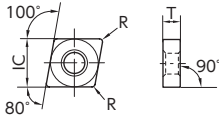


Item Number	IC	T
CN_1204_	12.7	4.76

## <80 degree Rhombic Negative type>



Steel	P																				
Stainless Steel	M																				
Cast Iron	K																				
Non-Ferrous Material	N																				
Heat Resistant Alloy	S																				
Hardened Material	H																				

● : 1st Choice  
● : 2nd choice

BIDEMICS • Ceramic

Negative type  
Positive type  
Wiper  
with chipbreaker  
For Machining Mill rolls

Shape	ISO Item Number	Inch Item Number	R	Ceramics														For applicable holder, see pages:					
				BIDEMICS		Alumina-based							Silicon nitride-based				Whisker-based						
				JX1	JX3	HC1	HW2	HC2	HC4	HC6	ZC7	SX6	SX7	SX3	SX9	SP9	WA1		WA5				
	<b>CNGA 120404 S02025</b>	<b>CNGA431-SNF</b>	0.4																				
	<b>120404 T01025</b>	<b>431-TN</b>	0.4																				
	<b>120404 Z02025</b>	<b>431-ZNF</b>	0.4																				
	<b>120408 S02025</b>	<b>432-SNF</b>	0.8																				
	<b>120408 T00520</b>	—	0.8																				
	<b>120408 T01020</b>	—	0.8																				
	<b>120408 T01025</b>	<b>432-TN</b>	0.8																				
	<b>120408 T02020</b>	—	0.8																				
	<b>120408 T02025</b>	<b>432-TNF</b>	0.8																				
	<b>120408 Z02025</b>	<b>432-ZNF</b>	0.8																				
	<b>120412 S02025</b>	<b>433-SNF</b>	1.2																				
	<b>120412 T00520</b>	—	1.2																				
	<b>120412 T01020</b>	—	1.2																				
	<b>120412 T01025</b>	<b>433-TN</b>	1.2																				
	<b>120412 T02020</b>	—	1.2																				
	<b>120412 T02025</b>	<b>433-TNF</b>	1.2																				
	<b>120416 T00520</b>	—	1.6																				
<b>120416 T01020</b>	—	1.6																					
<b>120416 T02020</b>	—	1.6																					
<b>120416 T02025</b>	<b>434-TNF</b>	1.6																					
Wiper	<b>CNGA 120408 WL T01025</b>	<b>CNGA432WL-TN</b>	0.8																				
	<b>120412 WL T01025</b>	<b>433WL-TN</b>	1.2																				
with chipbreaker	<b>CNGG 120408 Z01030 AG</b>	<b>CNGG432-ZNCGAG</b>	0.8																				
	<b>120412 Z01030 AG</b>	<b>433-ZNCGAG</b>	1.2																				

F9  
F11  
G40  
K34

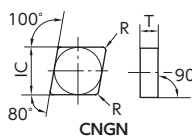
F9  
K34

F9  
F11  
G40  
K34

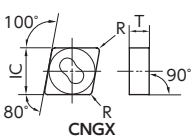
● : Standard stock   ● : New standard stock   ■ : Scheduled to be produced by order   ★ : Standard stock (Specified)

Item Number	IC	T
<b>CN_1204</b>	12.7	4.76
<b>CN_1207</b>	12.7	7.94
<b>CN_1607</b>	15.875	7.94

