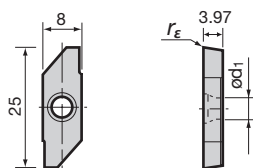
● : Stocked items
▲ : Discontinued items

Front turning Inserts



Positive

JXF



JXFR 8000 F

Hand Corner radius (r_ϵ) Sharp edge

$r_\epsilon / \phi d_1$	JXFR	8000	8010
r_ϵ		0.03	0.1
ϕd_1		4.4	4.4

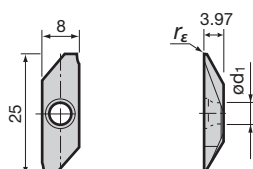
Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades												Applicable toolholders (pages)
	Appearance (Cross section)			J740												
Front turning			JXFR8000F	●												TAC External Toolholders (4-81)
			JXFR8010F	●												J-series (8-21)

Reverse turning Inserts



Positive

JXR



JXR 8000 F

Hand Corner radius (r_ϵ) Sharp edge

$r_\epsilon / \phi d_1$	JXFR	8000	8010
r_ϵ		0.03	0.1
ϕd_1		4.4	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades												Applicable toolholders (pages)
	Appearance (Cross section)			J740												
Reverse turning			JXR8000F	●												TAC External Toolholders (4-81)
			JXR8010F	●												J-series (8-21)

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

D

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Y

R

Special

TAC Inserts, positive

2

TAC Inserts

C

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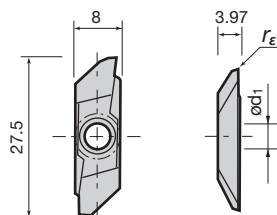
Special

Back turning Inserts



Positive

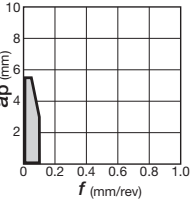
JXB□



JXBR 8000 F

Hand Corner radius (r_ϵ) F : Sharp edge □ : Honed edge

$r_\epsilon / \phi d_1$	JXB□	8000	8005	8010	8015
r_ϵ		0.03	0.05	0.10	0.15
ϕd_1		4.4	4.4	4.4	4.4

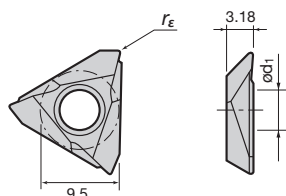
Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades				Applicable toolholders (pages)
	Appearance (Cross section)			Coated	Cermet	Uncoated		
Back turning			J740		NS530	TH10		TAC External Toolholders (4-82) J-series (8-22)
			JXBR8000F	●	●			
			JXBL8000F	●		●		
			JXBR8005F	●		●		
			JXBL8005F	●		●		
			JXBR8005	●				
			JXBL8005	●				
			JXBR8010F	●	●	●		
			JXBL8010F	●		●		
			JXBR8010	●				
			JXBL8010	●				
			JXBR8015F	●		●		
			JXBL8015F	●		●		
			JXBR8015	●				
			JXBL8015	●				

Backturning Inserts



Positive

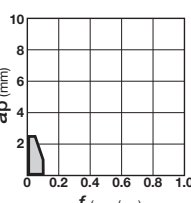
JTB□



JTBR 3000 F

Hand Corner radius (r_ϵ) F : Sharp edge □ : Honed edge

$r_\epsilon / \phi d_1$	JXB□	3000	3005	3010	3015
r_ϵ		0.03	0.05	0.10	0.15
ϕd_1		4.4	4.4	4.4	4.4

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades				Applicable toolholders (pages)
	Appearance (Cross section)			Coated	Coated cermet	Cermet	Uncoated	
Back turning			J740		J530	NS530	TH10	TAC External Toolholders (4-83) J-series (8-23)
			JTBR3000F	●		●	●	
			JTBL3000F	●		●	●	
			JTBR3005F	●		●	●	
			JTBL3005F	●		●	●	
			JTBR3005	●	●			
			JTBL3005	●	▲			
			JTBR3010F	●		●	●	
			JTBL3010F	●		●	●	
			JTBR3010	●	●			
			JTBL3010	●	●			
			JTBR3015F	●				

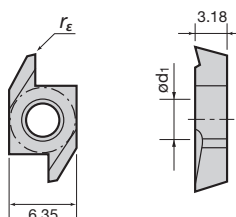
● : Stocked items
▲ : Discontinued items

Back turning Inserts



Positive

J10E



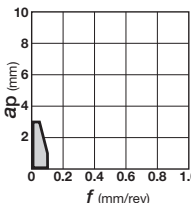
J10ER 005B F

Hand

Corner radius (r_ϵ)

F : Sharp edge
 : Honed edge

$r_\epsilon / \phi d_1$	J10E	005	010
r_ϵ		0.05	0.10
ϕd_1		3.0	3.0

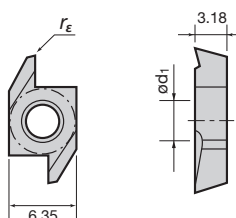
Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades				Applicable toolholders (pages)
	Appearance (Cross section)			Coated	Coated cermet	Cermet	Uncoated	
Back turning			J10ER005BF	●		●	●	TAC External Toolholders (4-84) J-series (8-24)
			J10EL005BF	●		●	●	
			J10ER005B	●	●			
			J10EL005B	●	▲			
			J10ER010BF	●		●	●	
			J10EL010BF	●		●	●	
			J10ER010B	●	●			
			J10EL010B	●	▲			

Back turning Inserts



Positive

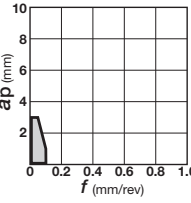
10E



10ER 100B

Hand

$r_\epsilon / \phi d_1$	10E	100	150	300
r_ϵ		0.03	0.03	-
ϕd_1		3.0	3.0	-

Application	Chipbreaker	$f - a_p$	Insert Cat. No.	Stocked grades			Applicable toolholders (pages)
	Appearance (Cross section)				Cermet	Uncoated	
Back turning			10ER100B		●	●	TAC External Toolholders (4-84) J-series (8-24)
			10ER100BC		●		
			10EL100B			●	
			10ER150B			●	
			10ER150BC		●		
			10EL150B			●	
			10ER300		●	●	
			10EL300			●	

*10ER / L300 : Insert blank

● : Stocked items
▲ : Discontinued items

2

TAC Inserts

C

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Special