

# Insert NEGATIVE TYPE

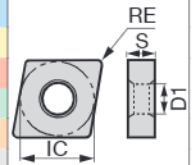
● : Continuous cutting  
 ● : Light interrupted cutting  
 ✱ : Heavy interrupted cutting

## CN



Rhombic, 80° with hole

	P	M	K	N	S	H
Steel	●●●●✱	●●	●●●●	●●●●	●●●●	●●●●
Stainless	●●	●●	●●●●	●●●●	●●●●	●●●●
Cast iron	●●●●	●●●●	●●●●	●●●●	●●●●	●●●●
Non-ferrous				●●●●	●●●●	●●●●
Superalloy					●●●●	●●●●
Hard material						●●●●



Application	Chipbreaker	Designation	Coated										Coated cermet		Cermet		Uncoated		Dimension (mm)			
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	AH120	GH110	GT9530	AT9530	NS9530	NS520	TH10	RE	IC	S	D1	
Application	<b>TF</b>	CNMG120404-TF													●		●	0.4	12.7	4.76	5.16	
		CNMG120408-TF													●			0.8	12.7	4.76	5.16	
Precision finishing	<b>01</b>	CNGG090302-01													●			0.2	9.525	3.18	3.81	
		CNGG090304-01													●			0.4	9.525	3.18	3.81	
		CNGG090308-01													●			0.8	9.525	3.18	3.81	
		CNGG120402-01													●●		●	0.2	12.7	4.76	5.16	
		CNGG120404-01													●●		●	0.4	12.7	4.76	5.16	
		CNGG120408-01													●●		●	0.8	12.7	4.76	5.16	
C	<b>C</b>	CNGG120404R-C											●		●			0.4	12.7	4.76	5.16	
		CNGG120404L-C													●			0.4	12.7	4.76	5.16	
		CNGG120408R-C													●			0.8	12.7	4.76	5.16	
		CNGG120408L-C													●			0.8	12.7	4.76	5.16	
Finishing	<b>TSF</b>	CNMG090404E-TSF	●●				▲▲						●●		●			0.4	9.525	4.76	3.81	
		CNMG090408E-TSF	●●				▲▲					●●		●				0.8	9.525	4.76	3.81	
		CNMG120404-TSF	●●●●				▲▲▲▲					●●		●				0.4	12.7	4.76	5.16	
		CNMG120408-TSF	●●●●	●			▲▲▲▲▲					●●		●				0.8	12.7	4.76	5.16	
		CNMG120412-TSF	●●				▲▲											1.2	12.7	4.76	5.16	
Finishing (wiper)	<b>FW</b>	CNMG090404E-FW	●●●●				▲▲▲▲					●		●				0.4	9.525	4.76	3.81	
		CNMG090408E-FW	●●●●				▲▲▲▲					●		●				0.8	9.525	4.76	3.81	
		CNMG120404-FW	●●				▲▲					●		●				0.4	12.7	4.76	5.16	
		CNMG120408-FW	●●●●				▲▲▲▲					●		●				0.8	12.7	4.76	5.16	
		*Wiper																				
AFW	<b>AFW</b>	CNMG120404-AFW	●●				▲▲					●		●				0.4	12.7	4.76	5.16	
		CNMG120408-AFW	●●●●	●			▲▲▲▲▲					●						0.8	12.7	4.76	5.16	

\* Please see L032-L036 about the adjustment of the machining program for rounding or taper machining by using SW/FW. Please contact our sales representatives if you have any question.

● : Line up  
 ▲ : To be discontinued

Reference pages: External toolholder → C016 - Internal toolholder → D021 -  
 J-Series toolholder → G044 TungCap → K008 -  
 PINZBOHR® → K180 - Cartridge → K199 -

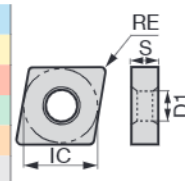
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● : Continuous cutting  
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## CN

Rhombic, 80°  
with hole

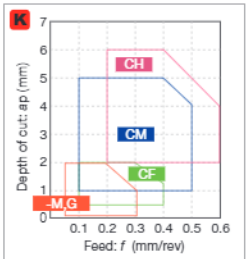
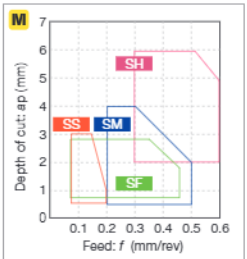
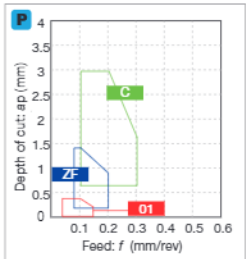
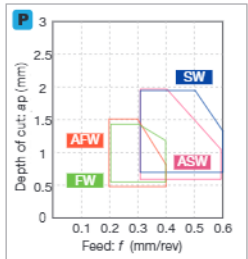
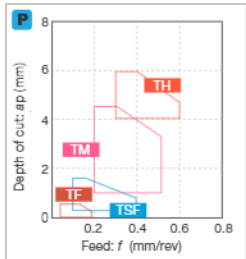
P	Steel	●	●	●	❖	❖	❖	❖	❖	●	●	●	●	●	●	●
M	Stainless	●	●							●	●					
K	Cast iron	●	●	●		●				●	●					
N	Non-ferrous														●	
S	Superalloy															
H	Hard material															



Application	Chipbreaker	Designation	Coated								Coated cermet		Cermet	Uncoated	Dimension (mm)								
			T9205	T9215	T9225	T9235	T9115	T9125	T9135	T6120	T6130	AH630	T5105	T5115	GT9530	AT9530	GT720	NS9530	TH10	RE	IC	S	D1
Finishing		ZF CNMG090404E-ZF	●	●			▲	▲												0.4	9.525	4.76	3.81
		CNMG120404-ZF	●	●			▲	▲					●	●						0.4	12.7	4.76	5.16
		CNMG120408-ZF	●	●	●	●	▲	▲	▲				●	●						0.8	12.7	4.76	5.16
Finishing		11 CNMG120404-11											●				●		0.4	12.7	4.76	5.16	
		CNMG120408-11											●	●				●		0.8	12.7	4.76	5.16
Finishing (for mild steel)		17 CNMG120404-17															●		0.4	12.7	4.76	5.16	
		CNMG120408-17															●			0.8	12.7	4.76	5.16
Finishing		SF CNMG090304-SF							●	●	●								0.4	9.525	3.18	3.81	
		CNMG090308-SF							●	●	●									0.8	9.525	3.18	3.81
		CNMG120404-SF								●	●	●								0.4	12.7	4.76	5.16
		CNMG120408-SF								●	●	●								0.8	12.7	4.76	5.16
		CNMG120412-SF								●	●	●								1.2	12.7	4.76	5.16
		CF CNMG120404-CF											●	●							0.4	12.7	4.76
Finishing		CNMG120408-CF										●	●						0.8	12.7	4.76	5.16	
		CNMG120412-CF											●	●						1.2	12.7	4.76	5.16

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Chip control range



\*-M,G: Without chipbreaker

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 J-Series toolholder → **G044** TungCap → **K008** -  
 PINZBOHR® → **K180** - Cartridge → **K199** -

Grade **A**  
 Insert **B**  
 Ext. Toolholder **C**  
 Int. Toolholder **D**  
 Threading **E**  
 Grooving **F**  
 Miniature tool **G**  
 Milling cutter **H**  
 Endmill **I**  
 Drilling tool **J**  
 Tooling System **K**  
 User's Guide **L**  
 Index **M**



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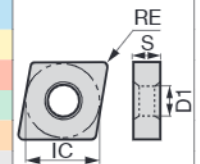
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## CN



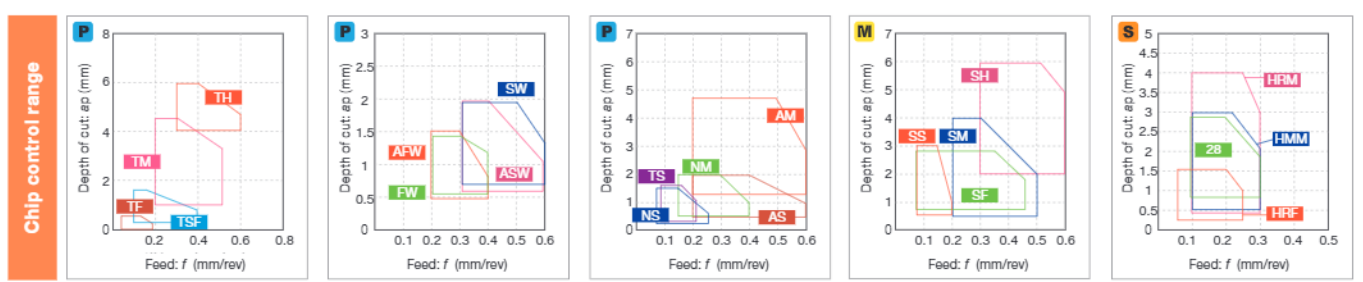
Rhombic, 80°  
with hole

Material	P Steel	M Stainless	K Cast iron	N Non-ferrous	S Superalloy	H Hard material	T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6120	T6130	AH630	AH645	T515	AH110	AH120	AH725	AH8015	GH330	NS9530
P Steel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M Stainless	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
K Cast iron	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
N Non-ferrous	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S Superalloy	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
H Hard material	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●



Application	Chipbreaker	Designation	Coated																				Cermet	Dimension (mm)								
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6120	T6130	AH630	AH645	T515	AH110	AH120	AH725	AH8015	GH330	NS9530	RE	IC	S	D1							
Finishing		<b>SS</b> CNMG090404E-SS																									0.4	9.525	4.76	3.81		
		CNMG090408E-SS																										0.8	9.525	4.76	3.81	
		CNMG120404-SS																										0.4	12.7	4.76	5.16	
		CNMG120408-SS																										0.8	12.7	4.76	5.16	
		CNMG120412-SS																										1.2	12.7	4.76	5.16	
Medium cutting		<b>TM</b> CNMG090304-TM	●	●					▲	▲																		0.4	9.525	3.18	3.81	
		CNMG090308-TM	●	●	●				▲	▲	▲																	0.8	9.525	3.18	3.81	
		CNMG090404E-TM	●	●					▲	▲						●	●	●		●		●		●				0.4	9.525	4.76	3.81	
		CNMG090408E-TM	●	●					▲	▲						●	●	●		●		●		●				0.8	9.525	4.76	3.81	
		CNMG090412E-TM	●	●					▲	▲						●	●	●		●		●		●				1.2	9.525	4.76	3.81	
		CNMG120404-TM	●	●	●	●	▲	▲	▲	▲						●	●	●		●		●		●				0.4	12.7	4.76	5.16	
		CNMG120408-TM	●	●	●	●	▲	▲	▲	▲						●	●	●		●		●		●	●			0.8	12.7	4.76	5.16	
		CNMG120412-TM	●	●	●	●	▲	▲	▲	▲						●	●	●		●		●		●				1.2	12.7	4.76	5.16	
		CNMG120416-TM	●	●	●	●	▲	▲	▲	▲						●	●	●		●		●		●				1.6	12.7	4.76	5.16	
		CNMG160612-TM	●	●	●	●	▲	▲	▲	▲						●	●	●		●		●		●				1.2	15.875	6.35	6.35	
CNMG190608-TM	●	●	●	●	▲	▲	▲	▲						●	●	●		●		●		●				0.8	19.05	6.35	7.93			
CNMG190612-TM	●	●	●	●	▲	▲	▲	▲						●	●	●		●		●		●				1.2	19.05	6.35	7.93			
Finishing to medium cutting		<b>AM</b> CNMG120408-AM	●	●					▲	▲																		0.8	12.7	4.76	5.16	
		CNMG120412-AM	●	●					▲	▲																		1.2	12.7	4.76	5.16	
		CNMG120416-AM	●	●					▲	▲																		1.6	12.7	4.76	5.16	
		<b>NM</b> CNMG120408-NM	●	●	●	●	▲	▲	▲	▲																	●		0.8	12.7	4.76	5.16
		CNMG120412-NM	●	●	●	●	▲	▲	▲																		●		1.2	12.7	4.76	5.16

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 J-Series toolholder → **G044** - TungCap → **K008** -  
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Grade  
 Insert  
 Ext. Toolholder  
 Int. Toolholder  
 Threading  
 Grooving  
 Miniature tool  
 Milling cutter  
 Endmill  
 Drilling tool  
 Tooling System  
 User's Guide  
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**A**  
**B**  
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**J**  
**K**  
**L**  
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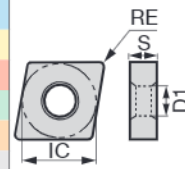
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## CN



**Rhombic, 80° with hole**

	P	M	K	N	S	H																
<b>P</b> Steel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>M</b> Stainless	●	●																				
<b>K</b> Cast iron	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>N</b> Non-ferrous				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>S</b> Superalloy						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>H</b> Hard material																						



Application	Chipbreaker	Designation	Coated													Coated cermet			Cermet		Un-coated	Dimension (mm)					
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T515	T5105	T5115	T5125	AH110	AH120	GT9530	AT9530	GT720	NS9530	NS520	TH10	RE	IC	S	D1	
Finishing to medium cutting		<b>TQ</b> CNMG120404-TQ	●	●													●	●					0.4	12.7	4.76	5.16	
		CNMG120408-TQ	●	●														●	●					0.8	12.7	4.76	5.16
Medium cutting		<b>TA</b> CNMG120408-TA	●	●																			0.8	12.7	4.76	5.16	
		CNMG120412-TA	●	●																				1.2	12.7	4.76	5.16
Finishing to medium cutting		<b>ZM</b> CNMG090408E-ZM	●	●			▲	▲															0.8	9.525	4.76	3.81	
		CNMG120408-ZM	●	●	●		▲	▲	▲							●		●					0.8	12.7	4.76	5.16	
		CNMG120412-ZM	●	●	●		▲	▲	▲							●								1.2	12.7	4.76	5.16
		CNMG120416-ZM	●	●			▲	▲																1.6	12.7	4.76	5.16
Medium cutting		<b>DM</b> CNMG120404-DM	●	●			▲	▲															0.4	12.7	4.76	5.16	
		CNMG120408-DM	●	●	●	●	▲	▲	▲	▲														0.8	12.7	4.76	5.16
		CNMG120412-DM	●	●	●	●	▲	▲	▲	▲														1.2	12.7	4.76	5.16
		<b>All-round</b> CNMG090304	●	●			▲	▲											●					0.4	9.525	3.18	3.81
		CNMG090308	●	●	●	●	▲	▲	▲	▲							●		●					0.8	9.525	3.18	3.81
		CNMG120404	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●	●	●	●	●	●	●	●	●	0.4	12.7	4.76	5.16
		CNMG120408	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●	●	●	●	●	●	●	●	●	0.8	12.7	4.76	5.16
		CNMG120412	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●	●	●	●	●	●	●	●	●	1.2	12.7	4.76	5.16
		CNMG120416	●	●	●	●	▲	▲	▲	▲	●	●	●	●										1.6	12.7	4.76	5.16
		CNMG160608	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●	●	●	●						0.8	15.875	6.35	6.35
		CNMG160612	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●	●	●	●						1.2	15.875	6.35	6.35
		CNMG160616	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●									1.6	15.875	6.35	6.35
CNMG190608	●	●	●	●	▲	▲	▲															0.8	19.05	6.35	7.93		
CNMG190612	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●	●	●	●						1.2	19.05	6.35	7.93		
CNMG190616	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●	●	●	●						1.6	19.05	6.35	7.93		

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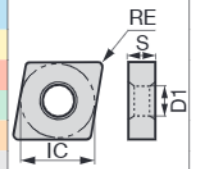
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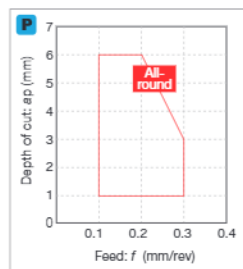
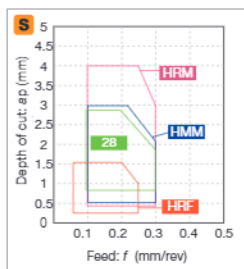
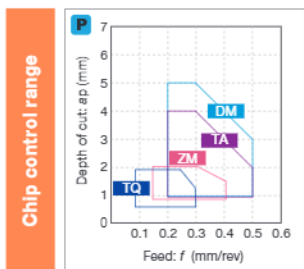
Rhombic, 80°  
with hole

	P Steel	M Stainless	K Cast iron	N Non-ferrous	S Superalloy	H Hard material															
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱



Application	Chipbreaker	Designation	Coated							Coated cermet	Cermet	Uncoated	Dimension (mm)								
			T9205	T9215	T9225	T9235	T9115	T9125	T9135	AH110	AH120	AH725	AH8005	AH8015	GH330	GT720	NS9530	TH10	RE	IC	S
Finishing to medium cutting		27 CNMG120404-27	●	●			▲	▲								●		0.4	12.7	4.76	5.16
		CNMG120408-27	●	●	●	●	▲	▲	▲							●		0.8	12.7	4.76	5.16
		CNMG120412-27			●			▲										1.2	12.7	4.76	5.16
Medium cutting		28 CNMG120404-28			●			▲		●	●		●	●				0.4	12.7	4.76	5.16
		CNMG120408-28								●	●		●	●				0.8	12.7	4.76	5.16
		CNMG120412-28											●	●				1.2	12.7	4.76	5.16
Medium cutting		33 CNMG120408-33								●				●				0.8	12.7	4.76	5.16
		CNMG120416-33			●			▲										1.6	12.7	4.76	5.16
		CNMG160612-33			●			▲										1.2	15.875	6.35	6.35
		CNMG190612-33			●			▲										1.2	19.05	6.35	7.93
Medium cutting		37 CNMG120404-37		●				▲						●			0.4	12.7	4.76	5.16	
		CNMG120408-37		●				▲					●		●		0.8	12.7	4.76	5.16	
		CNMG120412-37		●				▲									1.2	12.7	4.76	5.16	
Medium cutting		38 CNMG120404-38											●				0.4	12.7	4.76	5.16	
		CNMG120408-38		●				▲			●		●				0.8	12.7	4.76	5.16	

- : Line up
- ▲ : To be discontinued



Reference pages: External toolholder → **C018** - Internal toolholder → **D023** -  
 J-Series toolholder → **G044** - TungCap → **K008** -  
 PINZBOHR® → **K180** - Cartridge → **K199** -

Grade  
Insert  
Ext. Toolholder  
Int. Toolholder  
Threading  
Grooving  
Miniature tool  
Milling cutter  
Endmill  
Drilling tool  
Tooling System  
User's Guide  
Index

# Insert NEGATIVE TYPE

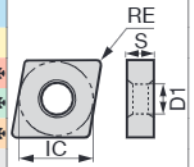
- : Continuous cutting
- ◐ : Light interrupted cutting
- ✱ : Heavy interrupted cutting

# CN



Rhombic, 80°  
with hole

	P	M	K	N	S	H
Steel	●	●	●	●	●	●
Stainless	●	●	●	●	●	●
Cast iron	●	●	●	●	●	●
Non-ferrous	●	●	●	●	●	●
Superalloy	●	●	●	●	●	●
Hard material	●	●	●	●	●	●



Application	Chipbreaker	Designation	Coated												Coated cermet	Cer- met	Uncoated	Dimension (mm)														
			T9225	T9235	T9125	T9135	T6120	T6130	AH630	AH645	AH110	AH120	T515	T5105	T5115	T5125	AH725	AH8005	AH8015	AH905	GH110	GH330	GT720	NS9530	TH10	KS05F	KS20	RE	IC	S	D1	
Medium cutting		CNMG090404E-SM					●	●	●																		0.4	9.525	4.76	3.81		
		CNMG090408E-SM					●	●	●																			0.8	9.525	4.76	3.81	
		CNMG090412E-SM					●	●	●																			1.2	9.525	4.76	3.81	
		CNMG120404-SM					●	●	●	●							●												0.4	12.7	4.76	5.16
		CNMG120408-SM					●	●	●	●							●			●									0.8	12.7	4.76	5.16
		CNMG120412-SM					●	●	●	●							●												1.2	12.7	4.76	5.16
Medium cutting		CNMG120404-CM										●	●	●	●												0.4	12.7	4.76	5.16		
		CNMG120408-CM										●	●	●	●													0.8	12.7	4.76	5.16	
		CNMG120412-CM										●	●	●	●													1.2	12.7	4.76	5.16	
		CNMG160608-CM												●	●	●												0.8	15.875	6.35	6.35	
		CNMG160612-CM										●	●	●													1.2	15.875	6.35	6.35		
Finishing to medium cutting		CNMG120404R-P																							●	●	0.4	12.7	4.76	5.16		
		CNMG120404L-P																								●	●	0.4	12.7	4.76	5.16	
		CNMG120408R-P																									●	●	0.8	12.7	4.76	5.16
		CNMG120408L-P																									●	●	0.8	12.7	4.76	5.16
Finishing to medium cutting		CNMG120404-HRM																									0.4	12.7	4.76	5.16		
		CNMG120408-HRM																										0.8	12.7	4.76	5.16	
		CNMG120412-HRM																										1.2	12.7	4.76	5.16	
		CNMG160608-HRM																										0.8	15.875	6.35	6.35	
		CNMG160612-HRM																										1.2	15.875	6.35	6.35	
		CNMG190612-HRM																										1.2	19.05	6.35	7.93	
		CNMG190616-HRM																									1.6	19.05	6.35	7.93		
Medium cutting		CNMG120404-HMM																									0.4	12.7	4.76	5.16		
		CNMG120408-HMM																										0.8	12.7	4.76	5.16	
		CNMG120412-HMM																										1.2	12.7	4.76	5.16	
		CNMG160608-HMM																										0.8	15.875	6.35	6.35	
		CNMG160612-HMM																										1.2	15.875	6.35	6.35	
		CNMG160616-HMM																										1.6	15.875	6.35	6.35	
Medium cutting		CNMG120404-SA					●	●	●	●	●																0.4	12.7	4.76	5.16		
		CNMG120408-SA					●	●	●	●	●	●															●	0.8	12.7	4.76	5.16	
		CNMG120412-SA					●	●	●	●	●	●															●	1.2	12.7	4.76	5.16	
		CNMG190612-SA																									●	1.2	19.05	6.35	7.93	
		CNMG190616-SA																									●	1.6	19.05	6.35	7.93	
Medium cutting		CNMG120404R-S	●	●	●	●	●	●	●																		0.4	12.7	4.76	5.16		
		CNMG120404L-S	●	●	●	●	●	●	●																			0.4	12.7	4.76	5.16	
		CNMG120408R-S	●	●	●	●	●	●	●																			0.8	12.7	4.76	5.16	
		CNMG120408L-S	●	●	●	●	●	●	●																			0.8	12.7	4.76	5.16	