## <80 degree Rhombic Negative type>



CNGN



CNGX

Steel

Stainless Steel

Cast Iron

Non-Ferrous Material

Heat Resistant Alloy

Hardened Material

P

M

K




N

S

H

● : 1st Choice

● : 2nd choice

Shape	ISO Item Number	Inch Item Number	R	BIDEMICS	Ceramics										For applicable holder, see pages:										
					Alumina-based							Silicon nitride-based				Whisker-based									
					JX1	JX3	HC1	HW2	HC2	HC4	HC6	ZC7	SX6	SX7		SX3	SX9	SP9	WA1	WA5					
	<b>CNGN 120404 T01025</b>	<b>CNGN431-TN</b>	0.4						●																
	<b>120408 S02025</b>	<b>432-SNF</b>	0.8																						
	<b>120408 T00520</b>	—	0.8																						
	<b>120408 T00820</b>	—	0.8																						
	<b>120408 T01020</b>	—	0.8																						
	<b>120408 T01025</b>	<b>432-TN</b>	0.8						●		●		●												
	<b>120408 T02020</b>	—	0.8																						
	<b>120408 T02025</b>	<b>432-TNF</b>	0.8							●															
	<b>120408 Z02025</b>	<b>432-ZNF</b>	0.8																						
	<b>120412 S02025</b>	<b>433-SNF</b>	1.2																						
	<b>120412 T00520</b>	—	1.2																						
	<b>120412 T00820</b>	—	1.2																						
	<b>120412 T01020</b>	—	1.2																						
	<b>120412 T01025</b>	<b>433-TN</b>	1.2								●		●		●										
	<b>120412 T02020</b>	—	1.2																						
	<b>120412 T02025</b>	<b>433-TNF</b>	1.2								●														
	<b>120412 Z02025</b>	<b>433-ZNF</b>	1.2																						
	<b>120416 T00520</b>	—	1.6																						
	<b>120416 T02020</b>	—	1.6																						
	<b>120416 T01020</b>	—	1.6																						
	<b>120416 T02025</b>	<b>434-TNF</b>	1.6																						
	<b>120420 T01025</b>	<b>435-TN</b>	2.0																						
		<b>CNGN 120708 T00520</b>	—	0.8																					
<b>120708 T02025</b>		<b>CNGN452-TN</b>	0.8																						
<b>120712 T02025</b>		<b>453-TN</b>	1.2																						
<b>CNGN 160716 T00520</b>	—	1.6																							
	<b>CNGX 120712 T02025</b>	—	1.2																						
	<b>120716 T02025</b>	—	1.6																						

● : Standard stock    ● : New standard stock    ■ : Scheduled to be produced by order    ★ : Standard stock (Specified)

**F9**  
**F11**  
**K34**

**F9**  
**K34**

- New Products
- Tool Materials / Selection Guide
- BIDEMICS, PCD and Ceramics
- Micrograin Carbide, PVD-Coated Carbide, CBN and Ceramics
- Insert Item List
- General Turning Toolholders
- Unique Swiss Tooling
- Grooving / Side Turning
- Threading
- Shaper
- ID Tooling
- Application Introduction
- Endmills
- Rotating Tools
- Information
- Index

Item Number	IC	T
<b>DN_1504_</b>	12.7	4.76
<b>DN_1507_</b>	12.7	7.94

**<55 degree Rhombic Negative type>**

Shape	ISO Item Number	Inch Item Number	R	Ceramics																For applicable holder, see pages:				
				Alumina-based							Silicon nitride-based					Whisker-based								
				BIDEMICS	JX1	JX3	HC1	HW2	HC2	HC4	HC6	ZC7	SX6	SX7	SX3	SX9	SP9	WA1	WA5					
	<b>DNGA 150404 S02025</b>	<b>DNGA431-SNF</b>	0.4																			<div style="display: flex; flex-direction: column; align-items: flex-end;"> <span><b>F13</b></span> <span><b>F15</b></span> <span><b>G41</b></span> <span><b>K35</b></span> </div>		
	<b>150404 T01025</b>	<b>431-TN</b>	0.4					●		●	●													
	<b>150404 Z02025</b>	<b>431-ZNF</b>	0.4						●															
	<b>150408 S02025</b>	<b>432-SNF</b>	0.8						●		●													
	<b>150408 T00520</b>	—	0.8																	●	●			
	<b>150408 T01020</b>	—	0.8																		●			
	<b>150408 T01025</b>	<b>432-TN</b>	0.8						●		●	●												
	<b>150408 T02020</b>	—	0.8									●												
	<b>150408 T02025</b>	<b>432-TNF</b>	0.8																		●			
	<b>150408 Z02025</b>	<b>432-ZNF</b>	0.8							●														
	<b>150412 S02025</b>	<b>433-SNF</b>	1.2									●												
	<b>150412 T01020</b>	—	1.2																		●		●	
	<b>150412 T01025</b>	<b>433-TN</b>	1.2							●		●												
	<b>150412 T02020</b>	—	1.2										●											
<b>150412 T02025</b>	<b>433-TNF</b>	1.2																		●				
	<b>DNGN 150404 T01025</b>	<b>DNGN431-TN</b>	0.4						●														<div style="display: flex; flex-direction: column; align-items: flex-end;"> <span><b>F13</b></span> <span><b>F15</b></span> </div>	
	<b>150408 S02025</b>	<b>432-SNF</b>	0.8								●													
	<b>150408 T01025</b>	<b>432-TN</b>	0.8								●	●												
	<b>150408 Z02025</b>	<b>432-ZNF</b>	0.8							●														
	<b>150412 T00520</b>	—	1.2																			●		
	<b>150412 T02025</b>	<b>433-TNF</b>	1.2																			●		
	<b>DNGG 150408 Z01030 AG</b>	<b>DNGG432-ZNCGAG</b>	0.8																				<div style="display: flex; flex-direction: column; align-items: flex-end;"> <span><b>F13</b></span> <span><b>F15</b></span> <span><b>G41</b></span> <span><b>K35</b></span> </div>	
	<b>150412 Z01030 AG</b>	<b>433-ZNCGAG</b>	1.2																					
	<b>DNGX 150716 T02025</b>	—	1.6																		●		<div style="display: flex; flex-direction: column; align-items: flex-end;"> <span><b>F13</b></span> <span><b>F15</b></span> <span><b>K35</b></span> </div>	

