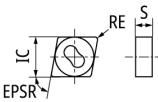


Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

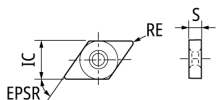
Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramIX	Alumina Ceramics				Silicon Nitride Ceramics					Whisker Ceramics					
	(ISO)		°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	PVD	PVD	PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	CVD	WA1	WA5	
														120	JP2														JP1			JP3
	CNGN120404T01025	T01025	80	12.7	4.76	-	0.4	-	-	-	-	-							●	●												
	CNGN120408S02025	S02025	80	12.7	4.76	-	0.8	-	-	-	-	-										●										
	CNGN120408T00520	T00520	80	12.7	4.76	-	0.8	-	-	-	-	-														●			●			
	CNGN120408T00820	T00820	80	12.7	4.76	-	0.8	-	-	-	-	-																		●		
	CNGN120408T01020	T01020	80	12.7	4.76	-	0.8	-	-	-	-	-																●	●			
	CNGN120408T01025	T01025	80	12.7	4.76	-	0.8	-	-	-	-	-							●		●		●									
	CNGN120408T02020	T02020	80	12.7	4.76	-	0.8	-	-	-	-	-							●		●		●					●				
	CNGN120408T02025	T02025	80	12.7	4.76	-	0.8	-	-	-	-	-					●									●			●			
	CNGN120408Z02025	Z02025	80	12.7	4.76	-	0.8	-	-	-	-	-								●							●					
	CNGN120412S02025	S02025	80	12.7	4.76	-	1.2	-	-	-	-	-											●									
	CNGN120412T00520	T00520	80	12.7	4.76	-	1.2	-	-	-	-	-														●			●			
	CNGN120412T00820	T00820	80	12.7	4.76	-	1.2	-	-	-	-	-																		●		
	CNGN120412T01020	T01020	80	12.7	4.76	-	1.2	-	-	-	-	-						●		●	●		●						●	●		
	CNGN120412T01025	T01025	80	12.7	4.76	-	1.2	-	-	-	-	-						●		●	●		●							●		
	CNGN120412T02020	T02020	80	12.7	4.76	-	1.2	-	-	-	-	-							●		●							●				
	CNGN120412T02025	T02025	80	12.7	4.76	-	1.2	-	-	-	-	-						●									●			●		
	CNGN120412Z02025	Z02025	80	12.7	4.76	-	1.2	-	-	-	-	-								●												
	CNGN120416T00520	T00520	80	12.7	4.76	-	1.6	-	-	-	-	-									●										●	
	CNGN120416T01020	T01020	80	12.7	4.76	-	1.6	-	-	-	-	-																	●			
	CNGN120416T02020	T02020	80	12.7	4.76	-	1.6	-	-	-	-	-																	●			
	CNGN120416T02025	T02025	80	12.7	4.76	-	1.6	-	-	-	-	-																●				
	CNGN120420T01025	T01025	80	12.7	4.76	-	2	-	-	-	-	-									●											
	CNGN120708T00520	T00520	80	12.7	7.94	-	0.8	-	-	-	-	-								●											●	
	CNGN120708T02025	T02025	80	12.7	7.94	-	0.8	-	-	-	-	-								●												
	CNGN120712T02025	T02025	80	12.7	7.94	-	1.2	-	-	-	-	-								●												
	CNGN160716T00520	T00520	80	15.875	7.94	-	1.6	-	-	-	-	-																			●	

CNGX



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramIX	Alumina Ceramics				Silicon Nitride Ceramics				Whisker Ceramics																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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	(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	120	JP2	JP1	JP3	450	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	CVD	WA1	WA5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	CNGX120712T02025	T02025	80	12.7	7.94	-	1.2	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	



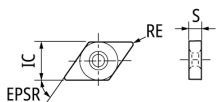
	Steel
Stainless Steel	
Cast Iron	☒ ☒ ☒ ☒ ☐ ☐ ☐ ☐ ☒ ☒ ☐ ☐
Non-Ferrous Material	
Heat Resistant Alloy	☒ ☒ ☒ ☒ ☐ ☐ ☒ ☒ ☒ ☒ ☐ ☒ ☒
Hardened Material	☒ ☐ ☒ ☐ ☒ ☒
Others (non-metallic)	

[illegible]

Turning Insert

D

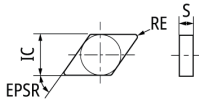
DNGG-AG with chipbreaker



	Steel
Stainless Steel	
Cast Iron	☒ ☒ ☒ ☒ ☐ ☐ ☐ ☐ ☒ ☒ ☐ ☐
Non-Ferrous Material	
Heat Resistant Alloy	☒ ☒ ☒ ☒ ☐ ☐ ☒ ☒ ☒ ☒ ☐ ☒ ☒
Hardened Material	☒ ☐ ☒ ☐ ☒ ☒
Others (non-metallic)	

[illegible]

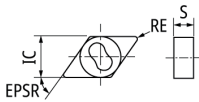
DNGN



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramIX	Alumina Ceramics							Silicon Nitride Ceramics						Whisker Ceramics	
													120 PVD	JP2 PVD	JX1	JX3	450 PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7 PVD	SX3	SX5	SX7	SX9	SX6	SP9 CVD	WA1	WA5
	DNGN150404T01025	T01025	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGN150408S02025	S02025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGN150408T01025	T01025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGN150408Z02025	Z02025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGN150412T00520	T00520	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGN150412T02025	T02025	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGN150712T02025	T02025	55	12.7	7.94	-	1.2	-	-	-	-	-																				

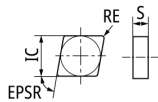
DNGX



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

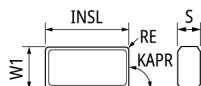
Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramIX	Alumina Ceramics							Silicon Nitride Ceramics						Whisker Ceramics	
													120 PVD	JP2 PVD	JX1	JX3	450 PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7 PVD	SX3	SX5	SX7	SX9	SX6	SP9 CVD	WA1	WA5
	DNGX150716T02025	T02025	55	12.7	7.94	-	1.6	-	-	-	-	-																				

ENGN

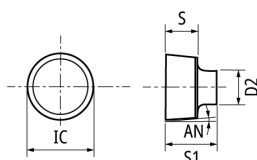


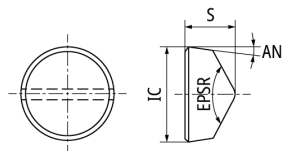
Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramIX	Alumina Ceramics							Silicon Nitride Ceramics						Whisker Ceramics	
													120 PVD	JP2 PVD	JX1	JX3	450 PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7 PVD	SX3	SX5	SX7	SX9	SX6	SP9 CVD	WA1	WA5
	ENGN130708T02025	T02025	75	12.7	7.94	-	0.8	-	-	-	-	-																				
	ENGN130712T02025	T02025	75	12.7	7.94	-	1.2	-	-	-	-	-																				

LNM

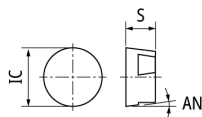
	Steel	Stainless Steel	Cast Iron	Non-Ferrous Material	Heat Resistant Alloy	Hardened Material	Others (non-metallic)
Material							
Temperature							
Pressure							
Corrosion Resistance							
Machinability							
Weldability							
Strength							
Ductility							
Toughness							
Cost							
Availability							
Longevity							
Weight							
Environmental Impact							
Recyclability							
Manufacturing Complexity							
Repairability							
Compatibility							
Performance							
Safety							
Regulatory Compliance							
Industry Standards							
Customer Satisfaction							
Supplier Reliability							
Logistics Efficiency							
Inventory Management							
Quality Control							
Documentation Accuracy							
Communication Effectiveness							
Team Collaboration							
Problem Solving Skills							
Adaptability							
Innovation Mindset							
Continuous Learning							
Time Management							
Resource Allocation							
Risk Assessment							
Decision Making							
Conflict Resolution							
Leadership Skills							
Project Management							

[illegible]**RBGX**[illegible][illegible]



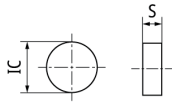
Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramIX	Alumina Ceramics							Silicon Nitride Ceramics						Whisker Ceramics				
													PVD	PVD	JX1	JX3		PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	CVD	WA1	WA5		
																	120																	JP2	450
	(ISO)		°	mm	mm	°	mm	mm	mm	mm	mm	mm	120	JP2	JX1	JX3	450	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5			
	RCGX060400T00520	T00520	120	6.35	4.76	7	-	-	-	-	-	-																					●	●	
	RCGX060400T00820	T00820	120	6.35	4.76	7	-	-	-	-	-	-			●	●																			
	RCGX060400T02020	T02020	120	6.35	4.76	7	-	-	-	-	-	-											★											★	
	RCGX060600P07015	P07015	120	6.35	6.35	7	-	-	-	-	-	-																						★	
	RCGX060700T00520	T00520	120	6.35	7.94	7	-	-	-	-	-	-																						●	
	RCGX090700E004	E004	120	9.525	7.94	7	-	-	-	-	-	-			●	●																			
	RCGX090700K20015	K20015	120	9.525	7.94	7	-	-	-	-	-	-											★											★	
	RCGX090700P07015	P07015	120	9.525	7.86	7	-	-	-	-	-	-								●															
	RCGX090700T00520	T00520	120	9.525	7.94	7	-	-	-	-	-	-													●				●					●	
	RCGX090700T00525	T00525	120	9.525	7.86	7	-	-	-	-	-	-																	●					●	
	RCGX090700T00820	T00820	120	9.525	7.94	7	-	-	-	-	-	-			●	●																			●
	RCGX090700T01020	T01020	120	9.525	7.94	7	-	-	-	-	-	-																							●
	RCGX120700E004	E004	120	12.7	7.94	7	-	-	-	-	-	-			●	●																			●
	RCGX120700K20015	K20015	120	12.7	7.94	7	-	-	-	-	-	-											★												★
	RCGX120700P15015	P15015	120	12.7	7.94	7	-	-	-	-	-	-								●															
	RCGX120700T00520	T00520	120	12.7	7.94	7	-	-	-	-	-	-													●				●						●
RCGX120700T00525	T00525	120	12.7	7.94	7	-	-	-	-	-	-																	●							
RCGX120700T00820	T00820	120	12.7	7.94	7	-	-	-	-	-	-			●	●																			●	
RCGX120700T01020	T01020	120	12.7	7.94	7	-	-	-	-	-	-																								
RCGX120700Z01520	Z01520	120	12.7	7.94	7	-	-	-	-	-	-																							●	