● : Line up  
▲ : To be discontinued

Reference pages: External toolholder → C016 - Internal toolholder → D021 -  
 J-Series toolholder → G044 TungCap → K008 -  
 PINZBOHR® → K180 - Cartridge → K199 -

# Insert NEGATIVE TYPE

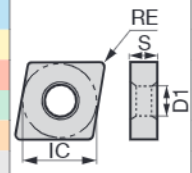
● : Continuous cutting  
 ● : Light interrupted cutting  
 \* : Heavy interrupted cutting

## CN



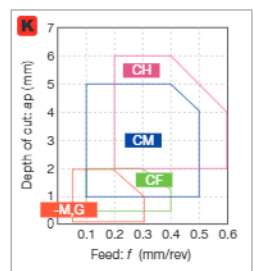
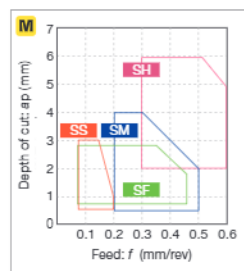
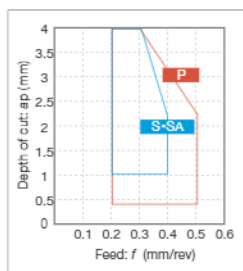
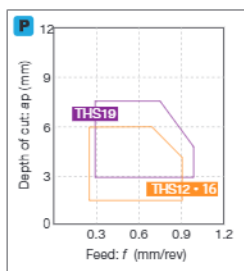
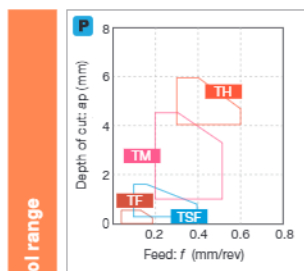
Rhombic, 80° with hole

Material	P	M	K	N	S	H
Steel	●●●●●●●●					
Stainless		●●				
Cast iron			●●●●			
Non-ferrous				●●●●		
Superalloy					●●	
Hard material						●●

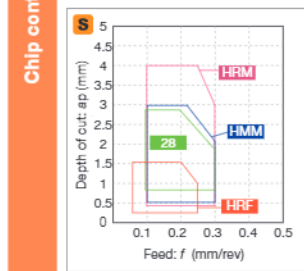


Application	Chipbreaker	Designation	Coated										Dimension (mm)			
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6130	AH120	RE	IC	S	D1
Medium to heavy cutting		<b>TH</b> CNMG120408-TH	●	●	●	●	▲	▲	▲	▲	●	●	0.8	12.7	4.76	5.16
		CNMG120412-TH	●	●	●	●	▲	▲	▲	▲	●	●	1.2	12.7	4.76	5.16
		CNMG120416-TH	●	●	●	●	▲	▲	▲	▲			1.6	12.7	4.76	5.16
		CNMG160612-TH	●	●	●	●	▲	▲	▲	▲	●	●	1.2	15.875	6.35	6.35
		CNMG160616-TH	●	●	●	●	▲	▲	▲	▲	●	●	1.6	15.875	6.35	6.35
		CNMG190612-TH	●	●	●	●	▲	▲	▲	▲	●	●	1.2	19.05	6.35	7.93
		CNMG190616-TH	●	●	●	●	▲	▲	▲	▲	●	●	1.6	19.05	6.35	7.93
		<b>THS</b> CNMG120408-THS	●	●	●	●	▲	▲	▲	▲			0.8	12.7	4.76	5.16
CNMG120412-THS	●	●	●	●	▲	▲	▲	▲			1.2	12.7	4.76	5.16		
CNMG120416-THS	●	●	●	●	▲	▲	▲	▲			1.6	12.7	4.76	5.16		
CNMG160612-THS	●	●	●	●	▲	▲	▲	▲			1.2	15.875	6.35	6.35		
CNMG160616-THS	●	●	●	●	▲	▲	▲	▲			1.6	15.875	6.35	6.35		
CNMG190612-THS		●	●	●		▲	▲	▲			1.2	19.05	6.35	7.93		
CNMG190616-THS		●	●	●		▲	▲	▲			1.6	19.05	6.35	7.93		
CNMG190624-THS		●	●	●		▲	▲	▲			2.4	19.05	6.35	7.93		
CNMG250924-THS		●	●	●		▲	▲	▲			2.4	25.4	9.52	9.12		
Medium to heavy cutting (single side)		<b>57</b> CNMM120404-57		●					▲			0.4	12.7	4.76	5.16	
		CNMM120408-57		●				▲	▲			0.8	12.7	4.76	5.16	
		CNMM120412-57			●				▲	▲			1.2	12.7	4.76	5.16
		CNMM190612-57				●				▲	▲		1.2	12.7	4.76	5.16
		CNMM190616-57				●				▲	▲		1.6	12.7	4.76	5.16

● : Line up  
 ▲ : To be discontinued



\*-M,G: Without chipbreaker



Reference pages: External toolholder → C018 - Internal toolholder → D023 -  
 J-Series toolholder → G044 TungCap → K008 -  
 PINZBOHR® → K180 - Cartridge → K199 -

Grade  
A  
Insert  
B  
Ext. Toolholder  
C  
Int. Toolholder  
D  
Threading  
E  
Grooving  
F  
Miniature tool  
G  
Milling cutter  
H  
Endmill  
I  
Drilling tool  
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M



# Insert NEGATIVE TYPE

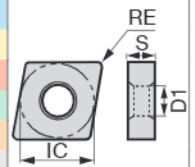
● : Continuous cutting  
 ● : Light interrupted cutting  
 ✱ : Heavy interrupted cutting

# CN



Rhombic, 80° with hole

Material	P Steel	M Stainless	K Cast iron	N Non-ferrous	S Superalloy	H Hard material	Coated	T9205	T9215	T9225	T9235	T9115	T9125	T9135	T6130	AH630	AH645	T515	T5105	T5115	T5125	
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●



Application	Chipbreaker	Designation	Coated																	Dimension (mm)									
			T9205	T9215	T9225	T9235	T9115	T9125	T9135	T6130	AH630	AH645	T515	T5105	T5115	T5125	RE	IC	S	D1									
Medium to heavy cutting (single side)		<b>TRS</b> CNMM120408-TRS	●	●	●	●	▲	▲	▲															0.8	12.7	4.76	5.16		
		CNMM120412-TRS	●	●	●	●	▲	▲	▲																1.2	12.7	4.76	5.16	
		CNMM160612-TRS	●	●	●	●	▲	▲	▲																	1.2	15.875	6.35	6.35
		CNMM160616-TRS	●	●	●	●	▲	▲	▲																	1.6	15.875	6.35	6.35
		CNMM190616-TRS	●	●	●	●	▲	▲	▲																	1.6	19.05	6.35	7.93
		CNMM190624-TRS	●	●	●	●	▲	▲	▲																	2.4	19.05	6.35	7.93
		CNMM250924-TRS	●	●	●	●	▲	▲	▲																	2.4	25.4	9.52	9.12
		<b>TU</b> CNMM190612-TU		●	●		▲	▲																		1.2	19.05	6.35	7.93
Heavy cutting (single side)		CNMM190616-TU		●	●		▲	▲																	1.6	19.05	6.35	7.93	
		CNMM190624-TU	●	●	●	▲	▲	▲																		2.4	19.05	6.35	7.93
		CNMM250924-TU		●	●		▲	▲																		2.4	25.4	9.52	9.12
		<b>TUS</b> CNMM190608-TUS	●	●		▲	▲																			0.8	19.05	6.35	7.93
		CNMM190612-TUS	●	●	●	▲	▲	▲																		1.2	19.05	6.35	7.93
		CNMM190616-TUS	●	●	●	▲	▲	▲																		1.6	19.05	6.35	7.93
		CNMM190624-TUS	●	●	●	▲	▲	▲																		2.4	19.05	6.35	7.93
		CNMM190632-TUS	●	●		▲	▲																			3.2	19.05	6.35	7.93
Medium to heavy cutting (single side)		CNMM250916-TUS	●	●	●	▲	▲	▲																	1.6	25.4	9.52	9.12	
		CNMM250924-TUS	●	●	●	▲	▲	▲																		2.4	25.4	9.52	9.12
		CNMM250932-TUS	●	●		▲	▲																			3.2	25.4	9.52	9.12
		<b>65</b> CNMM120412-65		●			▲																			1.2	12.7	4.76	5.16
		<b>SH</b> CNMG120408-SH														●	●	●								0.8	12.7	4.76	5.16
		CNMG120412-SH														●	●	●								1.2	12.7	4.76	5.16
		CNMG120416-SH														●	●	●								1.6	12.7	4.76	5.16
		CNMG160612-SH														●	●	●								1.2	15.875	6.35	6.35
Medium to heavy cutting		CNMG160616-SH													●	●	●								1.6	15.875	6.35	6.35	
		CNMG190612-SH													●	●	●								1.2	19.05	6.35	7.93	
		CNMG190616-SH													●	●	●								1.6	19.05	6.35	7.93	
		<b>CH</b> CNMG120404-CH																	●	●	●					0.4	12.7	4.76	5.16
		CNMG120408-CH																	●	●	●	●				0.8	12.7	4.76	5.16
		CNMG120412-CH																	●	●	●	●				1.2	12.7	4.76	5.16
		CNMG160612-CH																	●	●	●	●				1.2	15.875	6.35	6.35
		CNMG160616-CH																	●	●	●	●				1.6	15.875	6.35	6.35
CNMG190612-CH																	●	●	●	●				1.2	19.05	6.35	7.93		
CNMG190616-CH																	●	●	●	●				1.6	19.05	6.35	7.93		

● : Line up  
 ▲ : To be discontinued

Reference pages: External toolholder → C018 - Internal toolholder → D023 -  
 J-Series toolholder → G044 TungCap → K008 -  
 PINZBOHR® → K180 - Cartridge → K199 -

# Insert NEGATIVE TYPE

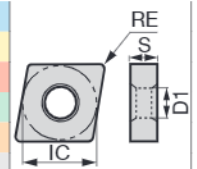
● : Continuous cutting  
 ● : Light interrupted cutting  
 ✱ : Heavy interrupted cutting

## CN



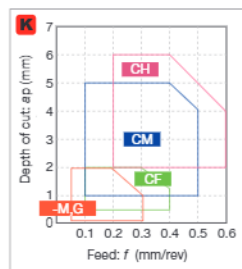
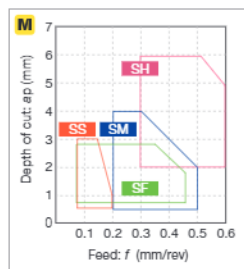
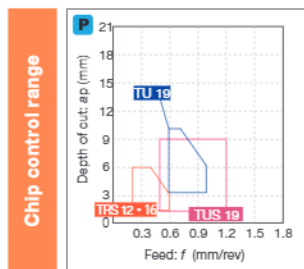
Rhombic, 80°  
with hole

Material	Steel	Stainless	Cast iron	Non-ferrous	Superalloy	Hard material
P	●	●	●	●	●	●
M	●	●	●	●	●	●
K	●	●	●	●	●	●
N	●	●	●	●	●	●
S	●	●	●	●	●	●
H	●	●	●	●	●	●



Application	Chipbreaker	Designation	Coated			Cermet	Uncoated	Ceramic			Dimension (mm)						
			T9205	T9105	T515	T5105	T5115	T5125	NS520	TH10	FX105	LX21	LX11	RE	IC	S	D1
Finishing to medium cutting	-	CNMA090404E			●								0.4	9.525	4.76	3.81	
		CNMA090408E			●								0.8	9.525	4.76	3.81	
		CNMA090412E			●								1.2	9.525	4.76	3.81	
		CNMA090416E			●								1.6	9.525	4.76	3.81	
		CNMA120404				●	●	●					0.4	12.7	4.76	5.16	
		CNMA120408	●	▲	●	●	●	●	●		●		0.8	12.7	4.76	5.16	
		CNMA120412	●	▲	●	●	●	●	●		●		1.2	12.7	4.76	5.16	
		CNMA120416	●	▲	●	●	●	●	●		●		1.6	12.7	4.76	5.16	
		CNMA160608				●	●	●					0.8	15.875	6.35	6.35	
		CNMA160612				●	●	●					1.2	15.875	6.35	6.35	
		CNMA160616				●	●	●					1.6	15.875	6.35	6.35	
		CNMA190612				●	●	●					1.2	19.05	6.35	7.93	
		CNMA190616				●	●	●					1.6	19.05	6.35	7.93	
	Finishing to medium cutting	Wiper	CNMA120408W									●		0.8	12.7	4.76	5.16
			CNMA120412W									●		1.2	12.7	4.76	5.16
			CNMA120416W									●		1.6	12.7	4.76	5.16
			CNMA120404											0.4	12.7	4.76	5.16
			CNMA120408						●					0.8	12.7	4.76	5.16
		CNMA120412											1.2	12.7	4.76	5.16	
Finishing to medium cutting	-	CNMA120416											1.6	12.7	4.76	5.16	
		CNMA120420											2	12.7	4.76	5.16	
		CNMA120404											0.4	12.7	4.76	5.16	
		CNMA120408						●					0.8	12.7	4.76	5.16	
		CNMA120412											1.2	12.7	4.76	5.16	

● : Line up  
 ▲ : To be discontinued



\*-M,G: Without chipbreaker

Reference pages: External toolholder → C018 - Internal toolholder → D021 -  
 J-Series toolholder → G044 TungCap → K008 -  
 PINZBOHR® → K180 - Cartridge → K199 -

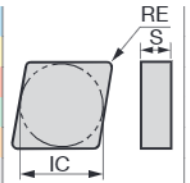
Grade  
 Insert  
 Ext. Toolholder  
 Int. Toolholder  
 Threading  
 Grooving  
 Miniature tool  
 Milling cutter  
 Endmill  
 Drilling tool  
 Tooling System  
 User's Guide  
 Index

## Insert NEGATIVE TYPE

● : Continuous cutting  
 ●c : Light interrupted cutting  
 ●\* : Heavy interrupted cutting

**CN**Rhombic, 80°  
without hole

	P	M	K	N	S	H
Steel	●	●	●	●	●	●
Stainless	●	●	●	●	●	●
Cast iron	●c	●c	●c	●c	●c	●c
Non-ferrous	●	●	●	●	●	●
Superalloy	●	●	●	●	●	●
Hard material	●	●	●	●	●	●



Application	Chipbreaker	Designation	Ceramic				Dimension (mm)			
			FX105	LX21	LX11	CX710	RE	IC	S	D1
-		CNGD120712	●				1.2	12.7	7.94	-
		CNGD120716	●				1.6	12.7	7.94	-
-		CNMN120408	●				0.8	12.7	4.76	-
		CNMN120412	●				1.2	12.7	4.76	-
-		CNGN120404			●		0.4	12.7	4.76	-
		CNGN120408	●		●		0.8	12.7	4.76	-
		CNGN120412	●		●	●	1.2	12.7	4.76	-
		CNGN120416	●	●	●		1.6	12.7	4.76	-
		CNGN120420	●				2	12.7	4.76	-
		CNGN120708	●		●		0.8	12.7	7.94	-
		CNGN120712	●		●		1.2	12.7	7.94	-
		CNGN120716	●		●		1.6	12.7	7.94	-
		CNGN120720			●		2	12.7	7.94	-

● : Line up

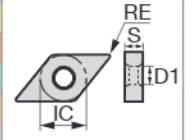
# Insert NEGATIVE TYPE

- : Continuous cutting
- ◐ : Light interrupted cutting
- ✱ : Heavy interrupted cutting

## DN

Rhombic, 55° with hole

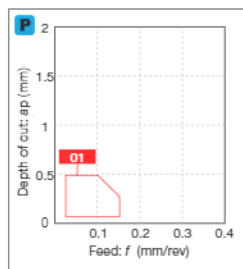
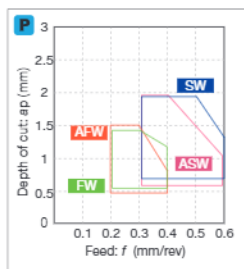
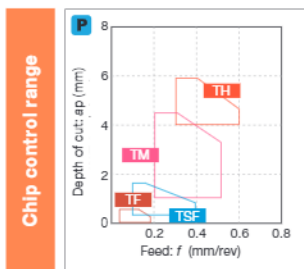
Material	Steel	Stainless	Cast iron	Non-ferrous	Superalloy	Hard material	Coated	Coated cermet	Cermet	Uncoated	Dimension (mm)
P	●	◐	◐	✱	●	●	●	●	●	●	RE, IC, S, D1
M	●	◐	◐	●	●	●	●	●	●	●	
K	◐	◐	●	●	●	●	●	●	●	●	
N	●	●	●	●	●	●	●	●	●	●	
S	●	●	●	●	●	●	●	●	●	●	
H	●	●	●	●	●	●	●	●	●	●	



Application	Chipbreaker	Designation	Coated						Coated cermet		Cermet		Uncoated		Dimension (mm)							
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	AH120	GH110	GT9530	AT9530	GT720	NS9530	NS520	TH10	RE	IC	S	D1
Precision finishing	<b>TF</b>	DNMG150404-TF													●		●	0.4	12.7	4.76	5.16	
		DNMG150408-TF														●			0.8	12.7	4.76	5.16
	<b>01</b>	DNGG110402-01														●			0.2	9.525	4.76	3.81
		DNGG110404-01														●	●		0.4	9.525	4.76	3.81
		DNGG110408-01												●		●			0.8	9.525	4.76	3.81
		DNGG150402-01														●	●	●	0.2	12.7	4.76	5.16
Finishing	<b>TSF</b>	DNMG110404E-TSF	●	●			▲	▲			●	●		●				0.4	9.525	4.76	3.81	
		DNMG110408E-TSF	●	●			▲	▲			●	●		●				0.8	9.525	4.76	3.81	
		DNMG110412E-TSF	●	●			▲	▲			●	●		●				1.2	9.525	4.76	3.81	
		DNMG150404-TSF	●	●	●	●	▲	▲	▲	●		●	●		●			0.4	12.7	4.76	5.16	
Finishing (wiper)	<b>FW</b>	DNMG110404E-FW	●				▲											0.4	9.525	4.76	3.81	
		DNMG110408E-FW	●				▲											0.8	9.525	4.76	3.81	
		DNMG150404-FW	●				▲											0.4	12.7	4.76	5.16	
		DNMG150408-FW	●				▲											0.8	12.7	4.76	5.16	

\* Please see **L032-L036** about the adjustment of the machining program for rounding or taper machining by using SW/FW. Please contact our sales representatives if you have any question.

