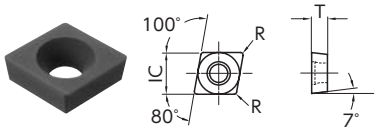
CCGW

(inch)	IC	T
CCGW 21.5	1/4	3/32
CCGW 32.5	3/8	5/32
CCGW 43	1/2	3/16

● : 1st Choice ● : 2nd choice



		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS Coated			Ceramics														
					SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
CCGW 21.51 T0225	CCGW 060204 T00525	1/4	.016														●				●
CCGW 21.52 T0225	CCGW 060208 T00525	1/4	.031														●				●
CCGW 32.51 T0425	CCGW 09T304 T01025	3/8	.016														●				●
CCGW 32.52 T0425	CCGW 09T308 T01025	3/8	.031														●				●
CCGW 431 T0420	CCGW 120404 T01020	1/2	.016									●									
CCGW 432 T0420	CCGW 120408 T01020	1/2	.031									●	●								

Holders ➡ Q10
Boring bars ➡ V30

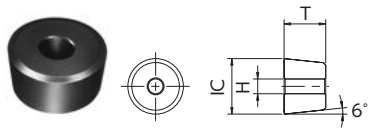
CDH

(inch)	IC	T	H
CDH 22	1/2	1/4	.125
CDH 33	3/4	3/8	.250

(inch)	IC	T	H
CDH 42	1	1/2	.266
CDH 43	1	3/4	.266

(inch)	IC	T	H
CDH 515	1-1/4	3/8	.391
CDH 53	1-1/4	3/4	.391

● : 1st Choice ● : 2nd choice



		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS Coated			Ceramics														
					SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

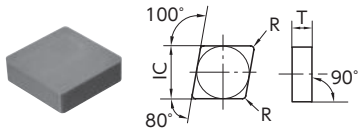
Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
CDH 22 P2810	CDH 1207 P07010	1/2															●	●	●		
CDH 33 P6015	CDH 1909 P15015	3/4															○				
CDH 33 Q6010	CDH 1909 Q15010	3/4															●				
CDH 33 Q6010B	CDH 1909 Q15010B	3/4																●	●		
CDH 42 P8015	CDH 2512 P20015	1																	●		
CDH 42 P12010	CDH 2512 P30010G	1															●	●			
CDH 43 P6010	CDH 2519 P15015	1															●				
CDH 515 P7110B	CDH 3209 P18010B	1-1/4															●				
CDH 515 P7110	CDH 3209 P18010	1-1/4															●				
CDH 515 P8015	CDH 3209 P20015	1-1/4																	●		
CDH 515 Q7110	CDH 3209 Q18010	1-1/4															●	●	●		
CDH 53 P8015	CDH 3219 P20015	1-1/4																	●		
CDH 53 Q9515	CDH 3219 Q24015	1-1/4															●	●			

Holders ➡ F17

CNG

(inch)	IC	T	(inch)	IC	T	(inch)	IC	T
CNG 43	1/2	3/16	CNG 54	5/8	1/4	CNG 64	3/4	1/4
CNG 45	1/2	5/16	CNG 55	5/8	5/16	CNG 65	3/4	5/16

● : 1st Choice ● : 2nd choice



		BIDEMICS Coated			Ceramics															
					SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC						
		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
CNG 431 T0425	CNGN 120404 T01025	1/2	.016													○	○				
CNG 431 T0525	CNGN 120404 T01225	1/2	.016														●				
CNG 432 T0220	CNGN 120408 T00520	1/2	.031						●	●	●										
CNG 432 T0420	CNGN 120408 T01020	1/2	.031								●		●								
CNG 432 T0425	CNGN 120408 T01025	1/2	.031													●	○			○	
CNG 432 T0525	CNGN 120408 T01225	1/2	.031														●				●
CNG 432 T0820	CNGN 120408 T02020	1/2	.031									○									
CNG 432 S0825	CNGN 120408 S02025	1/2	.031																	○	
CNG 432 T0825	CNGN 120408 T02025	1/2	.031						○		○			○							
CNG 433 T0220	CNGN 120412 T00520	1/2	.047						●	●	●										
CNG 433 T0320	CNGN 120412 T01220	1/2	.047		●																
CNG 433 T0420	CNGN 120412 T01020	1/2	.047								●		●								
CNG 433 T0425	CNGN 120412 T01025	1/2	.047								○			○	●	●	○			○	
CNG 433 T0525	CNGN 120412 T01225	1/2	.047														●				●
CNG 433 T0820	CNGN 120412 T02020	1/2	.047									●									
CNG 433 S0825	CNGN 120412 S02025	1/2	.047																	○	
CNG 433 T0825	CNGN 120412 T02025	1/2	.047						○		○			○							
CNG 434 T0220	CNGN 120416 T00520	1/2	.063							●	●										
CNG 434 T0420	CNGN 120416 T01020	1/2	.063										●								
CNG 434 T0820	CNGN 120416 T02020	1/2	.063									○									
CNG 434 T0825	CNGN 120416 T02025	1/2	.063						○												
CNG 435 T0825	CNGN 120420 T02025	1/2	.079													○					
CNG 452 T0220	CNGN 120708 T00520	1/2	.031								●										
CNG 452 T0825	CNGN 120708 T02025	1/2	.031														●				
CNG 453 T0220	CNGN 120712 T00520	1/2	.047							●	●										
CNG 453 T0825	CNGN 120712 T02025	1/2	.047														●				
CNG 454 T0220	CNGN 120716 T00520	1/2	.063								●										
CNG 454 T0825	CNGN 120716 T02025	1/2	.063														●				
CNG 543 T0825	CNGN 160612 T02025	5/8	.047														●				
CNG 552 T0825	CNGN 160708 T02025	5/8	.031														●				
CNG 554 T0220	CNGN 160716 T00520	5/8	.063								○										
CNG 643 T0825	CNGN 190612 T02025	3/4	.047														●				
CNG 644 T0825	CNGN 190616 T02025	3/4	.063														●				
CNG 646 T0220	CNGN 190624 T00520	3/4	.094								●										
CNG 648 T0825	CNGN 190632 T02025	3/4	.125														●				
CNG 656 T0220	CNGN 190724 T00520	3/4	.094							●											

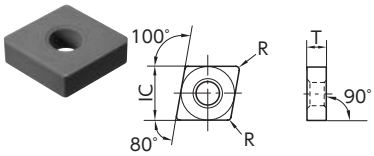
Holders ➡ F6・F7
Boring bars ➡ G5

● : Stock
● : Stock (Newly added)
■ □ R L : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
RⓁ : 1-2 week delivery (Right / Left-hand only)
RⓁ : 1-2 week delivery (Right / Left-hand only, Newly added)