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramIX	Alumina Ceramics							Silicon Nitride Ceramics				Whisker Ceramics					
													PVD	PVD				PVD																
	(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	mm	120	JP2	JX1	JX3	450	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5	
	RCGY090603T00525	T00525	-	9.525	6.35	7	-	-	-	-	-	-																						●
	RCGY120603T00525	T00525	-	12.7	6.35	7	-	-	-	-	-	-																						●

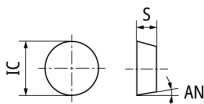


Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS	NTK Ceramix	Alumina Ceramics	Silicon Nitride Ceramics	Whisker Ceramics
	CECC															
	(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	120 PVD	450 PVD	HC1	SX3	SP9
												JP2	450 PVD	HC1	SX3	SP9
												JX1	450 PVD	HC1	SX3	SP9
												JX3	450 PVD	HC1	SX3	SP9
	RNGN120400S02025	S02025	-	12.7	4.76	-	-	-	-	-	-					
	RNGN120400T00520	T00520	-	12.7	4.76	-	-	-	-	-	-					
	RNGN120400T00525	T00525	-	12.7	4.76	-	-	-	-	-	-					
	RNGN120400T00820	T00820	-	12.7	4.76	-	-	-	-	-	-					
	RNGN120400T01020	T01020	-	12.7	4.76	-	-	-	-	-	-					
	RNGN120400T01025	T01025	-	12.7	4.76	-	-	-	-	-	-					
	RNGN120400T02020	T02020	-	12.7	4.76	-	-	-	-	-	-					
	RNGN120400T02025	T02025	-	12.7	4.76	-	-	-	-	-	-					
	RNGN120400Z02025	Z02025	-	12.7	4.76	-	-	-	-	-	-					
	RNGN120700E002	E002	-	12.7	7.94	-	-	-	-	-	-					
	RNGN120700E004	E004	-	12.7	7.94	-	-	-	-	-	-					
	RNGN120700E007	E007	-	12.7	7.94	-	-	-	-	-	-					
	RNGN120700K20015	K20015	-	12.7	7.94	-	-	-	-	-	-					
	RNGN120700S02025	S02025	-	12.7	7.94	-	-	-	-	-	-					
	RNGN120700T00520	T00520	-	12.7	7.94	-	-	-	-	-	-					
	RNGN120700T00525	T00525	-	12.7	7.94	-	-	-	-	-	-					
	RNGN120700T00820	T00820	-	12.7	7.94	-	-	-	-	-	-					
	RNGN120700T01020	T01020	-	12.7	7.94	-	-	-	-	-	-					
	RNGN120700T02025	T02025	-	12.7	7.94	-	-	-	-	-	-					
	RNGN120700Z01520	Z01520	-	12.7	7.94	-	-	-	-	-	-					
	RNGN120700Z02025	Z02025	-	12.7	7.94	-	-	-	-	-	-					
	RNGN150700T00520	T00520	-	15.875	7.94	-	-	-	-	-	-					
	RNGN150700T00525	T00525	-	15.875	7.94	-	-	-	-	-	-					
	RNGN150700T00820	T00820	-	15.875	7.94	-	-	-	-	-	-					
	RNGN190700K20015	K20015	-	19.05	7.94	-	-	-	-	-	-					
	RNGN190700T00520	T00520	-	19.05	7.94	-	-	-	-	-	-					
	RNGN190700T00525	T00525	-	19.05	7.94	-	-	-	-	-	-					
	RNGN190700T00820	T00820	-	19.05	7.94	-	-	-	-	-	-					
	RNGN190700T01020	T01020	-	19.05	7.94	-	-	-	-	-	-					
	RNGN250700T00520	T00520	-	25.4	7.94	-	-	-	-	-	-					
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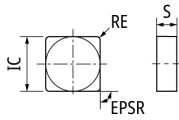
Turning Insert

D



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS	NTK Ceramix	Alumina Ceramics	Silicon Nitride Ceramics	Whisker Ceramics
	CECC															
	(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	120 PVD	450 PVD	HC1	SX3	SP9
												JP2	450 PVD	HC1	SX3	SP9
												JX1	450 PVD	HC1	SX3	SP9
												JX3	450 PVD	HC1	SX3	SP9
	RPGN060200T00520	T00520	-	6.35	2.38	11	-	-	-	-	-					
	RPGN090300T00520	T00520	-	9.525	3.18	11	-	-	-	-	-					
	RPGN120400E004	E004	-	12.7	4.76	11	-	-	-	-	-					
	RPGN120400EM02X	EM02X	-	12.7	4.76	11	-	-	-	-	-					
	RPGN120400T00520	T00520	-	12.7	4.76	11	-	-	-	-	-					
	RPGN120400T00525	T00525	-	12.7	4.76	11	-	-	-	-	-					
	RPGN120400T00820	T00820	-	12.7	4.76	11	-	-	-	-	-					
	RPGN120400T01020	T01020	-	12.7	4.76	11	-	-	-	-	-					

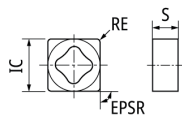


Steel	
Stainless Steel	
Cast Iron	● ● ● ● ○ ○ ○ ○ ● ● ○ ○
Non-Ferrous Material	
Heat Resistant Alloy	● ● ● ● ● ● ● ● ● ● ● ●
Hardened Material	● ○ ● ● ●
Others (non-metallic)	

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramIX	Alumina Ceramics							Silicon Nitride Ceramics					Whisker Ceramics																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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SNGX

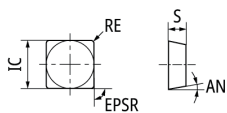


Steel																		
Stainless Steel																		
Cast Iron																		
Non-Ferrous Material																		
Heat Resistant Alloy																		
Hardened Material																		
Others (non-metallic)																		

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramIX	Alumina Ceramics							Silicon Nitride Ceramics					Whisker Ceramics				
													PVD	PVD	JX1	JX3		PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	PVD	SX3	SX5	SX7	SX9	SX6	CVD	WA1	WA5
		(ISO)		°	mm	mm	°	mm	mm	mm	mm	mm	mm	120	JP2		450																	
	SNGX120712T02025	T02025	90	12.7	7.94	-	1.2	-	-	-	-	-																						●
	SNGX120716T02025	T02025	90	12.7	7.94	-	1.6	-	-	-	-	-																						●

Turning Insert

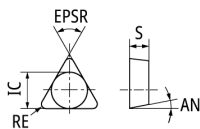
SPGN



Steel																		
Stainless Steel																		
Cast Iron																		
Non-Ferrous Material																		
Heat Resistant Alloy																		
Hardened Material																		
Others (non-metallic)																		

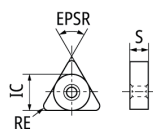
Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramIX	Alumina Ceramics							Silicon Nitride Ceramics					Whisker Ceramics																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
													PVD	PVD	JX1	JX3		PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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	SPGN090308T01025	T01025	90	9.525	3.18	11	0.8	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

TBGN



Steel																		
Stainless Steel																		
Cast Iron																		
Non-Ferrous Material																		
Heat Resistant Alloy																		
Hardened Material																		
Others (non-metallic)																		

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramIX	Alumina Ceramics							Silicon Nitride Ceramics					Whisker Ceramics			
													PVD	PVD	JX1	JX3		PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	CVD	WA1	WA5
	(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	120	JP2	JX1	JX3	450	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5	
	TBGN060104T00525	T00525	60	3.97	1.59	5	0.4	-	-	-	-	-																					
	TBGN060108T00525	T00525	60	3.97	1.59	5	0.8	-	-	-	-	-																					



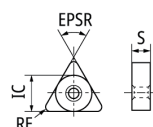
	Steel
Stainless Steel	
Cast Iron	● ● ● ● ○ ○ ○ ○ ● ● ○ ○
Non-Ferrous Material	
Heat Resistant Alloy	● ● ● ● ● ● ● ● ● ● ● ● ● ●
Hardened Material	● ○ ● ● ● ●
Others (non-metallic)	