- : Line up
- ▲ : To be discontinued



Reference pages: External toolholder → **C037 -** Internal toolholder → **D052 -**  
 J-Series toolholder → **G046** TungCap → **C045, K012 -**

Grade  
 Insert  
 Ext. Toolholder  
 Int. Toolholder  
 Threading  
 Grooving  
 Miniature tool  
 Milling cutter  
 Endmill  
 Drilling tool  
 Tooling System  
 User's Guide  
 Index



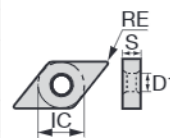
# Insert NEGATIVE TYPE

● : Continuous cutting  
 ● : Light interrupted cutting  
 ✱ : Heavy interrupted cutting

## DN

Rhombic, 55° with hole

Material	P	M	K	N	S	H	Steel	Stainless	Cast iron	Non-ferrous	Superalloy	Hard material
P	●	●	●	●	●	●	●	●	●	●	●	●
M	●	●	●	●	●	●	●	●	●	●	●	●
K	●	●	●	●	●	●	●	●	●	●	●	●
N	●	●	●	●	●	●	●	●	●	●	●	●
S	●	●	●	●	●	●	●	●	●	●	●	●
H	●	●	●	●	●	●	●	●	●	●	●	●



Application	Chipbreaker	Designation	Coated														Coated cermet		Cermet		Un-coated	Dimension (mm)					
			T9205	T9215	T9225	T9235	T9115	T9125	T9135	T6120	T6130	AH630	T5105	T5115	AH8005	AH8015	GH330	GT9530	AT9530	NS9530	NS520	TH10	RE	IC	S	D1	
Finishing		DNMG110404E-ZF	●	●		▲	▲																0.4	9.525	4.76	3.81	
		DNMG150404-ZF	●	●	●	●	▲	▲	▲									●	●		●			0.4	12.7	4.76	5.16
		DNMG150408-ZF	●	●	●	●	▲	▲	▲									●	●		●			0.8	12.7	4.76	5.16
		DNMG150412-ZF	●	●	●	●	▲	▲	▲															1.2	12.7	4.76	5.16
		DNMG150604-ZF	●	●			▲	▲													●			0.4	12.7	6.35	5.16
		DNMG150608-ZF	●	●	●	●	▲	▲	▲															0.8	12.7	6.35	5.16
		DNMG150612-ZF	●	●			▲	▲																1.2	12.7	6.35	5.16
Finishing		DNMG110404-11																		●			0.4	9.525	4.76	3.81	
		DNMG110408-11																			●			0.8	9.525	4.76	3.81
		DNMG150404-11															●					●		0.4	12.7	4.76	5.16
		DNMG150408-11		●			▲														●			0.8	12.7	4.76	5.16
Finishing (for mild steel)		DNMG150404-17																		●			0.4	12.7	4.76	5.16	
		DNMG150408-17																			●			0.8	12.7	4.76	5.16
Finishing		DNMG150404-SF							●	●	●												0.4	12.7	4.76	5.16	
		DNMG150408-SF							●	●	●													0.8	12.7	4.76	5.16
		DNMG150604-SF							●	●	●													0.4	12.7	6.35	5.16
		DNMG150608-SF							●	●	●													0.8	12.7	6.35	5.16
		DNMG150404-CF											●	●										0.4	12.7	4.76	5.16
Finishing		DNMG150408-CF										●	●										0.8	12.7	4.76	5.16	
		DNMG150412-CF											●	●										1.2	12.7	4.76	5.16
		DNMG150604-CF											●	●										0.4	12.7	6.35	5.16
		DNMG150608-CF											●	●										0.8	12.7	6.35	5.16
		DNMG150612-CF											●	●										1.2	12.7	6.35	5.16
Finishing		DNMG150404-HRF												●	●								0.4	12.7	4.76	5.16	
		DNMG150408-HRF													●	●								0.8	12.7	4.76	5.16
		DNMG150604-HRF															●	●						0.4	12.7	6.35	5.16
		DNMG150608-HRF															●	●						0.8	12.7	6.35	5.16


● : Line up  
 ▲ : To be discontinued

Reference pages: External toolholder → C037 - Internal toolholder → D052 -  
 J-Series toolholder → G046 TungCap → C045, K012 -

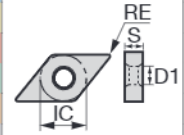
# Insert NEGATIVE TYPE

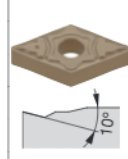
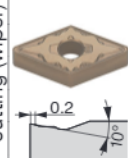
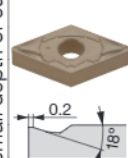
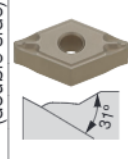
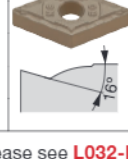
● : Continuous cutting  
 ◐ : Light interrupted cutting  
 ✱ : Heavy interrupted cutting

## DN

 Rhombic, 55°  
with hole

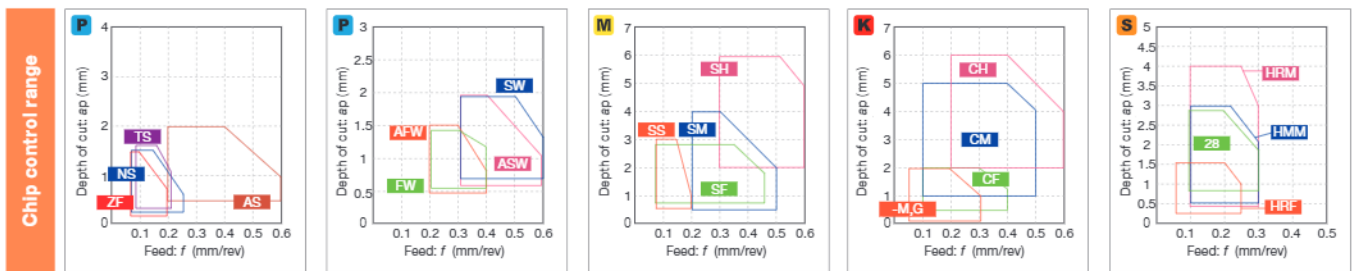
	P Steel	M Stainless	K Cast iron	N Non-ferrous	S Superalloy	H Hard material
●	●	●	●	●	●	●
◐	◐	◐	◐	◐	◐	◐
✱	✱	✱	✱	✱	✱	✱



Application	Chipbreaker	Designation	Coated							Coated cermet		Cermet		Dimension (mm)			
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	GT9530	AT9530	NS9530	NS520	RE	IC	S
Finishing		<b>TS</b> DNMG150404-TS	●	●	●	●	▲	▲	▲	●	●	●	●	0.4	12.7	4.76	5.16
		DNMG150408-TS	●	●	●	●	▲	▲	▲	●	●	●	●	0.8	12.7	4.76	5.16
		DNMG150412-TS	●	●	●	●	▲	▲	▲					1.2	12.7	4.76	5.16
		DNMG150604-TS								●	●	●	●	0.4	12.7	6.35	5.16
		DNMG150608-TS	●	●			▲	▲		●	●	●	●	0.8	12.7	6.35	5.16
		DNMG150612-TS	●	●			▲	▲						1.2	12.7	6.35	5.16
Finishing to medium cutting (wiper)		<b>SW</b> DNMG110408E-SW	●					▲					0.8	9.525	4.76	3.81	
		DNMG110412E-SW	●					▲					1.2	9.525	4.76	3.81	
		DNMG150408-SW	●					▲					0.8	12.7	4.76	5.16	
		DNMG150412-SW	●					▲					1.2	12.7	4.76	5.16	
		DNMG150608-SW	●					▲					0.8	12.7	6.35	5.16	
		DNMG150612-SW	●					▲						1.2	12.7	6.35	5.16
High feed, small depth of cut		<b>AS</b> DNMG150404-AS	●		●			▲		▲		●	0.4	12.7	4.76	5.16	
		DNMG150408-AS	●	●	●			▲	▲	▲		●	0.8	12.7	4.76	5.16	
		DNMG150412-AS	●	●	●			▲	▲	▲				1.2	12.7	4.76	5.16
		DNMG150604-AS	●					▲						0.4	12.7	6.35	5.16
		DNMG150608-AS	●	●				▲	▲					0.8	12.7	6.35	5.16
		DNMG150612-AS	●					▲						1.2	12.7	6.35	5.16
Boring (double side)		<b>CB</b> DNMG110404-CB								●		●	0.4	9.525	4.76	3.81	
		DNMG110408-CB	●					▲		●		●	0.8	9.525	4.76	3.81	
Finishing		<b>NS</b> DNMG150404-NS			●			▲				●	0.4	12.7	4.76	5.16	
		DNMG150408-NS	●	●	●			▲	▲	▲		●	0.8	12.7	4.76	5.16	

\* Please see **L032-L036** about the adjustment of the machining program for rounding or taper machining by using SW/FW.  
Please contact our sales representatives if you have any question.

● : Line up  
 ▲ : To be discontinued



\*-M,G: Without chipbreaker

Reference pages: External toolholder → **C037 -** Internal toolholder → **D052 -**  
 J-Series toolholder → **G046** TungCap → **C045, K012 -**

Negative

# Insert NEGATIVE TYPE

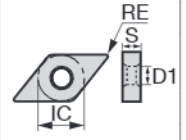
● : Continuous cutting  
 ● : Light interrupted cutting  
 ※ : Heavy interrupted cutting

Positive

# DN

Rhombic, 55°  
with hole

Material	P	M	K	N	S	H	T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6120	T6130	AH630	AH645	AH110	AH120	GH330	GT9530	NS9530	KS20
Steel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Stainless	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cast iron	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Non-ferrous	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Superalloy	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Hard material	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	



PCD / CBN

C

D

G

R

S

T

V

W

Y

OTHERS

Application	Chipbreaker	Designation	Coated										Coated cermet	Cermet	Un-coated	Dimension (mm)																	
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6120	T6130	AH630	AH645	AH110	AH120	GH330	GT9530	NS9530	KS20	RE	IC	S	D1									
Finishing		<b>SS</b> DNMG110404E-SS										●	●																0.4	9.525	4.76	3.81	
		DNMG110408E-SS																												0.8	9.525	4.76	3.81
		DNMG150404-SS								●	●	●	●				●												●	0.4	12.7	4.76	5.16
		DNMG150408-SS								●	●	●	●				●												●	0.8	12.7	4.76	5.16
		DNMG150412-SS								●	●	●	●																	1.2	12.7	4.76	5.16
		DNMG150604-SS								●	●	●	●				●	●												0.4	12.7	6.35	5.16
		DNMG150608-SS								●	●	●	●				●	●												0.8	12.7	6.35	5.16
		DNMG150612-SS								●	●	●	●				●	●												1.2	12.7	6.35	5.16
Medium cutting		<b>TM</b> DNMG110404E-TM	●	●							▲	▲																	0.4	9.525	4.76	3.81	
		DNMG110408E-TM	●	●							▲	▲																	0.8	9.525	4.76	3.81	
		DNMG110412E-TM	●	●							▲	▲																	1.2	9.525	4.76	3.81	
		DNMG110404-TM	●	●	●					▲	▲	▲																		0.4	9.525	4.76	3.81
		DNMG110408-TM	●	●	●					▲	▲	▲																		0.8	9.525	4.76	3.81
		DNMG150404-TM	●	●	●	●	▲	▲	▲	▲							●													0.4	12.7	4.76	5.16
		DNMG150408-TM	●	●	●	●	▲	▲	▲	▲							●													0.8	12.7	4.76	5.16
		DNMG150412-TM	●	●	●	●	▲	▲	▲	▲							●	●												1.2	12.7	4.76	5.16
		DNMG150416-TM	●	●			▲	▲																						1.6	12.7	4.76	5.16
		DNMG150604-TM	●	●	●	●	▲	▲	▲	▲							●													0.4	12.7	6.35	5.16
		DNMG150608-TM	●	●	●	●	▲	▲	▲	▲							●													0.8	12.7	6.35	5.16
DNMG150612-TM	●	●	●	●	▲	▲	▲	▲							●													1.2	12.7	6.35	5.16		
DNMG150616-TM	●	●	●	●	▲	▲	▲	▲																				1.6	12.7	6.35	5.16		
Finishing to medium cutting		<b>AM</b> DNMG150408-AM	●	●						▲	▲																		0.8	12.7	4.76	5.16	
		DNMG150412-AM	●	●						▲	▲																		1.2	12.7	4.76	5.16	
		DNMG150416-AM	●	●						▲	▲																		1.6	12.7	4.76	5.16	
		DNMG150608-AM	●	●						▲	▲																			0.8	12.7	6.35	5.16
		DNMG150612-AM	●	●						▲	▲																			1.2	12.7	6.35	5.16
		DNMG150616-AM	●	●						▲	▲																			1.6	12.7	6.35	5.16
<b>NM</b> DNMG150408-NM	●	●	●					▲	▲	▲					●							●						0.8	12.7	4.76	5.16		
DNMG150412-NM	●	●	●					▲	▲	▲												●						1.2	12.7	4.76	5.16		
DNMG150608-NM																						●	●					0.8	12.7	6.35	5.16		

● : Line up  
 ▲ : To be discontinued

Reference pages: External toolholder → C037 - Internal toolholder → D052 -  
 J-Series toolholder → G046 TungCap → C045, K012 -

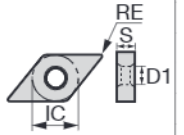
● : Continuous cutting  
 ● : Light interrupted cutting  
 ✱ : Heavy interrupted cutting

# Insert NEGATIVE TYPE

# DN

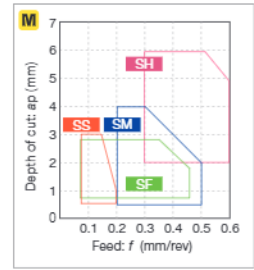
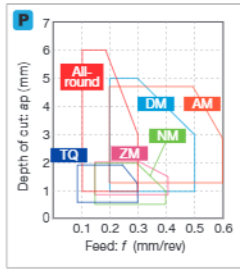
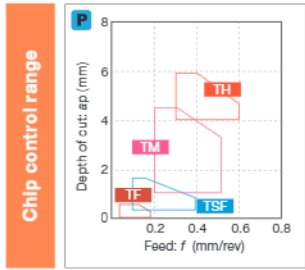
Rhombic, 55°  
with hole

	P	M	K	N	S	H														
Steel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Stainless		●	●																	
Cast iron	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-ferrous																				
Superalloy																				
Hard material																				



Application	Chipbreaker	Designation	Coated																Coated cermet		Cermet		Un-coated	Dimension (mm)			
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T515	T5105	T5115	T5125	AH110	AH120	GT9530	AT9530	NS9530	NS520	TH10	RE	IC	S	D1		
Finishing to medium cutting		<b>TQ</b> DNMG150404-TQ			●												●	●	●			0.4	12.7	4.76	5.16		
		DNMG150408-TQ			●													●	●	●			0.8	12.7	4.76	5.16	
		<b>ZM</b> DNMG110408E-ZM		●	●			▲	▲														0.8	9.525	4.76	3.81	
		DNMG150408-ZM		●	●	●		▲	▲	▲								●		●			0.8	12.7	4.76	5.16	
		DNMG150412-ZM		●	●	●		▲	▲	▲													1.2	12.7	4.76	5.16	
Medium cutting		<b>DM</b> DNMG150408-DM		●	●	●		▲	▲	▲												0.8	12.7	4.76	5.16		
		DNMG150412-DM		●	●	●	●	▲	▲	▲	▲												1.2	12.7	4.76	5.16	
		DNMG150604-DM			●			▲															0.4	12.7	6.35	5.16	
		DNMG150608-DM		●	●	●		▲	▲	▲													0.8	12.7	6.35	5.16	
		DNMG150612-DM		●	●	●	●	▲	▲	▲	▲												1.2	12.7	6.35	5.16	
Finishing to medium cutting		<b>All-round</b> DNMG110404		●	●			▲	▲			●	●	●				●		●		0.4	9.525	4.76	3.81		
		DNMG110408		●	●	●	●	▲	▲	▲		●	●	●				●		●		0.8	9.525	4.76	3.81		
		DNMG150404		●	●	●		▲	▲	▲		●	●	●	●	●		●		●		●	0.4	12.7	4.76	5.16	
		DNMG150408		●	●	●	●	▲	▲	▲	●	●	●	●	●	●		●		●		●	0.8	12.7	4.76	5.16	
		DNMG150412		●	●	●	▲	▲	▲	▲	●	●	●	●	●	●				●		●	1.2	12.7	4.76	5.16	
		DNMG150416			●			▲	▲			●	●	●									1.6	12.7	4.76	5.16	
		DNMG150604			●			▲	▲			●	●	●									0.4	12.7	6.35	5.16	
		DNMG150608		●	●	●	▲	▲	▲	▲	●	●	●	●	●	●							0.8	12.7	6.35	5.16	
		DNMG150612		●	●	●	▲	▲	▲	▲	●	●	●	●	●	●							1.2	12.7	6.35	5.16	
DNMG150616			●			▲	▲														1.6	12.7	6.35	5.16			
Finishing to medium cutting		<b>27</b> DNMG150404-27			●			▲											●			0.4	12.7	4.76	5.16		
		DNMG150408-27		●	●			▲	▲											●			0.8	12.7	4.76	5.16	
		DNMG150412-27			●			▲															1.2	12.7	4.76	5.16	

● : Line up  
 ▲ : To be discontinued



Reference pages: External toolholder → **C037 -** Internal toolholder → **D052 -**  
 J-Series toolholder → **G046** TungCap → **C045, K012 -**

Grade  
 Insert  
 Ext. Toolholder  
 Int. Toolholder  
 Threading  
 Grooving  
 Miniature tool  
 Milling cutter  
 Endmill  
 Drilling tool  
 Tooling System  
 User's Guide  
 Index





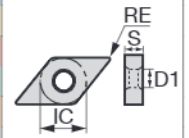
# Insert NEGATIVE TYPE

- : Continuous cutting
- ◐ : Light interrupted cutting
- ◑ : Heavy interrupted cutting

# DN

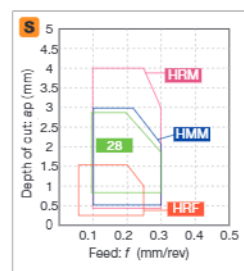
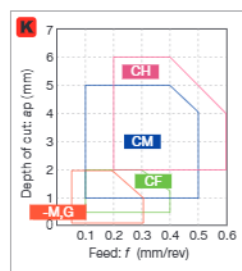
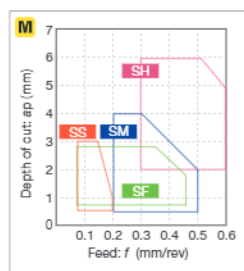
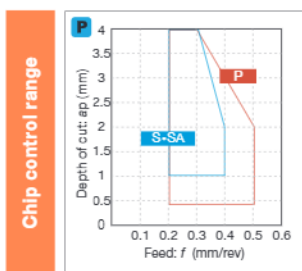
Rhombic, 55° with hole

<b>P</b> Steel	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
<b>M</b> Stainless	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
<b>K</b> Cast iron	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
<b>N</b> Non-ferrous	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
<b>S</b> Superalloy	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
<b>H</b> Hard material	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐



Application	Chipbreaker	Designation	Coated										Cermet	Uncoated	Dimension (mm)							
			T9225	T9235	T9125	T9135	T6130	AH630	AH645	AH120	AH8005	AH8015	AH905	GH110	GH330	NS9530	TH10	RE	IC	S	D1	
Medium cutting		<b>P</b> DNGG150402R-P														●		0.2	12.7	4.76	5.16	
		DNGG150402L-P															●		0.2	12.7	4.76	5.16
		DNGG150404R-P															●		0.4	12.7	4.76	5.16
		DNGG150404L-P															●		0.4	12.7	4.76	5.16
		DNGG150408R-P															●		0.8	12.7	4.76	5.16
		DNGG150408L-P															●		0.8	12.7	4.76	5.16
Finishing to medium cutting		<b>HRM</b> DNMG150404-HRM									●	●						0.4	12.7	4.76	5.16	
		DNMG150408-HRM									●	●						0.8	12.7	4.76	5.16	
		DNMG150412-HRM										●	●						1.2	12.7	4.76	5.16
		DNMG150604-HRM										●	●						0.4	12.7	6.35	5.16
		DNMG150608-HRM										●	●						0.8	12.7	6.35	5.16
		DNMG150612-HRM										●	●						1.2	12.7	6.35	5.16
Medium cutting		<b>HMM</b> DNMG150404-HMM										●						0.4	12.7	4.76	5.16	
		DNMG150408-HMM											●						0.8	12.7	4.76	5.16
		DNMG150412-HMM												●					1.2	12.7	4.76	5.16
		<b>SA</b> DNMG150404-SA									●								0.4	12.7	4.76	5.16
		DNMG150408-SA									●								0.8	12.7	4.76	5.16
		DNMG150604-SA									●								0.4	12.7	6.35	5.16
Medium cutting		<b>S</b> DNMG150404R-S	●	●	▲	▲	●	●	●							●		0.4	12.7	4.76	5.16	
		DNMG150404L-S	●	●	▲	▲	●	●	●								●		0.4	12.7	4.76	5.16
		DNMG150408R-S	●	●	▲	▲	●	●	●								●		0.8	12.7	4.76	5.16
		DNMG150408L-S	●	●	▲	▲	●	●	●								●		0.8	12.7	4.76	5.16
		DNMG150604R-S	●	●	▲	▲	●	●	●								●		0.4	12.7	6.35	5.16
		DNMG150604L-S	●	●	▲	▲	●	●	●								●		0.4	12.7	6.35	5.16
		DNMG150608R-S	●	●	▲	▲	●	●	●						●				0.8	12.7	6.35	5.16
		DNMG150608L-S	●	●	▲	▲	●	●	●						●				0.8	12.7	6.35	5.16

- : Line up
- ▲ : To be discontinued



\*-M,G: Without chipbreaker

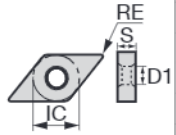
Reference pages: External toolholder → C042 - Internal toolholder → D052 -  
J-Series toolholder → G046 TungCap → C045, K012 -

# Insert NEGATIVE TYPE

## DN

Rhombic, 55° with hole

P	Steel	●	●c	●c✱	✱	●c	●c✱	✱	✱	●c✱	✱								●c	●c							
M	Stainless		●c							●c	●c	✱									●c						
K	Cast iron	●c	●c			●c						●c	●c	✱	●c	●c			●c		●c						
N	Non-ferrous																										
S	Superalloy																				●c						
H	Hard material																										



