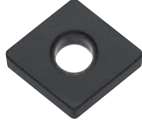
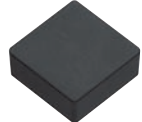
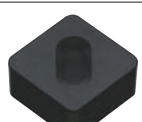


# Turning Indexable Inserts

## 80° Rhombic / Negative

	(mm)			(mm)			
Description	A	T	ød	Description	A	T	ød
CN_A 1204_	12.70	4.76	5.16	CN_N 1207_	12.70	7.94	-
CNGA 1606_	15.875	6.35	6.35	CNGN 1607_	15.875	7.94	-
CN_N 1204_	12.70	4.76	-	CNGX 1207_	12.70	7.94	-

Edge Specification				Classification of usage ✂: Interruption / 1st Choice ✂✂: Interruption / 2nd Choice ●: Light Interruption / 1st Choice ○: Light Interruption / 2nd Choice ●●: Continuous / 1st Choice ○○: Continuous / 2nd Choice	Material Compatibility										Ref. Page for Toolholder						
Symbol	Cutting Edge Condition	Example			K		S		H		Ceramics										
S	Chamfered and Honed Cutting Edge	S01525	0.15mm X 25° Chamfered and Honed Cutting Edge		Gray Cast Iron (With Scale)	Gray Cast Iron (Without Scale)	Nodular Cast Iron (With Scale)	Nodular Cast Iron (Without Scale)	Heat-Resistant Alloys	Hard materials	Alumina Ceramic	PVD Coated Ceramic	MEGACOAT Ceramic	Silicon Nitride Ceramic		SiC Coated Ceramic	Cell Fiber				
T	Chamfered Cutting Edge	T01525	0.15mm X 25° Chamfered Cutting Edge	Alumina Ceramic	PVD Coated Ceramic	MEGACOAT Ceramic	Silicon Nitride Ceramic	SiC Coated Ceramic	Cell Fiber	ε	KA30	A65	A66N	PT600M	KS6000	KS6050	CS7050	CF1			
Insert	Description			(Previous Description)	Edge Preparation	Dim. (mm)															
	CNGA 120412S01025			CNGA 120412	S01025	1.2	●													D8 F64 F68	
	CNGA 120404S01525			CNGA 120404	S01525	0.4			●												
	120408S01525			120408		0.8			●												
	120412S01525			120412		1.2			●												
	CNGA 120404S02025			-	S02025	0.4				●											
	120408S02025			-		0.8				●											
	120412S02025			-		1.2				●											
	CNGA 120404S03030			CNGA 120404-T30	S03030	0.4				●											
	120408S03030			120408-T30		0.8				●											
	120412S03030			120412-T30		1.2				●											
	CNGA 120412T00520			CNGA 120412-T05	T00520	1.2	●														
	CNGA 120404T01525			CNGA 120404T01525	T01525	0.4				●											
	120408T01525			120408T01525		0.8				●											
	120412T01525			120412T01525		1.2				●											
	CNGA 120404T02025			-	T02025	0.4					●										
120408T02025			CNGA 120408	0.8			●			●	●	●	●	●							
120412T02025			120412	1.2			●			●	●	●	●	●							
CNGA 160612T02025			CNGA 160612	T02025	1.2							□									
CNMA 120408S01525			CNMA 120408	S01525	0.8				●												
CNMA 120408S03030			CNMA 120408-T30	S03030	0.8				●												
120412S03030			120412-T30		1.2				●												
	CNGN 120408S01025			CNGN 120408	S01025	0.8	●													D22	
	120412S01025			120412		1.2	●														
	120416S01025			120416		1.6	□														
	CNGN 120404T00520			-	T00520	0.4					●										
	120408T00520			-		0.8					●										
	CNGN 120408T01020			CNGN 120408	T01020	0.8															●
	120412T01020			120412		1.2															●
	120404T02025			-		0.4						●									
	CNGN 120408T02025			CNGN 120408	T02025	0.8									●	●	●	●			
	120412T02025			120412		1.2									●	●	●	●			
	120416T02025			120416		1.6									●	●	●	●			
	CNGN 120708S01525			CNGN 120708	S01525	0.8					●										
	120712S01525			120712		1.2					●										
	CNGN 120708T01020			CNGN 120708		T01020	0.8														
	120712T01020			120712	1.2																●
CNGN 120704T02025			CNGN 120704	T02025	0.4			●													
120708T02025			120708		0.8		●														
120712T02025			120712		1.2		●							□							
120716T02025			120716		1.6		●							□							
CNGN 160708T02025			CNGN 160708	T02025	0.8		●														
160712T02025			160712		1.2		●														
160716T02025			160716		1.6		●														
CNMN 120708T02025			CNMN 120708	T02025	0.8		●														
120712T02025			120712		1.2		●														
	CNGX 120708T02025			-	T02025	0.8							●							D28 F74	
	120712T02025			-		1.2								●	●	●					
	120716T02025			-		1.6									●	●	●				