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramiX	Alumina Ceramics							Silicon Nitride Ceramics					Whisker Ceramics				
													PVD	PVD	JX1	JX3		PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	CVD	SP9	WA1	WA5
(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	mm	120	JP2	JX1	JX3	450	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5		
	TNGA160404S02025	S02025	60	9.525	4.76	-	0.4	-	-	-	-	-																						
	TNGA160404T01025	T01025	60	9.525	4.76	-	0.4	-	-	-	-	-																						
	TNGA160404X01015	X01015	60	9.525	4.76	-	0.4	-	-	-	-	-					●																	
	TNGA160404X01015-10	X01015	60	9.525	4.76	-	0.4	-	-	-	-	-					●																	
	TNGA160404Z02025	Z02025	60	9.525	4.76	-	0.4	-	-	-	-	-									●													
	TNGA160408S02025	S02025	60	9.525	4.76	-	0.8	-	-	-	-	-													●									
	TNGA160408T01025	T01025	60	9.525	4.76	-	0.8	-	-	-	-	-								●		●		●										
	TNGA160408T02020	T02020	60	9.525	4.76	-	0.8	-	-	-	-	-																			●			
	TNGA160408T02025	T02025	60	9.525	4.76	-	0.8	-	-	-	-	-																				●		
	TNGA160408X01015	X01015	60	9.525	4.76	-	0.8	-	-	-	-	-						●																
	TNGA160408X01015-10	X01015	60	9.525	4.76	-	0.8	-	-	-	-	-						●																
	TNGA160408Z02025	Z02025	60	9.525	4.76	-	0.8	-	-	-	-	-									●													
	TNGA160412S02025	S02025	60	9.525	4.76	-	1.2	-	-	-	-	-													●									
	TNGA160412T01025	T01025	60	9.525	4.76	-	1.2	-	-	-	-	-									●		●		●									
	TNGA160412T02020	T02020	60	9.525	4.76	-	1.2	-	-	-	-	-											●									●		
	TNGA160412T02025	T02025	60	9.525	4.76	-	1.2	-	-	-	-	-																				●		
	TNGA160412X01015	X01015	60	9.525	4.76	-	1.2	-	-	-	-	-						●																
	TNGA160412X01015-10	X01015	60	9.525	4.76	-	1.2	-	-	-	-	-						●																
TNGA160416T02025	T02025	60	9.525	4.76	-	1.6	-	-	-	-	-																				●			

Turning Insert

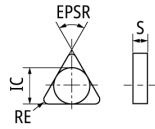
D

■ TNGG-AG with chipbreaker



	Steel
Stainless Steel	
Cast Iron	● ● ● ○ ○ ○ ○ ● ● ○ ○
Non-Ferrous Material	
Heat Resistant Alloy	● ● ● ● ● ● ● ● ● ●
Hardened Material	● ○ ● ● ●
Others (non-metallic)	

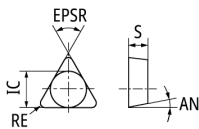
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Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

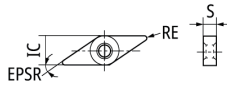
Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS	NTK	CeramiX	Alumina Ceramics	Silicon Nitride Ceramics	Whisker Ceramics											
(ISO)			°	mm	mm	°	mm	mm	mm	mm	mm	mm	PVD	PVD	PVD	HC1	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5
TNGN110308T00525	T00525		60	6.35	3.18	-	0.8	-	-	-	-	-																	
TNGN160304T01025	T01025		60	9.525	3.18	-	0.4	-	-	-	-	-																	
TNGN160404T01025	T01025		60	9.525	4.76	-	0.4	-	-	-	-	-																	
TNGN160404Z02025	Z02025		60	9.525	4.76	-	0.4	-	-	-	-	-																	
TNGN160408S02025	S02025		60	9.525	4.76	-	0.8	-	-	-	-	-																	
TNGN160408T00820	T00820		60	9.525	4.76	-	0.8	-	-	-	-	-																	
TNGN160408T01020	T01020		60	9.525	4.76	-	0.8	-	-	-	-	-																	
TNGN160408T01025	T01025		60	9.525	4.76	-	0.8	-	-	-	-	-																	
TNGN160408T02020	T02020		60	9.525	4.76	-	0.8	-	-	-	-	-																	
TNGN160408T02025	T02025		60	9.525	4.76	-	0.8	-	-	-	-	-																	
TNGN160408Z02025	Z02025		60	9.525	4.76	-	0.8	-	-	-	-	-																	
TNGN160412S02025	S02025		60	9.525	4.76	-	1.2	-	-	-	-	-																	
TNGN160412T00820	T00820		60	9.525	4.76	-	1.2	-	-	-	-	-																	
TNGN160412T01020	T01020		60	9.525	4.76	-	1.2	-	-	-	-	-																	
TNGN160412T01025	T01025		60	9.525	4.76	-	1.2	-	-	-	-	-																	
TNGN160412T02020	T02020		60	9.525	4.76	-	1.2	-	-	-	-	-																	
TNGN160412T02025	T02025		60	9.525	4.76	-	1.2	-	-	-	-	-																	
TNGN160412Z02025	Z02025		60	9.525	4.76	-	1.2	-	-	-	-	-																	
TNGN160416T01020	T01020		60	9.525	4.76	-	1.6	-	-	-	-	-																	
TNGN160416T01025	T01025		60	9.525	4.76	-	1.6	-	-	-	-	-																	
TNGN160416T02020	T02020		60	9.525	4.76	-	1.6	-	-	-	-	-																	
TNGN160416T02025	T02025		60	9.525	4.76	-	1.6	-	-	-	-	-																	
TNGN160420T01025	T01025		60	9.525	4.76	-	2	-	-	-	-	-																	
TNGN160420T02020	T02020		60	9.525	4.76	-	2	-	-	-	-	-																	
TNGN160708T02025	T02025		60	9.525	7.94	-	0.8	-	-	-	-	-																	
TNGN160712T02025	T02025		60	9.525	7.94	-	1.2	-	-	-	-	-																	
TNGN220416T00520	T00520		60	12.7	4.76	-	1.6	-	-	-	-	-																	
TNGN220716T00520	T00520		60	12.7	7.94	-	1.6	-	-	-	-	-																	

TPGN



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK	CeramiX	Alumina Ceramics							Silicon Nitride Ceramics					Whisker Ceramics			
													PVD	PVD	JX1	JX3			PVD	HC1	HW2	HC2	HC4	HC6	HC7	PVD	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5
(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	mm	120	JP2	JX1	JX3	450	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5		
	TPGN090204T00525	T00525	60	5.56	2.38	11	0.4	-	-	-	-	-								●														
	TPGN090208T00525	T00525	60	5.56	2.38	11	0.8	-	-	-	-	-								●														
	TPGN110304T00525	T00525	60	6.35	3.18	11	0.4	-	-	-	-	-								●														
	TPGN110304T01025	T01025	60	6.35	3.18	11	0.4	-	-	-	-	-												●										
	TPGN110308T00525	T00525	60	6.35	3.18	11	0.8	-	-	-	-	-								●														
	TPGN110308T01025	T01025	60	6.35	3.18	11	0.8	-	-	-	-	-												●										
	TPGN160304T01025	T01025	60	9.525	3.18	11	0.4	-	-	-	-	-								●				●										
	TPGN160304Z01025	Z01025	60	9.525	3.18	11	0.4	-	-	-	-	-										●												
	TPGN160308T01025	T01025	60	9.525	3.18	11	0.8	-	-	-	-	-								●		●		●										
	TPGN160308Z01025	Z01025	60	9.525	3.18	11	0.8	-	-	-	-	-										●												
TPGN160312T01025	T01025	60	9.525	3.18	11	1.2	-	-	-	-	-								●															

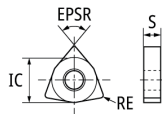


Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number (ISO)	CECC	EPSR °	IC mm	S mm	AN °	RE mm	D1 mm	D2 mm	INSL mm	S1 mm	W1 mm	BIDEMICS				NTK CeramiX	Alumina Ceramics							Silicon Nitride Ceramics					Whisker Ceramics			
													PVD	PVD	JX1	JX3		PVD	HC1	HW2	HC2	HC4	HC6	HC7	PVD	SX3	SX5	SX7	SX9	SX6	SP9	CVD	WA1
													120	JP2	JP1	JP3	450																
	VNGA160404BQE004	E004	35	9.525	4.76	-	0.4	-	-	-	-	-																					
	VNGA160404BQT00520	T00520	35	9.525	4.76	-	0.4	-	-	-	-	-																					
	VNGA160404S02025	S02025	35	9.525	4.76	-	0.4	-	-	-	-	-																					
	VNGA160404T01020	T01020	35	9.525	4.76	-	0.4	-	-	-	-	-																					
	VNGA160404T01025	T01025	35	9.525	4.76	-	0.4	-	-	-	-	-																					
	VNGA160404X01015	X01015	35	9.525	4.76	-	0.4	-	-	-	-	-																					
	VNGA160404X01015-10	X01015	35	9.525	4.76	-	0.4	-	-	-	-	-																					
	VNGA160404Z02025	Z02025	35	9.525	4.76	-	0.4	-	-	-	-	-																					
	VNGA160408BQE004	E004	35	9.525	4.76	-	0.8	-	-	-	-	-	-																				
	VNGA160408BQT00520	T00520	35	9.525	4.76	-	0.8	-	-	-	-	-	-																				
	VNGA160408S02025	S02025	35	9.525	4.76	-	0.8	-	-	-	-	-	-																				
	VNGA160408T00520	T00520	35	9.525	4.76	-	0.8	-	-	-	-	-	-																				
	VNGA160408T01020	T01020	35	9.525	4.76	-	0.8	-	-	-	-	-	-																				
	VNGA160408T01025	T01025	35	9.525	4.76	-	0.8	-	-	-	-	-	-																				
	VNGA160408X01015	X01015	35	9.525	4.76	-	0.8	-	-	-	-	-	-																				
	VNGA160408X01015-10	X01015	35	9.525	4.76	-	0.8	-	-	-	-	-	-																				
	VNGA160408Z02025	Z02025	35	9.525	4.76	-	0.8	-	-	-	-	-	-																				
	VNGA160412BQT00520	T00520	35	9.525	4.76	-	1.2	-	-	-	-	-	-																				
	VNGA160412S02025	S02025	35	9.525	4.76	-	1.2	-	-	-	-	-	-																				
	VNGA160412T01020	T01020	35	9.525	4.76	-	1.2	-	-	-	-	-	-																				
VNGA160412T01025	T01025	35	9.525	4.76	-	1.2	-	-	-	-	-	-																					
VNGA160412X01015	X01015	35	9.525	4.76	-	1.2	-	-	-	-	-	-																					
VNGA160412X01015-10	X01015	35	9.525	4.76	-	1.2	-	-	-	-	-	-																					
VNGA160412Z02025	Z02025	35	9.525	4.76	-	1.2	-	-	-	-	-	-																					
VNGA220424T01020	T01020	35	12.7	4.76	-	2.4	-	-	-	-	-	-																					