Application	Chipbreaker	Designation	Coated										Coated cermet	Cermet	Uncoated	Dimension (mm)										
			T9205	T9215	T9225	T9235	T9115	T9125	T9135	T6130	AH630	AH645	T515	T5105	T5115	T5125	AH120	GT720	NS520	TH10	RE	IC	S	D1		
Medium to heavy cutting (single side)		57 DNMM150608-57			●																0.8	12.7	6.35	5.16		
		DNMM150612-57			●																	1.2	12.7	6.35	5.16	
		TH																								
Medium to heavy cutting		DNMG150408-TH		●	●	●	▲	▲	▲													0.8	12.7	4.76	5.16	
		DNMG150412-TH		●	●	●	▲	▲	▲														1.2	12.7	4.76	5.16
		DNMG150416-TH		●	●		▲	▲															1.6	12.7	4.76	5.16
		DNMG150608-TH		●	●	●	▲	▲	▲														0.8	12.7	6.35	5.16
		DNMG150612-TH		●	●	●	▲	▲	▲														1.2	12.7	6.35	5.16
		DNMG150616-TH		●	●	●	▲	▲	▲														1.6	12.7	6.35	5.16
		DNMG150408-THS		●	●	●	▲	▲	▲													0.8	12.7	4.76	5.16	
		DNMG150412-THS		●	●	●	▲	▲	▲														1.2	12.7	4.76	5.16
		DNMG150416-THS		●	●		▲	▲															1.6	12.7	4.76	5.16
		DNMG150608-THS		●	●	●	▲	▲	▲														0.8	12.7	6.35	5.16
		DNMG150612-THS		●	●	●	▲	▲	▲														1.2	12.7	6.35	5.16
		DNMG150616-THS		●	●		▲	▲															1.6	12.7	6.35	5.16
		DNMG150408-SH								●	●	●										0.8	12.7	4.76	5.16	
		DNMG150412-SH								●	●	●											1.2	12.7	4.76	5.16
		DNMG150416-SH								●	●	●											1.6	12.7	4.76	5.16
		DNMG150608-SH								●	●	●											0.8	12.7	6.35	5.16
		DNMG150612-SH								●	●	●											1.2	12.7	6.35	5.16
		CH																								
Finishing to medium cutting		DNMA110404E																			0.4	9.525	4.76	3.81		
		DNMA110408E																				0.8	9.525	4.76	3.81	
		DNMA110412E																				1.2	9.525	4.76	3.81	
		DNMA150404											●						●		●	0.4	12.7	4.76	5.16	
		DNMA150408											●	●	●	●					●	0.8	12.7	4.76	5.16	
		DNMA150412											●	●	●	●						1.2	12.7	4.76	5.16	
		DNMA150604											●	●	●	●						0.4	12.7	6.35	5.16	
		DNMA150608											●	●	●	●						0.8	12.7	6.35	5.16	
		DNMA150612											●	●	●							1.2	12.7	6.35	5.16	

● : Line up  
▲ : To be discontinued

Reference pages: External toolholder → C037 - Internal toolholder → D052 -  
J-Series toolholder → G046 TungCap → C045, K012 -

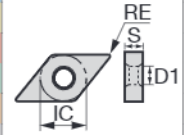
# Insert NEGATIVE TYPE

- : Continuous cutting
- : Light interrupted cutting
- : Heavy interrupted cutting

## DN

Rhombic, 55° with hole

P	Steel	●●		●																
M	Stainless	●		●																
K	Cast iron	●●		●●		●●	●													
N	Non-ferrous	●		●																
S	Superalloy	●		●																
H	Hard material																			

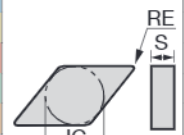


Application	Chipbreaker	Designation	Material					Dimension (mm)			
			Cermet	Uncoated	Ceramic			RE	IC	S	D1
Finishing to medium cutting	-	DNGA150404	●	●		●	●	0.4	12.7	4.76	5.16
		DNGA150408	●	●		●	●	0.8	12.7	4.76	5.16
		DNGA150412				●	●	1.2	12.7	4.76	5.16
		DNGA150416				●	●	1.6	12.7	4.76	5.16
		DNGA150604					●	-	-	-	-
		DNGA150608					●	0.8	12.7	6.35	5.16
		DNGA150612					●	1.2	12.7	6.35	5.16
		DNGA150616					●	1.6	12.7	6.35	5.16
		DNGA150620					●	2	12.7	6.35	5.16

## DN

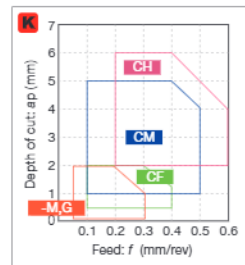
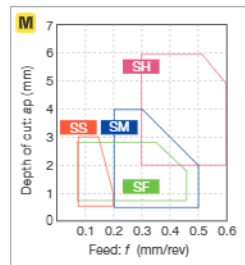
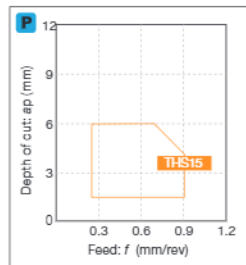
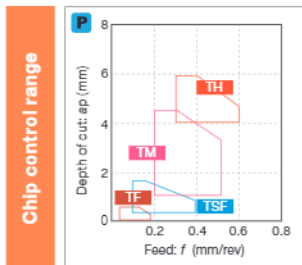
Rhombic, 55° without hole

P	Steel																			
M	Stainless																			
K	Cast iron	●●																		
N	Non-ferrous	●																		
S	Superalloy	●																		
H	Hard material																			



Application	Chipbreaker	Designation	Material					Dimension (mm)				
			Ceramic					RE	IC	S	D1	
Finishing to medium cutting	-	DNGD150708	●						0.8	12.7	7.94	-
		DNGD150712	●						1.2	12.7	7.94	-
		DNGD150716	●						1.6	12.7	7.94	-
		DNGN150404		●					0.4	12.7	4.76	-
		DNGN150408		●					0.8	12.7	4.76	-
		DNGN150412		●	●				1.2	12.7	4.76	-
		DNGN150416		●					1.6	12.7	4.76	-
		DNGN150708		●					0.8	12.7	7.94	-
		DNGN150712		●					1.2	12.7	7.94	-
		DNGN150716		●					1.6	12.7	7.94	-

● : Line up



\*-M,G: Without chipbreaker

Reference pages: DNGA...: External toolholder → C042 -, Internal toolholder → D052 -, J-Series toolholder → G046, TungCap → C045, K012 -  
 DNGD...: External toolholder → C046 -

- : Continuous cutting
- : Light interrupted cutting
- : Heavy interrupted cutting

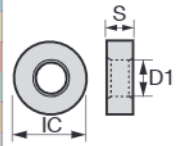
# Insert NEGATIVE TYPE

## RN



Round, with hole

Material	Steel	Stainless	Cast iron	Non-ferrous	Superalloy	Hard material
P	●●●●●●	●●	●●●●●●	●●	●●	●●
M	●●	●●●●●●	●●	●●	●●	●●
K	●●●●●●	●●	●●●●●●	●●	●●	●●
N	●●	●●●●●●	●●	●●	●●	●●
S	●●	●●●●●●	●●	●●	●●	●●
H	●●	●●	●●	●●	●●	●●



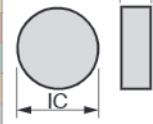
Application	Chipbreaker	Designation	Coated								Uncoated	Ceramic	Dimension (mm)			
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	AH120	TH10	LX11	RE	IC	S
Heavy cutting 	61	RNMG090300-61	●	●			▲	▲					-	9.525	3.18	3.81
		RNMG120400-61	●	●	●	●	▲	▲	▲	▲	●		-	12.7	4.76	5.16
		RNMG150600-61	●	●			▲	▲					-	15.875	6.35	6.43
		RNMG190600-61	●	●	●		▲	▲	▲				-	19.05	6.35	7.93
		RNMG250900-61	●	●			▲	▲					-	25.4	9.52	9.22
Finishing to medium cutting	-	RNGA120400									●		-	12.7	4.76	5.16

## RN



Round, without hole

Material	Steel	Stainless	Cast iron	Non-ferrous	Superalloy	Hard material
P	●●●●●●	●●	●●	●●	●●	●●
M	●●	●●●●●●	●●	●●	●●	●●
K	●●	●●	●●●●●●	●●	●●	●●
N	●●	●●●●●●	●●	●●	●●	●●
S	●●	●●●●●●	●●	●●	●●	●●
H	●●	●●	●●	●●	●●	●●



Application	Chipbreaker	Designation	Ceramic			Dimension (mm)			
			FX105	LX11	WG300	RE	IC	S	D1
Finishing to medium cutting 	-	RNGN120400	●	●		-	12.7	4.76	-
		RNGN120700	●	●		-	12.7	7.94	-

- : Line up
- ▲ : To be discontinued

Reference pages: RNMG..., RNGA...:External toolholder → C080 -

# Insert NEGATIVE TYPE

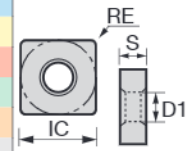
- : Continuous cutting
- ◐ : Light interrupted cutting
- ◑ : Heavy interrupted cutting

## SN



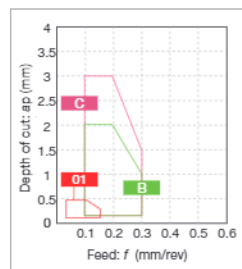
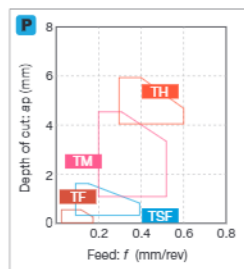
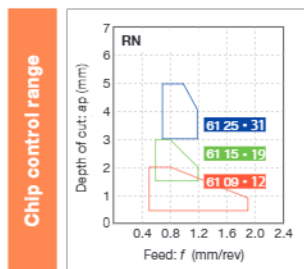
Square, 90°  
with hole

Material	P Steel	M Stainless	K Cast iron	N Non-ferrous	S Superalloy	H Hard material
●	●	◐	◐	◐	◐	◐
◐	◐	◐	◐	◐	◐	◐
◑	◑	◑	◑	◑	◑	◑



Application	Chipbreaker	Designation	Coated			Coated cermet		Cermet		Dimension (mm)							
			T9215	T9225	T9115	T9125	GT9530	AT9530	NS9530	NS520	X407	RE	IC	S	D1		
Precision finishing	<b>TF</b>	SNMG120404-TF							●			0.4	12.7	4.76	5.16		
		SNMG120408-TF							●			0.8	12.7	4.76	5.16		
		<b>01</b>	SNGG090302-01							●	●		0.2	9.525	3.18	3.81	
			SNGG090304-01							●			0.4	9.525	3.18	3.81	
			SNGG090308-01							●	●		0.8	9.525	3.18	3.81	
			SNGG120402-01							●			0.2	12.7	4.76	5.16	
			SNGG120404-01							●			0.4	12.7	4.76	5.16	
			SNGG120408-01							●	●		0.8	12.7	4.76	5.16	
		<b>B - D</b>	SNGG090304R-B						●		●		0.4	9.525	3.18	3.81	
			SNGG090304L-B						●		●		0.4	9.525	3.18	3.81	
			SNGG090308R-B							●	●		0.8	9.525	3.18	3.81	
			SNGG090308L-B							●	●		0.8	9.525	3.18	3.81	
				SNGG120404R-C						●		●		0.4	12.7	4.76	5.16
				SNGG120404L-C						●		●		0.4	12.7	4.76	5.16
				SNGG120408R-C							●	●		0.8	12.7	4.76	5.16
			SNGG120408L-C							●	●		0.8	12.7	4.76	5.16	
			SNGG120408R-D							●	●		0.8	12.7	4.76	5.16	
			SNGG120408L-D							●	●		0.8	12.7	4.76	5.16	
Finishing	<b>TSF</b>	SNMG120404-TSF	●	●	▲	▲		●	●			0.4	12.7	4.76	5.16		
		SNMG120408-TSF	●	●	▲	▲		●	●			0.8	12.7	4.76	5.16		
		SNMG120412-TSF	●	●	▲	▲						1.2	12.7	4.76	5.16		

- : Line up
- ▲ : To be discontinued



Reference pages: External toolholder → C093 - Internal toolholder → D040 -  
Cartridge → K197

Grade  
Insert  
Toolholder  
Ext. Toolholder  
Int. Toolholder  
Threading  
Grooving  
Miniature tool  
Milling cutter  
Endmill  
Drilling tool  
Tooling System  
User's Guide  
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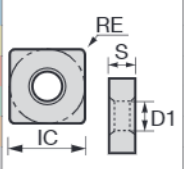
# Insert NEGATIVE TYPE

- : Continuous cutting
- (with dot) : Light interrupted cutting
- ✳ : Heavy interrupted cutting

## SN

Square, 90°  
with hole

<b>P</b> Steel	● ● ● ● ✳	✳ ● ● ● ✳	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
<b>M</b> Stainless	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●
<b>K</b> Cast iron	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
<b>N</b> Non-ferrous	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
<b>S</b> Superalloy	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
<b>H</b> Hard material	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●



Application	Chipbreaker	Designation	Coated								Coated cermet		Cermet	Un-coated	Dimension (mm)										
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6120	T6130	AH630	T5105	T5115	AH8005	AH8015	GT9530	AT9530	NS9530	TH10	RE	IC	S	D1
Finishing		11 SNMG120404-11																		●		0.4	12.7	4.76	5.16
		SNMG120408-11																			●	●	0.8	12.7	4.76
Finishing (for mild steel)		17 SNMG120408-17																		●		0.8	12.7	4.76	5.16
Finishing		SF SNMG120404-SF								● ● ●												0.4	12.7	4.76	5.16
		SNMG120408-SF								● ● ●													0.8	12.7	4.76
Finishing		CF SNMG120408-CF										● ●										0.8	12.7	4.76	5.16
		SNMG120412-CF										● ●											1.2	12.7	4.76
Finishing		HRF SNMG120408-HRF											● ●									0.8	12.7	4.76	5.16
		SNMG120412-HRF											● ●										1.2	12.7	4.76
Finishing		TS SNMG120404-TS	● ●				▲ ▲												● ●	●		0.4	12.7	4.76	5.16
		SNMG120408-TS	● ● ● ● ●	▲ ▲ ▲ ▲															● ●	●		0.8	12.7	4.76	5.16
		SNMG120412-TS	● ● ●		▲ ▲ ▲																		1.2	12.7	4.76
High feed, small depth of cut		AS SNMG120404-AS																		●		0.4	12.7	4.76	5.16
		SNMG120408-AS	● ●			▲ ▲															●		0.8	12.7	4.76

● : Line up  
▲ : To be discontinued

Reference pages: External toolholder → **C093** - Internal toolholder → **D040** -  
Cartridge → **K197**

# Insert NEGATIVE TYPE

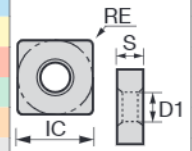
● : Continuous cutting  
 ● : Light interrupted cutting  
 ✖ : Heavy interrupted cutting

## SN



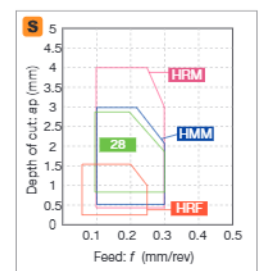
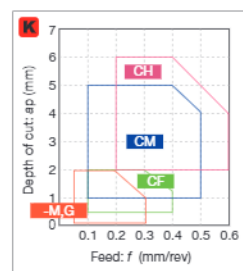
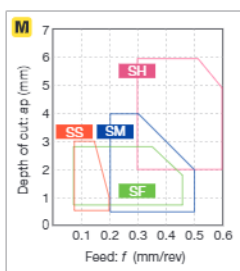
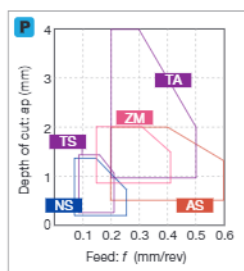
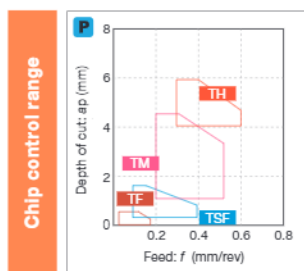
Square, 90°  
with hole

Material	P Steel	M Stainless	K Cast iron	N Non-ferrous	S Superalloy	H Hard material	T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6120	T6130	AH630	AH645	AH120	GH330
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●



Application	Chipbreaker	Designation	Coated																	Dimension (mm)						
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6120	T6130	AH630	AH645	AH120	GH330	RE	IC	S	D1						
Finishing		<b>NS</b> SNMG120408-NS	●	●			▲	▲														0.8	12.7	4.76	5.16	
		<b>SS</b> SNMG120404-SS									●	●	●	●		●						0.4	12.7	4.76	5.16	
		SNMG120408-SS SNMG120412-SS									●	●	●	●		●						0.8 1.2	12.7	4.76	5.16	
Medium cutting		<b>TM</b> SNMG090304-TM	●	●	●		▲	▲	▲													0.4	9.525	3.18	3.81	
		SNMG090308-TM	●	●	●		▲	▲	▲													0.8	9.525	3.18	3.81	
		SNMG120404-TM	●	●			▲	▲	▲										●			0.4	12.7	4.76	5.16	
		SNMG120408-TM	●	●	●	▲	▲	▲	▲										●			0.8	12.7	4.76	5.16	
		SNMG120412-TM	●	●	●	▲	▲	▲	▲										●			1.2	12.7	4.76	5.16	
		SNMG120416-TM	●	●	●		▲	▲	▲														1.6	12.7	4.76	5.16
		SNMG150608-TM	●				▲	▲	▲											●			0.8	15.875	6.35	6.35
		SNMG150612-TM	●				▲	▲	▲											●			1.2	15.875	6.35	6.35
		SNMG190608-TM	●				▲	▲	▲												●			0.8	19.05	6.35
SNMG190612-TM	●				▲	▲	▲												●			1.2	19.05	6.35	7.93	
Medium cutting		<b>TA</b> SNMG120408-TA	●	●																		0.8	12.7	4.76	5.16	
		SNMG120412-TA	●	●																			1.2	12.7	4.76	5.16
Finishing to medium cutting		<b>ZM</b> SNMG120408-ZM	●	●	●		▲	▲	▲													0.8	12.7	4.76	5.16	
		SNMG120412-ZM	●	●	●		▲	▲	▲														1.2	12.7	4.76	5.16

● : Line up  
 ▲ : To be discontinued



\*-M,G: Without chipbreaker

Reference pages: External toolholder → C093 - Internal toolholder → D040 -  
 Cartridge → K197

Grade  
 Insert  
 Ext. Toolholder  
 Int. Toolholder  
 Threading  
 Grooving  
 Miniature tool  
 Milling cutter  
 Endmill  
 Drilling tool  
 Tooling System  
 User's Guide  
 Index





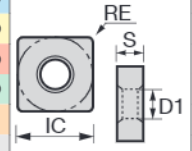
# Insert NEGATIVE TYPE

● : Continuous cutting  
 ● : Light interrupted cutting  
 \* : Heavy interrupted cutting

## SN

● Square, 90° with hole

	P	M	K	N	S	H																																			
Steel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Stainless	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cast iron	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-ferrous	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Superalloy	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Hard material	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●



Application	Chipbreaker	Designation	Coated																Coated cermet	Cermet	Un-coated	Dimension (mm)										
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6120	T6130	AH630	AH645	T515	T5105	T5115	T5125				AH725	AH110	AH120	GH330	GT720	NS9530	NS520	TH10	RE	IC	S
Application		DM SNMG120408-DM	●	●				▲	▲																				0.8	12.7	4.76	5.16
		DM SNMG120412-DM	●	●	●			▲	▲	▲																				1.2	12.7	4.76
Medium cutting		All-round SNMG090304		●	●			▲	▲															●	●	●	●	0.4	9.525	3.18	3.81	
		All-round SNMG090308		●	●	●		▲	▲	▲															●	●	●	●	0.8	9.525	3.18	3.81
		All-round SNMG120404		●	●	●		▲	▲	▲						●	●	●		●	●				●	●	●	●	0.4	12.7	4.76	5.16
		All-round SNMG120408		●	●	●	●	▲	▲	▲	▲					●	●	●	●		●	●		●	●	●	●	0.8	12.7	4.76	5.16	
		All-round SNMG120412		●	●	●	●	▲	▲	▲	▲					●	●	●	●		●	●			●		●	1.2	12.7	4.76	5.16	
		All-round SNMG120416		●	●	●	●	▲	▲	▲	▲						●	●	●									1.6	12.7	4.76	5.16	
		All-round SNMG120420		●	●	●		▲	▲	▲						●	●	●										2	12.7	4.76	5.16	
		All-round SNMG150612		●	●	●		▲	▲	▲		●				●												1.2	15.875	6.35	6.35	
		All-round SNMG150616		●	●			▲	▲							●												1.6	15.875	6.35	6.35	
		All-round SNMG190612		●	●	●		▲	▲	▲		●				●	●	●	●		●							1.2	19.05	6.35	7.93	
		All-round SNMG190616		●	●	●		▲	▲	▲						●	●	●	●		●							1.6	19.05	6.35	7.93	
		All-round SNMG250724		●	●	●		▲	▲	▲																		2.4	25.4	7.94	9.12	
Finishing to medium cutting		27 SNMG120408-27		●				▲																●				0.8	12.7	4.76	5.16	
		27 SNMG120412-27		●				▲																					1.2	12.7	4.76	5.16
Finishing to medium cutting		33 SNMG120408-33		●	●			▲	▲																				0.8	12.7	4.76	5.16
		33 SNMG120412-33			●			▲																					1.2	12.7	4.76	5.16
		33 SNMG150612-33		●	●			▲	▲																				1.2	15.875	6.35	6.35
		33 SNMG190616-33			●	●		▲	▲																				1.6	19.05	6.35	7.93
Medium cutting		37 SNMG120408-37		●				▲															●		●			0.8	12.7	4.76	5.16	
		37 SNMG120412-37		●				▲																					1.2	12.7	4.76	5.16
Medium cutting		SM SNMG120408-SM								●	●	●	●					●										0.8	12.7	4.76	5.16	
		SM SNMG120412-SM									●	●	●	●															1.2	12.7	4.76	5.16