● : Std. Item □ : Check Availability

Inserts are sold in 10 piece boxes.

# Turning Indexable Inserts

## 55° Rhombic / Negative

(mm)

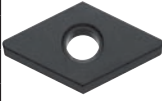
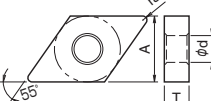
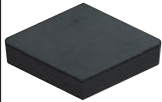
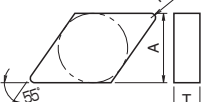
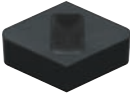
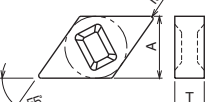
(mm)

Description	A	T	ød	Description	A	T	ød
DNGA 1504_	12.70	4.76	5.16	DNGX 1207_	10.00	7.94	-
1506_		6.35		DNGX 1507_	12.70	7.94	-
DNGN 1504_	12.70	4.76	-				
1507_		7.94					

B



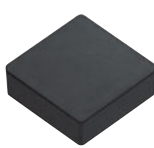
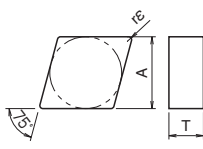

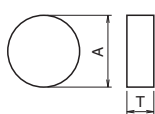
Insert (Turning)

Edge Specification				Classification of usage ✂: Interruption / 1st Choice ✂✂: Interruption / 2nd Choice ●: Light Interruption / 1st Choice ○: Light Interruption / 2nd Choice ●: Continuous / 1st Choice ○: Continuous / 2nd Choice	Material Compatibility										Ref. Page for Toolholder												
Symbol	Cutting Edge Condition	Example			K	Gray Cast Iron (With Scale)	Gray Cast Iron (Without Scale)	Nodular Cast Iron (With Scale)	Nodular Cast Iron (Without Scale)	S	Heat-Resistant Alloys	H	Hard materials	Alumina Ceramic		PVD Coated Ceramic	MEGACOAT Ceramic	Silicon Nitride Ceramic	CVD Coated Silicon Nitride Ceramic	Cell Fiber							
Insert	Description	(Previous Description)	Edge Preparation	Dim. (mm)	KA30	A65	A6N	PT600M	KS6000	KS6050	CS7050	CF1	ε	KA30	A65	A6N	PT600M	KS6000	KS6050	CS7050	CF1						
 	DNGA 150408S01025	DNGA 150408	S01025	0.8	●																			D10 D11 F65			
	150412S01025	150412	S01025	1.2	●																						
	DNGA 150404S01525	DNGA 150404	S01525	0.4			●																				
	150408S01525	150408	S01525	0.8			●																				
	DNGA 150404S02025	-	S02025	0.4				●																			
	150408S02025	-	S02025	0.8				●																			
	DNGA 150408S03030	DNGA 150408-T30	S03030	0.8			●																				
	DNGA 150404T02025	DNGA 150404	T02025	0.4		●			●																		
	150408T02025	150408		0.8		●			●		□																
	150412T02025	-		1.2						●		□															
	150416T02025	150416		1.6			●																				
	DNGA 150604S01525	DNGA 150604	S01525	0.4			●																				
	150608S01525	150608		0.8			●																				
	150612S01525	150612		1.2				●																			
	150616S01525	150616		1.6				●																			
	DNGA 150604T02025	-	T02025	0.4					●																		
150608T02025	-	0.8						●																			
150612T02025	-	1.2							●																		
 	DNGN 150404S01025	DNGN 150404	S01025	0.4	□																				-		
	150408S01025	150408		0.8	□																						
	150412S01025	150412		1.2	□																						
	150416S01025	150416		1.6	□																						
	DNGN 150408T02025	-	T02025	0.8					●																D23		
	DNGN 150704S01525	DNGN 150704	S01525	0.4			●																				
	150708S01525	150708		0.8			●																				
	150712S01525	150712		1.2			●																				
	DNGN 150704S02025	-	S02025	0.4					●																		
	150708S02025	-		0.8					●																		
150712S02025	-	1.2							●																		
DNGN 150704T02025	DNGN 150704	T02025	0.4		●																						
150708T02025	150708		0.8		●																						
150712T02025	150712		1.2		●																						
150716T02025	150716		1.6		●																						
 	DNGX 120708T02025	-	T02025	0.8						●														D29 F74			
	120712T02025	-		1.2							●																
	120716T02025	-		1.6								●															
	DNGX 150708T02025	-	T02025	0.8							●													D29			
	150712T02025	-		1.2								●															
150716T02025	-	T02025	1.6								●																