Turning Insert
D

WNGA

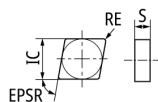


Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number (ISO)	CECC	EPSR °	IC mm	S mm	AN °	RE mm	D1 mm	D2 mm	INSL mm	S1 mm	W1 mm	BIDEMICS				NTK CeramiX PVD	Alumina Ceramics							Silicon Nitride Ceramics					Whisker Ceramics																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
													PVD	PVD	JX1	JX3		HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	WNGA080408T00520	T00520	80	12.7	4.76	-	0.8	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

CN.. series/Inserts BIDE MICS / Ceramics / NTK CeramiX

CNGN

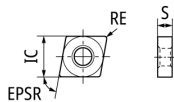


Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramiX	Alumina Ceramics							Silicon Nitride Ceramics						Whisker Ceramics		
													PVD	PVD			PVD	HC1	HW2	HC2	HC4	HC6	HC7	PVD	SX3	SX5	SX7	SX9	SX6	CVD	WA1	WA5	
													120	JP2	JX1	JX3	450																
(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	mm	120	JP2	JX1	JX3	450	HC1	HW2	HC2	HC4	HC6	HC7	PVD	SX3	SX5	SX7	SX9	SX6	CVD	WA1	WA5	
	CNGN120404T01025	T01025	80	12.7	4.76	-	0.4	-	-	-	-	-								●		●											
	CNGN120408S02025	S02025	80	12.7	4.76	-	0.8	-	-	-	-	-												●									
	CNGN120408T00520	T00520	80	12.7	4.76	-	0.8	-	-	-	-	-																●			●		
	CNGN120408T00820	T00820	80	12.7	4.76	-	0.8	-	-	-	-	-																				●	
	CNGN120408T01020	T01020	80	12.7	4.76	-	0.8	-	-	-	-	-																		●	●		
	CNGN120408T01025	T01025	80	12.7	4.76	-	0.8	-	-	-	-	-								●		●		●									
	CNGN120408T02020	T02020	80	12.7	4.76	-	0.8	-	-	-	-	-									●							●					
	CNGN120408T02025	T02025	80	12.7	4.76	-	0.8	-	-	-	-	-						●									●				●		
	CNGN120408Z02025	Z02025	80	12.7	4.76	-	0.8	-	-	-	-	-							●			●						●					
	CNGN120412S02025	S02025	80	12.7	4.76	-	1.2	-	-	-	-	-												●									
	CNGN120412T00520	T00520	80	12.7	4.76	-	1.2	-	-	-	-	-																●			●		
	CNGN120412T00820	T00820	80	12.7	4.76	-	1.2	-	-	-	-	-																●				●	
	CNGN120412T01020	T01020	80	12.7	4.76	-	1.2	-	-	-	-	-																		●	●		
	CNGN120412T01025	T01025	80	12.7	4.76	-	1.2	-	-	-	-	-							●		●		●		●						●		
	CNGN120412T02020	T02020	80	12.7	4.76	-	1.2	-	-	-	-	-								●		●							●				
	CNGN120412T02025	T02025	80	12.7	4.76	-	1.2	-	-	-	-	-							●									●				●	
	CNGN120412Z02025	Z02025	80	12.7	4.76	-	1.2	-	-	-	-	-								●			●					●					
	CNGN120416T00520	T00520	80	12.7	4.76	-	1.6	-	-	-	-	-																				●	
	CNGN120416T01020	T01020	80	12.7	4.76	-	1.6	-	-	-	-	-																			●		
	CNGN120416T02020	T02020	80	12.7	4.76	-	1.6	-	-	-	-	-																		●			
	CNGN120416T02025	T02025	80	12.7	4.76	-	1.6	-	-	-	-	-																	●				
	CNGN120420T01025	T01025	80	12.7	4.76	-	2	-	-	-	-	-											●										
	CNGN120708T00520	T00520	80	12.7	7.94	-	0.8	-	-	-	-	-																				●	
	CNGN120708T02025	T02025	80	12.7	7.94	-	0.8	-	-	-	-	-									●												
	CNGN120712T02025	T02025	80	12.7	7.94	-	1.2	-	-	-	-	-										●											



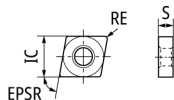
General Turning
Toolholders



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK Ceramix	Alumina Ceramics							Silicon Nitride Ceramics					Whisker Ceramics		
													PVD	PVD				PVD	HC1	HW2	HC2	HC4	HC6	HC7	PVD	SX3	SX5	SX7	SX9	SX6	CVD	WA1
													(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	120	JP2	JX1	JX3	450	HC1	HW2	HC2
	CNGA120404BQE004	E004	80	12.7	4.76	-	0.4	-	-	-	-	-																				
	CNGA120404BQT00520	T00520	80	12.7	4.76	-	0.4	-	-	-	-	-																				
	CNGA120404S02025	S02025	80	12.7	4.76	-	0.4	-	-	-	-	-																				
	CNGA120404T01025	T01025	80	12.7	4.76	-	0.4	-	-	-	-	-																				
	CNGA120404X01015	X01015	80	12.7	4.76	-	0.4	-	-	-	-	-																				
	CNGA120404X01015-10	X01015	80	12.7	4.76	-	0.4	-	-	-	-	-																				
	CNGA120404Z02025	Z02025	80	12.7	4.76	-	0.4	-	-	-	-	-																				
	CNGA120408BQE004	E004	80	12.7	4.76	-	0.8	-	-	-	-	-																				
	CNGA120408BQT00520	T00520	80	12.7	4.76	-	0.8	-	-	-	-	-																				
	CNGA120408S02025	S02025	80	12.7	4.76	-	0.8	-	-	-	-	-																				
	CNGA120408T00520	T00520	80	12.7	4.76	-	0.8	-	-	-	-	-																				
	CNGA120408T01020	T01020	80	12.7	4.76	-	0.8	-	-	-	-	-																				
	CNGA120408T01025	T01025	80	12.7	4.76	-	0.8	-	-	-	-	-																				
	CNGA120408T02020	T02020	80	12.7	4.76	-	0.8	-	-	-	-	-																				
	CNGA120408T02025	T02025	80	12.7	4.76	-	0.8	-	-	-	-	-																				
	CNGA120408X01015	X01015	80	12.7	4.76	-	0.8	-	-	-	-	-																				
	CNGA120408X01015-10	X01015	80	12.7	4.76	-	0.8	-	-	-	-	-																				
	CNGA120408Z02025	Z02025	80	12.7	4.76	-	0.8	-	-	-	-	-																				
	CNGA120412BQE004	E004	80	12.7	4.76	-	1.2	-	-	-	-	-																				
	CNGA120412BQT00520	T00520	80	12.7	4.76	-	1.2	-	-	-	-	-																				
	CNGA120412S02025	S02025	80	12.7	4.76	-	1.2	-	-	-	-	-																				
	CNGA120412T00520	T00520	80	12.7	4.76	-	1.2	-	-	-	-	-																				
	CNGA120412T01020	T01020	80	12.7	4.76	-	1.2	-	-	-	-	-																				
	CNGA120412T01025	T01025	80	12.7	4.76	-	1.2	-	-	-	-	-																				
	CNGA120412T02020	T02020	80	12.7	4.76	-	1.2	-	-	-	-	-																				
	CNGA120412T02025	T02025	80	12.7	4.76	-	1.2	-	-	-	-	-																				
	CNGA120412X01015	X01015	80	12.7	4.76	-	1.2	-	-	-	-	-																				
	CNGA120412X01015-10	X01015	80	12.7	4.76	-	1.2	-	-	-	-	-																				
	CNGA120416T00520	T00520	80	12.7	4.76	-	1.6	-	-	-	-	-																				
	CNGA120416T01020	T01020	80	12.7	4.76	-	1.6	-	-	-	-	-																				
	CNGA120416T02020	T02020	80	12.7	4.76	-	1.6	-	-	-	-	-																				
	CNGA120416T02025	T02025	80	12.7	4.76	-	1.6	-	-	-	-	-																				

CNGA-WL with wiper for higher feed



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

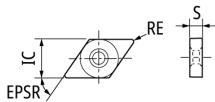
Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramIX	Alumina Ceramics							Silicon Nitride Ceramics					Whisker Ceramics							
													PVD	PVD	JP1	JP3		PVD	HC1	HW2	HC2	HC4	HC6	HC7	PVD	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5				
(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	mm	120	JP2	JP1	JP3	450	PVD	HC1	HW2	HC2	HC4	HC6	HC7	PVD	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5			
	CNGA120408WLT01025	T01025	80	12.7	4.76	-	0.8	-	-	-	-	-	-																								
	CNGA120412WLT01025	T01025	80	12.7	4.76	-	1.2	-	-	-	-	-	-																								

Wiper Width: R0.4: 0.35mm, R0.8: 0.65mm, R1.2: 0.85mm

Applicable holders: 95° cutting edge angle (C31, CCLN), 75° cutting edge angle (CCBN).