Reference pages: External toolholder → C093 - Internal toolholder → D040 -  
 Cartridge → K197

● : Line up  
 ▲ : To be discontinued










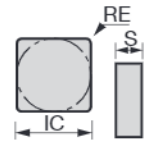
# Insert NEGATIVE TYPE


- : Continuous cutting
- c : Light interrupted cutting
- \* : Heavy interrupted cutting

## SN

 Square, 90° without hole

Material	Continuity	Coated	Uncoated
P Steel	●c	Light	Light
M Stainless	●c	Light	Light
K Cast iron	●c	Light	Light
N Non-ferrous	●	Light	Light
S Superalloy	●c	Light	Light
H Hard material	●	Light	Light

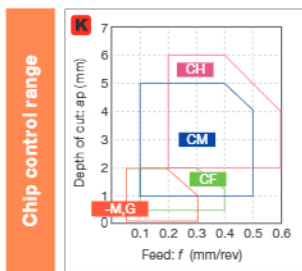


Application	Chipbreaker	Designation	Coated		Uncoated		Dimension (mm)						
			Coated	Uncoated	Coated	Uncoated	RE	IC	S	D1			
Finishing to medium cutting	-	SNMN120408	AH120		TH10								
		SNMN120412	●										

● : Line up

Grade  
Insert  
Toolholder  
Ext. Toolholder  
Int. Toolholder  
Threading  
Grooving  
Miniature tool  
Milling cutter  
Endmill  
Drilling tool  
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K  
L  
M



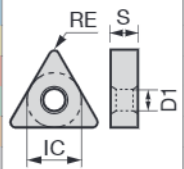
\*-M,G: Without chipbreaker




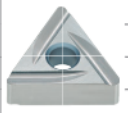

Insert **NEGATIVE TYPE**

**TN**

 Triangular, 60° with hole

P	Steel	●	●	●	●			●	●	●	●								
M	Stainless	●	●	●	●			●	●	●	●								
K	Cast iron	●	●	●	●			●	●	●	●								
N	Non-ferrous																		
S	Superalloy	●																	
H	Hard material																		



Application	Chipbreaker	Designation	Coated		Coated cermet		Cermet			Uncoated			Dimension (mm)					
			GH110	GH330	SH725		GT9530	GT720		NS9530	NS520	X407	TH10	RE	IC	S	D1	
Precision finishing		<b>TF</b> TNMG160404-TF							●	●		●	0.4	9.525	4.76	3.81		
		TNMG160408-TF							●	●			0.8	9.525	4.76	3.81		
		<b>01</b> TNGG110302-01								●				0.2	6.35	3.18	2.26	
		TNGG110304-01								●				0.4	6.35	3.18	2.26	
		TNGG110308-01								●	●			0.8	6.35	3.18	2.26	
		TNGG160402-01	●							●	●		●	0.2	9.525	4.76	3.81	
Precision finishing (sharp edge)		<b>01</b> TNGG160402F-01			●									0.2	9.525	4.76	3.81	
		TNGG160404F-01			●									0.4	9.525	4.76	3.81	
		TNGG160408F-01			●									0.8	9.525	4.76	3.81	
		<b>A, C</b>	TNGG110304R-A							●					0.4	6.35	3.18	2.26
			TNGG110304L-A							●					0.4	6.35	3.18	2.26
			TNGG110308R-A								●				0.8	6.35	3.18	2.26
TNGG110308L-A										●				0.8	6.35	3.18	2.26	
TNGG160304R-C										●	●			0.4	9.525	3.18	3.81	
TNGG160304L-C										●				0.4	9.525	3.18	3.81	
TNGG160308R-C										●				0.8	9.525	3.18	3.81	
TNGG160308L-C										●				0.8	9.525	3.18	3.81	
TNGG160400R-C										●					0.03	9.525	4.76	3.81
	<b>D</b>	TNGG160400L-C							●				0.03	9.525	4.76	3.81		
		TNGG160402R-C						●		●		●	0.2	9.525	4.76	3.81		
		TNGG160402L-C							●					0.2	9.525	4.76	3.81	
		TNGG160404R-C	●	●				●		●	●		●	0.4	9.525	4.76	3.81	
		TNGG160404L-C	●	●				●		●		●	0.4	9.525	4.76	3.81		
		TNGG160408R-C	●	●				●		●	●		●	0.8	9.525	4.76	3.81	
		TNGG160408L-C	●	●				●		●		●	0.8	9.525	4.76	3.81		
		TNGG220404R-D								●	●			0.4	12.7	4.76	5.16	
		TNGG220404L-D								●				0.4	12.7	4.76	5.16	
TNGG220408R-D								●	●			0.8	12.7	4.76	5.16			
TNGG220408L-D								●				0.8	12.7	4.76	5.16			

● : Line up

Reference pages: External toolholder → **C027 -** Internal toolholder → **D046 -**  
 J-Series toolholder → **G045 -** Cartridge → **K193 -**

# Insert NEGATIVE TYPE

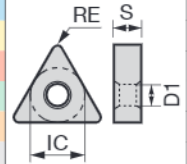
● : Continuous cutting  
 ● : Light interrupted cutting  
 ✖ : Heavy interrupted cutting

## TN



Triangular, 60°  
with hole

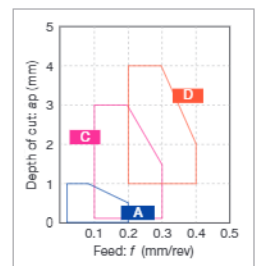
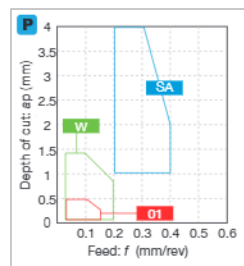
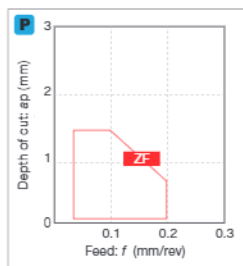
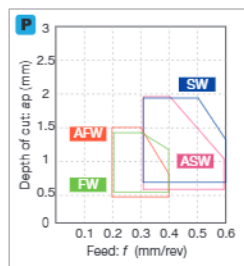
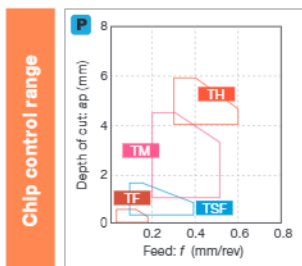
	P	M	K	N	S	H
Steel	●●●●●	●●	●●●●	●●●●	●●	●●
Stainless	●●	●●	●●	●●	●●	●●
Cast iron	●●●●	●●	●●●●	●●	●●	●●
Non-ferrous	●●	●●	●●	●●	●●	●●
Superalloy	●●	●●	●●	●●	●●	●●
Hard material	●●	●●	●●	●●	●●	●●



Application	Chipbreaker	Designation	Coated							Coated cermet	Cermet	Uncoated	Dimension (mm)						
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	AH120	SH725	GT9530	AT9530	NS9530	TH10	RE	IC	S
Precision finishing		W TNGG160404R-W												●		0.4	9.525	4.76	3.81
		TNGG160404L-W												●		0.4	9.525	4.76	3.81
		TNGG160408R-W												●		0.8	9.525	4.76	3.81
		TNGG160408L-W												●		0.8	9.525	4.76	3.81
Precision finishing (sharp edge)		W TNGG160402FR-W												●		0.2	9.525	4.76	3.81
		TNGG160402FL-W												●		0.2	9.525	4.76	3.81
		TNGG160404FR-W												●		0.4	9.525	4.76	3.81
		TNGG160404FL-W												●		0.4	9.525	4.76	3.81
		TNGG160408FR-W												●		0.8	9.525	4.76	3.81
		TNGG160408FL-W												●		0.8	9.525	4.76	3.81
Finishing		TSF TNMG110404E-TSF		●●							●●	●●		●		0.4	6.35	4.76	2.26
		TNMG110408E-TSF		●●							●●	●●		●		0.8	6.35	4.76	2.26
		TNMG160402-TSF								●				●		0.2	9.525	4.76	3.81
		TNMG160404-TSF		●●●				▲▲▲		●		●●		●		0.4	9.525	4.76	3.81
		TNMG160408-TSF		●●●●●				▲▲▲▲		●		●●		●		0.8	9.525	4.76	3.81
		TNMG160412-TSF		●●●				▲▲▲				●				1.2	9.525	4.76	3.81
Finishing (wiper)		FW TNMG110404E-FW		●				▲							0.4	6.35	4.76	2.26	
		TNMG110408E-FW		●				▲							0.8	6.35	4.76	2.26	
		TNMG160404-FW		●				▲							0.4	9.525	4.76	3.81	
		TNMG160408-FW		●				▲							0.8	9.525	4.76	3.81	
Finishing		ZF TNMG160404-ZF		●●●				▲▲▲		●●		●			0.4	9.525	4.76	3.81	
		TNMG160408-ZF		●●●				▲▲▲		●●		●			0.8	9.525	4.76	3.81	
		TNMG160412-ZF			●			▲							1.2	9.525	4.76	3.81	

\* Please see L032-L036 about the adjustment of the machining program for rounding or taper machining by using SW/FW. Please contact our sales representatives if you have any question.

● : Line up  
 ▲ : To be discontinued



Reference pages: External toolholder → C027 - Internal toolholder → D046 -  
 J-Series toolholder → G045 - Cartridge → K193 -

Grade  
 Insert  
 Ext. Toolholder  
 Int. Toolholder  
 Threading  
 Grooving  
 Miniature tool  
 Milling cutter  
 Endmill  
 Drilling tool  
 Tooling System  
 User's Guide  
 Index



- : Continuous cutting
- : Light interrupted cutting
- ✱ : Heavy interrupted cutting

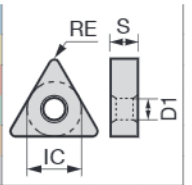
# Insert NEGATIVE TYPE

## TN



Triangular, 60° with hole

	P	M	K	N	S	H	Steel	Stainless	Cast iron	Non-ferrous	Superalloy	Hard material
●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●
✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱



Application	Chipbreaker	Designation	Coated							Coated cermet	Uncoated		Dimension (mm)						
			T9125	T9225	T6120	T6130	AH630	T5105	T5115	AH8005	AH8015	GH330	NS9530	TH10	RE	IC	S	D1	
Finishing		11	TNMG110304-11										●		0.4	6.35	3.18	2.26	
		TNMG110308-11											●		0.8	6.35	3.18	2.26	
		TNMG160402-11											●		0.2	9.525	4.76	3.81	
		TNMG160404-11									●	●	●	0.4	9.525	4.76	3.81		
		TNMG160408-11										●		0.8	9.525	4.76	3.81		
		TNMG220404-11											●		0.4	12.7	4.76	5.16	
		TNMG220408-11											●		0.8	12.7	4.76	5.16	
Finishing (for mild steel)		17	TNMG160404-17	▲	●							●		0.4	9.525	4.76	3.81		
		TNMG160408-17	▲	●								●		0.8	9.525	4.76	3.81		
Finishing		SF	TNMG160404-SF		●	●	●								0.4	9.525	4.76	3.81	
		TNMG160408-SF		●	●	●									0.8	9.525	4.76	3.81	
		TNMG160412-SF		●	●	●									1.2	9.525	4.76	3.81	
		CF	TNMG160404-CF					●	●							0.4	9.525	4.76	3.81
		TNMG160408-CF					●	●							0.8	9.525	4.76	3.81	
		HRF	TNMG160404-HRF							●	●					0.4	9.525	4.76	3.81
TNMG160408-HRF							●	●					0.8	9.525	4.76	3.81			

● : Line up  
▲ : To be discontinued

Reference pages: External toolholder → C027 - Internal toolholder → D046 -  
J-Series toolholder → G045 - Cartridge → K193 -

# Insert **NEGATIVE TYPE**

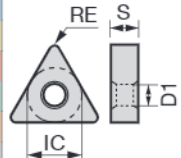
● : Continuous cutting  
 ●● : Light interrupted cutting  
 ●●● : Heavy interrupted cutting

## TN



**Triangular, 60°  
with hole**

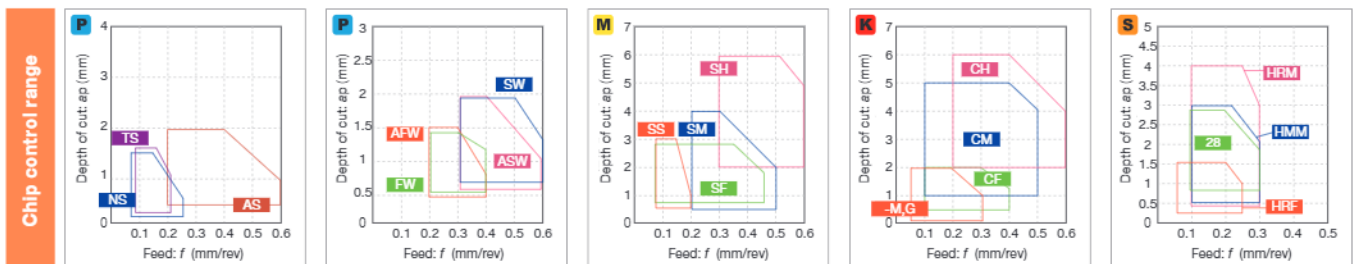
P	Steel	●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	
M	Stainless	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
K	Cast iron	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
N	Non-ferrous	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
S	Superalloy	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
H	Hard material	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●



Application	Chipbreaker	Designation	Coated							Coated cermet		Cermet		Dimension (mm)						
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	GT9530	AT9530	NS9530	NS520	RE	IC	S	D1		
Finishing		TS	TNMG160404-TS	●	●	●	●	▲	▲	▲	●	●	●	●	0.4	9.525	4.76	3.81		
			TNMG160408-TS	●	●	●	●	▲	▲	▲	▲	●	●	●	●	0.8	9.525	4.76	3.81	
			TNMG160412-TS	●	●	●	●	▲	▲	▲	▲	●	●	●	●	1.2	9.525	4.76	3.81	
Finishing to medium cutting (wiper)		SW	TNMG110408E-SW	●						▲				0.8	6.35	4.76	2.26			
			TNMG110412E-SW	●						▲				1.2	6.35	4.76	2.26			
			TNMG160408-SW	●						▲				0.8	9.525	4.76	3.81			
			TNMG160412-SW	●						▲				1.2	9.525	4.76	3.81			
		*Wiper																		
High feed, small depth of cut		AS	TNMG160404-AS			●	●						●		0.4	9.525	4.76	3.81		
			TNMG160408-AS	●	●	●	●	▲	▲	▲	▲			●		0.8	9.525	4.76	3.81	
			TNMG160412-AS	●	●	●	▲	▲	▲					●		1.2	9.525	4.76	3.81	
Boring (double side)		CB	TNMG110304-CB	●						▲				0.4	6.35	3.18	2.26			
			TNMG110308-CB	●						▲				0.8	6.35	3.18	2.26			
Finishing		NS	TNMG160404-NS		●	●						●		0.4	9.525	4.76	3.81			
			TNMG160408-NS	●	●	●	▲	▲	▲			●		0.8	9.525	4.76	3.81			

\* Please see L032-L036 about the adjustment of the machining program for rounding or taper machining by using SW/FW.  
 Please contact our sales representatives if you have any question.

● : Line up  
 ▲ : To be discontinued



Reference pages: External toolholder → C027 - Internal toolholder → D046 -  
 J-Series toolholder → G045 - Cartridge → K193 -

Grade  
A  
Insert  
B  
C  
Ext. Toolholder  
D  
Int. Toolholder  
E  
Threading  
F  
Grooving  
G  
Miniature tool  
H  
Milling cutter  
I  
Endmill  
J  
Drilling tool  
K  
Tooling System  
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# Insert NEGATIVE TYPE

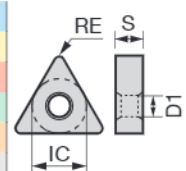
● : Continuous cutting  
● : Light interrupted cutting  
★ : Heavy interrupted cutting

## TN



Triangular, 60° with hole

Material	Steel	Stainless	Cast iron	Non-ferrous	Superalloy	Hard material	Coated	Coated cermet	Cermet	Un-coated	Dimension (mm)
P	●●●●●●●●●●	●●	●●●●●●●●●●	●●●●●●●●●●	●●	●●	●●●●●●●●●●	●●●●●●●●●●	●●	●●	RE, IC, S, D1
M	●●	●●									
K	●●	●●	●●●●●●●●●●	●●●●●●●●●●						●●	
N				●●●●●●●●●●						●●	
S					●●						
H						●●					



Application	Chipbreaker	Designation	Coated							Coated cermet		Cermet	Un-coated	Dimension (mm)														
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6120	T6130	AH630	AH645	AH120	AH725	GH330	GT9530	AT9530	NS9530	KS20	RE	IC	S	D1			
Finishing		SS	TNMG110404E-SS																				●	0.4	6.35	4.76	2.26	
		TNMG110408E-SS																					●	0.8	6.35	4.76	2.26	
		TNMG160404-SS								●	●	●	●	●									●	0.4	9.525	4.76	3.81	
		TNMG160408-SS								●	●	●	●	●									●	0.8	9.525	4.76	3.81	
		TNMG160412-SS									●	●	●	●											1.2	9.525	4.76	3.81
		TNMG220404-SS									●	●	●	●											0.4	12.7	4.76	5.16
		TNMG220408-SS									●	●	●	●											0.8	12.7	4.76	5.16
		TNMG220412-SS										●	●	●	●										1.2	12.7	4.76	5.16
Medium cutting		TM	TNMG110304-TM	●	●	●		▲	▲	▲														0.4	6.35	3.18	2.26	
		TNMG110308-TM	●	●	●		▲	▲	▲																0.8	6.35	3.18	2.26
		TNMG110404E-TM	●	●			▲	▲																	0.4	6.35	4.76	2.26
		TNMG110408E-TM	●	●			▲	▲																	0.8	6.35	4.76	2.26
		TNMG110412E-TM	●	●			▲	▲																	1.2	6.35	4.76	2.26
		TNMG160404-TM	●	●	●		▲	▲	▲						●	●									0.4	9.525	4.76	3.81
		TNMG160408-TM	●	●	●	●	▲	▲	▲						●	●									0.8	9.525	4.76	3.81
		TNMG160412-TM	●	●	●	●	▲	▲	▲																1.2	9.525	4.76	3.81
		TNMG220404-TM	●	●			▲	▲							●										0.4	12.7	4.76	5.16
		TNMG220408-TM	●	●	●	●	▲	▲	▲						●										0.8	12.7	4.76	5.16
		TNMG220412-TM	●	●	●		▲	▲	▲						●										1.2	12.7	4.76	5.16
TNMG220416-TM	●	●			▲	▲																	1.6	12.7	4.76	5.16		
Finishing to medium cutting		AM	TNMG160408-AM	●	●			▲	▲															0.8	9.525	4.76	3.81	
		TNMG160412-AM	●	●			▲	▲																1.2	9.525	4.76	3.81	
		NM	TNMG160408-NM		●					▲															0.8	9.525	4.76	3.81
		TNMG160412-NM	●	●			▲	▲																	1.2	9.525	4.76	3.81
Medium cutting		TQ	TNMG160404-TQ	●	●												●	●	●					0.4	9.525	4.76	3.81	
		TNMG160408-TQ	●	●														●	●	●					0.8	9.525	4.76	3.81
Medium cutting		TA	TNMG160404-TA	●	●																			0.4	9.525	4.76	3.81	
		TNMG160408-TA	●	●																				0.8	9.525	4.76	3.81	
		TNMG160412-TA	●	●																				1.2	9.525	4.76	3.81	

● : Line up  
▲ : To be discontinued

Reference pages: External toolholder → C027 - Internal toolholder → D046 -  
J-Series toolholder → G045 - Cartridge → K193 -

# Insert NEGATIVE TYPE

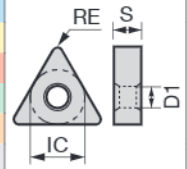
● : Continuous cutting  
 ● : Light interrupted cutting  
 ✱ : Heavy interrupted cutting

## TN



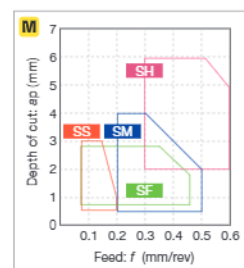
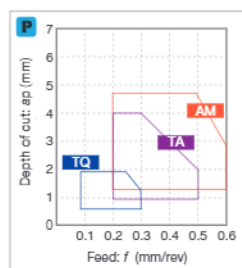
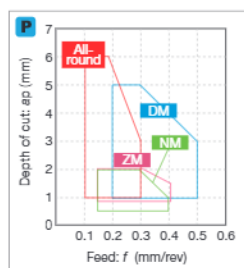
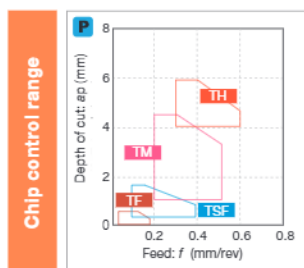
Triangular, 60° with hole