CNGA

(inch)	IC	T
CNGA 43	1/2	3/16
CNGA 54	5/8	1/4
CNGA 64	3/4	1/4

● : 1st Choice ● : 2nd choice



		JP2*	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS Coated			Ceramics SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2*	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
CNGA 431 BQ T0220	CNGA 120404 BQ T00520	1/2	.016	●																	
CNGA 431 BQ E02	CNGA 120404 BQ ENB	1/2	.016	●																	
CNGA 431 T0220	CNGA 120404 T00520	1/2	.016								●										
CNGA 431 T0425	CNGA 120404 T01025	1/2	.016														●			●	
CNGA 431 T0525	CNGA 120404 T01225	1/2	.016													●					●
CNGA 431 S0825	CNGA 120404 S02025	1/2	.016																	●	
CNGA 431 Z0825	CNGA 120404 Z02025	1/2	.016																		●
CNGA 432 BQ T0220	CNGA 120408 BQ T00520	1/2	.031	●																	
CNGA 432 BQ E02	CNGA 120408 BQ ENB	1/2	.031	●																	
CNGA 432 T0220	CNGA 120408 T00520	1/2	.031						●	●	●										
CNGA 432 T0320	CNGA 120408 T00820	1/2	.031				●														
CNGA 432 T0420	CNGA 120408 T01020	1/2	.031								●		●								
CNGA 432 T0425	CNGA 120408 T01025	1/2	.031													○	○			●	
CNGA 432 T0525	CNGA 120408 T01225	1/2	.031											●		●	●	●			●
CNGA 432 T0820	CNGA 120408 T02020	1/2	.031									●					●				
CNGA 432 Z0820	CNGA 120408 Z02020	1/2	.031								●										
CNGA 432 S0825	CNGA 120408 S02025	1/2	.031																	●	
CNGA 432 T0825	CNGA 120408 T02025	1/2	.031						○												
CNGA 432 Z0825	CNGA 120408 Z02025	1/2	.031																		●
CNGA 433 BQ T0220	CNGA 120412 BQ T00520	1/2	.047	●																	
CNGA 433 BQ E02	CNGA 120408 BQ ENB	1/2	.047	●																	
CNGA 433 T0220	CNGA 120412 T00520	1/2	.047						●	●	●										
CNGA 433 T0320	CNGA 120412 T00820	1/2	.047				●														
CNGA 433 T0420	CNGA 120412 T01020	1/2	.047						●		●		●								
CNGA 433 T0425	CNGA 120412 T01025	1/2	.047											●		○	○			●	
CNGA 433 T0525	CNGA 120412 T01225	1/2	.047													●	●	●			●
CNGA 433 T0820	CNGA 120412 T02020	1/2	.047						●			●					●				
CNGA 433 Z0820	CNGA 120412 Z02020	1/2	.047								●										
CNGA 433 S0825	CNGA 120412 S02025	1/2	.047																	●	
CNGA 433 T0825	CNGA 120412 T02025	1/2	.047						○							●					
CNGA 433 Z0825	CNGA 120412 Z02025	1/2	.047																		●
CNGA 434 T0220	CNGA 120416 T00520	1/2	.063						○	●	●										
CNGA 434 T0420	CNGA 120416 T01020	1/2	.063								●		●								
CNGA 434 T0525	CNGA 120416 T01225	1/2	.063														●	●			
CNGA 434 T0820	CNGA 120416 T02020	1/2	.063									●									
CNGA 434 T0825	CNGA 120416 T02025	1/2	.063						○												
CNGA 542 T0825	CNGA 160608 T02025	5/8	.031														●				
CNGA 543 T0220	CNGA 160612 T00520	5/8	.047							●	●										
CNGA 543 T0420	CNGA 160612 T01020	5/8	.047										●								
CNGA 543 T0820	CNGA 160612 T02020	5/8	.047									●									
CNGA 543 T0825	CNGA 160612 T02025	5/8	.047														●	●			
CNGA 543 Z0825	CNGA 160612 Z02025	5/8	.047								●										●
CNGA 544 T0220	CNGA 160616 T00520	5/8	.063							●	●										
CNGA 544 T0825	CNGA 160616 T02025	5/8	.063														●				
CNGA 544 Z0825	CNGA 160616 Z02025	5/8	.063																		●
CNGA 643 T0220	CNGA 190612 T00520	3/4	.047							●	●										
CNGA 643 T0420	CNGA 190612 T01020	3/4	.047								●		●								
CNGA 643 T0525	CNGA 190612 T01225	3/4	.047																		
CNGA 643 Z0620	CNGA 190612 Z01520	3/4	.047								●										
CNGA 643 T0820	CNGA 190612 T02020	3/4	.047									●									
CNGA 643 T0825	CNGA 190612 T02025	3/4	.047														●	●			●
CNGA 644 T0220	CNGA 190616 T00520	3/4	.063							●	●										
CNGA 644 T0825	CNGA 190616 T02025	3/4	.063														●				

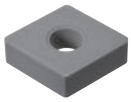
*Brazed insert

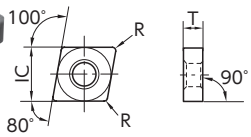
Holders ➡ F6 • F7 • Q38
Boring bars ➡ G5

CNGA-WL with wiper for higher feed

● : 1st Choice ● : 2nd choice

(inch)	IC	T
CNGA 43 WL	1/2	3/16





	BIDEMICS Coated JP2	JX1	JX3	Ceramics SiAlON SX7	SX3	SX9	SX5	Whisker WA1	Silicon Nitride SX6	SP9	Alumina HC1	HW2	Alumina - TiC HC6	HC2	HC5	HC7	ZC7	ZC4
Steel P																		
Stainless Steel M																		
Cast Iron K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material N																		
Heat Resistant Alloy S	●	●	●	●	●	●	●	●										
Hardened Material H								●						●	●	●	●	●

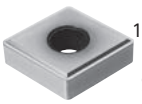
Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
CNGA 431 WL T0425	CNGA 120404 WL T01025	1/2	.016																	●	
CNGA 431 WL T0525	CNGA 120404 WL T01225	1/2	.016																		●
CNGA 432 WL T0425	CNGA 120408 WL T01025	1/2	.031																	●	
CNGA 432 WL T0525	CNGA 120408 WL T01225	1/2	.031																		●
CNGA 433 WL T0425	CNGA 120412 WL T01025	1/2	.047																	●	
CNGA 433 WL T0525	CNGA 120412 WL T01225	1/2	.047																		●

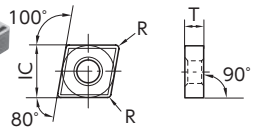
Holders ➡ F6 • F7 • Q38
Boring bars ➡ G5

CNGG with chipbreaker

● : 1st Choice ● : 2nd choice

(inch)	IC	T
CNGG 43	1/2	3/16





	BIDEMICS Coated JP2	JX1	JX3	Ceramics SiAlON SX7	SX3	SX9	SX5	Whisker WA1	Silicon Nitride SX6	SP9	Alumina HC1	HW2	Alumina - TiC HC6	HC2	HC5	HC7	ZC7	ZC4
Steel P																		
Stainless Steel M																		
Cast Iron K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material N																		
Heat Resistant Alloy S	●	●	●	●	●	●	●	●										
Hardened Material H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
CNGG 432 Z0430 AG	CNGG 120408 Z01030 AG	1/2	.031																	●	
CNGG 433 Z0430 AG	CNGG 120412 Z01030 AG	1/2	.047																	●	

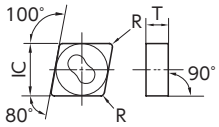
Holders ➡ F6 • F7 • Q38
Boring bars ➡ G5

● : Stock
● : Stock (Newly added)
■ □ R L : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only)
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only, Newly added)

CNGX

(inch)	IC	T
CNGX 43	1/2	3/16
CNGX 45	1/2	5/16

● : 1st Choice ● : 2nd choice



		BIDEMICS Coated			Ceramics														
					SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
CNGX 432 T0320	CNGX 120408 T00820	1/2	.031				●														
CNGX 432 T0420	CNGX 120408 T01020	1/2	.031										●								
CNGX 432 T0820	CNGX 120408 T02020	1/2	.031									●									
CNGX 433 T0220	CNGX 120412 T00520	1/2	.047				●														
CNGX 433 T0320	CNGX 120412 T00820	1/2	.047				●														
CNGX 433 T0420	CNGX 120412 T01020	1/2	.047										●								
CNGX 433 T0820	CNGX 120412 T02020	1/2	.047									●									
CNGX 434 T0420	CNGX 120416 T01020	1/2	.063										●								
CNGX 434 T0820	CNGX 120416 T02020	1/2	.063									●									
CNGX 452 T0220	CNGX 120708 T00520	1/2	.031						●												
CNGX 452 T0320	CNGX 120708 T00820	1/2	.031				●														
CNGX 452 T0420	CNGX 120708 T01020	1/2	.031										●								
CNGX 452 T0820	CNGX 120708 T02020	1/2	.031									●									
CNGX 452 T0825	CNGX 120708 T02025	1/2	.031																		
CNGX 453 T0220	CNGX 120712 T00520	1/2	.047						●												
CNGX 453 T0320	CNGX 120712 T00820	1/2	.047				●														
CNGX 453 T0420	CNGX 120712 T01020	1/2	.047				●						●								
CNGX 453 T0820	CNGX 120712 T02020	1/2	.047						●			●									
CNGX 453 T0825	CNGX 120712 T02025	1/2	.047										●		●						
CNGX 453 S0830	CNGX 120712 S02030	1/2	.047																	●	
CNGX 454 T0420	CNGX 120716 T01020	1/2	.063										●								
CNGX 454 T0425	CNGX 120716 T01025	1/2	.063																		
CNGX 454 T0820	CNGX 120716 T02020	1/2	.063						●			●									
CNGX 454 S0825	CNGX 120716 S02025	1/2	.063																		
CNGX 454 T0825	CNGX 120716 T02025	1/2	.063										●								
CNGX 454 S0830	CNGX 120716 S02030	1/2	.063																	●	