DN.. series/Inserts BIDE MICS / Ceramics / NTK CeramiX

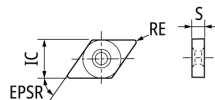
DNGN



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramiX	Alumina Ceramics							Silicon Nitride Ceramics						Whisker Ceramics	
													(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	120 PVD	JP2 PVD	JX1	JX3	450 PVD	HC1	HW2	HC2	HC4
	DNGN150404T01025	T01025	55	12.7	4.76	-	0.4	-	-	-	-	-							●													
	DNGN150408S02025	S02025	55	12.7	4.76	-	0.8	-	-	-	-	-											●									
	DNGN150408T01025	T01025	55	12.7	4.76	-	0.8	-	-	-	-	-									●		●									
	DNGN150408Z02025	Z02025	55	12.7	4.76	-	0.8	-	-	-	-	-							●													
	DNGN150412T00520	T00520	55	12.7	4.76	-	1.2	-	-	-	-	-																				●
	DNGN150412T02025	T02025	55	12.7	4.76	-	1.2	-	-	-	-	-																				●
	DNGN150712T02025	T02025	55	12.7	7.94	-	1.2	-	-	-	-	-																				●

DNGA

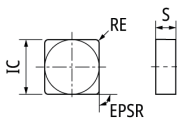


Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramiX	Alumina Ceramics							Silicon Nitride Ceramics						Whisker Ceramics	
													(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	120 PVD	JP2 PVD	JX1	JX3	450 PVD	HC1	HW2	HC2
	DNGA150404BQE004	E004	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150404BQT00520	T00520	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150404S02025	S02025	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150404T01025	T01025	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150404X01015	X01015	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150404X01015-10	X01015	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150404Z02025	Z02025	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150408BQE004	E004	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408BQT00520	T00520	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408S02025	S02025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408T00520	T00520	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408T01020	T01020	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408T01025	T01025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408T02020	T02020	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408T02025	T02025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408X01015	X01015	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408X01015-10	X01015	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408Z02025	Z02025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150412BQE004	E004	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412BQT00520	T00520	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412S02025	S02025	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412T01020	T01020	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412T01025	T01025	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412T02020	T02020	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412T02025	T02025	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412X01015	X01015	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412X01015-10	X01015	55	12.7	4.76	-	1.2	-	-	-	-	-																				

SN.. series/Inserts BIDEMICS / Ceramics / NTK CeramiX

SNGN



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

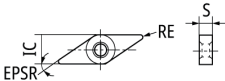
Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramiX	Alumina Ceramics					Silicon Nitride Ceramics					Whisker Ceramics				
													PVD	PVD			PVD	HC1	HW2	HC2	HC4	HC6	HC7	PVD	SX3	SX5	SX7	SX9	SX6	CVD	WA1	WA5
			°	mm	mm	°	mm	mm	mm	mm	mm	mm	120	JP2	JX1	JX3	450															
	SNGN120404T01025	T01025	90	12.7	4.76	-	0.4	-	-	-	-	-								●												
	SNGN120408S02025	S02025	90	12.7	4.76	-	0.8	-	-	-	-	-											●									
	SNGN120408T00520	T00520	90	12.7	4.76	-	0.8	-	-	-	-	-																				
	SNGN120408T00820	T00820	90	12.7	4.76	-	0.8	-	-	-	-	-																				
	SNGN120408T01020	T01020	90	12.7	4.76	-	0.8	-	-	-	-	-																				
	SNGN120408T01025	T01025	90	12.7	4.76	-	0.8	-	-	-	-	-					●	●	●	●										●	●	
	SNGN120408T02020	T02020	90	12.7	4.76	-	0.8	-	-	-	-	-																				
	SNGN120408T02025	T02025	90	12.7	4.76	-	0.8	-	-	-	-	-																				
	SNGN120408Z02025	Z02025	90	12.7	4.76	-	0.8	-	-	-	-	-								●												
	SNGN120412S02025	S02025	90	12.7	4.76	-	1.2	-	-	-	-	-											●									
	SNGN120412T00520	T00520	90	12.7	4.76	-	1.2	-	-	-	-	-																				
	SNGN120412T00820	T00820	90	12.7	4.76	-	1.2	-	-	-	-	-																				
	SNGN120412T01020	T01020	90	12.7	4.76	-	1.2	-	-	-	-	-																				
	SNGN120412T01025	T01025	90	12.7	4.76	-	1.2	-	-	-	-	-					●	●	●	●												
	SNGN120412T02020	T02020	90	12.7	4.76	-	1.2	-	-	-	-	-																				
	SNGN120412T02025	T02025	90	12.7	4.76	-	1.2	-	-	-	-	-																				
	SNGN120412Z02025	Z02025	90	12.7	4.76	-	1.2	-	-	-	-	-								●												
	SNGN120416S02025	S02025	90	12.7	4.76	-	1.6	-	-	-	-	-											●									
	SNGN120416T00520	T00520	90	12.7	4.76	-	1.6	-	-	-	-	-																				
	SNGN120416T01020	T01020	90	12.7	4.76	-	1.6	-	-	-	-	-																				
	SNGN120416T01025	T01025	90	12.7	4.76	-	1.6	-	-	-	-	-					●	●	●	●												
	SNGN120416T02020	T02020	90	12.7	4.76	-	1.6	-	-	-	-	-																				
	SNGN120416T02025	T02025	90	12.7	4.76	-	1.6	-	-	-	-	-																				
	SNGN120416Z02025	Z02025	90	12.7	4.76	-	1.6	-	-	-	-	-								●												
	SNGN120420T01020	T01020	90	12.7	4.76	-	2	-	-	-	-	-																				
	SNGN120420T01025	T01025	90	12.7	4.76	-	2	-	-	-	-	-								●	●											
	SNGN120420T02020	T02020	90	12.7	4.76	-	2	-	-	-	-	-																				
	SNGN120420T02025	T02025	90	12.7	4.76	-	2	-	-	-	-	-					●															
	SNGN120424T01025	T01025	90	12.7	4.76	-	2.4	-	-	-	-	-								●												
	SNGN120424T02020	T02020	90	12.7	4.76	-	2.4	-	-	-	-	-																				
	SNGN120708T02025	T02025	90	12.7	7.94	-	0.8	-	-	-	-	-					●	●														
	SNGN120712S02025	S02025	90	12.7	7.94	-	1.2	-	-	-	-	-								●												
	SNGN120712T02025	T02025	90	12.7	7.94	-	1.2	-	-	-	-	-								●												
	SNGN120716T02025	T02025	90	12.7	7.94	-	1.6	-	-	-	-	-							●													

General Turning
Toolholders



VN.. series/Inserts BIDE MICS / Ceramics / NTK CeramiX

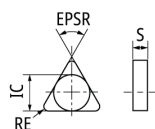
VNGA



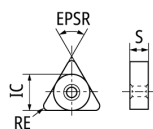
Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramiX	Alumina Ceramics							Silicon Nitride Ceramics					Whisker Ceramics				
													PVD	PVD	JX1	JX3		PVD	HC1	HW2	HC2	HC4	HC6	HC7	PVD	SX3	SX5	SX7	SX9	CVD	WA1	WA5		
	(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	mm	120	JP2	JX1	JX3	450	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5	
	VNGA160404BQE004	E004	35	9.525	4.76	-	0.4	-	-	-	-	-																						
	VNGA160404BQT00520	T00520	35	9.525	4.76	-	0.4	-	-	-	-	-																						
	VNGA160404S02025	S02025	35	9.525	4.76	-	0.4	-	-	-	-	-																						
	VNGA160404T01020	T01020	35	9.525	4.76	-	0.4	-	-	-	-	-																						
	VNGA160404T01025	T01025	35	9.525	4.76	-	0.4	-	-	-	-	-																						
	VNGA160404X01015	X01015	35	9.525	4.76	-	0.4	-	-	-	-	-																						
	VNGA160404X01015-10	X01015	35	9.525	4.76	-	0.4	-	-	-	-	-																						
	VNGA160404Z02025	Z02025	35	9.525	4.76	-	0.4	-	-	-	-	-																						
	VNGA160408BQE004	E004	35	9.525	4.76	-	0.8	-	-	-	-	-	-																					
	VNGA160408BQT00520	T00520	35	9.525	4.76	-	0.8	-	-	-	-	-	-																					
	VNGA160408S02025	S02025	35	9.525	4.76	-	0.8	-	-	-	-	-	-																					
	VNGA160408T00520	T00520	35	9.525	4.76	-	0.8	-	-	-	-	-	-																					
	VNGA160408T01020	T01020	35	9.525	4.76	-	0.8	-	-	-	-	-	-																					
	VNGA160408T01025	T01025	35	9.525	4.76	-	0.8	-	-	-	-	-	-																					
	VNGA160408X01015	X01015	35	9.525	4.76	-	0.8	-	-	-	-	-	-																					
	VNGA160408X01015-10	X01015	35	9.525	4.76	-	0.8	-	-	-	-	-	-																					
	VNGA160408Z02025	Z02025	35	9.525	4.76	-	0.8	-	-	-	-	-	-																					
	VNGA160412BQT00520	T00520	35	9.525	4.76	-	1.2	-	-	-	-	-	-																					
	VNGA160412S02025	S02025	35	9.525	4.76	-	1.2	-	-	-	-	-	-																					
	VNGA160412T01020	T01020	35	9.525	4.76	-	1.2	-	-	-	-	-	-																					
	VNGA160412T01025	T01025	35	9.525	4.76	-	1.2	-	-	-	-	-	-																					
	VNGA160412X01015	X01015	35	9.525	4.76	-	1.2	-	-	-	-	-	-																					
	VNGA160412X01015-10	X01015	35	9.525	4.76	-	1.2	-	-	-	-	-	-																					
	VNGA160412Z02025	Z02025	35	9.525	4.76	-	1.2	-	-	-	-	-	-																					
	VNGA220424T01020	T01020	35	12.7	4.76	-	2.4	-	-	-	-	-	-																					