(mm)

# 75° Rhombic / Negative Round / Negative

Description	A	T	ød
ENGN 1307_	12.70	7.94	-
RNGN 0603_	6.35	3.18	-
RNGN 0903_	9.525	4.76	-
0904_	9.525	7.94	-
RNGN 1204_	12.70	4.76	-
1207_	12.70	7.94	-
RNGN 1507_	15.875	7.94	-
RNGN 2507_	25.40	7.94	-

Edge Specification				Classification of usage ✦: Interruption / 1st Choice ✧: Interruption / 2nd Choice ●: Light Interruption / 1st Choice ○: Light Interruption / 2nd Choice ●: Continuous / 1st Choice ○: Continuous / 2nd Choice	K	S	H	Material										Ref. Page for Toolholder
Symbol	Cutting Edge Condition	Example						Gray Cast Iron (With Scale)	Gray Cast Iron (Without Scale)	Nodular Cast Iron (With Scale)	Nodular Cast Iron (Without Scale)	Heat-Resistant Alloys	Hard materials	Alumina Ceramic	PVD Coated Ceramic	MEGACOAT Ceramic	Silicon Nitride Ceramic	
Insert	Description	(Previous Description)	* Edge Preparation	Dim. (mm)	KA30	A65	A66N	PT600M	KS6000	KS6050	CS7050	CF1						
 	ENGN 130708S01525	ENGN 130708	S01525	0.8			●										D23 F73	
	130712S01525	130712	S01525	1.2			●											
	ENGN 130708S02025	-	S02025	0.8			●											
	130712S02025	-	S02025	1.2			●											
	ENGN 130704T02025	ENGN 130704	T02025	0.4	●			●										
	130708T02025	130708		0.8	●			●										
	130712T02025	130712		1.2	●			●										
	130716T02025	130716		1.6	●			●										
130720T02025	130720	2.0		●			●											
130730T02025	130730	3.0	●			●												
 	RNGN 060300T01525	RNGN 060300T01525	T01525	-			●										D33	
	RNGN 090300T01525	RNGN 090300T01525	T01525	-			●											
	RNGN 090400S01525	RNGN 090400	S01525	-			●										D33	
	090400S02025	-	S02025	-			●											
	090400T01020	-	T01020	-											●			
	090400T02025	RNGN 090400	T02025	-	●			●										
	RNGN 090700T01020	-	T01020	-											●			
	RNGN 120400S01525	RNGN 120400	S01525	-			●										D27 D33	
	120400S02025	-	S02025	-				●										
	120400T01020	-	T01020	-											●			
	120400T01525	RNGN 120400T01525	T01525	-			□											
	120400T02025	RNGN 120400	T02025	-	●			●	●	●	●							
	RNGN 120700K15015	-	K15015	-													D27 D33	
	120700S01525	RNGN 120700	S01525	-			●											
	120700S02025	-	S02025	-				●										
	120700S03030	RNGN 120700-T30	S03030	-				●										
	120700T01020	-	T01020	-											●			
	120700T01525	RNGN 120700T01525	T01525	-			●										D27	
	120700T02025	RNGN 120700	T02025	-	●			●	●									
	RNGN 150700S01525	RNGN 150700	S01525	-			●											
150700S02025	-	S02025	-				●											
150700T02025	RNGN 150700	T02025	-	●			●											
RNGN 250700P20015	RNGN 250700K	P20015	-				●											