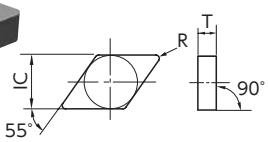
Holders ➡ F6
Boring bars ➡ G5

DNG

(inch)	IC	T
DNG 43	1/2	3/16
DNG 45	1/2	5/16

(inch)	IC	T
DNG 54	5/8	1/4

● : 1st Choice ● : 2nd choice



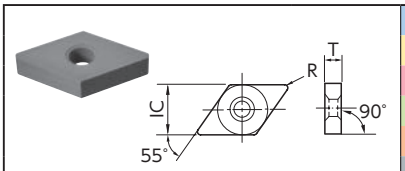
		BIDEMICS Coated			Ceramics														
					SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
DNG 431 T0420	DNGN 150404 T01020	1/2	.016														○				
DNG 432 T0220	DNGN 150408 T00520	1/2	.031								●										
DNG 432 T0420	DNGN 150408 T01020	1/2	.031								●										
DNG 432 T0425	DNGN 150408 T01025	1/2	.031													○				○	
DNG 432 T0525	DNGN 150408 T01225	1/2	.031														●				
DNG 432 S0825	DNGN 150408 S02025	1/2	.031																	○	
DNG 433 T0220	DNGN 150412 T00520	1/2	.047								●										
DNG 433 T0420	DNGN 150412 T01020	1/2	.047								●										
DNG 433 T0625	DNGN 150412 T01525	1/2	.047														●				
DNG 433 T0825	DNGN 150412 T02025	1/2	.047								○										
DNG 434 T0220	DNGN 150416 T00520	1/2	.063								●										
DNG 434 T0420	DNGN 150416 T01020	1/2	.063								●										
DNG 434 T0425	DNGN 150416 T01025	1/2	.063														●				
DNG 453 T0825	DNGN 150712 T02025	1/2	.047								○						●				
DNG 454 T0825	DNGN 150716 T02025	1/2	.063														●				
DNG 543 T0825	DNGN 190612 T02025	5/8	.047														●				

DNGA

(inch)	IC	T	(inch)	IC	T
DNGA 33	3/8	3/16	DNGA 44	1/2	1/4
DNGA 43	1/2	3/16	DNGA 54	5/8	1/4

● : 1st Choice ● : 2nd choice



		JP2*	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS Coated			Ceramics SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2*	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
DNGA 331 T0820	DNGA 110404 T02020	3/8	.016														●				
DNGA 431 BQ T0220	DNGA 150404 BQ T00520	1/2	.016	●																	
DNGA 431 BQ E02	DNGA 150404 BQ ENB	1/2	.016	●																	
DNGA 431 T0220	DNGA 150404 T00520	1/2	.016								●										
DNGA 431 T0425	DNGA 150404 T01025	1/2	.016													○	●			●	
DNGA 431 T0525	DNGA 150404 T01225	1/2	.016																		●
DNGA 431 S0825	DNGA 150404 S02025	1/2	.016																	●	
DNGA 431 Z0825	DNGA 150404 Z02025	1/2	.016														●				●
DNGA 432 BQ T0220	DNGA 150408 BQ T00520	1/2	.031	●																	
DNGA 432 BQ E02	DNGA 150408 BQ ENB	1/2	.031	●																	
DNGA 432 T0220	DNGA 150408 T00520	1/2	.031						●	●	●										
DNGA 432 T0320	DNGA 150408 T00820	1/2	.031				●														
DNGA 432 T0420	DNGA 150408 T01020	1/2	.031								●		●								
DNGA 432 T0425	DNGA 150408 T01025	1/2	.031													○	○			●	
DNGA 432 T0525	DNGA 150408 T01225	1/2	.031													●	●				●
DNGA 432 T0820	DNGA 150408 T02020	1/2	.031									●					●				
DNGA 432 S0825	DNGA 150408 S02025	1/2	.031														○			●	
DNGA 432 T0825	DNGA 150408 T02025	1/2	.031						○					●							
DNGA 432 Z0820	DNGA 150408 Z02020	1/2	.031								●										
DNGA 432 Z0825	DNGA 150408 Z02025	1/2	.031																		●
DNGA 433 BQ T0220	DNGA 150412 BQ T00520	1/2	.047	●																	
DNGA 433 BQ E02	DNGA 150412 BQ ENB	1/2	.047	●																	
DNGA 433 T0220	DNGA 150412 T00520	1/2	.047						●	●	●										
DNGA 433 T0320	DNGA 150412 T00820	1/2	.047				●														
DNGA 433 T0420	DNGA 150412 T01020	1/2	.047								●		●								
DNGA 433 T0425	DNGA 150412 T01025	1/2	.047												○					○	
DNGA 433 T0525	DNGA 150412 T01225	1/2	.047													●	●				
DNGA 433 T0820	DNGA 150412 T02020	1/2	.047									●					●				
DNGA 433 S0825	DNGA 150412 S02025	1/2	.047																	●	
DNGA 433 T0825	DNGA 150412 T02025	1/2	.047						●					●							
DNGA 433 Z0825	DNGA 150412 Z02025	1/2	.047																		●
DNGA 434 T0220	DNGA 150416 T00520	1/2	.063								●										
DNGA 434 T0420	DNGA 150416 T01020	1/2	.063								●										
DNGA 434 T0525	DNGA 150416 T01225	1/2	.063																		●
DNGA 434 S0820	DNGA 150416 S02020	1/2	.063														●				
DNGA 436 T0420	DNGA 150424 T01020	1/2	.094								●										
DNGA 442 T0825	DNGA 150608 T02025	1/2	.031														●				
DNGA 542 T0820	DNGA 190608 T02020	5/8	.031														●				
DNGA 543 T0820	DNGA 190612 T02020	5/8	.047														●				
DNGA 544 T0825	DNGA 190616 T02025	5/8	.063														●				

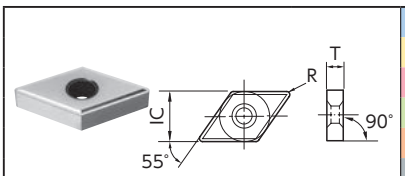
*Brazed insert

Holders ➡ F8 • F9 • Q40
Boring bars ➡ G5

DNGG with chip-breaker

(inch)	IC	T
DNGG 43	1/2	3/16

● : 1st Choice ● : 2nd choice



		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS Coated			Ceramics SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
DNGG 432 Z0430 AG	DNGG 150408 Z01030 AG	1/2	.031																	●	
DNGG 433 Z0430 AG	DNGG 150412 Z01030 AG	1/2	.047																	○	

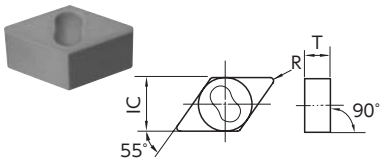
Holders ➡ F8 • F9 • Q40
Boring bars ➡ G5

● : Stock
● : Stock (Newly added)
■ □ RL : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
RⓁ : 1-2 week delivery (Right / Left-hand only)
RⓁ : 1-2 week delivery (Right / Left-hand only, Newly added)

DNGX

(inch)	IC	T
DNGX 35	.394	5/16
DNGX 45	1/2	5/16

● : 1st Choice ● : 2nd choice



		BIDEMICS Coated			Ceramics														
					SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

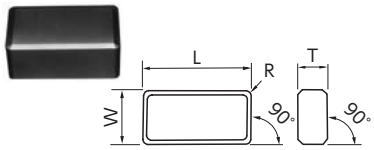
Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
DNGX 353 T0825	DNGX 120712 T02025	.394	.047												●						
DNGX 452 T0220	DNGX 150708 T00520	1/2	.031						●												
DNGX 454 T0825	DNGX 150716 T02025	1/2	.063										○								

Holders ➡ F8 • F9
Boring bars ➡ G5

LNJ / LNM

(inch)	W	L	T
LNJ / M 6688	3/4	1-1/2	1/2

● : 1st Choice ● : 2nd choice



		BIDEMICS Coated			Ceramics														
					SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
LNJ 6688 P6015	LNJ 6688 P15015		.125						●								●				
LNJ 6688 Q8015	LNJ 6688 Q20015		.125															●	●		
LNM 6688 S6015	LNM 6688 SN2		.125								○										
LNM 6688 SNX2	LNM 6688 SNX2		.125														○				
LNM 6688 SNX6	LNM 6688 SNX6		.125																○		

RCGX

(inch)	IC	T	θ
RCGX 23	1/4	3/16	120
RCGX 25	1/4	5/16	120
RCGX 35	3/8	5/16	120
RCGX 45	1/2	5/16	120