TNGN

[illegible]

Shape	Item Number	CECC	EPSP	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramiX	Alumina Ceramics							Silicon Nitride Ceramics					Whisker Ceramics			
													PVD	PVD	JX1	JX3		PVD	HC1	HW2	HC2	HC4	HC6	HC7	PVD	SX3	SX5	SX7	SX9	CVD	SP9	WA1	WA5
(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	120	JP2	JX1	JX3	450	HC1	HW2	HC2	HC4	HC6	HC7	PVD	SX3	SX5	SX7	SX9	CVD	SP9	WA1	WA5		
	TNGN110308T00525	T00525	60	6.35	3.18	-	0.8	-	-	-	-	-							●														
	TNGN160304T01025	T01025	60	9.525	3.18	-	0.4	-	-	-	-	-							●														
	TNGN160404T01025	T01025	60	9.525	4.76	-	0.4	-	-	-	-	-							●														
	TNGN160404Z02025	Z02025	60	9.525	4.76	-	0.4	-	-	-	-	-								●													
	TNGN160408S02025	S02025	60	9.525	4.76	-	0.8	-	-	-	-	-											●										
	TNGN160408T00820	T00820	60	9.525	4.76	-	0.8	-	-	-	-	-																				●	
	TNGN160408T01020	T01020	60	9.525	4.76	-	0.8	-	-	-	-	-																	●	●			
	TNGN160408T01025	T01025	60	9.525	4.76	-	0.8	-	-	-	-	-					●		●		●		●						●	●			
	TNGN160408T02020	T02020	60	9.525	4.76	-	0.8	-	-	-	-	-																●					
	TNGN160408T02025	T02025	60	9.525	4.76	-	0.8	-	-	-	-	-															●						
	TNGN160408Z02025	Z02025	60	9.525	4.76	-	0.8	-	-	-	-	-									●												
	TNGN160412S02025	S02025	60	9.525	4.76	-	1.2	-	-	-	-	-											●										
	TNGN160412T00820	T00820	60	9.525	4.76	-	1.2	-	-	-	-	-																				●	
	TNGN160412T01020	T01020	60	9.525	4.76	-	1.2	-	-	-	-	-																	●				
	TNGN160412T01025	T01025	60	9.525	4.76	-	1.2	-	-	-	-	-					●		●		●		●							●			
	TNGN160412T02020	T02020	60	9.525	4.76	-	1.2	-	-	-	-	-																●					
	TNGN160412T02025	T02025	60	9.525	4.76	-	1.2	-	-	-	-	-															●						
	TNGN160412Z02025	Z02025	60	9.525	4.76	-	1.2	-	-	-	-	-								●													
	TNGN160416T01020	T01020	60	9.525	4.76	-	1.6	-	-	-	-	-																	●				
	TNGN160416T01025	T01025	60	9.525	4.76	-	1.6	-	-	-	-	-					●	●	●														
	TNGN160416T02020	T02020	60	9.525	4.76	-	1.6	-	-	-	-	-																●					
	TNGN160416T02025	T02025	60	9.525	4.76	-	1.6	-	-	-	-	-															●						
	TNGN160420T01025	T01025	60	9.525	4.76	-	2	-	-	-	-	-					●		●														
	TNGN160420T02020	T02020	60	9.525	4.76	-	2	-	-	-	-	-																●					
	TNGN160708T02025	T02025	60	9.525	7.94	-	0.8	-	-	-	-	-								●													
	TNGN160712T02025	T02025	60	9.525	7.94	-	1.2	-	-	-	-	-								●													
	TNGN220416T00520	T00520	60	12.7	4.76	-	1.6	-	-	-	-	-																				●	
	TNGN220716T00520	T00520	60	12.7	7.94	-	1.6	-	-	-	-	-																				●	

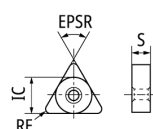


Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

[illegible]

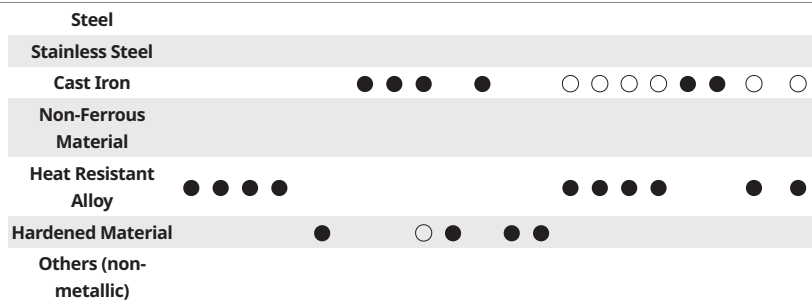
General Turning Toolholders

■ TNGG-AG with chipbreaker

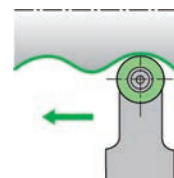
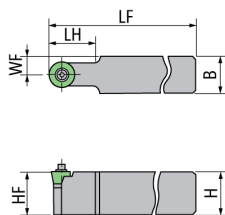


	Steel
Stainless Steel	
Cast Iron	
Non-Ferrous Material	
Heat Resistant Alloy	
Hardened Material	
Others (non-metallic)	

[illegible]

RNGN

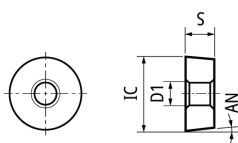
Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK	CeramiX	Alumina Ceramics							Silicon Nitride Ceramics						Whisker Ceramics				
													PVD	PVD	JX1	JX3			PVD	HC1	HW2	HC2	HC4	HC6	HC7	PVD	ZC7	SX3	SX5	SX7	SX9	SX6	CVD	SP9	WA1	WA5
(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	mm	120	JP2	JX1	JX3	450	HC1	HW2	HC2	HC4	HC6	HC7	PVD	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5			
	RNGN120400S02025	S02025	-	12.7	4.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-	-	-	-	-	-	-	-	-	-	-
	RNGN120400T00520	T00520	-	12.7	4.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-	-	-	-	-	-	-	-	●	-
	RNGN120400T00525	T00525	-	12.7	4.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-
	RNGN120400T00820	T00820	-	12.7	4.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN120400T01020	T01020	-	12.7	4.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-
	RNGN120400T01025	T01025	-	12.7	4.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-	-	-	-	-	-	-	-	●	-
	RNGN120400T02020	T02020	-	12.7	4.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RNGN120400T02025	T02025	-	12.7	4.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RNGN120400Z02025	Z02025	-	12.7	4.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RNGN120700E002	E002	-	12.7	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RNGN120700E004	E004	-	12.7	7.94	-	-	-	-	-	-	-	-	-	-	●	●	●	-	-	-	-	-	-	-	-	●	-	●	-	-	-	-	-	-	-
	RNGN120700E007	E007	-	12.7	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RNGN120700K20015	K20015	-	12.7	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	★
	RNGN120700S02025	S02025	-	12.7	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-	-	-	-	-	-	-	-	-	-
	RNGN120700T00520	T00520	-	12.7	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-	●	-	-	-	-	-	-	●
	RNGN120700T00525	T00525	-	12.7	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN120700T00820	T00820	-	12.7	7.94	-	-	-	-	-	-	-	-	-	-	●	●	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN120700T01020	T01020	-	12.7	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN120700T02025	T02025	-	12.7	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-	●	-	-	-	-	-	-	-	-
	RNGN120700Z01520	Z01520	-	12.7	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN120700Z02025	Z02025	-	12.7	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RNGN150700T00520	T00520	-	15.875	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN150700T00525	T00525	-	15.875	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN150700T00820	T00820	-	15.875	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN190700K20015	K20015	-	19.05	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN190700T00520	T00520	-	19.05	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN190700T00525	T00525	-	19.05	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN190700T00820	T00820	-	19.05	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN190700T01020	T01020	-	19.05	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN250700T00520	T00520	-	25.4	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	RNGN250700T00820	T00820	-	25.4	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●

HRCD

EDP	Item Number	Stock	Hand	B mm	H mm	HF mm	LF mm	LH mm	Insert Gage
5454921	HRCD-22	●	N	50	50	50	300	30	CDH1207..
5144274	HRCD-33	●	N	50	50	50	300	50	CDH1909..