● : Standard stock   ● : New standard stock   ■ : Scheduled to be produced by order   ★ : Standard stock (Specified)

**<75 degree Rhombic Negative type>**

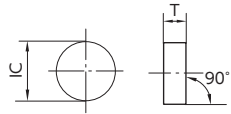
Item Number	IC	T
<b>EN_1307_</b>	12.7	7.94

Shape	ISO Item Number	Inch Item Number	R	Ceramics																For applicable holder, see pages:			
				Alumina-based							Silicon nitride-based					Whisker-based							
				BIDEMICS	JX1	JX3	HC1	HW2	HC2	HC4	HC6	ZC7	SX6	SX7	SX3	SX9	SP9	WA1	WA5				
	<b>ENGN 130708 T02025</b>	<b>ENGN452-TN</b>	0.8																				—
	<b>130712 T02025</b>	<b>453-TN</b>	1.2							●													

● : Standard stock   ● : New standard stock   ■ : Scheduled to be produced by order   ★ : Standard stock (Specified)

Item Number	IC	T
<b>RN_1204_</b>	12.7	4.76
<b>RN_1207_</b>	12.7	7.94
<b>RN_1507_</b>	15.875	7.94
<b>RN_1907_</b>	19.05	7.94
<b>RN_2507_</b>	25.4	7.94

## <Round Negative type>



Steel	P																					
Stainless Steel	M																					
Cast Iron	K																					
Non-Ferrous Material	N																					
Heat Resistant Alloy	S																					
Hardened Material	H																					

Shape	ISO Item Number	Inch Item Number	R	Ceramics														For applicable holder, see pages:						
				BIDEMICS		Alumina-based							Silicon nitride-based				Whisker-based							
				JX1	JX3	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX6	SX7	SX3	SX9	SP9		WA1	WA5				
	<b>RNGN 120400 S02025</b>	<b>RNGN430-SNF</b>	-																					
	<b>120400 T00520</b>	—	-																					
	<b>120400 T00820</b>	—	-																					
	<b>120400 T00525</b>	<b>430-TNB</b>	-																					
	<b>120400 T01020</b>	—	-																					
	<b>120400 T01025</b>	<b>430-TN</b>	-																					
	<b>120400 T02020</b>	—	-																					
	<b>120400 T02025</b>	<b>430-TNF</b>	-																					
	<b>120400 Z02025</b>	<b>430-ZNF</b>	-																					
	<b>RNGN 120700 E002</b>	—	-																					
	<b>120700 E004</b>	—	-		●	●																		
	<b>120700 E007</b>	<b>RNGN450-ENC</b>	-																					
	<b>120700 S02025</b>	<b>450-SNF</b>	-																					
	<b>120700 T00520</b>	—	-																					
	<b>120700 T00525</b>	<b>450-TNB</b>	-																					
	<b>120700 T00820</b>	—	-		●	●																		
	<b>120700 T01020</b>	—	-																					
	<b>120700 T02025</b>	<b>450-TN</b>	-																					
	<b>120700 Z01520</b>	—	-																					
	<b>120700 Z02025</b>	<b>450-ZNF</b>	-																					
	<b>120700 K20015</b>	—	-																				★	
<b>RNGN 150700 T00520</b>	—	-																						
<b>150700 T00525</b>	<b>RNGN550-TNB</b>	-																						
<b>150700 T00820</b>	—	-																						
<b>RNGN 190700 T00520</b>	—	-																						
<b>190700 T00525</b>	<b>RNGN650-TNB</b>	-																						
<b>190700 T00820</b>	—	-																						
<b>190700 T01020</b>	—	-																						
<b>190700 K20015</b>	—	-																						
<b>RNGN 250700 T00520</b>	—	-																						
<b>250700 T00820</b>	—	-																						


