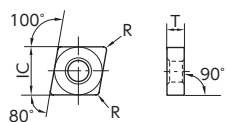


Item Number	IC	T
CN_1204_	12.7	4.76

<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

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
	CNGA 120404 S02025	CNGA431-SNF	0.4										●						F9 F11 G40 K34
	120404 T01025	431-TN	0.4										●						
	120404 Z02025	431-ZNF	0.4								●								
	120408 S02025	432-SNF	0.8											●					
	120408 T00520	—	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 T01020	—	1.2															●	
	120412 T01025	433-TN	1.2												●				
	120412 T02020	—	1.2														●		
	120412 T02025	433-TNF	1.2															●	
	120416 T00520	—	1.6															●	
	120416 T01020	—	1.6															●	
	120416 T02020	—	1.6															●	
	120416 T02025	434-TNF	1.6															●	
	CNGA 120408 WL T01025	CNGA432WL-TN	0.8											●				F9 K34	
	120412 WL T01025	433WL-TN	1.2														●		
	CNGG 120408 Z01030 AG	CNGG432-ZNCGAG	0.8												●			F9 F11 G40 K34	
	120412 Z01030 AG	433-ZNCGAG	1.2														●		

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

BIDEMICS • Ceramic

Negative type

Positive type



For Machining Mill rolls

Item Number	IC	T
CN_1204_	12.7	4.76
CN_1207_	12.7	7.94
CN_1607_	15.875	7.94

<80 degree Rhombic 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					
	CNGN 120404 T01025	CNGN431-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	—	1.2																				●	
	120412 T01020	—	1.2																				●	
	120412 T01025	433-TN	1.2				●		●		●	●											●	
	120412 T02020	—	1.2										●											
	120412 T02025	433-TNF	1.2				●																●	
	120412 Z02025	433-ZNF	1.2							●														
	120416 T00520	—	1.6																				●	
	120416 T02020	—	1.6											●										
	120416 T01020	—	1.6																				●	
	120416 T02025	434-TNF	1.6																				●	
	120420 T01025	435-TN	2.0											●										
		CNGN 120708 T00520	—	0.8																			●	
120708 T02025		CNGN452-TN	0.8					●																
120712 T02025		453-TN	1.2					●																
CNGN 160716 T00520	—	1.6																				●		
	CNGX 120712 T02025	—	1.2																			●		
	120716 T02025	—	1.6																			●		

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

Item Number	IC	T
DN_1504_	12.7	4.76
DN_1507_	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		
	DNGA 150404 S02025	DNGA431-SNF	0.4																	F13 F15 G41 K35
	150404 T01025	431-TN	0.4					●		●	●									
	150404 Z02025	431-ZNF	0.4						●											
	150408 S02025	432-SNF	0.8					●		●										
	150408 T00520	—	0.8													●		●		
	150408 T01020	—	0.8														●			
	150408 T01025	432-TN	0.8					●		●	●									
	150408 T02020	—	0.8										●							
	150408 T02025	432-TNF	0.8													●				
	150408 Z02025	432-ZNF	0.8						●											
	150412 S02025	433-SNF	1.2								●									
	150412 T01020	—	1.2														●	●		
	150412 T01025	433-TN	1.2					●			●									
	150412 T02020	—	1.2										●							
150412 T02025	433-TNF	1.2													●					
	DNGN 150404 T01025	DNGN431-TN	0.4					●											F13 F15	
	150408 S02025	432-SNF	0.8							●										
	150408 T01025	432-TN	0.8							●	●									
	150408 Z02025	432-ZNF	0.8						●											
	150412 T00520	—	1.2														●			
	150412 T02025	433-TNF	1.2															●		
	DNGG 150408 Z01030 AG	DNGG432-ZNCGAG	0.8								●								F13 F15 G41 K35	
	150412 Z01030 AG	433-ZNCGAG	1.2								●									
	DNGX 150716 T02025	—	1.6													●			F13 F15 K35	

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

<75 degree Rhombic Negative type>

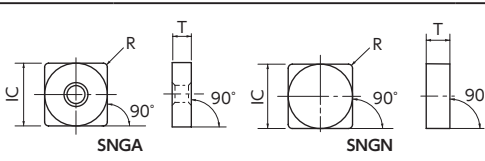
Item Number	IC	T
EN_1307_	12.7	7.94

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	
	ENGN 130708 T02025	ENGN452-TN	0.8					●											—
	130712 T02025	453-TN	1.2					●											



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

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>

	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	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			
	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				●											F17 F19 F21 K36 N12 N14 N16	
		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)