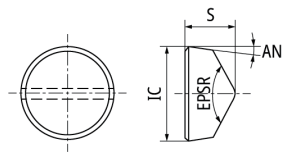
Item Number	Shim	Clamp screw	Wrench (for Clamp screw)	Washer
HRCD-22	HACDH22	CS0316	LW-2.5	W120
HRCD-33	HACDH33	CS0625	LW-5	W110

General Turning Toolholders

CDH[illegible][illegible]

RCGX/RPGX.. series/Inserts BIDE MICS / Ceramics / NTK CeramiX

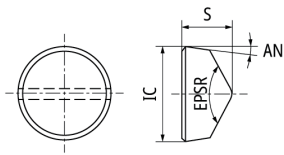
RCGX



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramiX	Alumina Ceramics							Silicon Nitride Ceramics						Whisker Ceramics					
													PVD	PVD	JX1	JX3		PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	CVD	WA1	WA5		
																	120																		JP2	450
	(ISO)		°	mm	mm	°	mm	mm	mm	mm	mm	mm																								
	RCGX060400T00520	T00520	120	6.35	4.76	7	-	-	-	-	-	-																								
	RCGX060400T00820	T00820	120	6.35	4.76	7	-	-	-	-	-	-		●	●																					
	RCGX060400T02020	T02020	120	6.35	4.76	7	-	-	-	-	-	-								★																★
	RCGX060600P07015	P07015	120	6.35	6.35	7	-	-	-	-	-	-																								★
	RCGX060700T00520	T00520	120	6.35	7.94	7	-	-	-	-	-	-																								●
	RCGX090700E004	E004	120	9.525	7.94	7	-	-	-	-	-	-		●	●																					
	RCGX090700K20015	K20015	120	9.525	7.94	7	-	-	-	-	-	-									★															★
	RCGX090700P07015	P07015	120	9.525	7.86	7	-	-	-	-	-	-								●																
	RCGX090700T00520	T00520	120	9.525	7.94	7	-	-	-	-	-	-											●													●
	RCGX090700T00525	T00525	120	9.525	7.86	7	-	-	-	-	-	-																								●
	RCGX090700T00820	T00820	120	9.525	7.94	7	-	-	-	-	-	-		●	●																					●
	RCGX090700T01020	T01020	120	9.525	7.94	7	-	-	-	-	-	-																								●
	RCGX120700E004	E004	120	12.7	7.94	7	-	-	-	-	-	-		●	●																					
	RCGX120700K20015	K20015	120	12.7	7.94	7	-	-	-	-	-	-										★														★
	RCGX120700P15015	P15015	120	12.7	7.94	7	-	-	-	-	-	-								●																
	RCGX120700T00520	T00520	120	12.7	7.94	7	-	-	-	-	-	-											●													●
	RCGX120700T00525	T00525	120	12.7	7.94	7	-	-	-	-	-	-																								●
	RCGX120700T00820	T00820	120	12.7	7.94	7	-	-	-	-	-	-		●	●																					●
	RCGX120700T01020	T01020	120	12.7	7.94	7	-	-	-	-	-	-																								●
	RCGX120700Z01520	Z01520	120	12.7	7.94	7	-	-	-	-	-	-																								●

RPGX

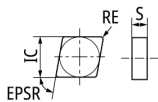


Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK CeramiX	Alumina Ceramics							Silicon Nitride Ceramics						Whisker Ceramics																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
													PVD	PVD				PVD	HC1	HW2	HC2	HC4	HC6	HC7	PVD	SX3	SX5	SX7	SX9	SX6	SP9	CVD	WA1	WA5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
													(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	120	JP2	JX1	JX3	450	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	SX3	SX5	SX7	SX9	SX6	SP9	WA1	WA5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	RPGX060400T00520	T00520	120	6.35	4.76	11	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

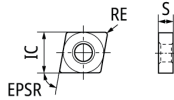
CN.. series/Inserts BIDEMICS / Ceramics / NTK CeramiX

CNGN



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

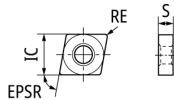
Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS			NTK CeramiX	Alumina Ceramics							Silicon Nitride Ceramics				Whisker Ceramics						
			°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	120 PVD	JP2 PVD	JX1	JX3	450 PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7 PVD	SX3	SX5	SX7	SX9	SX6	SP9 CVD	WA1	WA5	
	CNGN120404T01025	T01025	80	12.7	4.76	-	0.4	-	-	-	-	-									●		●											
	CNGN120408S02025	S02025	80	12.7	4.76	-	0.8	-	-	-	-	-													●									
	CNGN120408T00520	T00520	80	12.7	4.76	-	0.8	-	-	-	-	-																●					●	
	CNGN120408T00820	T00820	80	12.7	4.76	-	0.8	-	-	-	-	-																					●	
	CNGN120408T01020	T01020	80	12.7	4.76	-	0.8	-	-	-	-	-																		●			●	
	CNGN120408T01025	T01025	80	12.7	4.76	-	0.8	-	-	-	-	-									●		●		●									
	CNGN120408T02020	T02020	80	12.7	4.76	-	0.8	-	-	-	-	-																	●					
	CNGN120408T02025	T02025	80	12.7	4.76	-	0.8	-	-	-	-	-							●									●					●	
	CNGN120408Z02025	Z02025	80	12.7	4.76	-	0.8	-	-	-	-	-										●												
	CNGN120412S02025	S02025	80	12.7	4.76	-	1.2	-	-	-	-	-																						
	CNGN120412T00520	T00520	80	12.7	4.76	-	1.2	-	-	-	-	-																	●					●
	CNGN120412T00820	T00820	80	12.7	4.76	-	1.2	-	-	-	-	-																						●
	CNGN120412T01020	T01020	80	12.7	4.76	-	1.2	-	-	-	-	-																		●				●
	CNGN120412T01025	T01025	80	12.7	4.76	-	1.2	-	-	-	-	-							●		●		●		●									●
	CNGN120412T02020	T02020	80	12.7	4.76	-	1.2	-	-	-	-	-																		●				
	CNGN120412T02025	T02025	80	12.7	4.76	-	1.2	-	-	-	-	-							●										●					●
	CNGN120412Z02025	Z02025	80	12.7	4.76	-	1.2	-	-	-	-	-											●											
	CNGN120416T00520	T00520	80	12.7	4.76	-	1.6	-	-	-	-	-																						●
	CNGN120416T01020	T01020	80	12.7	4.76	-	1.6	-	-	-	-	-																			●			
	CNGN120416T02020	T02020	80	12.7	4.76	-	1.6	-	-	-	-	-																						
	CNGN120416T02025	T02025	80	12.7	4.76	-	1.6	-	-	-	-	-																						
	CNGN120420T01025	T01025	80	12.7	4.76	-	2	-	-	-	-	-																	●					
	CNGN120708T00520	T00520	80	12.7	7.94	-	0.8	-	-	-	-	-																						●
	CNGN120708T02025	T02025	80	12.7	7.94	-	0.8	-	-	-	-	-									●													
	CNGN120712T02025	T02025	80	12.7	7.94	-	1.2	-	-	-	-	-										●												



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number	CECC	EPSCR											IC				S				AN				RE				D1				D2				INSL				S1				W1				BIDEMICS				NTK				CeramiX				Alumina Ceramics				Silicon Nitride Ceramics				Whisker Ceramics																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

CNGA-WL with wiper for higher feed



Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

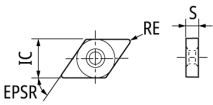
Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDEMICS				NTK	CeramiX	Alumina Ceramics				Silicon Nitride Ceramics					Whisker Ceramics								
													PVD	PVD	JX1	JX3			PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	PVD	SX3	SX5	SX7	SX9	SX6	SP9	CVD	WA1	WA5
(ISO)	°	mm	mm	°	mm	mm	mm	mm	mm	mm	mm	mm	120	P2	JX1	JX3	450	HC1	HW2	HC2	HC4	HC6	HC7	ZC7	PVD	SX3	SX5	SX7	SX9	SX6	SP9	CVD	WA1	WA5		
	CNGA120408WLT01025	T01025	80	12.7	4.76	-	0.8	-	-	-	-	-																								
	CNGA120412WLT01025	T01025	80	12.7	4.76	-	1.2	-	-	-	-	-																								

Wiper Width: R0.4: 0.35mm, R0.8: 0.65mm, R1.2: 0.85mm

Applicable holders: 95° cutting edge angle (C31, CCLN), 75° cutting edge angle (CCBN).

