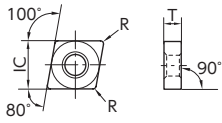


Item Number	IC	T
CN_1204_	12.7	4.76

<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																					
	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																						
Wiper	CNGA 120408 WL T01025	CNGA432WL-TN	0.8																					
	120412 WL T01025	433WL-TN	1.2																					
with chipbreaker	CNGG 120408 Z01030 AG	CNGG432-ZNCGAG	0.8																					
	120412 Z01030 AG	433-ZNCGAG	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
CN_1204_	12.7	4.76
CN_1207_	12.7	7.94
CN_1607_	15.875	7.94

<80 degree Rhombic Negative type>

Diagram		Material			Ceramics												For applicable holder, see pages:	
Shape	ISO Item Number	Inch Item Number	R	BIDEMICS		Alumina-based					Silicon nitride-based				Whisker-based			
				JX1	JX3	HC1	HW2	HC2	HC4	HC6	ZC7	SX6	SX7	SX3	SX9	SP9		WA1
				Steel	P													
				Stainless Steel	M													
				Cast Iron	K													
				Non-Ferrous Material	N													
				Heat Resistant Alloy	S													
				Hardened Material	H													

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

● : 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	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
	DNGA 150404 S02025	DNGA431-SNF	0.4																● : 1st Choice ● : 2nd choice	
	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																● : 1st Choice ● : 2nd choice	
	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																● : 1st Choice ● : 2nd choice	
	150412 Z01030 AG	433-ZNCGAG	1.2																	
	DNGX 150716 T02025	—	1.6																● : 1st Choice ● : 2nd choice	

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

<75 degree Rhombic Negative type>

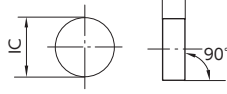
Item Number	IC	T
EN_1307	12.7	7.94

Shape	ISO Item Number	Inch Item Number	R	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
	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
RN_1204_	12.7	4.76
RN_1207_	12.7	7.94
RN_1507_	15.875	7.94
RN_1907_	19.05	7.94
RN_2507_	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																			

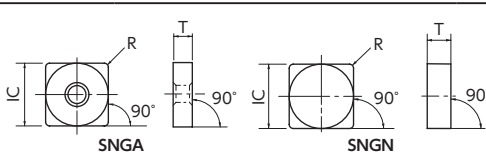
● : 1st Choice
● : 2nd choice

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	HC7	ZC7	SX6	SX7	SX3	SX9	SP9	WA1		WA5		
	RNGN 120400 S02025	RNGN430-SNF	-																		<div style="display: flex; flex-direction: column; gap: 5px;"> F30 N9 L23 L30 </div>	
	120400 T00520	—	-																			
	120400 T00820	—	-																			
	120400 T00525	430-TNB	-																			
	120400 T01020	—	-																			
	120400 T01025	430-TN	-																			
	120400 T02020	—	-																			
	120400 T02025	430-TNF	-																			
	120400 Z02025	430-ZNF	-																			
	RNGN 120700 E002	—	-																			
	120700 E004	—	-																			
	120700 E007	RNGN450-ENC	-																			
	120700 S02025	450-SNF	-																			
	120700 T00520	—	-																			
	120700 T00525	450-TNB	-																			
	120700 T00820	—	-																			
	120700 T01020	—	-																			
	120700 T02025	450-TN	-																			
	120700 Z01520	—	-																			
	120700 Z02025	450-ZNF	-																			
120700 K20015	—	-																				
RNGN 150700 T00520	—	-																				
150700 T00525	RNGN550-TNB	-																				
150700 T00820	—	-																				
RNGN 190700 T00520	—	-																				
190700 T00525	RNGN650-TNB	-																				
190700 T00820	—	-																				
190700 T01020	—	-																				
190700 K20015	—	-																				
RNGN 250700 T00520	—	-																				
250700 T00820	—	-																				

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


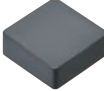
Item Number	IC	T
SN_0903	9.525	3.18
SN_0904	9.525	4.76
SN_1204	12.7	4.76

<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

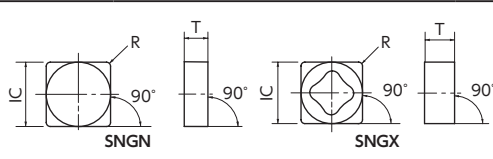
Shape	ISO Item Number	Inch Item Number	R	Ceramics																For applicable holder, see pages:																						
				BIDEMICS		Alumina-based						Silicon nitride-based					Whisker-based																									
				JX1	JX3	HC1	HW2	HC2	HC4	HC6	ZC7	SX6	SX7	SX3	SX9	SP9	WA1	WA5																								
	SNGA 120408 S02025	SNGA432-SNF	0.8								●																															
	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)

BIDEMICS • Ceramic
 Positive type
 Negative type
 For Machining Mill tools

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>



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

● : 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	
	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)

- New Products
- Tool Materials / Selection Guide
- BIDEMICS, PCD, CBN and Ceramics
- Micrograin Carbide, PVD Coated Carbide
- 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
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																	<div style="background-color: #90EE90; padding: 2px;">F23</div> <div style="background-color: #90EE90; padding: 2px;">F25</div> <div style="background-color: #90EE90; padding: 2px;">G39</div>
	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)

BIDEMICS • Ceramic

Negative type

Positive type



For Machining Mill tools