Material	P Steel	M Stainless	K Cast iron	N Non-ferrous	S Superalloy	H Hard material	Coated	Coated cermet	Cermet	Un-coated
P Steel	●●●●✱	●●	●●●●	●●●●	●●●●	●●●●	●●●●	●●●●	●●●●	●●
M Stainless	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
K Cast iron	●●●●	●●	●●●●	●●●●	●●●●	●●●●	●●●●	●●●●	●●●●	●●
N Non-ferrous	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
S Superalloy	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
H Hard material	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●



Application	Chipbreaker	Designation	Coated											Coated cermet		Cermet		Un-coated	Dimension (mm)								
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	AH630	T515	T5105	T5115	T5125	AH110	AH120	GT9530	GT720	NS9530	NS520	TH10	RE	IC	S	D1	
Finishing to medium cutting		ZM TNMG160404-ZM	●	●	●	●	▲	▲	▲								●		●				0.4	9.525	4.76	3.81	
		TNMG160408-ZM	●	●	●	●	▲	▲	▲								●		●				0.8	9.525	4.76	3.81	
		TNMG160412-ZM	●	●	●	●	▲	▲	▲															1.2	9.525	4.76	3.81
		TNMG220412-ZM		●			▲																	1.2	12.7	4.76	5.16
DM		DM TNMG160408-DM	●	●	●	●	▲	▲	▲	▲													0.8	9.525	4.76	3.81	
		TNMG160412-DM	●	●			▲	▲																1.2	9.525	4.76	3.81
Medium cutting		All-round TNMG110304		●	●		▲	▲					●	●	●				●	●	●		0.4	6.35	3.18	2.26	
		TNMG110308		●	●		▲	▲					●	●	●				●	●	●		0.8	6.35	3.18	2.26	
		TNMG160304																		●	●	●		0.4	9.525	3.18	3.81
		TNMG160308																		●	●	●		0.8	9.525	3.18	3.81
		TNMG160404		●	●	●	●	▲	▲	▲	▲			●	●	●	●	●		●	●	●		0.4	9.525	4.76	3.81
		TNMG160408		●	●	●	●	▲	▲	▲	▲			●	●	●	●	●		●	●	●		0.8	9.525	4.76	3.81
		TNMG160412		●	●	●	●	▲	▲	▲	▲			●	●	●	●	●		●	●	●		1.2	9.525	4.76	3.81
		TNMG160416			●	●	●	▲	▲	▲				●	●	●				●	●	●		1.6	9.525	4.76	3.81
		TNMG160420			●	●	●	▲	▲	▲										●	●	●		2	9.525	4.76	3.81
		TNMG220408		●	●	●	●	▲	▲	▲	▲			●	●	●				●	●	●		0.8	12.7	4.76	5.16
		TNMG220412		●	●	●	●	▲	▲	▲	▲	●		●	●	●				●	●	●		1.2	12.7	4.76	5.16
		TNMG220416		●	●			▲	▲			●		●	●	●				●	●	●		1.6	12.7	4.76	5.16
		TNMG270608			●			▲									●							0.8	15.875	6.35	6.35
TNMG270612			●			▲									●							1.2	15.875	6.35	6.35		
TNMG270616															●							1.6	15.875	6.35	6.35		
Finishing to medium cutting		27 TNMG160404-27	●	●			▲	▲															0.4	9.525	4.76	3.81	
		TNMG160408-27	●	●			▲	▲											●				0.8	9.525	4.76	3.81	
		TNMG160412-27	●	●			▲	▲																1.2	9.525	4.76	3.81
		TNMG220404-27		●			▲																	0.4	12.7	4.76	5.16
		TNMG220408-27		●			▲																	0.8	12.7	4.76	5.16
		TNMG220412-27		●			▲																	1.2	12.7	4.76	5.16

● : Line up  
 ▲ : To be discontinued



Reference pages: External toolholder → C027 - Internal toolholder → D046 -  
 J-Series toolholder → G045 - Cartridge → K193 -

Grade  
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 Threading  
 Grooving  
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 Milling cutter  
 Endmill  
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# Insert NEGATIVE TYPE

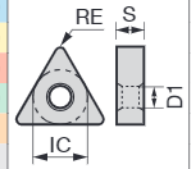
- : Continuous cutting
- ◐ : Light interrupted cutting
- ✱ : Heavy interrupted cutting

## TN



Triangular, 60° with hole

	P	M	K	N	S	H	Coated													Coated cermet	Cermet	Un-coated								
	Steel	Stainless	Cast iron	Non-ferrous	Superalloy	Hard material	T9205	T9215	T9225	T9235	T9115	T9125	T9135	T6120	T6130	AH630	AH645	AH8005	AH8015	T515	T5105	T5115	T5125	AH120	AH725	GH330	GT720	NS9530	TH10	
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱



Application	Chipbreaker	Designation	Coated																							Coated cermet	Cermet	Un-coated	Dimension (mm)								
			T9205	T9215	T9225	T9235	T9115	T9125	T9135	T6120	T6130	AH630	AH645	AH8005	AH8015	T515	T5105	T5115	T5125	AH120	AH725	GH330	GT720	NS9530	TH10				RE	IC	S	D1					
Medium cutting		<b>28</b> TNMG160404-28																●	●											●	0.4	9.525	4.76	3.81			
		TNMG160408-28																	●	●											●	0.8	9.525	4.76	3.81		
		TNMG220404-28																														●	0.4	12.7	4.76	5.16	
		TNMG220408-28																														●	0.8	12.7	4.76	5.16	
		<b>33</b> TNMG160404-33																														●	0.4	9.525	4.76	3.81	
Medium cutting		TNMG160408-33																													●	0.8	9.525	4.76	3.81		
		TNMG160416-33			●				▲																							●	1.6	9.525	4.76	3.81	
		TNMG220404-33			●				▲																			●					●	0.4	12.7	4.76	5.16
		TNMG220412-33			●				▲																								●	1.2	12.7	4.76	5.16
		TNMG220416-33			●				▲																								●	1.6	12.7	4.76	5.16
Medium cutting		<b>37</b> TNMG160404-37		●						▲																			●	●	0.4	9.525	4.76	3.81			
		TNMG160408-37		●						▲																			●	●	0.8	9.525	4.76	3.81			
Medium cutting		<b>38</b> TNMG160404-38																												●	0.4	9.525	4.76	3.81			
		TNMG160408-38																													●	0.8	9.525	4.76	3.81		
Medium cutting		<b>SM</b> TNMG110404E-SM													●	●	●															0.4	6.35	4.76	2.26		
		TNMG110408E-SM													●	●	●																0.8	6.35	4.76	2.26	
		TNMG160404-SM														●	●	●	●							●							0.4	9.525	4.76	3.81	
		TNMG160408-SM														●	●	●	●							●							0.8	9.525	4.76	3.81	
		TNMG160412-SM														●	●	●	●															1.2	9.525	4.76	3.81
		TNMG220408-SM														●	●	●	●															0.8	12.7	4.76	5.16
Medium cutting		TNMG220412-SM												●	●	●	●															1.2	12.7	4.76	5.16		
		<b>CM</b> TNMG160404-CM																			●	●	●	●								0.4	9.525	4.76	3.81		
		TNMG160408-CM																			●	●	●	●								0.8	9.525	4.76	3.81		
		TNMG160412-CM																			●	●	●	●								1.2	9.525	4.76	3.81		
		TNMG220408-CM																				●	●	●	●								0.8	12.7	4.76	5.16	
Medium cutting		TNMG220412-CM																		●	●	●	●								1.2	12.7	4.76	5.16			

● : Line up  
▲ : To be discontinued

Reference pages: External toolholder → C027 - Internal toolholder → D046 -  
J-Series toolholder → G045 - Cartridge → K193 -

# Insert NEGATIVE TYPE

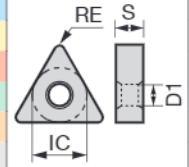
- : Continuous cutting
- ◐ : Light interrupted cutting
- ◑ : Heavy interrupted cutting

## TN



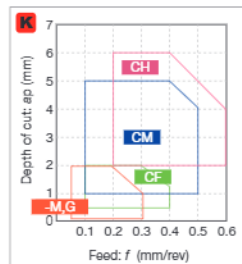
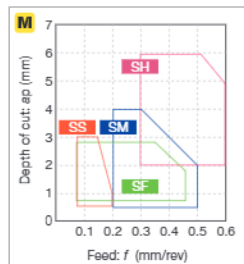
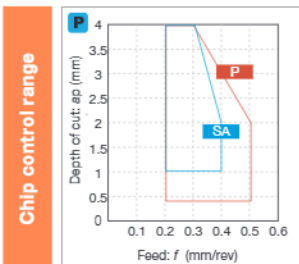
Triangular, 60° with hole

Grade	Material	Coated	Cermet	Uncoated	Dimension (mm)
P	Steel	◐ ◑ ◑ ◑ ◑			
M	Stainless	● ◐ ◐ ◑ ◑			
K	Cast iron			● ◐ ◑ ◑	
N	Non-ferrous			● ◐ ◑ ◑	
S	Superalloy			● ◐ ◑ ◑	
H	Hard material				



Application	Chipbreaker	Designation	Coated							Cermet	Uncoated		Dimension (mm)							
			T6120	T6130	AH630	AH645	AH120	AH8005	AH8015	AH905	GH110	GH330	SH725	NS9530	TH10	KS20	RE	IC	S	D1
Medium cutting		P TNGG160402R-P									●			●		0.2	9.525	4.76	3.81	
		TNGG160402L-P									●			●		0.2	9.525	4.76	3.81	
		TNGG160404R-P									●			●		0.4	9.525	4.76	3.81	
		TNGG160404L-P									●			●		0.4	9.525	4.76	3.81	
		TNGG160408R-P									●			●		0.8	9.525	4.76	3.81	
		TNGG160408L-P									●			●		0.8	9.525	4.76	3.81	
Medium cutting (sharp edge)		P TNGG160402FR-P									●					0.2	9.525	4.76	3.81	
		TNGG160402FL-P									●						0.2	9.525	4.76	3.81
		TNGG160404FR-P									●						0.4	9.525	4.76	3.81
		TNGG160404FL-P									●						0.4	9.525	4.76	3.81
		TNGG160408FR-P									●						0.8	9.525	4.76	3.81
		TNGG160408FL-P									●						0.8	9.525	4.76	3.81
Finishing to medium cutting		HRM TNMG160404-HRM						●	●							0.4	9.525	4.76	3.81	
		TNMG160408-HRM						●	●							0.8	9.525	4.76	3.81	
		TNMG160412-HRM						●	●							1.2	9.525	4.76	3.81	
Medium cutting		HMM TNMG160404-HMM							●							0.4	9.525	4.76	3.81	
		TNMG160408-HMM							●							0.8	9.525	4.76	3.81	
		TNMG160412-HMM							●							1.2	9.525	4.76	3.81	
Medium cutting		SA TNMG160404-SA	●	●	●	●	●									0.4	9.525	4.76	3.81	
		TNMG160408-SA	●	●	●	●	●								●		0.8	9.525	4.76	3.81
		TNMG160412-SA	●	●	●	●	●								●		1.2	9.525	4.76	3.81
		TNMG220408-SA	●	●	●	●	●								●		0.8	12.7	4.76	5.16
		TNMG220412-SA	●	●	●	●											1.2	12.7	4.76	5.16

● : Line up



\*-M,G: Without chipbreaker



Reference pages: External toolholder → C027 - Internal toolholder → D046 -  
 J-Series toolholder → G045 - Cartridge → K193 -

# Insert NEGATIVE TYPE

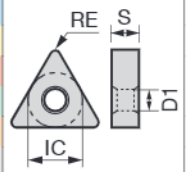
● : Continuous cutting  
 ● : Light interrupted cutting  
 ✖ : Heavy interrupted cutting

## TN



Triangular, 60° with hole

	P Steel	M Stainless	K Cast iron	N Non-ferrous	S Superalloy	H Hard material																					
●	●	●	●	●	●		●	●	●	●									●								
●		●																									
●			●																								
				●																							
					●																						
						●																					



Application	Chipbreaker	Designation	Coated																Cermet	Dimension (mm)						
			T9205	T9215	T9225	T9235	T9115	T9125	T9135	T6130	AH630	AH645	T515	T5105	T5115	T5125	AH120	AH725		GH330	NS9530	RE	IC	S	D1	
Medium cutting		<b>S</b> TNMG160404R-S	●	●	●	▲	▲	▲	●	●	●							●	●	●	0.4	9.525	4.76	3.81		
		TNMG160404L-S		●	●		▲	▲	●	●	●								●	●	●	0.4	9.525	4.76	3.81	
		TNMG160408R-S		●	●			▲	▲	●	●	●							●	●	●	0.8	9.525	4.76	3.81	
		TNMG160408L-S		●	●				▲	▲	●	●	●						●	●	●	0.8	9.525	4.76	3.81	
		TNMG220404R-S		●	●				▲	▲	●	●	●						●	●	●	0.4	12.7	4.76	5.16	
		TNMG220404L-S		●	●					▲	▲	●	●	●					●	●	●	0.4	12.7	4.76	5.16	
		TNMG220408R-S		●	●						▲	▲	●	●	●				●	●	●	0.8	12.7	4.76	5.16	
		TNMG220408L-S		●	●							▲	▲	●	●	●			●	●	●	0.8	12.7	4.76	5.16	
Medium to heavy cutting		<b>TH</b> TNMG220408-TH	●	●	●	▲	▲	▲									●				0.8	12.7	4.76	5.16		
		TNMG220412-TH	●	●	●	▲	▲	▲														1.2	12.7	4.76	5.16	
		<b>THS</b> TNMG220408-THS	●	●	●	▲	▲	▲															0.8	12.7	4.76	5.16
		TNMG220412-THS	●	●	●	▲	▲	▲															1.2	12.7	4.76	5.16
		<b>CH</b> TNMG160404-CH										●	●	●	●								0.4	9.525	4.76	3.81
		TNMG160408-CH										●	●	●	●								0.8	9.525	4.76	3.81
Medium to heavy cutting (single side)		TNMG160412-CH									●	●	●	●							1.2	9.525	4.76	3.81		
		TNMG220408-CH											●	●	●							0.8	12.7	4.76	5.16	
		TNMG220412-CH												●	●	●						1.2	12.7	4.76	5.16	
		TNMG220416-CH													●	●	●					1.6	12.7	4.76	5.16	
		<b>57</b> TNMM160408-57		●				▲															0.8	9.525	4.76	3.81
		TNMM220408-57		●				▲															0.8	12.7	4.76	5.16
TNMM220412-57		●				▲															1.2	12.7	4.76	5.16		

● : Line up  
 ▲ : To be discontinued

Reference pages: External toolholder → C027 - Internal toolholder → D046 -  
 J-Series toolholder → G045 - Cartridge → K193 -

# Insert NEGATIVE TYPE

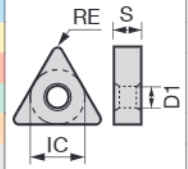
- : Continuous cutting
- ◐ : Light interrupted cutting
- ✱ : Heavy interrupted cutting

## TN



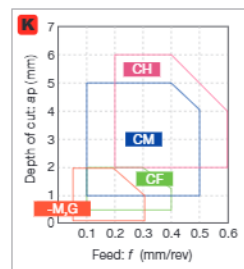
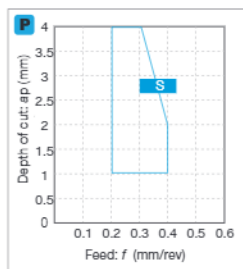
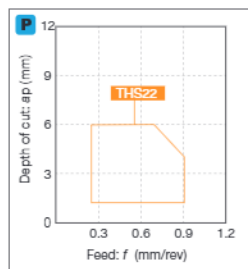
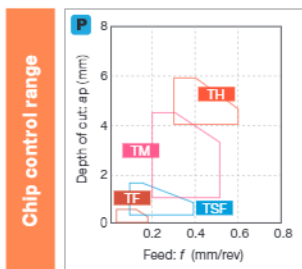
Triangular, 60°  
with hole

	P	M	K	N	S	H
Steel	●					
Stainless		●				
Cast iron	◐		◐	✱		
Non-ferrous				●		
Superalloy					●	
Hard material						●



Application	Chipbreaker	Designation	Coated					Coated cermet		Cermet	Uncoated		Ceramic			Dimension (mm)			
			T515	T5105	T5115	T5125	GH110	GT720	NS520	TH03	TH10	FX105	LX21	LX11	RE	IC	S	D1	
Finishing to medium cutting	-	TNMA110404E	●											0.4	6.35	4.76	2.26		
		TNMA110408E	●											0.8	6.35	4.76	2.26		
		TNMA110412E	●											1.2	6.35	4.76	2.26		
		TNMA160404	●	●	●	●				●				0.4	9.525	4.76	3.81		
		TNMA160408	●	●	●	●		●		●		●		0.8	9.525	4.76	3.81		
		TNMA160412	●	●	●	●						●		1.2	9.525	4.76	3.81		
		TNMA160416		●	●	●								1.6	9.525	4.76	3.81		
		TNMA160420		●	●	●								2	9.525	4.76	3.81		
		TNMA220404		●	●	●								0.4	12.7	4.76	5.16		
		TNMA220408		●	●	●								0.8	12.7	4.76	5.16		
		TNMA220412		●	●	●								1.2	12.7	4.76	5.16		
		TNMA220416		●	●	●								1.6	12.7	4.76	5.16		
		-	TNGA110304								●			0.4	6.35	3.18	2.26		
			TNGA110308								●			0.8	6.35	3.18	2.26		
			TNGA160304								●			0.4	9.525	3.18	3.81		
			TNGA160308								●			0.8	9.525	3.18	3.81		
			TNGA160402										●	0.2	9.525	4.76	3.81		
			TNGA160404				●		●		●	●	●	0.4	9.525	4.76	3.81		
			TNGA160408				●		●		●	●	●	0.8	9.525	4.76	3.81		
			TNGA160412						●		●	●	●	1.2	9.525	4.76	3.81		
			TNGA160416								●	●		1.6	9.525	4.76	3.81		
			TNGA220408								●			0.8	12.7	4.76	5.16		

● : Line up



\*-M,G: Without chipbreaker

Reference pages: External toolholder → C027 - Internal toolholder → D046 -  
J-Series toolholder → G045 - Cartridge → K193 -

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

Tooling System

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Negative

Positive

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OTHERS

# Insert NEGATIVE TYPE

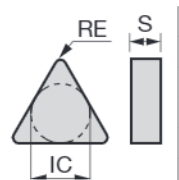
- : Continuous cutting
- : Light interrupted cutting
- : Heavy interrupted cutting

## TN



Triangular, 60° without hole

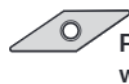
P Steel	●																								
M Stainless	●																								
K Cast iron	●				●●	●																			
N Non-ferrous	●																								
S Superalloy	●																								
H Hard material	●						●																		



Application	Chipbreaker	Designation	Uncoated		Ceramic			Dimension (mm)							
			TH10	FX105 LX21 LX11				RE	IC	S	D1				
Finishing to medium cutting	-	TNGN110308	●									0.8	6.35	3.18	-
		TNGN160404			●	●						0.4	9.525	4.76	-
		TNGN160408	●			●	●					0.8	9.525	4.76	-
		TNGN160412	●			●	●	●				1.2	9.525	4.76	-
		TNGN160416				●		●				1.6	9.525	4.76	-
		TNGN160420				●						2	9.525	4.76	-
		TNGN160708						●				0.8	9.525	7.94	-
		TNGN160712						●				1.2	9.525	7.94	-

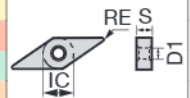
● : Line up

## VN



Rhombic, 35° with hole

P Steel	●			●●		●●●●		●																	
M Stainless	●																								
K Cast iron	●			●●		●●●●		●																	
N Non-ferrous	●																								
S Superalloy	●																								
H Hard material																									



Application	Chipbreaker	Designation	Coated	Coated cermet	Cermet	Uncoated	Dimension (mm)								
			GH110	GT720	NS9530 NS520	TH10	RE	IC	S	D1					
Finishing	TF	VNMG160404-TF			●							0.4	9.525	4.76	3.81
		VNMG160408-TF		●	●							0.8	9.525	4.76	3.81
Precision finishing	01	VNGG160402-01	●		●	●						0.2	9.525	4.76	3.81
		VNGG160404-01			●	●						0.4	9.525	4.76	3.81
		VNGG160408-01			●	●						0.8	9.525	4.76	3.81

● : Line up

Reference pages: TNGN...: External toolholder → C027 -  
 VNMG..., VNGG...: External toolholder → C059 -, Internal toolholder → D070 -,  
 TungCap → K015 -

# Insert NEGATIVE TYPE

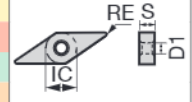
- : Continuous cutting
- ◐ : Light interrupted cutting
- ◑ : Heavy interrupted cutting

## VN



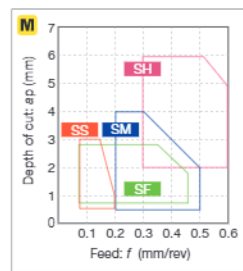
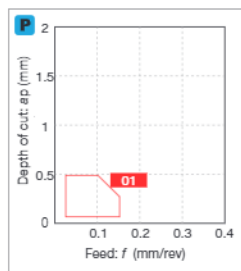
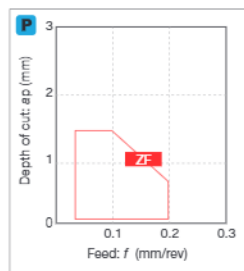
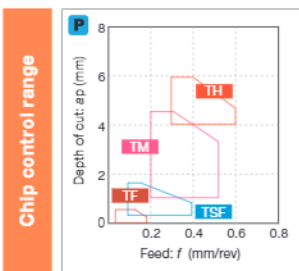
Rhombic, 35° with hole