● : 1st Choice ● : 2nd choice

	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel (P)																		
Stainless Steel (M)																		
Cast Iron (K)				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material (N)																		
Heat Resistant Alloy (S)	●	●	●	●	●	●	●	●										
Hardened Material (H)								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
RCGX 23 T0220	RCGX 060400 T00520	1/4							●	●	●										
RCGX 23 T0320	RCGX 060400 T00820	1/4			●	●	●														
RCGX 25 T0220	RCGX 060700 T00520	1/4						●	●	●	●										
RCGX 25 Z0820	RCGX 060700 Z02020	1/4									●										
RCGX 35 E02	RCGX 090700 E004	3/8			●	●					●										
RCGX 35 T0220	RCGX 090700 T00520	3/8						●	●	●	●										
RCGX 35 T0320	RCGX 090700 T00820	3/8			●	●	●				●										
RCGX 35 T0420	RCGX 090700 T01020	3/8							●		●										
RCGX 35 Z0420	RCGX 090700 Z01020	3/8									●										
RCGX 35 Z0820	RCGX 090700 Z02020	3/8									●										
RCGX 45 E02	RCGX 120700 E004	1/2			●	●	●				●										
RCGX 45 T0220	RCGX 120700 T00520	1/2						●	●	●	●										
RCGX 45 T0320	RCGX 120700 T00820	1/2			●	●	●				●										
RCGX 45 T0420	RCGX 120700 T01020	1/2							●		●										
RCGX 45 Z0620	RCGX 120700 Z01520	1/2									●										
RCGX 45 Z0820	RCGX 120700 Z02020	1/2									●										

Holders ➡ F19 • F20 • F21 • F22

RCGX10

(inch)	IC	T	θ
RCGX 101	3/16	.240	90
RCGX 102	1/4	.309	120
RCGX 103	3/8	.309	120
RCGX 104	1/2	.312	120

(inch)	IC	T	θ
RCGX 105	5/8	.388	120
RCGX 106	3/4	.388	120
RCGX 108	1	.461	140

● : 1st Choice ● : 2nd choice

	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel (P)																		
Stainless Steel (M)																		
Cast Iron (K)				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material (N)																		
Heat Resistant Alloy (S)	●	●	●	●	●	●	●	●										
Hardened Material (H)								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
RCGX 101 P2010		3/16															●				
RCGX 102 P4815		1/4															●	●	●		
RCGX 102 T0225		1/4							●	●											
RCGX 102 T0820		1/4															●				
RCGX 103 P4815		3/8															●	●	●		
RCGX 103 P8015		3/8																●	●		
RCGX 103 T0820		3/8															●				
RCGX 103 T0825		3/8																			●
RCGX 103 T1625		3/8																			●
RCGX 104 P6015		1/2															●	●	●		
RCGX 104 P8015		1/2																●	●		
RCGX 104 T0820		1/2															●				
RCGX 104 T1625		1/2																			●
RCGX 105 P4815		5/8															●	●			
RCGX 105 P8015		5/8																●	●		
RCGX 105 S8020		5/8															●		●		●
RCGX 106 P4815		3/4															●				
RCGX 106 P8015		3/4															●	●	●		
RCGX 108 P8015		1															●				

Holders ➡ F19 • F20 • F21 • F22

● : Stock
● : Stock (Newly added)
■ □ R L : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only)
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only, Newly added)

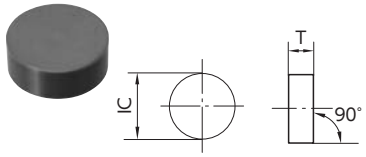
RNG

(inch)	IC	T
RNG 32	3/8	1/8
RNG 33	3/8	3/16
RNG 42	1/2	1/8
RNG 43	1/2	3/16

(inch)	IC	T
RNG 45	1/2	5/16
RNG 55	5/8	5/16
RNG 64	3/4	1/4
RNG 65	3/4	5/16

(inch)	IC	T
RNG 85	1	5/16
RNG 86	1	3/8

● : 1st Choice ● : 2nd choice



		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS Coated			Ceramics SiAlON				Ceramics Whisker	Ceramics Silicon Nitride		Ceramics Alumina		Ceramics Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
RNG 32 T0220	RNGN 090300 T00525	3/8									●										
RNG 32 T0425	RNGN 090300 T01025	3/8															●				
RNG 32 T0525	RNGN 090300 T01225	3/8																			●
RNG 33 T0320	RNGN 090400 T00820	3/8					●														
RNG 42 T0425	RNGN 120300 T01025	1/2															●				
RNG 43 E01	RNGN 120400 E002	1/2							●												
RNG 43 E02	RNGN 120400 E004	1/2					●	●													
RNG 43 T0220	RNGN 120400 T00520	1/2						●	●	●	●										
RNG 43 T0225	RNGN 120400 T00525	1/2							○		○										
RNG 43 T0320	RNGN 120400 T00820	1/2					●														
RNG 43 T0420	RNGN 120400 T01020	1/2							●		●		●						●		
RNG 43 T0425	RNGN 120400 T01025	1/2														●	○			○	
RNG 43 T0525	RNGN 120400 T01225	1/2															●	●			●
RNG 43 T0820	RNGN 120400 T02020	1/2										●									
RNG 43 S0825	RNGN 120400 S02025	1/2																		●	
RNG 43 T0825	RNGN 120400 T02025	1/2							○												
RNG 43 Z0825	RNGN 120400 Z02025	1/2																	●		●
RNG 43 T2820	RNGN 120400 T07020	1/2															●				
RNG 45 E01	RNGN 120700 E002	1/2							●		●										
RNG 45 E02	RNGN 120700 E004	1/2			●	●	●	●													
RNG 45 E03	RNGN 120700 E007	1/2															○				
RNG 45 T0220	RNGN 120700 T00520	1/2						●	●	●	●										
RNG 45 T0225	RNGN 120700 T00525	1/2							○		○										
RNG 45 T0320	RNGN 120700 T00820	1/2			●	●	●														
RNG 45 T0420	RNGN 120700 T01020	1/2							●	●	●								●		
RNG 45 T0525	RNGN 120700 T01225	1/2																			●
RNG 45 Z0620	RNGN 120700 Z01520	1/2									●										
RNG 45 S0825	RNGN 120700 S02025	1/2																		●	
RNG 45 T0825	RNGN 120700 T02025	1/2															●			○	
RNG 45 Z0825	RNGN 120700 Z02025	1/2																	●		●
RNG 45 P2810	RNGN 120700 P07010	1/2															●				
RNG 55 T0220	RNGN 150700 T00520	5/8						●	●	●	●										
RNG 55 T0225	RNGN 150700 T00525	5/8							○		○										
RNG 55 T0320	RNGN 150700 T00820	5/8					●														
RNG 64 T0825	RNGN 190600 T02025	3/4															●				
RNG 64 P6010	RNGN 190600 P15010	3/4															●				
RNG 65 T0220	RNGN 190700 T00520	3/4						●	●	●	●										
RNG 65 T0225	RNGN 190700 T00525	3/4							○												
RNG 65 T0320	RNGN 190700 T00820	3/4					●														
RNG 65 T0420	RNGN 190700 T01020	3/4							●		●										
RNG 85 T0220	RNGN 250700 T00520	1						●	○	●	○										
RNG 85 S6015	RNGN 250700 S15015	1								●											
RNG 86 T0220	RNGN 250900 T00520	1						●		●											

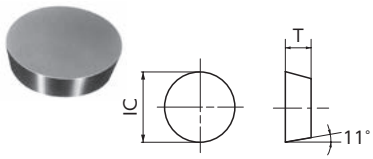
Holders ➡ F16
Boring bars ➡ G4
Cutters ➡ I14

RPG

(inch)	IC	T
RPG 21.5	1/4	3/32
RPG 32	3/8	1/8
RPG 42	1/2	1/8

(inch)	IC	T
RPG 43	1/2	3/16
RPG 65	3/4	5/16

● : 1st Choice ● : 2nd choice



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

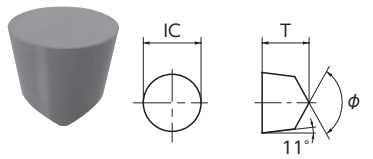
Item Number	ISO Item Number	IC	R	BIDEMICS Coated JP2	JX1	JX3	Ceramics SiAlON SX7	SX3	SX9	SX5	Whisker WA1	Silicon Nitride SX6	SP9	Alumina HC1	HW2	Alumina - TiC HC6	HC2	HC5	HC7	ZC7	ZC4
RPG 21.5 E02	RPGN 060200 E004	1/4					●														
RPG 21.5 T0220	RPGN 060200 T00520	1/4						●	●	●	●										
RPG 21.5 T0320	RPGN 060200 T00820	1/4					●														
RPG 21.5 T0420	RPGN 060200 T01020	1/4									●										
RPG 32 E02	RPGN 090300 E004	3/8					●														
RPG 32 T0220	RPGN 090300 T00520	3/8						●	●		●										
RPG 32 T0320	RPGN 090300 T00820	3/8					●														
RPG 32 T0420	RPGN 090300 T01020	3/8									●										
RPG 32 T0425	RPGN 090300 T01025	3/8															●				
RPG 42 T0525	RPGN 120300 T01225	1/2																			●
RPG 43 E01	RPGN 120400 E002	1/2							●												
RPG 43 E02	RPGN 120400 E004	1/2					●														
RPG 43 T0220	RPGN 120400 T00520	1/2						●	●	●	●										
RPG 43 T0225	RPGN 120400 T00525	1/2							○												
RPG 43 T0320	RPGN 120400 T00820	1/2					●														
RPG 43 T0420	RPGN 120400 T01020	1/2							●	●	●								●		
RPG 43 Z0620	RPGN 120400 Z01520	1/2									●										
RPG 43 Z0825	RPGN 120400 Z02025	1/2																	●		
RPG 65 T0220	RPGN 190700 T00520	3/4								●											