DN.. series/Inserts BIDE MICS / Ceramics / NTK CeramiX

DNGN



Steel

Stainless Steel

Cast Iron

Non-Ferrous Material

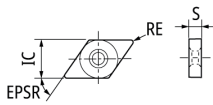
Heat Resistant Alloy

Hardened Material

Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDE MICS				NTK CeramiX	Alumina Ceramics							Silicon Nitride Ceramics						Whisker Ceramics	
	(ISO)		°	mm	mm	°	mm	mm	mm	mm	mm	mm	120 PVD	JP2 PVD	JX1	JX3	450 PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7 PVD	SX3	SX5	SX7	SX9	SX6	SP9 CVD	WA1	WA5
	DNGN150404T01025	T01025	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGN150408S02025	S02025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGN150408T01025	T01025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGN150408Z02025	Z02025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGN150412T00520	T00520	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGN150412T02025	T02025	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGN150712T02025	T02025	55	12.7	7.94	-	1.2	-	-	-	-	-																				

DNGA



Steel

Stainless Steel

Cast Iron

Non-Ferrous Material

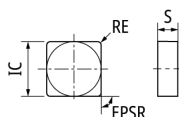
Heat Resistant Alloy

Hardened Material

Others (non-metallic)

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	D1	D2	INSL	S1	W1	BIDE MICS				NTK CeramiX	Alumina Ceramics							Silicon Nitride Ceramics						Whisker Ceramics	
	(ISO)		°	mm	mm	°	mm	mm	mm	mm	mm	mm	120 PVD	JP2 PVD	JX1	JX3	450 PVD	HC1	HW2	HC2	HC4	HC6	HC7	ZC7 PVD	SX3	SX5	SX7	SX9	SX6	SP9 CVD	WA1	WA5
	DNGA150404BQE004	E004	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150404BQT00520	T00520	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150404S02025	S02025	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150404T01025	T01025	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150404X01015	X01015	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150404X01015-10	X01015	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150404Z02025	Z02025	55	12.7	4.76	-	0.4	-	-	-	-	-																				
	DNGA150408BQE004	E004	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408BQT00520	T00520	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408S02025	S02025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408T00520	T00520	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408T01020	T01020	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408T01025	T01025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408T02020	T02020	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408T02025	T02025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408X01015	X01015	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408X01015-10	X01015	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150408Z02025	Z02025	55	12.7	4.76	-	0.8	-	-	-	-	-																				
	DNGA150412BQE004	E004	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412BQT00520	T00520	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412S02025	S02025	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412T01020	T01020	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412T01025	T01025	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412T02020	T02020	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412T02025	T02025	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412X01015	X01015	55	12.7	4.76	-	1.2	-	-	-	-	-																				
	DNGA150412X01015-10	X01015	55	12.7	4.76	-	1.2	-	-	-	-	-																				

SNGN

[illegible][illegible]

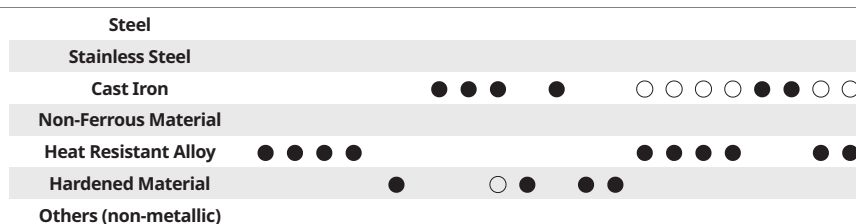
JRNMW Arbor type



EDP	Item Number	Stock	Hand	Number of teeth	APMX mm	DC mm	DCON mm	DCX mm	GAMF °	GMAP °	KWL mm	KWW mm	LF mm	Weight kg	Insert Gage
5719950	JRNMW050S220R03	●	R	3	~3.2	37.3	22	50	-10	-5	6	10	50	0.42	RN..1207..
5719968	JRNMW063S220R04	●	R	4	~3.2	50.3	22	63	-10	-5	6	10	50	0.55	RN..1207..
5719976	JRNMW080S254R05	●	R	5	~3.2	67.3	25.4	80	-10	-5	6	9.5	50	0.85	RN..1207..

■ Spare Parts

Item Number	Clamp	Clamp screw	Wrench (for Clamp screw)
JRNMW050S220R03	AMS-6T	AOB-6S-T30	LLR-T30
JRNMW063S220R04	AMS-6T	AOB-6S-T30	LLR-T30
JRNMW080S254R05	AMS-6T	AOB-6S-T30	LLR-T30

RNGN[illegible]

SNGN/SNGF

※Recommended Cutting Conditions
Cutting Speed $V_c = 1000 \text{ m/min}$
Feed $f = 0.1 \text{ mm/t}$

JFDX.. series / Inserts Ceramics

SNGN/SNGF

		Steel																												
		Stainless Steel																												
		Cast Iron																												
		Non-Ferrous Material																												
		Heat Resistant Alloy																												
		Hardened Material																												
		Others (non-metallic)																												
Figure	Shape	Item Number	CECC	EPSR	IC	S	RE	GAN	BIDEMICS				NTK CeramIX	Alumina Ceramics				Silicon Nitride Ceramics				Whisker Ceramics								
									PVD	PVD	JX1	JX3		PVD	HC1	HW2	HC2	HC4	HC6	HC7	PVD	SX3	SX5	SX7	SX9	SX6	CVD	WA1	WA5	
																														120
		(ISO)		°	mm	mm	mm	°																						
1		SNGN120408S02025	S02025	90	12.7	4.76	0.8	-																						
1		SNGN120408T00520	T00520	90	12.7	4.76	0.8	-																						
1		SNGN120408T00820	T00820	90	12.7	4.76	0.8	-																						
1		SNGN120408T01020	T01020	90	12.7	4.76	0.8	-																						
1		SNGN120408T01025	T01025	90	12.7	4.76	0.8	-							●		●		●		●									
1		SNGN120408T02020	T02020	90	12.7	4.76	0.8	-																						
1		SNGN120408T02025	T02025	90	12.7	4.76	0.8	-																						
1		SNGN120408Z02025	Z02025	90	12.7	4.76	0.8	-																						
1		SNGN120412S02025	S02025	90	12.7	4.76	1.2	-																						
1		SNGN120412T00520	T00520	90	12.7	4.76	1.2	-																						
1		SNGN120412T00820	T00820	90	12.7	4.76	1.2	-																						
1		SNGN120412T01020	T01020	90	12.7	4.76	1.2	-																						
1		SNGN120412T01025	T01025	90	12.7	4.76	1.2	-								●		●		●		●								
1		SNGN120412T02020	T02020	90	12.7	4.76	1.2	-																						
1		SNGN120412T02025	T02025	90	12.7	4.76	1.2	-																						
1		SNGN120412Z02025	Z02025	90	12.7	4.76	1.2	-																						
1		SNGN120416S02025	S02025	90	12.7	4.76	1.6	-																						
1		SNGN120416T00520	T00520	90	12.7	4.76	1.6	-																						
1		SNGN120416T01020	T01020	90	12.7	4.76	1.6	-																						
1		SNGN120416T01025	T01025	90	12.7	4.76	1.6	-								●		●		●		●								
1		SNGN120416T02020	T02020	90	12.7	4.76	1.6	-																						
-		SNGN120416T02025	T02025	90	12.7	4.76	1.6	-																						
1		SNGN120416Z02025	Z02025	90	12.7	4.76	1.6	-																						
2		SNGF120412T01025RC	T01025	90	12.7	4.76	1.2	14																						
2		SNGF120412T01025RCM	T01025	90	12.7	4.76	1.2	14																						

※Recommended Cutting Conditions
Cutting Speed V_c = - 1000m/min
Feed f = - 0.1mm/t

JFDX.. series / Inserts Ceramics

SNGN/SNGF

		Steel																											
		Stainless Steel																											
		Cast Iron																											
		Non-Ferrous Material																											
		Heat Resistant Alloy																											
		Hardened Material																											
		Others (non-metallic)																											
Figure	Shape	Item Number	CECC	EPSR	IC	S	RE	GAN	BIDEMICS				Alumina Ceramics				Silicon Nitride Ceramics				Whisker Ceramics								
									PVD	PVD	JX1	JX3	PVD	HC1	HW2	HC2	HC4	HC6	HC7	PVD	SX3	SX5	SX7	SX9	SX6	CVD	WA1	WA5	
																													120
		(ISO)		°	mm	mm	mm	°																					
1		SNGN120408S02025	S02025	90	12.7	4.76	0.8	-																					
1		SNGN120408T00520	T00520	90	12.7	4.76	0.8	-																					
1		SNGN120408T00820	T00820	90	12.7	4.76	0.8	-																					
1		SNGN120408T01020	T01020	90	12.7	4.76	0.8	-																					
1		SNGN120408T01025	T01025	90	12.7	4.76	0.8	-																					
1		SNGN120408T02020	T02020	90	12.7	4.76	0.8	-																					
1		SNGN120408T02025	T02025	90	12.7	4.76	0.8	-																					
1		SNGN120408Z02025	Z02025	90	12.7	4.76	0.8	-																					
1		SNGN120412S02025	S02025	90	12.7	4.76	1.2	-																					
1		SNGN120412T00520	T00520	90	12.7	4.76	1.2	-																					
1		SNGN120412T00820	T00820	90	12.7	4.76	1.2	-																					
1		SNGN120412T01020	T01020	90	12.7	4.76	1.2	-																					
1		SNGN120412T01025	T01025	90	12.7	4.76	1.2	-																					
1		SNGN120412T02020	T02020	90	12.7	4.76	1.2	-																					
1		SNGN120412T02025	T02025	90	12.7	4.76	1.2	-																					
1		SNGN120412Z02025	Z02025	90	12.7	4.76	1.2	-																					
1		SNGN120416S02025	S02025	90	12.7	4.76	1.6	-																					
1		SNGN120416T00520	T00520	90	12.7	4.76	1.6	-																					
1		SNGN120416T01020	T01020	90	12.7	4.76	1.6	-																					
1		SNGN120416T01025	T01025	90	12.7	4.76	1.6	-																					
1		SNGN120416T02020	T02020	90	12.7	4.76	1.6	-																					
-		SNGN120416T02025	T02025	90	12.7	4.76	1.6	-																					
1		SNGN120416Z02025	Z02025	90	12.7	4.76	1.6	-																					
2		SNGF120412T01025RC	T01025	90	12.7	4.76	1.2	14																					
2		SNGF120412T01025RCM	T01025	90	12.7	4.76	1.2	14																					

※Recommended Cutting Conditions
Cutting Speed $V_c = 1000\text{m/min}$
Feed $f = 0.1\text{mm/t}$