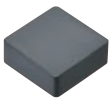
**F30**  
**N9**  
**L23**  
**L30**

● : Standard stock   ● : New standard stock   ■ : Scheduled to be produced by order   ★ : Standard stock (Specified)

- New Products
- Tool Materials / Selection Guide
- BIDEMICS, PCD, CBN and Ceramics
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- Grooving / Side Turning
- Threading
- Shaper
- ID Tooling
- Application Introduction
- Endmills
- Rotating Tools
- Information
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Item Number	IC	T
SN_0903	9.525	3.18
SN_0904	9.525	4.76
SN_1204	12.7	4.76



<90 degree Square Negative type>

Shape	ISO Item Number	Inch Item Number	R	Ceramics													For applicable holder, see pages:						
				Alumina-based		Silicon nitride-based					Whisker-based												
				BIDEMICS																			
				JX1	JX3	HC1	HW2	HC2	HC4	HC6	ZC7	SX6	SX7	SX3	SX9	SP9	WA1	WA5					
	SNGA 120408 S02025	SNGA432-SNF	0.8								●											F17 F19 K36	
	120408 T01025	432-TN	0.8								●												
	120408 T02020	—	0.8									●											
	120412 S02025	433-SNF	1.2								●												
	120412 T01025	433-TN	1.2								●												
	120412 T02020	—	1.2									●											
	120416 T02020	—	1.6										●										
	SNGN 090308 T01025	SNGN322-TN	0.8				●																—
	090316 T01025	324-TN	1.6			●	●																
	SNGN 090408 T01025	SNGN332-TN	0.8					●															
	SNGN 120404 T01025	SNGN431-TN	0.4					●															
	120408 S02025	432-SNF	0.8								●												
	120408 T00520	—	0.8														●						
	120408 T00820	—	0.8															●					
	120408 T01020	—	0.8														●						
	120408 T01025	432-TN	0.8			●	●		●	●							●						
	120408 T02020	—	0.8									●											
	120408 T02025	432-TNF	0.8													●							
	120408 Z02025	432-ZNF	0.8						●														
	120412 S02025	433-SNF	1.2									●											
	120412 T00520	—	1.2															●					
	120412 T00820	—	—																●				
120412 T01020	—	1.2														●	●						

● : Standard stock    ● : New standard stock    ■ : Scheduled to be produced by order    ★ : Standard stock (Specified)

Item Number	IC	T
<b>SN_1204</b>	12.7	4.76
<b>SN_1207</b>	12.7	7.94
<b>SN_1507</b>	15.875	7.94
<b>SN_1906</b>	19.05	6.35
<b>SN_1907</b>	19.05	7.94