Cutters ➡ I12
Boring bars ➡ G4

RPGX

(inch)	IC	T	θ
RPGX 23	1/4	3/16	120
RPGX 25	1/4	5/16	120
RPGX 35	3/8	5/16	120
RPGX 45	1/2	5/16	120

● : 1st Choice ● : 2nd choice



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

Item Number	ISO Item Number	IC	R	BIDEMICS Coated JP2	JX1	JX3	Ceramics SiAlON SX7	SX3	SX9	SX5	Whisker WA1	Silicon Nitride SX6	SP9	Alumina HC1	HW2	Alumina - TiC HC6	HC2	HC5	HC7	ZC7	ZC4
RPGX 23 T0220	RPGX 060400 T00520	1/4								●	●										
RPGX 25 T0220	RPGX 060700 T00520	1/4						●													
RPGX 35 E02	RPGX 090700 E004	3/8			●	●					●										
RPGX 35 T0220	RPGX 090700 T00520	3/8						●	●	●	●										
RPGX 35 T0320	RPGX 090700 T00820	3/8			●	●	●														
RPGX 35 T0420	RPGX 090700 T01020	3/8									●										
RPGX 45 E02	RPGX 120700 E004	1/2			●	●					●										
RPGX 45 T0220	RPGX 120700 T00520	1/2						●	●	●	●										
RPGX 45 T0320	RPGX 120700 T00820	1/2			●	●	●														
RPGX 45 T0420	RPGX 120700 T01020	1/2							●		●										

Holders ➡ F19 • F20 • F21 • F22

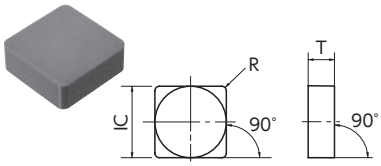
● : Stock
● : Stock (Newly added)
■ □ R L : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
RⓁ : 1-2 week delivery (Right / Left-hand only)
RⓁ : 1-2 week delivery (Right / Left-hand only, Newly added)

SNG3 / SNG4 / SNG55

(inch)	IC	T
SNG 32	3/8	1/8
SNG 33	3/8	3/16
SNG 43	1/2	3/16

(inch)	IC	T
SNG 45	1/2	5/16
SNG 55	5/8	5/16

● : 1st Choice ● : 2nd choice



		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS Coated			Ceramics														
					SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
SNG 322 T0425	SNGN 090308 T01025	3/8	.031													●	○				
SNG 322 T0525	SNGN 090308 T01225	3/8	.031														●				
SNG 324 T0425	SNGN 090316 T01025	3/8	.063											○			○				
SNG 324 T0525	SNGN 090316 T01225	3/8	.063														●				
SNG 332 T0425	SNGN 090408 T01025	3/8	.031														○				
SNG 431 T0425	SNGN 120404 T01025	1/2	.016														○				
SNG 432 T0220	SNGN 120408 T00520	1/2	.031						●	●	●										
SNG 432 T0420	SNGN 120408 T01020	1/2	.031								●	●	●								
SNG 432 T0425	SNGN 120408 T01025	1/2	.031								○			●		●	○			○	
SNG 432 T0525	SNGN 120408 T01225	1/2	.031														●				●
SNG 432 T0820	SNGN 120408 T02020	1/2	.031									○									
SNG 432 S0825	SNGN 120408 S02025	1/2	.031																	○	
SNG 432 T0825	SNGN 120408 T02025	1/2	.031						○												
SNG 433 T0220	SNGN 120412 T00520	1/2	.047						●	●	●										
SNG 433 T0420	SNGN 120412 T01020	1/2	.047								●	●	●								
SNG 433 T0425	SNGN 120412 T01025	1/2	.047								○			●		●	○			○	
SNG 433 T0525	SNGN 120412 T01225	1/2	.047														●				●
SNG 433 T0820	SNGN 120412 T02020	1/2	.047									●	○								
SNG 433 S0825	SNGN 120412 S02025	1/2	.047																	○	
SNG 433 T0825	SNGN 120412 T02025	1/2	.047						○												
SNG 433 Z0825	SNGN 120412 Z02025	1/2	.047																		●
SNG 434 T0220	SNGN 120416 T00520	1/2	.063						●	●	●										
SNG 434 T0420	SNGN 120416 T01020	1/2	.063								●	●	●								
SNG 434 T0425	SNGN 120416 T01025	1/2	.063								○			○		●	●			○	
SNG 434 T0525	SNGN 120416 T01225	1/2	.063														●				●
SNG 434 T0820	SNGN 120416 T02020	1/2	.063									●									
SNG 434 S0825	SNGN 120416 S02025	1/2	.063																	○	
SNG 434 T0825	SNGN 120416 T02025	1/2	.063						○												
SNG 435 T0420	SNGN 120420 T01020	1/2	.079										●								
SNG 435 T0425	SNGN 120420 T01025	1/2	.079													○	○				
SNG 435 T0820	SNGN 120420 T02020	1/2	.079									●									
SNG 435 T0825	SNGN 120420 T02025	1/2	.079								○			○							
SNG 436 T0425	SNGN 120424 T01025	1/2	.094														○				
SNG 436 T0625	SNGN 120424 T01525	1/2	.094														●				
SNG 436 T0820	SNGN 120424 T02020	1/2	.094									○									
SNG 438 T0525	SNGN 120432 T01225	1/2	.125														●				
SNG 438 S0825	SNGN 120432 S02025	1/2	.125														●				
SNG 452 T0220	SNGN 120708 T00520	1/2	.031								●										
SNG 452 T0825	SNGN 120708 T02025	1/2	.031											○			○				
SNG 453 T0220	SNGN 120712 T00520	1/2	.047							●	●										
SNG 453 S0825	SNGN 120712 S02025	1/2	.047														○				
SNG 453 T0825	SNGN 120712 T02025	1/2	.047														●				
SNG 454 T0220	SNGN 120716 T00520	1/2	.063							●	●										
SNG 454 Z0620	SNGN 120716 Z01520	1/2	.063								●										
SNG 454 T0825	SNGN 120716 T02025	1/2	.063												○		●				
SNG 554 T0820	SNGN 150716 T02020	5/8	.063								●										

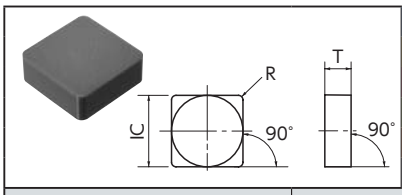
SNG6	➡ E14
Holders	➡ F10・F11
Boring bars	➡ G6
Cutters	➡ I18・I20・I22

● : Stock
● : Stock (Newly added)
■ □ R L : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only)
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only, Newly added)

SNG6

(inch)	IC	T
SNG 63	3/4	3/16
SNG 64	3/4	1/4
SNG 65	3/4	5/16

● : 1st Choice ● : 2nd choice



		BIDEMICS			Ceramics														
		Coated			SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