P	Steel	●	◐	◑	◐	◑	●	◐	◑	◐	◑	●	◐	◑	◐	◑	●	◐	◑
M	Stainless	●	◐	◑	◐	◑	●	◐	◑	◐	◑	●	◐	◑	◐	◑	●	◐	◑
K	Cast iron	●	◐	◑	◐	◑	●	◐	◑	◐	◑	●	◐	◑	◐	◑	●	◐	◑
N	Non-ferrous	●	◐	◑	◐	◑	●	◐	◑	◐	◑	●	◐	◑	◐	◑	●	◐	◑
S	Superalloy	●	◐	◑	◐	◑	●	◐	◑	◐	◑	●	◐	◑	◐	◑	●	◐	◑
H	Hard material	●	◐	◑	◐	◑	●	◐	◑	◐	◑	●	◐	◑	◐	◑	●	◐	◑



Application	Chipbreaker	Designation	Coated										Coated cermet	Cermet	Uncoated	Dimension (mm)							
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6120	T6130	AH630	AH120	GH330	GT9530	AT9530	NS9530	TH10	RE	IC	S	D1
Finishing	TSF	VNMG120402E-TSF	●	●			▲	▲							●	●				0.2	7.15	4.76	3.81
		VNMG120404E-TSF	●	●			▲	▲							●	●				0.4	7.15	4.76	3.81
		VNMG120408E-TSF	●	●			▲	▲							●	●				0.8	7.15	4.76	3.81
	VNMG160402-TSF													●	●				0.2	9.525	4.76	3.81	
	VNMG160404-TSF	●	●	●	●	▲	▲	▲	▲					●	●				0.4	9.525	4.76	3.81	
	VNMG160408-TSF	●	●	●	●	▲	▲	▲	▲					●	●				0.8	9.525	4.76	3.81	
	VNMG160412-TSF	●	●	●	●	▲	▲	▲	▲										1.2	9.525	4.76	3.81	
	ZF	VNMG160404-ZF	●	●	●		▲	▲	▲						●	●				0.4	9.525	4.76	3.81
VNMG160408-ZF	●	●	●		▲	▲	▲							●	●				0.8	9.525	4.76	3.81	
VNMG160412-ZF	●	●	●		▲	▲	▲												1.2	9.525	4.76	3.81	
Grooving	11	VNMG160404-11											●				●		0.4	9.525	4.76	3.81	
		VNMG160408-11															●		0.8	9.525	4.76	3.81	
		VNMG160412-11															●		1.2	9.525	4.76	3.81	
	SF	VNMG160404-SF								●	●	●								0.4	9.525	4.76	3.81
VNMG160408-SF								●	●	●									0.8	9.525	4.76	3.81	

● : Line up  
▲ : To be discontinued



Reference pages: External toolholder → C054 - Internal toolholder → D070 - TungCap → C061, K015 -

Grade: A  
Insert: B  
Ext. Toolholder: C  
Int. Toolholder: D  
Threading: E  
Grooving: F  
Miniature tool: G  
Milling cutter: H  
Endmill: I  
Drilling tool: J  
Tooling System: K  
User's Guide: L  
Index: M

Negative

Positive

PCD / CBN

C

D

G

R

S

T

V

W

Y

OTHERS

# Insert NEGATIVE TYPE

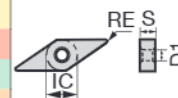
- : Continuous cutting
- ◐ : Light interrupted cutting
- ⊛ : Heavy interrupted cutting

# VN



Rhombic, 35° with hole

	P	M	K	N	S	H															
Steel	●	◐	◐	◐	◐			⊛	⊛	⊛											
Stainless		●																			
Cast iron	●	◐	◐																		
Non-ferrous				●	◐	◐															
Superalloy																					
Hard material																					



Application	Chipbreaker	Designation	Coated																	Coated cermet	Cermet		Dimension (mm)								
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6120	T6130	AH630	AH645	T5105	T5115	AH110	AH120	AH8005	AH8015	GH330	GT9530	AT9530	NS9530	NS520	RE	IC	S	D1		
Application	<b>CF</b>	VNMG160404-CF													●	●										0.4	9.525	4.76	3.81		
		VNMG160408-CF													●	●										0.8	9.525	4.76	3.81		
Finishing	<b>HRF</b>	VNMG160404-HRF																			●	●				0.4	9.525	4.76	3.81		
		VNMG160408-HRF																			●	●				0.8	9.525	4.76	3.81		
Finishing	<b>TS</b>	VNMG160404-TS	●	●	●		▲	▲	▲														●	●	●	●	0.4	9.525	4.76	3.81	
		VNMG160408-TS	●	●	●		▲	▲	▲															●	●	●	●	0.8	9.525	4.76	3.81
		VNMG160412-TS	●	●	●		▲	▲	▲																		1.2	9.525	4.76	3.81	
Medium cutting	<b>SS</b>	VNMG120404E-SS								●	●	●	●													0.4	7.15	4.76	3.81		
		VNMG120408E-SS								●	●	●	●													0.8	7.15	4.76	3.81		
		VNMG160404-SS								●	●	●	●					●					●			0.4	9.525	4.76	3.81		
		VNMG160408-SS								●	●	●	●					●					●			0.8	9.525	4.76	3.81		
		VNMG160412-SS								●	●	●	●										●			1.2	9.525	4.76	3.81		
Medium cutting	<b>TM</b>	VNMG120404E-TM	●	●			▲	▲																		0.4	7.15	4.76	3.81		
		VNMG120408E-TM	●	●			▲	▲																		0.8	7.15	4.76	3.81		
		VNMG160404-TM	●	●	●	▲	▲	▲	▲	●								●								0.4	9.525	4.76	3.81		
		VNMG160408-TM	●	●	●	▲	▲	▲	▲								●	●								0.8	9.525	4.76	3.81		
Finishing to medium cutting	<b>TQ</b>	VNMG160404-TQ	●	●																			●	●	●	0.4	9.525	4.76	3.81		
		VNMG160408-TQ	●	●																			●	●	●	0.8	9.525	4.76	3.81		

● : Line up  
▲ : To be discontinued

Reference pages: External toolholder → C054 - Internal toolholder → D070 -  
TungCap → C061, K015 -

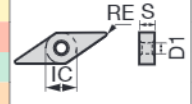
# Insert NEGATIVE TYPE

● : Continuous cutting  
 ● : Light interrupted cutting  
 ✖ : Heavy interrupted cutting



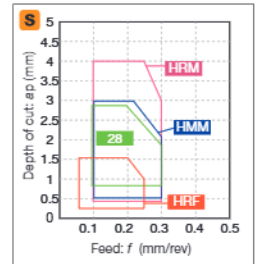
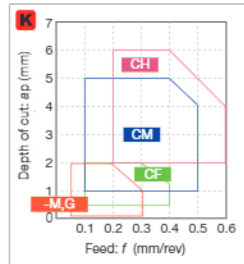
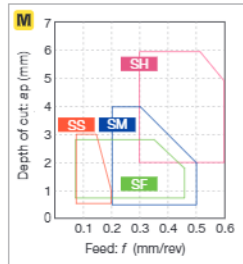
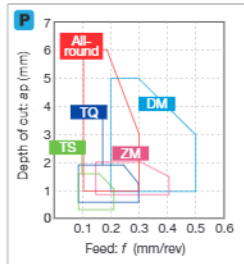
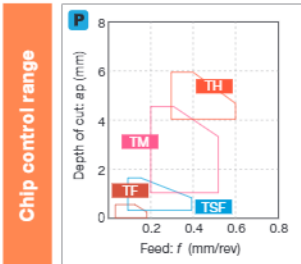
Rhombic, 35°  
with hole

Material	P Steel	M Stainless	K Cast iron	N Non-ferrous	S Superalloy	H Hard material
●	●	●	●	●	●	●
●	●	●	●	●	●	●
✖	✖	✖	✖	✖	✖	✖



Application	Chipbreaker	Designation	Coated												Cermet	Uncoated	Dimension (mm)							
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T515	T5105	T5115	T5125	AH110	AH120	AH8005	AH8015	NS9530	TH10	RE	IC	S	D1
Finishing to medium cutting	ZM	VNMG160408-ZM	●	●	●	●	▲	▲	▲												0.8	9.525	4.76	3.81
		VNMG160412-ZM	●	●	●		▲	▲	▲												1.2	9.525	4.76	3.81
Medium cutting	DM	VNMG160408-DM	●	●	●	●	▲	▲	▲	▲											0.8	9.525	4.76	3.81
		VNMG160412-DM	●	●	●		▲	▲	▲												1.2	9.525	4.76	3.81
Medium cutting	All-round	VNMG160404	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●	●	●	●	●	●	0.4	9.525	4.76	3.81
		VNMG160408	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●	●	●	●	●	●	0.8	9.525	4.76	3.81
		VNMG160412	●	●			▲	▲			●	●	●	●							1.2	9.525	4.76	3.81
Medium cutting	28	VNMG160404-28												●	●	●				0.4	9.525	4.76	3.81	
		VNMG160408-28													●	●	●				0.8	9.525	4.76	3.81
Medium cutting	33	VNMG160404-33		●			▲							●						0.4	9.525	4.76	3.81	
		VNMG160408-33	●	●			▲	▲													0.8	9.525	4.76	3.81

● : Line up  
 ▲ : To be discontinued



\*-M,G: Without chipbreaker

Reference pages: External toolholder → C059 - Internal toolholder → D070 -  
 TungCap → C061, K015 -



# Insert NEGATIVE TYPE

● : Continuous cutting  
 ● : Light interrupted cutting  
 ✖ : Heavy interrupted cutting

## VN



Rhombic, 35°  
with hole

P	Steel	●	✖	✖	✖						●	●						
M	Stainless	●	●	●	✖							●	●					
K	Cast iron					●	●	●	✖			●	●					
N	Non-ferrous												●					
S	Superalloy										●	●	●					
H	Hard material														●			



Application	Chipbreaker	Designation	Coated							Cermet	Uncoated	Ceramic	Dimension (mm)							
			T6120	T6130	AH630	AH645	T515	T5105	T5115	T5125	AH8005	AH8015	AH905	NS520	TH10	LX11	RE	IC	S	D1
Medium cutting		<b>SM</b> VNMG120404E-SM	●	●	●	●										0.4	7.15	4.76	3.81	
		VNMG120408E-SM	●	●	●	●											0.8	7.15	4.76	3.81
		VNMG160404-SM	●	●	●	●											0.4	9.525	4.76	3.81
		VNMG160408-SM	●	●	●	●											0.8	9.525	4.76	3.81
		VNMG160412-SM	●	●	●	●											1.2	9.525	4.76	3.81
		<b>CM</b> VNMG160408-CM					●	●	●	●								0.8	9.525	4.76
<b>CM</b> VNMG160412-CM						●	●	●								1.2	9.525	4.76	3.81	
Finishing to medium cutting		<b>HRM</b> VNMG160404-HRM								●	●					0.4	9.525	4.76	3.81	
		VNMG160408-HRM								●	●					0.8	9.525	4.76	3.81	
		VNMG160412-HRM									●	●				1.2	9.525	4.76	3.81	
Medium cutting		<b>HMM</b> VNMG160404-HMM														0.4	9.525	4.76	3.81	
		VNMG160408-HMM															0.8	9.525	4.76	3.81
		VNMG160412-HMM															1.2	9.525	4.76	3.81
Finishing to medium cutting		- VNMA120404E					●									0.4	7.15	4.76	3.81	
		VNMA120408E					●										0.8	7.15	4.76	3.81
		VNMA160402												●			0.2	9.525	4.76	3.81
		VNMA160404						●	●	●		●					0.4	9.525	4.76	3.81
		VNMA160408						●	●	●		●					0.8	9.525	4.76	3.81
		VNGA160404													●		0.4	9.525	4.76	3.81
		VNGA160408													●		0.8	9.525	4.76	3.81

\* Please see L032-L036 about the adjustment of the machining program for rounding or taper machining by using SW/FW. Please contact our sales representatives if you have any question.

● : Line up

Reference pages: External toolholder → C054 - Internal toolholder → D070 -  
 TungCap → C061, K015 -



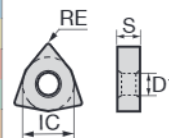
# Insert NEGATIVE TYPE

● : Continuous cutting  
 ● : Light interrupted cutting  
 ✖ : Heavy interrupted cutting

## WN

Trigon, 80° with hole

	P	M	K	N	S	H
Steel	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖
Stainless	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖
Cast iron	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖
Non-ferrous	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖
Superalloy	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖
Hard material	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖	● ● ● ● ✖



Application	Chipbreaker	Designation	Coated								Coated cermet		Cermet	Dimension (mm)				
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	AH120	GT9530	AT9530	NS9530	RE	IC	S	D1
Finishing		<b>TSF</b> WNMG060404E-TSF	●	●			▲	▲				●	●	●	0.4	9.525	4.76	3.81
		WNMG060408E-TSF	●	●			▲	▲				●	●	●	0.8	9.525	4.76	3.81
		WNMG060412E-TSF	●	●			▲	▲				●	●	●	1.2	9.525	4.76	3.81
		WNMG060404-TSF	●	●			▲	▲							0.4	9.525	4.76	3.81
		WNMG060408-TSF	●	●			▲	▲							0.8	9.525	4.76	3.81
		WNMG080404-TSF	●	●	●		▲	▲	▲	●		●	●	●	0.4	12.7	4.76	5.16
		WNMG080408-TSF	●	●	●		▲	▲	▲	●		●	●	●	0.8	12.7	4.76	5.16
		WNMG080412-TSF	●	●	●		▲	▲	▲	●					1.2	12.7	4.76	5.16
Finishing (wiper)		<b>FW</b> WNMG060404E-FW	●	●	●		▲	▲	▲			●	●	0.4	9.525	4.76	3.81	
		WNMG060408E-FW	●	●	●		▲	▲	▲			●	●	0.8	9.525	4.76	3.81	
		WNMG080404-FW	●	●			▲	▲				●	●	0.4	12.7	4.76	5.16	
		WNMG080408-FW	●	●	●		▲	▲	▲			●	●	0.8	12.7	4.76	5.16	
		*Wiper																
			<b>AFW</b> WNMG060404-AFW	●	●			▲	▲				●	●	0.4	9.525	4.76	3.81
			WNMG060408-AFW	●	●	●	●	▲	▲	▲	▲		●	●	0.8	9.525	4.76	3.81
			WNMG080404-AFW	●	●			▲	▲				●	●	0.4	12.7	4.76	5.16
WNMG080408-AFW	●		●	●	●	▲	▲	▲	▲		●	●	0.8	12.7	4.76	5.16		
Finishing		<b>ZF</b> WNMG060404E-ZF	●	●			▲	▲						0.4	9.525	4.76	3.81	
		WNMG060404-ZF	●	●			▲	▲						0.4	9.525	4.76	3.81	
		WNMG060408-ZF	●	●			▲	▲						0.8	9.525	4.76	3.81	
		WNMG080404-ZF	●	●	●		▲	▲	▲		●	●	●	0.4	12.7	4.76	5.16	
		WNMG080408-ZF	●	●	●		▲	▲	▲		●	●	●	0.8	12.7	4.76	5.16	
		WNMG080412-ZF	●				▲							1.2	12.7	4.76	5.16	
		<b>11</b> WNMG080404-11											●	●	0.4	12.7	4.76	5.16
WNMG080408-11											●	●	0.8	12.7	4.76	5.16		
Finishing (for mild steel)		<b>17</b> WNMG080404-17										●	●	0.4	12.7	4.76	5.16	
		WNMG080408-17										●	●	0.8	12.7	4.76	5.16	

\* Please see L032-L036 about the adjustment of the machining program for rounding or taper machining by using SW/FW. Please contact our sales representatives if you have any question.

● : Line up  
 ▲ : To be discontinued

Reference pages: External toolholder → C029 - Internal toolholder → D029 -  
 TungCap → C035 -, K011 -

# Insert NEGATIVE TYPE

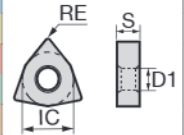
● : Continuous cutting  
 ● : Light interrupted cutting  
 ✳ : Heavy interrupted cutting

# WN



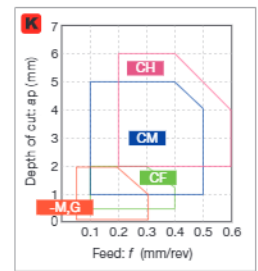
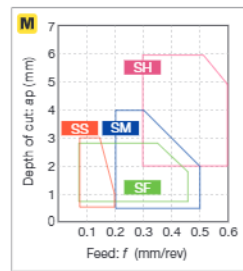
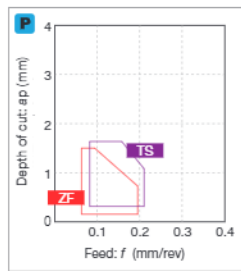
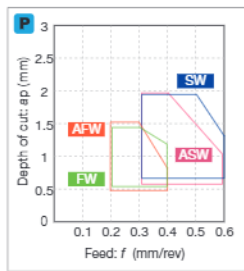
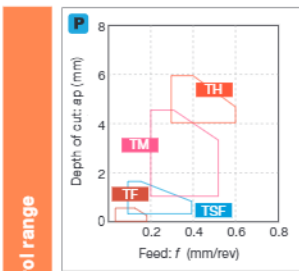
Trigon, 80°  
with hole

	P	M	K	N	S	H	Coated	Coated cermet	Cermet	Dimension (mm)			
Steel	●●●●✳	●●	●●●●	●●●●✳	●●●●✳	●●●●✳	●●●●	●●●●	●●●●	●	●	●	●
Stainless	●●	●●	●●●●	●●●●✳	●●●●✳	●●●●✳	●●●●	●●●●	●●●●	●	●	●	●
Cast iron	●●●●	●●●●	●●●●	●●●●✳	●●●●✳	●●●●✳	●●●●	●●●●	●●●●	●	●	●	●
Non-ferrous	●●●●✳	●●●●✳	●●●●✳	●●●●✳	●●●●✳	●●●●✳	●●●●	●●●●	●●●●	●	●	●	●
Superalloy	●●●●✳	●●●●✳	●●●●✳	●●●●✳	●●●●✳	●●●●✳	●●●●	●●●●	●●●●	●	●	●	●
Hard material	●●●●✳	●●●●✳	●●●●✳	●●●●✳	●●●●✳	●●●●✳	●●●●	●●●●	●●●●	●	●	●	●

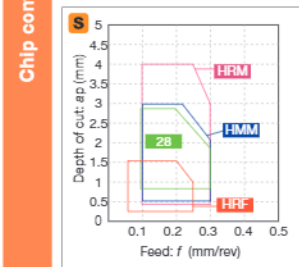


Application	Chipbreaker	Designation	Coated								Coated cermet		Cermet		Dimension (mm)									
			T9205	T9215	T9225	T9235	T9115	T9125	T9135	T6120	T6130	AH630	T5105	T5115	AH8005	AH8015	GT9530	AT9530	NS9530	NS520	RE	IC	S	D1
Finishing	<b>SF</b>	WNMG060404-SF								●	●	●									0.4	9.525	4.76	3.81
		WNMG060408-SF								●	●	●									0.8	9.525	4.76	3.81
		WNMG080404-SF								●	●	●									0.4	12.7	4.76	5.16
		WNMG080408-SF								●	●	●									0.8	12.7	4.76	5.16
	<b>CF</b>	WNMG080404-CF										●	●								0.4	12.7	4.76	5.16
		WNMG080408-CF										●	●								0.8	12.7	4.76	5.16
		WNMG080412-CF										●	●								1.2	12.7	4.76	5.16
	<b>HRF</b>	WNMG080404-HRF										●	●								0.4	12.7	4.76	5.16
		WNMG080408-HRF										●	●								0.8	12.7	4.76	5.16
	<b>TS</b>	WNMG080404-TS		●	●	●	●	▲	▲							●	●		●	●	0.4	12.7	4.76	5.16
		WNMG080408-TS		●	●	●	●	▲	▲							●	●		●	●	0.8	12.7	4.76	5.16
		WNMG080412-TS		●	●	●	●	▲	▲												1.2	12.7	4.76	5.16

● : Line up  
 ▲ : To be discontinued



\*-M,G: Without chipbreaker



Reference pages: External toolholder → C029 - Internal toolholder → D029 -  
 TungCap → C035 -, K011 -

Grade  
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# Insert NEGATIVE TYPE

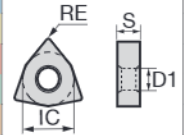
● : Continuous cutting  
 ● : Light interrupted cutting  
 \* : Heavy interrupted cutting

## WN



Trigon, 80°  
with hole

	P	M	K	N	S	H	Steel	Stainless	Cast iron	Non-ferrous	Superalloy	Hard material
●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●
*	*	*	*	*	*	*	*	*	*	*	*	*



Application	Chipbreaker	Designation	Coated												Cermet		Dimension (mm)					
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6120	T6130	AH630	AH645	T515	T5115	GH330	NS9530	RE	IC	S	D1
Finishing to medium cutting (wiper)	<b>SW</b>	WNMG060408E-SW	●	●	●		▲	▲	▲										0.8	9.525	4.76	3.81
		WNMG060412E-SW	●	●	●		▲	▲	▲										1.2	9.525	4.76	3.81
		WNMG080408-SW	●	●	●		▲	▲	▲						●	●			0.8	12.7	4.76	5.16
		WNMG080412-SW		●	●		▲	▲							●	●			1.2	12.7	4.76	5.16
		*Wiper																				
Finishing to medium cutting (wiper)	<b>ASW</b>	WNMG060408-ASW	●	●	●		▲	▲	▲										0.8	9.525	4.76	3.81
		WNMG060412-ASW	●	●	●	●	▲	▲	▲	▲									1.2	9.525	4.76	3.81
		WNMG080408-ASW	●	●	●	●	▲	▲	▲	▲									0.8	12.7	4.76	5.16
		WNMG080412-ASW	●	●	●	●	▲	▲	▲	▲									1.2	12.7	4.76	5.16
High feed, small depth of cut	<b>AS</b>	WNMG080404-AS	●				▲										●		0.4	12.7	4.76	5.16
		WNMG080408-AS	●	●	●	●	▲	▲	▲	▲							●		0.8	12.7	4.76	5.16
		WNMG080412-AS	●	●	●	●	▲	▲	▲	▲									1.2	12.7	4.76	5.16
Boring (double side)	<b>CB</b>	WNMG060404-CB			●			▲									●		0.4	9.525	4.76	3.81
		WNMG060408-CB			●			▲									●		0.8	9.525	4.76	3.81
Finishing	<b>NS</b>	WNMG080404-NS	●	●			▲	▲									●		0.4	12.7	4.76	5.16
		WNMG080408-NS	●	●			▲	▲									●		0.8	12.7	4.76	5.16
	<b>SS</b>	WNMG060404E-SS														●	●		0.4	9.525	4.76	3.81
	WNMG060408E-SS														●	●		0.8	9.525	4.76	3.81	
	WNMG060412E-SS														●	●		1.2	9.525	4.76	3.81	
	WNMG080404-SS									●	●	●	●			●		0.4	12.7	4.76	5.16	
	WNMG080408-SS									●	●	●	●			●		0.8	12.7	4.76	5.16	
	WNMG080412-SS									●	●	●	●					1.2	12.7	4.76	5.16	

\* Please see **L032-L036** about the adjustment of the machining program for rounding or taper machining by using SW/FW. Please contact our sales representatives if you have any question.