## <90 degree Square Negative type>

Shape	ISO Item Number	Inch Item Number	R	Ceramics															For applicable holder, see pages:	
				BIDEMICS		Alumina-based							Silicon nitride-based					Whisker-based		
				JX1	JX3	HC1	HW2	HC2	HC4	HC6	ZC7	SX6	SX7	SX3	SX9	SP9	WA1	WA5		
	<b>SNGN 120412 T01025</b>	<b>SNGN433-TN</b>	1.2			●		●		●	●							●		<b>F17</b> <b>F19</b> <b>F21</b> <b>K36</b> <b>N12</b> <b>N14</b> <b>N16</b>
	<b>120412 T02020</b>	—	1.2											●				●		
	<b>120412 T02025</b>	<b>433-TNF</b>	1.2															●		
	<b>120412 Z02025</b>	<b>433-ZNF</b>	1.2							●										
	<b>120416 S02025</b>	<b>434-SNF</b>	1.6											●						
	<b>120416 T00520</b>	—	1.6																●	
	<b>120416 T01020</b>	—	1.6															●	●	
	<b>120416 T01025</b>	<b>434-TN</b>	1.6			●		●		●	●								●	
	<b>120416 T02020</b>	—	1.6											●						
	<b>120416 T02025</b>	<b>434-TNF</b>	1.6															●		
	<b>120416 Z02025</b>	<b>434-ZNF</b>	1.6							●										
	<b>120420 T01025</b>	<b>435-TN</b>	2					●		●										
	<b>120420 T01020</b>	—	2															●		
	<b>120420 T02020</b>	—	2											●						
	<b>120420 T02025</b>	<b>435-TNF</b>	2			●													●	
	<b>120424 T01025</b>	<b>436-TN</b>	2.4						●											
	<b>120424 T02020</b>	—	2.4											●						
	<b>SNGN 120708 T02025</b>	<b>SNGN452-TN</b>	0.8			●		●												
	<b>120712 S02025</b>	<b>453-SNF</b>	1.2						●											
	<b>120712 T02025</b>	<b>453-TN</b>	1.2						●											
<b>120716 T02025</b>	<b>454-TN</b>	1.6					●													
<b>SNGN 150716 T02025</b>	<b>SNGN554-TN</b>	1.6																●		
<b>SNGN 190616 T00525</b>	<b>SNGN644-TNB</b>	1.6															●			
<b>SNGN 190724 T00525</b>	<b>SNGN656-TNB</b>	2.4															●			
	<b>SNGX 120712 T02025</b>	—	1.2															●	<b>F17</b> <b>K36</b>	
	<b>120716 T02025</b>	—	1.6															●		

● : Standard stock    ● : New standard stock    ■ : Scheduled to be produced by order    ★ : Standard stock (Specified)

- New Products
- Tool Materials / Selection Guide
- BIDEMICS, PCD, CBN and Ceramics
- Micrograin Carbide, PVD Coated Carbide
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- Unique Swiss Tooling
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- Threading
- Shaper
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- Index

Item Number	IC	T
<b>TN_1103</b>	6.35	3.18
<b>TN_1603</b>	9.525	3.18
<b>TN_1604</b>	9.525	4.76

BIDEMICS • Ceramic

## <60 degree Triangle Negative type>

				Steel	P													
				Stainless Steel	M													
				Cast Iron	K													
				Non-Ferrous Material	N													
				Heat Resistant Alloy	S													
				Hardened Material	H													
Shape	ISO Item Number	Inch Item Number	R	BIDEMICS	Ceramics													For applicable holder, see pages:
					Alumina-based							Silicon nitride-based				Whisker-based		
					JX1	JX3	HC1	HW2	HC2	HC4	HC6	ZC7	SX6	SX7	SX3	SX9	SP9	
	<b>TNGA 160404 S02025</b>	<b>TNGA331-SNF</b>	0.4															
	<b>160404 T01025</b>	<b>331-TN</b>	0.4															
	<b>160404 Z02025</b>	<b>331-ZNF</b>	0.4															
	<b>160408 S02025</b>	<b>332-SNF</b>	0.8															
	<b>160408 T01025</b>	<b>332-TN</b>	0.8															
	<b>160408 T02020</b>	—	0.8															
	<b>160408 T02025</b>	<b>332-TNF</b>	0.8															
	<b>160408 Z02025</b>	<b>332-ZNF</b>	0.8															
	<b>160412 S02025</b>	<b>333-SNF</b>	1.2															
	<b>160412 T01025</b>	<b>333-TN</b>	1.2															
	<b>160412 T02020</b>	—	1.2															
	<b>160412 T02025</b>	<b>333-TNF</b>	1.2															
	<b>160416 T02025</b>	<b>334-TNF</b>	1.6															
	<b>TNGN 110308 T00525</b>	<b>TNGN222-TN</b>	0.8															
	<b>TNGN 160304 T01025</b>	<b>TNGN321-TN</b>	0.4															
	<b>TNGN 160404 T01025</b>	<b>TNGN331-TN</b>	0.4															
	<b>160404 Z02025</b>	<b>331-ZNF</b>	0.4															
	<b>160408 S02025</b>	<b>332-SNF</b>	0.8															
	<b>160408 T00820</b>	—	0.8															
	<b>160408 T01020</b>	—	0.8															
	<b>160408 T01025</b>	<b>332-TN</b>	0.8															
	<b>160408 T02020</b>	—	0.8															
	<b>160408 T02025</b>	<b>332-TNF</b>	0.8															
	<b>160408 Z02025</b>	<b>332-ZNF</b>	0.8															
	<b>160412 S02025</b>	<b>333-SNF</b>	0.8															
	<b>160412 T00820</b>	—	1.2															
	<b>160412 T01020</b>	—	1.2															
	<b>160412 T01025</b>	<b>333-TN</b>	1.2															
	<b>160412 T02020</b>	—	1.2															
	<b>160412 T02025</b>	<b>333-TNF</b>	1.2															
	<b>160412 Z02025</b>	<b>333-ZNF</b>	1.2															