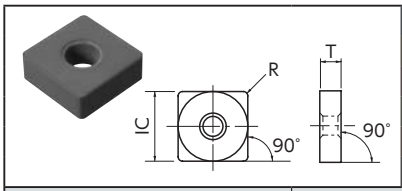
Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
SNG 632 T0820	SNGN 190408 T02020	3/4	.031														●				
SNG 634 T0820	SNGN 190416 T02020	3/4	.063														●				
SNG 643 T0820	SNGN 190612 T02020	3/4	.047														●				
SNG 644 T0120	SNGN 190616 T00320	3/4	.063							●											
SNG 644 T0220	SNGN 190616 T00520	3/4	.063					●	●	●	●										
SNG 644 T0225	SNGN 190616 T00525	3/4	.063						○												
SNG 644 T0320	SNGN 190616 T00820	3/4	.063				●														
SNG 644 T0420	SNGN 190616 T01020	3/4	.063						●	●											
SNG 644 Z0620	SNGN 190616 Z01520	3/4	.063								●										
SNG 644 T0825	SNGN 190616 T02025	3/4	.063														●				
SNG 653 T0825	SNGN 190712 T02025	3/4	.047														●				
SNG 654 T0825	SNGN 190716 T02025	3/4	.063														●				
SNG 656 T0120	SNGN 190724 T00320	3/4	.094							●											
SNG 656 T0225	SNGN 190724 T00525	3/4	.094						○												
SNG 656 T0320	SNGN 190724 T00820	3/4	.094				●														

SNG3 / 4 / 5 ➡ E13

SNGA

(inch)	IC	T
SNGA 43	1/2	3/16
SNGA 54	5/8	1/4
SNGA 64	3/4	1/4

● : 1st Choice ● : 2nd choice



		BIDEMICS			Ceramics														
		Coated			SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

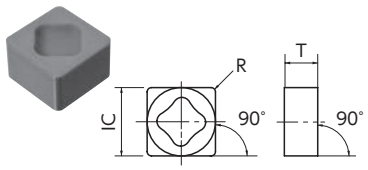
Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
SNGA 432 T0220	SNGA 120408 T00520	1/2	.031								●										
SNGA 432 T0425	SNGA 120408 T01025	1/2	.031																	○	
SNGA 432 T0525	SNGA 120408 T01225	1/2	.031													●	●				
SNGA 432 T0820	SNGA 120408 T02020	1/2	.031									●									
SNGA 432 S0825	SNGA 120408 S02025	1/2	.031																	●	
SNGA 432 T0825	SNGA 120408 T02025	1/2	.031																		
SNGA 432 Z0825	SNGA 120408 Z02025	1/2	.031																		●
SNGA 433 T0220	SNGA 120412 T00520	1/2	.047						●		●										
SNGA 433 T0420	SNGA 120412 T01020	1/2	.047						●	●	●										
SNGA 433 T0425	SNGA 120412 T01025	1/2	.047																	○	
SNGA 433 T0525	SNGA 120412 T01225	1/2	.047													●	●				●
SNGA 433 T0820	SNGA 120412 T02020	1/2	.047									●									
SNGA 433 S0825	SNGA 120412 S02025	1/2	.047																	●	
SNGA 433 Z0825	SNGA 120412 Z02025	1/2	.047																		●
SNGA 434 T0525	SNGA 120416 T01225	1/2	.063													●					
SNGA 434 T0820	SNGA 120416 T02020	1/2	.063									●									
SNGA 543 T0220	SNGA 150612 T00520	5/8	.047							●	●										
SNGA 543 T0225	SNGA 150612 T00525	5/8	.047						●												
SNGA 544 T0220	SNGA 150616 T00520	5/8	.063							●											
SNGA 544 T0820	SNGA 150616 T02020	5/8	.063							●											
SNGA 644 T0825	SNGA 190616 T02025	3/4	.063														●				

Holders ➡ F11
Boring bars ➡ G6

SNGX

(inch)	IC	T
SNGX 45	1/2	5/16
SNGX 55	5/8	5/16

● : 1st Choice ● : 2nd choice



		BIDEMICS			Ceramics															
		Coated			SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC						
		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

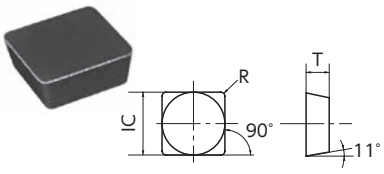
Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
SNGX 452 T0220	SNGX 120708 T00520	1/2	.031						●												
SNGX 452 T0320	SNGX 120708 T00820	1/2	.031				●														
SNGX 453 T0220	SNGX 120712 T00520	1/2	.047					●	●												
SNGX 453 T0320	SNGX 120712 T00820	1/2	.047				●														
SNGX 453 T0820	SNGX 120712 T02020	1/2	.047									●									
SNGX 453 T0825	SNGX 120712 T02025	1/2	.047										●								
SNGX 454 T0820	SNGX 120716 T02020	1/2	.063									●	●								
SNGX 454 T0825	SNGX 120716 T02025	1/2	.063										●								
SNGX 552 T0320	SNGX 150708 T00820	5/8	.031				●														
SNGX 553 T0220	SNGX 150712 T00520	5/8	.047						●	●											
SNGX 553 T0320	SNGX 150712 T00820	5/8	.047				●														
SNGX 554 T0320	SNGX 150716 T00820	5/8	.063				●														

Holders ➡ F10・F11
Boring bars ➡ G6

SPG

(inch)	IC	T
SPG 32	3/8	1/8
SPG 42	1/2	1/8
SPG 43	1/2	3/16
SPG 63	3/4	3/16

● : 1st Choice ● : 2nd choice



		BIDEMICS			Ceramics															
		Coated			SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC						
		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

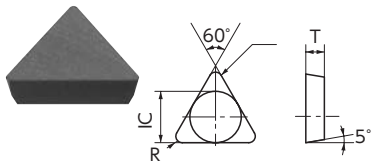
Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
SPG 322 T0425	SPGN 090308 T01025	3/8	.031														○				
SPG 324 S0820	SPGN 090316 S02020	3/8	.063														●				
SPG 422 T0425	SPGN 120308 T01025	1/2	.031													●	●				
SPG 422 T0525	SPGN 120308 T01225	1/2	.031																		●
SPG 432 T0420	SPGN 120408 T01020	1/2	.031									●									
SPG 432 T0425	SPGN 120408 T01025	1/2	.031														●				
SPG 433 T0420	SPGN 120412 T01020	1/2	.047									●									
SPG 433 T0425	SPGN 120412 T01025	1/2	.047														○				
SPG 434 T0420	SPGN 120416 T01020	1/2	.063									●									
SPG 434 T0425	SPGN 120416 T01025	1/2	.063													●					
SPG 434 T0820	SPGN 120416 T02020	1/2	.063									●									
SPG 634 T0420	SPGN 190416 T01020	3/4	.063									●									

● : Stock
● : Stock (Newly added)
■ □ R L : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only)
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only, Newly added)

TBGE

● : 1st Choice ● : 2nd choice

(inch)	IC	T
TBGE 52	5/32	.063



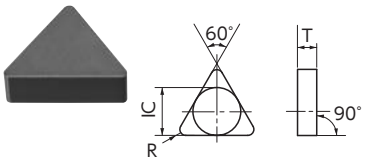
		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS Coated			Ceramics SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
TBGE 521 T0225	TBGE 060104 T00525	5/32	.016														●				
TBGE 522 T0225	TBGE 060108 T00525	5/32	.031														○				

TNG2 / TNG3

● : 1st Choice ● : 2nd choice

(inch)	IC	T
TNG 22	1/4	1/8
TNG 32	3/8	1/8
TNG 33	3/8	3/16
TNG 35	3/8	5/16



		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS Coated			Ceramics SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

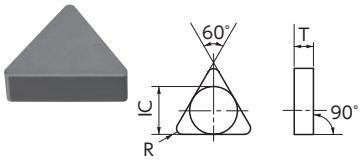
Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
TNG 221 T0225	TNGN 110304 T00525	1/4	.016														●				
TNG 222 T0225	TNGN 110308 T00525	1/4	.031													●	●				
TNG 321 T0425	TNGN 160304 T01025	3/8	.016														●				
TNG 322 T0425	TNGN 160308 T01025	3/8	.031													●	●				
TNG 322 T0525	TNGN 160308 T01225	3/8	.031																		●
TNG 322 T0825	TNGN 160308 T02025	3/8	.031														●				
TNG 331 T0425	TNGN 160404 T01025	3/8	.016														●				
TNG 332 T0420	TNGN 160408 T01020	3/8	.031								●		●								
TNG 332 T0425	TNGN 160408 T01025	3/8	.031								○			○		●	○			○	
TNG 332 T0525	TNGN 160408 T01225	3/8	.031														●	●			●
TNG 332 T0820	TNGN 160408 T02020	3/8	.031									○									
TNG 332 S0825	TNGN 160408 S02025	3/8	.031																	○	
TNG 332 T0825	TNGN 160408 T02025	3/8	.031						○												
TNG 333 T0420	TNGN 160412 T01020	3/8	.047								●	●	●								
TNG 333 T0425	TNGN 160412 T01025	3/8	.047								○			●		●	●			○	
TNG 333 T0525	TNGN 160412 T01225	3/8	.047																		●
TNG 333 T0820	TNGN 160412 T02020	3/8	.047									●					●				
TNG 333 S0825	TNGN 160412 S02025	3/8	.047																	○	
TNG 333 T0825	TNGN 160412 T02025	3/8	.047						○												
TNG 334 T0420	TNGN 160416 T01020	3/8	.063										●								
TNG 334 T0425	TNGN 160416 T01025	3/8	.063											●	○		○				
TNG 334 T0525	TNGN 160416 T01225	3/8	.063														●				
TNG 334 T0820	TNGN 160416 T02020	3/8	.063									○									
TNG 334 T0825	TNGN 160416 T02025	3/8	.063						○												
TNG 335 T0425	TNGN 160420 T01025	3/8	.079											○			○				
TNG 335 T0820	TNGN 160420 T02020	3/8	.079									○									
TNG 352 T0825	TNGN 160708 T02025	3/8	.031														○				
TNG 353 T0825	TNGN 160712 T02025	3/8	.047														○				