● : Line up  
 ▲ : To be discontinued

Reference pages: External toolholder → **C029 -** Internal toolholder → **D029 -**  
 TungCap → **C035 - , K011 -**

# Insert NEGATIVE TYPE

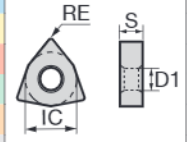
- : Continuous cutting
- : Light interrupted cutting
- ✱ : Heavy interrupted cutting

## WN



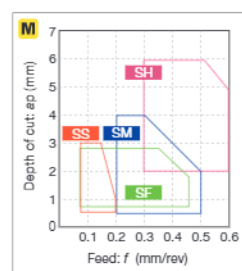
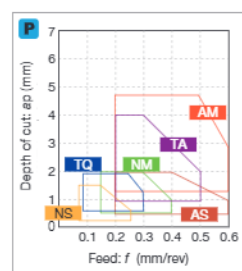
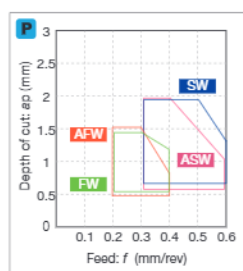
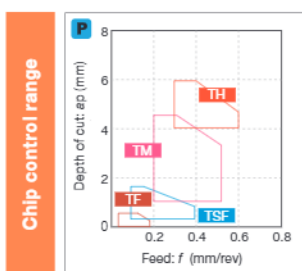
Trigon, 80°  
with hole

	P Steel	M Stainless	K Cast iron	N Non-ferrous	S Superalloy	H Hard material																	
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱



Application	Chipbreaker	Designation	Coated											Coated cermet		Cermert	Dimension (mm)					
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	AH120	AH725	GT9530	AT9530	NS9530	RE	IC	S	D1			
Medium cutting		TM WNMG060404E-TM	●	●				▲	▲									0.4	9.525	4.76	3.81	
		WNMG060408E-TM	●	●				▲	▲										0.8	9.525	4.76	3.81
		WNMG060412E-TM	●	●				▲	▲										1.2	9.525	4.76	3.81
		WNMG060404-TM	●	●	●			▲	▲	▲									0.4	9.525	4.76	3.81
		WNMG060408-TM	●	●	●	●		▲	▲	▲	▲	●							0.8	9.525	4.76	3.81
		WNMG080404-TM	●	●	●	●	▲	▲	▲	▲	▲	●	●						0.4	12.7	4.76	5.16
		WNMG080408-TM	●	●	●	●	▲	▲	▲	▲	▲	●	●						0.8	12.7	4.76	5.16
		WNMG080412-TM	●	●	●	●	▲	▲	▲	▲	▲	●	●						1.2	12.7	4.76	5.16
		WNMG080416-TM	●	●	●		▲	▲	▲			●							1.6	12.7	4.76	5.16
Finishing to medium cutting		AM WNMG080408-AM		●	●			▲	▲									0.8	12.7	4.76	5.16	
		WNMG080412-AM		●	●			▲	▲										1.2	12.7	4.76	5.16
		WNMG080416-AM		●	●			▲	▲										1.6	12.7	4.76	5.16
Finishing to medium cutting		TQ WNMG080404-TQ			●							●	●	●				0.4	12.7	4.76	5.16	
		WNMG080408-TQ			●							●	●	●					0.8	12.7	4.76	5.16
Medium cutting		TA WNMG080408-TA		●	●													0.8	12.7	4.76	5.16	
		WNMG080412-TA		●	●														1.2	12.7	4.76	5.16
Finishing to medium cutting		NM WNMG060412E-NM			●				▲									1.2	9.525	4.76	3.81	
		WNMG080408-NM	●	●	●			▲	▲	▲								0.8	12.7	4.76	5.16	
		WNMG080412-NM	●	●	●	●		▲	▲	▲	▲							1.2	12.7	4.76	5.16	

● : Line up  
▲ : To be discontinued



Reference pages: External toolholder → C029 - Internal toolholder → D029 -  
TungCap → C035 -, K011 -

Grade  
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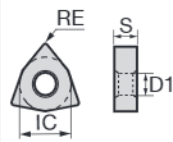
# Insert NEGATIVE TYPE

- : Continuous cutting
- ◐ : Light interrupted cutting
- ✱ : Heavy interrupted cutting

## WN



P	Steel	●	◐	◐	◐	✱	●	◐	◐	✱								●	◐	◐	◐	◐	●			
M	Stainless	●	◐																●	◐	◐	◐	◐	●		
K	Cast iron	◐	◐				◐	◐	◐		◐	◐	◐	✱	●	◐	◐	◐	◐	◐	◐	◐	◐	◐		
N	Non-ferrous																							●		
S	Superalloy														●	◐										
H	Hard material																									



Application	Chipbreaker	Designation	Coated													Coated cermet		Cermet		Uncoated	Dimension (mm)						
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T515	T5105	T5115	T5125	AH110	AH120	GH330	GT720	GT9530		NS9530	NS520	TH10	RE	IC	S	D1
Finishing to medium cutting		<b>ZM</b> WNMG060408E-ZM	●	●			▲	▲																0.8	9.525	4.76	3.81
		WNMG060408-ZM	●	●	●		▲	▲	▲															0.8	9.525	4.76	3.81
		WNMG060412-ZM	●	●	●		▲	▲	▲															1.2	9.525	4.76	3.81
		WNMG080408-ZM	●	●	●		▲	▲	▲										●		●			0.8	12.7	4.76	5.16
		WNMG080412-ZM	●	●	●		▲	▲	▲															1.2	12.7	4.76	5.16
		WNMG080416-ZM	●	●			▲	▲																1.6	12.7	4.76	5.16
Medium cutting		<b>DM</b> WNMG080408-DM	●	●	●	●	▲	▲	▲	▲													0.8	12.7	4.76	5.16	
		WNMG080412-DM	●	●	●	●	▲	▲	▲	▲													1.2	12.7	4.76	5.16	
		<b>All-round</b> WNMG060404		●	●			▲	▲			●	●	●										0.4	9.525	4.76	3.81
		WNMG060408		●	●			▲	▲			●	●	●										0.8	9.525	4.76	3.81
		WNMG080404	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●	●	●			●		●		0.4	12.7	4.76	5.16
		WNMG080408	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●	●	●			●	●	●		0.8	12.7	4.76	5.16
Finishing to medium cutting		WNMG080412	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●	●							1.2	12.7	4.76	5.16	
		WNMG080416	●	●	●	●	▲	▲	▲	▲	●	●	●	●	●	●							1.6	12.7	4.76	5.16	
		<b>27</b> WNMG080408-27			●				▲															0.8	12.7	4.76	5.16
		<b>33</b> WNMG080404-33																	●					0.4	12.7	4.76	5.16
		WNMG080408-33							▲													●		0.8	12.7	4.76	5.16
		Medium cutting		<b>37</b> WNMG080404-37																			●		0.4	12.7	4.76
WNMG080408-37	●							▲							●					●			0.8	12.7	4.76	5.16	

● : Line up  
▲ : To be discontinued

Reference pages: External toolholder → C029 - Internal toolholder → D029 -  
TungCap → C035 -, K011 -

# Insert NEGATIVE TYPE

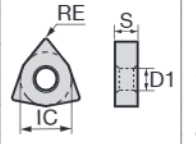
● : Continuous cutting  
 ●● : Light interrupted cutting  
 ●●● : Heavy interrupted cutting

## WN



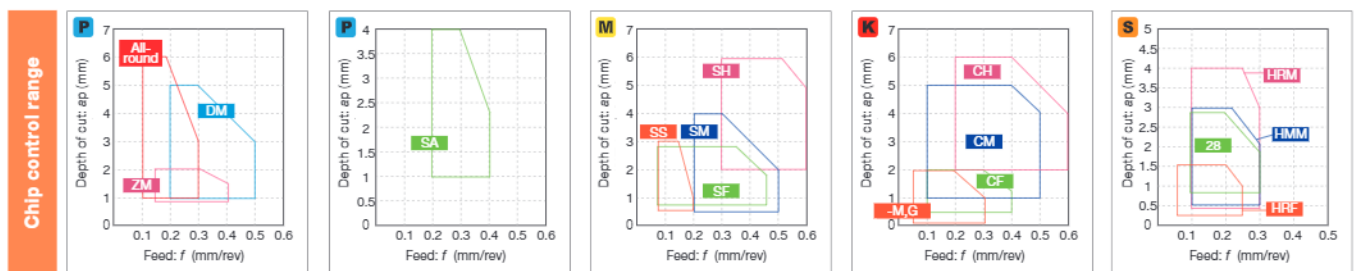
**Trigon, 80° with hole**

<b>P</b> Steel	●●●●									●●					
<b>M</b> Stainless	●●●●									●●					
<b>K</b> Cast iron			●●	●●	●●	●●				●●					
<b>N</b> Non-ferrous										●●	●●				
<b>S</b> Superalloy										●●	●●	●●	●●	●●	●●
<b>H</b> Hard material										●●	●●	●●	●●	●●	●●



Application	Chipbreaker	Designation	Coated										Uncoated	Dimension (mm)						
			T6120	T6130	AH630	AH645	T515	T5105	T5115	T5125	AH120	AH725	AH8005	AH8015	AH905	KS20	RE	IC	S	D1
Medium cutting		<b>SM</b> WNMG060404E-SM	●●	●●	●●												0.4	9.525	4.76	3.81
		WNMG060408E-SM	●●	●●	●●												0.8	9.525	4.76	3.81
		WNMG060412E-SM	●●	●●	●●												1.2	9.525	4.76	3.81
		WNMG060408-SM								●●							0.8	9.525	4.76	3.81
		WNMG080404-SM	●●	●●	●●	●●											0.4	12.7	4.76	5.16
		WNMG080408-SM	●●	●●	●●	●●					●●						0.8	12.7	4.76	5.16
		WNMG080412-SM	●●	●●	●●	●●					●●						1.2	12.7	4.76	5.16
	<b>CM</b> WNMG080404-CM							●●									0.4	12.7	4.76	5.16
	WNMG080408-CM					●●	●●	●●	●●								0.8	12.7	4.76	5.16
	WNMG080412-CM					●●	●●	●●	●●								1.2	12.7	4.76	5.16
Finishing to medium cutting		<b>HRM</b> WNMG080404-HRM									●●	●●				0.4	12.7	4.76	5.16	
		WNMG080408-HRM									●●	●●				0.8	12.7	4.76	5.16	
		WNMG080412-HRM									●●	●●				1.2	12.7	4.76	5.16	
Medium cutting		<b>HMM</b> WNMG080404-HMM										●●				0.4	12.7	4.76	5.16	
		WNMG080408-HMM										●●				0.8	12.7	4.76	5.16	
		WNMG080412-HMM										●●				1.2	12.7	4.76	5.16	
		<b>SA</b> WNMG080408-SA	●●	●●	●●	●●				●●	●●				●●		0.8	12.7	4.76	5.16
WNMG080412-SA	●●	●●	●●	●●				●●							1.2	12.7	4.76	5.16		

● : Line up



\*-M,G: Without chipbreaker

Reference pages: External toolholder → **C029 -** Internal toolholder → **D029 -**  
 TungCap → **C035 -, K011 -**



# Insert NEGATIVE TYPE

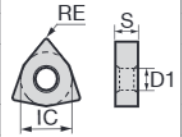
- : Continuous cutting
- : Light interrupted cutting
- ✱ : Heavy interrupted cutting

## WN



Trigon, 80° with hole

	P	M	K	N	S	H	Steel	Stainless	Cast iron	Non-ferrous	Superalloy	Hard material	T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6130	AH630	AH645	T515	T5105	T5115	T5125	AH120	NS520	Cermet	Uncoated	Ceramic	
●			●				●	●	●				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
○		○	○																														
✱																																	



Application	Chipbreaker	Designation	Coated																Cermet	Uncoated	Ceramic	Dimension (mm)														
			T9205	T9215	T9225	T9235	T9105	T9115	T9125	T9135	T6130	AH630	AH645	T515	T5105	T5115	T5125	AH120	NS520	TH10	LX11	RE	IC	S	D1											
Medium to heavy cutting		<b>TH</b> WNMG080408-TH ●●●●●▲▲▲▲▲●	●	●	●	●	▲	▲	▲	▲	●							●														0.8	12.7	4.76	5.16	
		WNMG080412-TH ●●●●●▲▲▲▲▲●	●	●	●	●	▲	▲	▲	▲	●								●														1.2	12.7	4.76	5.16
		WNMG080416-TH ●●●●●▲▲▲▲▲	●	●	●		▲	▲	▲																								1.6	12.7	4.76	5.16
		WNMG100612-TH ●●●▲▲▲	●	●			▲	▲																									1.2	15.875	6.35	6.35
		WNMG100616-TH ●●▲▲	●	●			▲	▲																									1.6	15.875	6.35	6.35
		<b>THS</b> WNMG080408-THS ●●●●●▲▲▲▲▲	●	●	●	●	▲	▲	▲	▲																						0.8	12.7	4.76	5.16	
		WNMG080412-THS ●●●●●▲▲▲▲▲	●	●	●	●	▲	▲	▲	▲																						1.2	12.7	4.76	5.16	
		WNMG080416-THS ●●▲▲	●	●			▲	▲																								1.6	12.7	4.76	5.16	
		WNMG100612-THS ●●●▲▲▲	●	●	●		▲	▲	▲																							1.2	15.875	6.35	6.35	
		WNMG100616-THS ●●●▲▲▲	●	●	●		▲	▲	▲																							1.6	15.875	6.35	6.35	
	Medium to heavy cutting		<b>SH</b> WNMG080408-SH ●●●●●									●	●	●																		0.8	12.7	4.76	5.16	
			WNMG080412-SH ●●●●●									●	●	●																		1.2	12.7	4.76	5.16	
			<b>CH</b> WNMG080408-CH ●●●●●												●	●	●															0.8	12.7	4.76	5.16	
WNMG080412-CH ●●●●●														●	●	●															1.2	12.7	4.76	5.16		
Finishing to medium cutting		<b>-</b> WNMA060404E ●●●●●											●																		0.4	9.525	4.76	3.81		
		WNMA060408E ●●●●●												●																	0.8	9.525	4.76	3.81		
		WNMA060412E ●●●●●												●																	1.2	9.525	4.76	3.81		
		WNMA060416E ●●●●●												●																	1.6	9.525	4.76	3.81		
		WNMA080404 ●●●●●												●	●	●							●									0.4	12.7	4.76	5.16	
		WNMA080408 ●●●●●												●	●	●	●					●										0.8	12.7	4.76	5.16	
		WNMA080412 ●●●●●												●	●	●	●															1.2	12.7	4.76	5.16	
		WNMA080416 ●●●●●												●	●	●	●															1.6	12.7	4.76	5.16	
		WNGA080404 ●●●●●																								●							0.4	12.7	4.76	5.16
		WNGA080408 ●●●●●																							●							0.8	12.7	4.76	5.16	
		WNGA080412 ●●●●●																							●							1.2	12.7	4.76	5.16	

● : Line up  
▲ : To be discontinued

Reference pages: External toolholder → C029 - Internal toolholder → D029 -  
TungCap → C035 -, K011 -

# Insert NEGATIVE TYPE

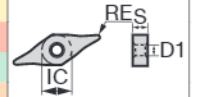
- : Continuous cutting
- (with dot) : Light interrupted cutting
- ✱ : Heavy interrupted cutting

## YN



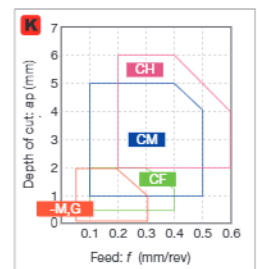
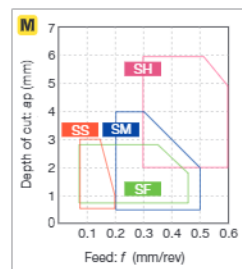
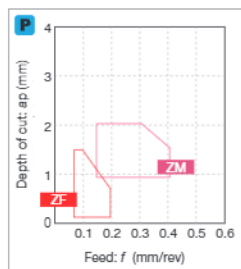
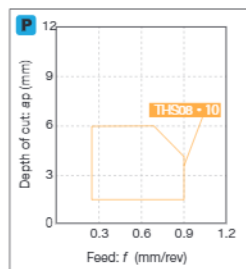
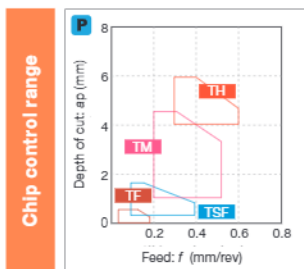
Rhombic, 25°  
with hole

P	Steel	✱	✱	✱	✱	●	●																		
M	Stainless																								
K	Cast iron					●	●																		
N	Non-ferrous																								
S	Superalloy																								
H	Hard material																								



Application	Chipbreaker	Designation	Coated			Coated cermet	Cermet		Dimension (mm)			
			T9125	T9225	T9235	T9135	GT9530	NS9530	RE	IC	S	D1
Finishing	ZF	YNMG160404-ZF	●	●	▲	●	●	0.4	9.525	4.76	3.81	
		YNMG160408-ZF	●	●	▲	●	●	0.8	9.525	4.76	3.81	
Finishing to medium cutting	ZM	YNMG160404-ZM	●	●	▲	●	●	0.4	9.525	4.76	3.81	
		YNMG160408-ZM	●	●	▲	●	●	0.8	9.525	4.76	3.81	

- : Line up
- ▲ : To be discontinued



\*-M,G: Without chipbreaker

Reference pages: YNMG...: External toolholder → C059 -, Internal toolholder → D073 -

- Grade A
- Insert B
- Toolholder C
- Toolholder D
- Threading E
- Grooving F
- Miniature tool G
- Milling cutter H
- Endmill I
- Drilling tool J
- Tooling System K
- User's Guide L
- Index M

- : Continuous cutting
- : Light interrupted cutting
- : Heavy interrupted cutting

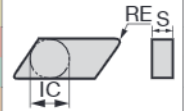
# Insert NEGATIVE TYPE

## KN

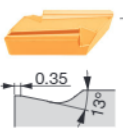


Parallelogram, 55°  
without hole

P	Steel	●●
M	Stainless	●●
K	Cast iron	●●
N	Non-ferrous	●
S	Superalloy	●
H	Hard material	●



Application	Chipbreaker	Designation	Coated								Dimension (mm)						
			GH330								RE	IC	S	D1			
Finishing	<b>S1</b>	KNMX160405R-S1	●											0.5	9.525	4.76	-
		KNMX160405L-S1	●											0.5	9.525	4.76	-

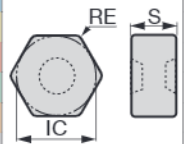


## HN



Hexagonal,  
120°  
without hole

P	Steel	●●
M	Stainless	●●
K	Cast iron	●●
N	Non-ferrous	●
S	Superalloy	●
H	Hard material	●



Application	Chipbreaker	Designation	Ceramic								Dimension (mm)						
			FX105								RE	IC	S	D1			
Finishing to medium cutting	-	HNGD050712	●											1.2	12.7	7.94	-
		HNGD050716	●											1.6	12.7	7.94	-



● : Line up