F23  
F25  
G39

F23  
F25

● : Standard stock   ● : New standard stock   ■ : Scheduled to be produced by order   ★ : Standard stock (Specified)

Negative type

Positive type

G

D

E

R

S

T



V

W

For Machining Mill rolls

Item Number	IC	T
<b>TN_1604_</b>	9.525	4.76
<b>TN_1607_</b>	9.525	7.94
<b>TN_2204_</b>	12.7	4.76
<b>TN_2207_</b>	12.7	7.94

## <60 degree Triangle Negative type>

Shape	ISO Item Number	Inch Item Number	R	BIDEMICS		Ceramics										For applicable holder, see pages:				
				JX1	JX3	Alumina-based					Silicon nitride-based				Whisker-based					
						HC1	HW2	HC2	HC4	HC6	ZC7	SX6	SX7	SX3	SX9	SP9	WA1	WA5		
	<b>TNGN 160416 T01020</b>	—	1.6													●			<b>F23</b> <b>F25</b>	
	<b>160416 T01025</b>	<b>TNGN334-TN</b>	1.6			●	●	●												
	<b>160416 T02020</b>	—	1.6										●							
	<b>160416 T02025</b>	<b>334-TNF</b>	1.6													●				
	<b>160420 T01025</b>	<b>335-TN</b>	1.6			●		●												
	<b>160420 T02020</b>	—	2											●						
	<b>TNGN 160708 T02025</b>	<b>TNGN352-TN</b>	0.8					●												
	<b>160712 T02025</b>	<b>353-TN</b>	1.2					●												
	<b>TNGN 220416 T00520</b>	—	1.6															●		
	<b>TNGN 220716 T00520</b>	—	1.6															●		
	<b>TNGG 160408 Z01030 AG</b>	<b>TNGG332-ZNCGAG</b>	0.8								●								<b>F23</b> <b>F25</b> <b>G39</b>	
	<b>160412 Z01030 AG</b>	<b>333-ZNCGAG</b>	1.2								●									

● : Standard stock    ● : New standard stock    ■ : Scheduled to be produced by order    ★ : Standard stock (Specified)



Item Number	IC	T	Relief angle
<b>RP_0602_</b>	6.35	2.38	11°
<b>RP_0903_</b>	9.525	3.18	11°
<b>RP_1204_</b>	12.70	4.76	11°

## <Round Positive type>

Steel	P																			
Stainless Steel	M																			
Cast Iron	K																			
Non-Ferrous Material	N																			
Heat Resistant Alloy	S																			
Hardened Material	H																			

● : 1st Choice

● : 2nd choice

Shape	ISO Item Number	Inch Item Number	R	Ceramics															For applicable holder, see pages:			
				BIDEMICS		Alumina-based							Silicon nitride-based					Whisker-based				
				JX1	JX3	HC1	HW2	HC2	HC4	HC6	ZC7	SX6	SX7	SX3	SX9	SP9	WA1	WA5				
	<b>RPGN 060200 T00520</b>	—	—																			<b>N8</b>
	<b>RPGN 090300 T00520</b>	—	—																			
	<b>RPGN 120400 E004</b>	—	—																			
	<b>120400 EX0004</b>	—	—																			
	<b>120400 T00520</b>	—	—																			
	<b>120400 T00525</b>	RPGN430-TNB	—																			
	<b>120400 T00820</b>	—	—																			
	<b>120400 T01020</b>	—	—																			