TNG4 / 5 ➡ E17
Holders ➡ F14

TNG4 / TNG5

(inch)	IC	T
TNG 43	1/2	3/16
TNG 45	1/2	5/16
TNG 54	5/8	1/4

● : 1st Choice ● : 2nd choice



		BIDEMICS Coated			Ceramics														
					SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
TNG 431 T0425	TNGN 220404 T01025	1/2	.016														●				
TNG 432 T0220	TNGN 220408 T00520	1/2	.031						●	●	●										
TNG 432 T0420	TNGN 220408 T01020	1/2	.031						●		●										
TNG 432 T0425	TNGN 220408 T01025	1/2	.031													●					
TNG 432 T0525	TNGN 220408 T01225	1/2	.031														●				
TNG 432 T0820	TNGN 160408 T02020	1/2	.031									●									
TNG 432 Z0825	TNGN 220408 Z02025	1/2	.031																		●
TNG 433 T0220	TNGN 220412 T00520	1/2	.047							●	●										
TNG 433 T0225	TNGN 220412 T00525	1/2	.047							●											
TNG 433 T0425	TNGN 220412 T01025	1/2	.047													●					
TNG 433 T0630	TNGN 220412 T01530	1/2	.047														●				
TNG 433 Z0820	TNGN 220412 Z02020	1/2	.047														●				
TNG 433 Z0825	TNGN 220412 Z02025	1/2	.047																	●	●
TNG 434 T0220	TNGN 220416 T00520	1/2	.063							●	●										
TNG 434 T0625	TNGN 220416 T01525	1/2	.063														●				
TNG 452 T0220	TNGN 220708 T00520	1/2	.031							●											
TNG 452 T0825	TNGN 220708 T02025	1/2	.031														●				
TNG 453 T0220	TNGN 220712 T00520	1/2	.047							●	●										
TNG 454 T0825	TNGN 220716 T02025	1/2	.063														●				
TNG 543 T0825	TNGN 270612 T02025	5/8	.047														●				
TNG 544 T0120	TNGN 270616 T00320	5/8	.063							●											
TNG 544 T0220	TNGN 270616 T00520	5/8	.063								●										
TNG 544 T0825	TNGN 270616 T02025	5/8	.063														●				

TNG2 / 3 ➡ E16

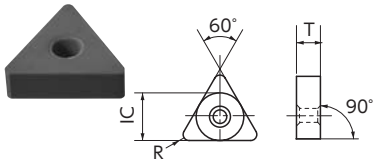
● : Stock
● : Stock (Newly added)
■ □ R L : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only)
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only, Newly added)

TNGA

(inch)	IC	T
TNGA 32	3/8	1/8
TNGA 33	3/8	3/16

(inch)	IC	T
TNGA 43	1/2	3/16

● : 1st Choice ● : 2nd choice



		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS Coated			Ceramics SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

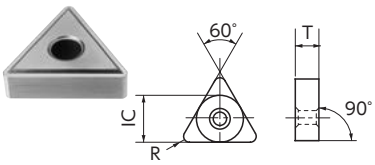
Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
TNGA 321 T0425	TNGA 160304 T01025	3/8	.016														●				
TNGA 322 T0525	TNGA 160308 T01225	3/8	.031														●				
TNGA 331 T0425	TNGA 160404 T01025	3/8	.016														●			○	
TNGA 331 S0825	TNGA 160404 S02025	3/8	.016																	●	
TNGA 331 Z0825	TNGA 160404 Z02025	3/8	.016																		●
TNGA 332 T0425	TNGA 160408 T01025	3/8	.031										●			○	○			○	
TNGA 332 T0525	TNGA 160408 T01225	3/8	.031													●	●	●			●
TNGA 332 T0820	TNGA 160408 T02020	3/8	.031									●									
TNGA 332 S0825	TNGA 160408 S02025	3/8	.031																	●	
TNGA 332 T0825	TNGA 160408 T02025	3/8	.031						○												
TNGA 332 Z0825	TNGA 160408 Z02025	3/8	.031																		●
TNGA 333 T0425	TNGA 160412 T01025	3/8	.047										●			○	●			○	
TNGA 333 T0525	TNGA 160412 T01225	3/8	.047													●					
TNGA 333 T0820	TNGA 160412 T02020	3/8	.047									●									
TNGA 333 S0825	TNGA 160412 S02025	3/8	.047																	●	
TNGA 333 T0825	TNGA 160412 T02025	3/8	.047						○												
TNGA 333 Z0825	TNGA 160412 Z02025	3/8	.047																		●
TNGA 334 T0825	TNGA 160416 T02025	3/8	.063						○												
TNGA 431 T0425	TNGA 220404 T01025	1/2	.016														●				
TNGA 432 T0220	TNGA 220408 T00520	1/2	.031								●										
TNGA 432 T0525	TNGA 220408 T01225	1/2	.031																		●
TNGA 432 S0825	TNGA 220408 S02025	1/2	.031																	●	
TNGA 432 T0825	TNGA 220408 T02025	1/2	.031														●	●			
TNGA 433 T0825	TNGA 220412 T02025	1/2	.047														●				
TNGA 433 Z0825	TNGA 220412 Z02025	1/2	.047																		●
TNGA 434 T0525	TNGA 220416 T01225	1/2	.063																		●
TNGA 434 T0825	TNGA 220416 T02025	1/2	.063														●				

Holders ➡ F14 • Q34

TNGG with chip-breaker

(inch)	IC	T
TNGG 33	3/8	3/16

● : 1st Choice ● : 2nd choice



		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS Coated			Ceramics SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

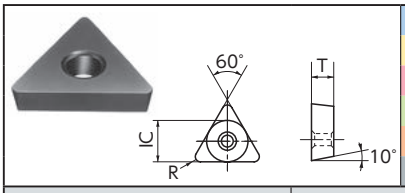
Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
TNGG 332 Z0430 AG	TNGG 160408 Z01030 AG	3/8	.031																	●	
TNGG 333 Z0430 AG	TNGG 160412 Z01030 AG	3/8	.047																	●	

Holders ➡ F14 • Q34

TP

(inch)	IC	T
TP 41	1/4	3/32
TP 42	1/4	3/32

● : 1st Choice ● : 2nd choice



		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

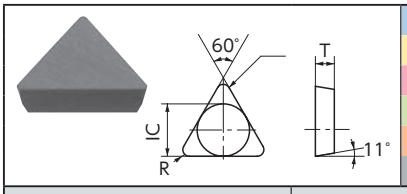
Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
				BIDEMICS Coated			Ceramics SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
TP 41 T0225		1/4	.016														●				
TP 42 T0225		1/4	.031														●				