BIDEMICS • Ceramic



Negative type

Positive type



Item Number	IC	T
SN_1204	12.7	4.76
SN_1207	12.7	7.94
SN_1507	15.875	7.94
SN_1906	19.05	6.35
SN_1907	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		
	SNGN 120412 T01025	SNGN433-TN	1.2			●		●		●	●								●	F17 F19 F21 K36 N12 N14 N16
	120412 T02020	—	1.2											●				●		
	120412 T02025	433-TNF	1.2														●			
	120412 Z02025	433-ZNF	1.2						●											
	120416 S02025	434-SNF	1.6									●								
	120416 T00520	—	1.6															●		
	120416 T01020	—	1.6														●	●		
	120416 T01025	434-TN	1.6			●		●		●	●							●		
	120416 T02020	—	1.6									●								
	120416 T02025	434-TNF	1.6												●					
	120416 Z02025	434-ZNF	1.6						●											
	120420 T01025	435-TN	2					●		●										
	120420 T01020	—	2															●		
	120420 T02020	—	2									●								
	120420 T02025	435-TNF	2			●												●		
	120424 T01025	436-TN	2.4						●											
	120424 T02020	—	2.4									●								
	SNGN 120708 T02025	SNGN452-TN	0.8			●		●												
	120712 S02025	453-SNF	1.2					●												
	120712 T02025	453-TN	1.2					●												
120716 T02025	454-TN	1.6				●														
SNGN 150716 T02025	SNGN554-TN	1.6															●			
SNGN 190616 T00525	SNGN644-TNB	1.6													●					
SNGN 190724 T00525	SNGN656-TNB	2.4													●					
	SNGX 120712 T02025	—	1.2														●	F17 K36		
	120716 T02025	—	1.6														●			

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

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Item Number	IC	T
TN_1103	6.35	3.18
TN_1603	9.525	3.18
TN_1604	9.525	4.76

<60 degree Triangle 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		
	TNGA 160404 S02025	TNGA331-SNF	0.4								●									● : 1st Choice ● : 2nd choice
	160404 T01025	331-TN	0.4								●									
	160404 Z02025	331-ZNF	0.4						●											
	160408 S02025	332-SNF	0.8									●								
	160408 T01025	332-TN	0.8					●		●	●									
	160408 T02020	—	0.8										●							
	160408 T02025	332-TNF	0.8													●				
	160408 Z02025	332-ZNF	0.8						●											
	160412 S02025	333-SNF	1.2									●								
	160412 T01025	333-TN	1.2						●		●	●								
	160412 T02020	—	1.2										●							
	160412 T02025	333-TNF	1.2													●				
	160416 T02025	334-TNF	1.6													●				
	TNGN 110308 T00525	TNGN222-TN	0.8					●												—
	TNGN 160304 T01025	TNGN321-TN	0.4					●												
	TNGN 160404 T01025	TNGN331-TN	0.4					●												
	160404 Z02025	331-ZNF	0.4						●											
	160408 S02025	332-SNF	0.8									●								
	160408 T00820	—	0.8																●	
	160408 T01020	—	0.8														●	●		
	160408 T01025	332-TN	0.8					●		●	●	●							●	
	160408 T02020	—	0.8										●							
	160408 T02025	332-TNF	0.8													●				
	160408 Z02025	332-ZNF	0.8						●											
	160412 S02025	333-SNF	0.8									●								
	160412 T00820	—	1.2																●	
	160412 T01020	—	1.2														●			
	160412 T01025	333-TN	1.2					●		●	●	●							●	
	160412 T02020	—	1.2										●							
	160412 T02025	333-TNF	1.2													●				
	160412 Z02025	333-ZNF	1.2						●								●			

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

Negative type
Positive type
C
D
E
R
S
T
W
For Machining Mill rolls

F23
F25
G39

F23
F25

Item Number	IC	T
TN_1604	9.525	4.76
TN_1607	9.525	7.94
TN_2204	12.7	4.76
TN_2207	12.7	7.94

<60 degree Triangle 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		
	TNGN 160416 T01020	—	1.6																	F23 F25
	160416 T01025	TNGN334-TN	1.6			●	●	●												
	160416 T02020	—	1.6										●							
	160416 T02025	334-TNF	1.6													●				
	160420 T01025	335-TN	1.6			●		●												
	160420 T02020	—	2											●						
	TNGN 160708 T02025	TNGN352-TN	0.8					●												
	160712 T02025	353-TN	1.2					●												
	TNGN 220416 T00520	—	1.6																●	
	TNGN 220716 T00520	—	1.6																●	
	TNGG 160408 Z01030 AG	TNGG332-ZNCGAG	0.8								●								F23 F25 G39	
	160412 Z01030 AG	333-ZNCGAG	1.2								●									

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

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

<Round Positive type>

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
	RPGN 060200 T00520	—	—														●
	RPGN 090300 T00520	—	—														●
	RPGN 120400 E004	—	—								●						
	120400 EX0004	—	—									●					
	120400 T00520	—	—										●				
	120400 T00525	RPGN430-TNB	—	—									●				
	120400 T00820	—	—	—							●						
	120400 T01020	—	—	—									●	●			

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

Item Number	IC	T	Relief angle
SP_0903_	9.525	3.18	11°
SP_1203_	12.7	3.18	11°
SP_1204_	12.7	4.76	11°

<90 degree Square Positive type>

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
	SPGN 090308 T01025	SPGN322-TN	0.8														
	SPGN 120308 T01025	SPGN422-TN	0.8						●								
	SPGN 120408 T01025	SPGN432-TN	0.8						●								
	120412 T01025	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.

Shape	ISO 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	
	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	-															●	F32 L19~21 L27~29	
	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	-															●	L22	
	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)

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