● : Standard stock    ● : New standard stock    ■ : Scheduled to be produced by order    ★ : Standard stock (Specified)

Item Number	IC	T	Relief angle
<b>SP_0903_</b>	9.525	3.18	11°
<b>SP_1203_</b>	12.7	3.18	11°
<b>SP_1204_</b>	12.7	4.76	11°

## <90 degree Square Positive type>

Steel	P																			
Stainless Steel	M																			
Cast Iron	K																			
Non-Ferrous Material	N																			
Heat Resistant Alloy	S																			
Hardened Material	H																			

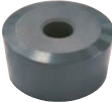

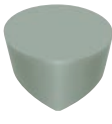


● : 1st Choice

● : 2nd choice

Shape	ISO Item Number	Inch Item Number	R	Ceramics															For applicable holder, see pages:			
				BIDEMICS		Alumina-based							Silicon nitride-based					Whisker-based				
				JX1	JX3	HC1	HW2	HC2	HC4	HC6	ZC7	SX6	SX7	SX3	SX9	SP9	WA1	WA5				
	<b>SPGN 090308 T01025</b>	SPGN322-TN	0.8																			—
	<b>SPGN 120308 T01025</b>	SPGN422-TN	0.8																			
	<b>SPGN 120408 T01025</b>	SPGN432-TN	0.8																			
	<b>120412 T01025</b>	433-TN	1.2																			

● : Standard stock    ● : New standard stock    ■ : Scheduled to be produced by order    ★ : Standard stock (Specified)

## <For Machining Mill Rolls and Heat-Resistant Alloys> ※For details of insert measurement, please go to page L18, L22, L26, L27, L31.

		Steel	P															
		Stainless Steel	M															
		Cast Iron	K															
		Non-Ferrous Material	N															
		Heat Resistant Alloy	S															
		Hardened Material	H															
Shape	ISO Item Number	R	BIDEMICS	Ceramics													For applicable holder, see pages:	
				Alumina-based							Silicon nitride-based				Whisker-based			
				JX1	JX3	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX6	SX7	SX3	SX9		SP9
	CDH 22 PN	-																F31
	CDH 33 PN	-																L26
	RCGX 060400 T00520	-																F32 L19~21 L27~29
	060400 T00820		●	●														
	060400 T02020	-																
	RCGX 060600 P07015	-																
	RCGX 060700 T00520	-																
	RCGX 090700 E004	-	●	●														
	090700 T00520	-												●	●			
	090700 T00820	-	●	●														
	090700 T01020	-																
	090700 K20015	-																
	RCGX 0908 PN	-																
	0908 TNB	-																
	RCGX 120700 E004	-	●	●														
	120700 T00520	-												●	●			
120700 T00820	-	●	●															
120700 T01020	-																	
120700 Z01520	-																	
120700 K20015	-																	
RCGX 1208 PN	-																	
1208 TNB	-													●				
	RPGX 060400 T00520	-																
	RPGX 090700 E004	-	●	●														
	090700 T00520	-												●	●			
	090700 T00820	-	●	●										●	●			
	RPGX 0908 TNB	-													●			
	RPGX 120700 E004	-	●	●														
	120700 T00520	-												●	●			
	120700 T00820	-	●	●										●	●			
120700 T01020	-																	
RPGX 1208 TNB	-													●				
	RCGY 090603 TNB	-																
	RCGY 120603 TNB	-																
	RBGX 16S PN	-																
	16S SN2	-																
	RBGX 20S PN	-																
	RBGX 26S PN	-																
26 SSN3	-																	

● : Standard stock   ● : New standard stock   ■ : Scheduled to be produced by order   ★ : Standard stock (Specified)

New Products  
Tool Materials / Selection Guide  
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Micrograin Carbide, PVD Coated Carbide  
Insert Item List  
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