TPG / TPGE

(inch)	IC	T
TPG 22	1/4	1/8
TPG 32	3/8	1/8
TPG 43	1/2	3/16

(inch)	IC	T
TPGE 52	5/32	1/16
TPGE 73	7/32	3/32

● : 1st Choice ● : 2nd choice



		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

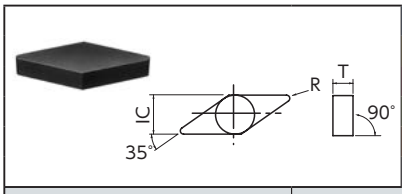
Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
				BIDEMICS Coated			Ceramics SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
TPG 221 T0225	TPGN 110304 T00525	1/4	.016														●				
TPG 221 T0425	TPGN 110304 T01025	1/4	.016																	○	
TPG 221 T0525	TPGN 110304 T01225	1/4	.016																		●
TPG 222 T0225	TPGN 110308 T00525	1/4	.031													●	●				
TPG 222 T0425	TPGN 110308 T01025	1/4	.031																	○	
TPG 222 T0525	TPGN 110308 T01225	1/4	.031																		●
TPG 222 T0825	TPGN 110308 T02025	1/4	.031														●				
TPG 223 T0225	TPGN 110312 T00525	1/4	.047													●					
TPG 223 T0820	TPGN 110312 T02020	1/4	.047														●				
TPG 32Y T0425	TPGN 160302 T01025	3/8	.008														●				
TPG 321 T0425	TPGN 160304 T01025	3/8	.016														●			○	
TPG 321 T0525	TPGN 160304 T01225	3/8	.016																		●
TPG 322 T0220	TPGN 160308 T00520	3/8	.031							●	●										
TPG 322 T0425	TPGN 160308 T01025	3/8	.031													●	○			○	
TPG 322 T0525	TPGN 160308 T01225	3/8	.031														●				●
TPG 323 T0220	TPGN 160312 T00520	3/8	.047							●	●										
TPG 323 T0425	TPGN 160312 T01025	3/8	.047														●				
TPG 323 T0525	TPGN 160312 T01225	3/8	.047																		●
TPG 324 T0425	TPGN 160316 T01025	3/8	.063														●				
TPG 431 T0425	TPGN 220404 T01025	1/2	.016														●				
TPG 432 T0220	TPGN 220408 T00520	1/2	.031							●											
TPG 432 T0425	TPGN 220408 T01025	1/2	.031													●	●				
TPG 432 T0525	TPGN 220408 T01225	1/2	.031																		●
TPG 433 T0220	TPGN 220412 T00520	1/2	.047							●											
TPG 434 T0220	TPGN 220416 T00520	1/2	.063							●											
TPG 434 T0425	TPGN 220416 T01025	1/2	.063														●				
TPGE 521 T0225	TPGN 060104 T00525	5/32	.016														●				
TPGE 731 T0225	TPGN 090204 T00525	7/32	.016														●				
TPGE 732 T0225	TPGN 090208 T00525	7/32	.031														●				

● : Stock
● : Stock (Newly added)
■ □ R L : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only)
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only, Newly added)

VNG

● : 1st Choice ● : 2nd choice

(inch)	IC	T
VNG 33	3/8	3/16



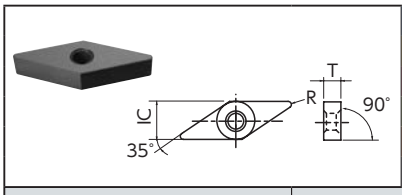
		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS (Coated)			Ceramics: SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
VNG 331 T0425	VNGN 160404 T01025	3/8	.016														●				
VNG 332 T0425	VNGN 160408 T01025	3/8	.031														●				

VNGA

● : 1st Choice ● : 2nd choice

(inch)	IC	T
VNGA 33	3/8	3/16
VNGA 43	1/2	3/16



		JP2*	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS (Coated)			Ceramics: SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2*	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
VNGA 331 BQ T0220	VNGA 160404 BQ T00520	3/8	.016	●																	
VNGA 331 BQ E02	VNGA 160404 BQ ENB	3/8	.016	●																	
VNGA 331 T0220	VNGA 160404 T00520	3/8	.016							●											
VNGA 331 T0225	VNGA 160404 T00525	3/8	.016							●											
VNGA 331 T0420	VNGA 160404 T01020	3/8	.016									○									
VNGA 331 T0425	VNGA 160404 T01025	3/8	.016													○	●			○	
VNGA 331 T0525	VNGA 160404 T01225	3/8	.016													●					●
VNGA 331 S0825	VNGA 160404 S02025	3/8	.016																	●	
VNGA 331 Z0825	VNGA 160404 Z02025	3/8	.016																		●
VNGA 332 BQ T0220	VNGA 160408 BQ T00520	3/8	.031	●																	
VNGA 332 BQ E02	VNGA 160408 BQ ENB	3/8	.031	●																	
VNGA 332 T0220	VNGA 160408 T00520	3/8	.031							●	●										
VNGA 332 T0320	VNGA 160408 T00820	3/8	.031				●														
VNGA 332 T0420	VNGA 160408 T01020	3/8	.031									●	●								
VNGA 332 T0425	VNGA 160408 T01025	3/8	.031													○	●			○	
VNGA 332 T0525	VNGA 160408 T01225	3/8	.031													●					●
VNGA 332 S0825	VNGA 160408 S02025	3/8	.031																	●	
VNGA 332 Z0825	VNGA 160408 Z02025	3/8	.031																		●
VNGA 333 BQ T0220	VNGA 160412 BQ T00520	3/8	.047	●																	
VNGA 333 BQ E02	VNGA 160412 BQ ENB	3/8	.047	●																	
VNGA 333 T0220	VNGA 160412 T00520	3/8	.047								●										
VNGA 333 T0320	VNGA 160412 T00820	3/8	.047				●														
VNGA 333 T0420	VNGA 160412 T01020	3/8	.047									●	●								
VNGA 333 T0425	VNGA 160412 T01025	3/8	.047														●	●		○	●
VNGA 333 S0825	VNGA 160412 S02025	3/8	.047																	●	
VNGA 333 Z0825	VNGA 160412 Z02025	3/8	.047																		●
VNGA 431 T0425	VNGA 220404 T01025	1/2	.016														●				
VNGA 432 T0425	VNGA 220408 T01025	1/2	.031														●				
VNGA 433 T0425	VNGA 220412 T01025	1/2	.047															●			
VNGA 436 T0420	VNGA 220424 T01020	1/2	.094								●										

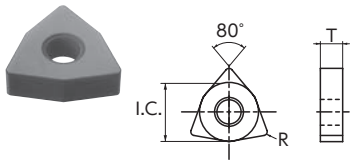
*Brazed insert

Holders ➡ F12・F13

WNGA

(inch)	IC	T
WNGA 33	3/8	3/16
WNGA 43	1/2	3/16

● : 1st Choice ● : 2nd choice



		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS Coated			Ceramics SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

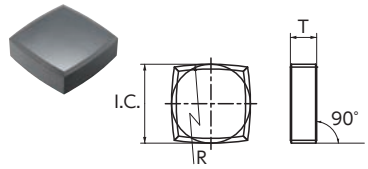
Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
WNGA 331 T0525	WNGA 060404 T01225	3/8	.016																		●
WNGA 332 T0525	WNGA 060408 T01225	3/8	.031																		●
WNGA 333 T0525	WNGA 060412 T01225	3/8	.047																		●
WNGA 431 T0220	WNGA 080404 T00520	1/2	.016								●										
WNGA 431 Z0825	WNGA 080404 Z02025	1/2	.016																		●
WNGA 432 T0220	WNGA 080408 T00520	1/2	.031						●	●	●										
WNGA 432 T0420	WNGA 080408 T01020	1/2	.031										●								
WNGA 432 T0525	WNGA 080408 T01225	1/2	.031													●					●
WNGA 432 T0820	WNGA 080408 T02020	1/2	.031									●					●				
WNGA 432 Z0825	WNGA 080408 Z02025	1/2	.031																		●
WNGA 433 T0220	WNGA 080412 T00520	1/2	.047						●	●	●										
WNGA 433 T0420	WNGA 080412 T01020	1/2	.047										●								
WNGA 433 T0525	WNGA 080412 T01225	1/2	.047													●					
WNGA 433 T0820	WNGA 080412 T02020	1/2	.047									●					●				
WNGA 434 T0420	WNGA 080416 T01020	1/2	.063						●												
WNGA 434 T0820	WNGA 080416 T02020	1/2	.063									●									

Holders ➡ F15
Boring bars ➡ G6

ZT 1130

(inch)	IC	T
ZT1130	1-1/2	1/2

● : 1st Choice ● : 2nd choice



		JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
		BIDEMICS Coated			Ceramics SiAlON				Whisker	Silicon Nitride		Alumina		Alumina - TiC					
Steel	P																		
Stainless Steel	M																		
Cast Iron	K				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N																		
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●										
Hardened Material	H								●						●	●	●	●	●

Item Number	ISO Item Number	IC	R	JP2	JX1	JX3	SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC1	HW2	HC6	HC2	HC5	HC7	ZC7	ZC4
ZT 1130 PNX5		1-1/2	4-1/2														●	●	●		

● : Stock
● : Stock (Newly added)
■ □ R L : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
: Coolant through
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only)
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only, Newly added)