\* For cutting edge "K," please refer to the table below.

Edge Preparation			
Symbol	Cutting Edge Condition	Example	
K	Double Chamfered Cutting Edges	K15015	1.5mm X 15° Chamfered Cutting Edge

• Note: Symbol "K" and "P" describe only the largest chamfer width and its angle.

● : Std. Item □ : Check Availability

Inserts are sold in 10 piece boxes.



Insert (Turning)



# Turning Indexable Inserts

## 90° Square / Negative

(mm)

Description	A	T	ød
SN_A1204_	12.70	4.76	5.16
SNGN1204_			
SNGN1207_		7.94	-

B




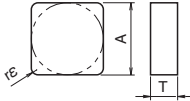


Insert (Turning)

Edge Specification				Classification of usage ✖: Interruption / 1st Choice ✖✖: Interruption / 2nd Choice ●: Light Interruption / 1st Choice ○: Light Interruption / 2nd Choice ●: Continuous / 1st Choice ○: Continuous / 2nd Choice	Material Compatibility										Ref. Page for Toolholder							
Symbol	Cutting Edge Condition	Example			K	Gray Cast Iron (With Scale)	Gray Cast Iron (Without Scale)	Nodular Cast Iron (With Scale)	Nodular Cast Iron (Without Scale)	S	Heat-Resistant Alloys	H	Hard materials	Alumina Ceramic		PVD Coated Ceramic	MEGACOAT Ceramic	Silicon Nitride Ceramic	CVD Coated Silicon Nitride Ceramic	Cell Fiber		
Insert	Description	(Previous Description)	Edge Preparation	Dim. (mm)	KA30	A65	A6N	PT600M	KS6000	KS6050	CS7050	CF1	ε	KA30	A65	A6N	PT600M	KS6000	KS6050	CS7050	CF1	
	SNGA 120408S01525	SNGA 120408	S01525	0.8																		
	120412S01525	120412	S01525	1.2																		
	SNGA 120408S02025	-	S02025	0.8																		
	120412S02025	-	S02025	1.2																		
	SNGA 120408T01525	SNGA 120408T01525	T01525	0.8																		
	120412T01525	120412T01525	T01525	1.2																		
	SNGA 120408T02025	SNGA 120408	T02025	0.8		●			●	●												
	120412T02025	120412	T02025	1.2		●			●	●	●											
	120416T02025	120416	T02025	1.6					●	●	●	●										
	SNMA 120408S03030	SNMA 120408-T30	S03030	0.8																		
	SNGN 120404S01025	SNGN 120404	S01025	0.4	□																	
	120408S01025	120408		S01025	0.8	●																
	120412S01025	120412		S01025	1.2	●																
	120416S01025	120416		S01025	1.6	●																
	120420S01025	120420		S01025	2.0	●																
	SNGN 120408S01525	SNGN 120408	S01525	0.8																		
	120412S01525	120412		S01525	1.2																	
	120416S01525	120416		S01525	1.6																	
	SNGN 120408S02025	-	S02025	0.8																		
	120412S02025	-		S02025	1.2																	
	120416S02025	-		S02025	1.6																	
	SNGN 120416S03030	SNGN 120416-T30	S03030	1.6																		
	SNGN 120408T00520	SNGN 120408-T05	T00520	0.8	□	●																
	120412T00520	120412-T05		T00520	1.2	□																
	120416T00520	120416-T05		T00520	1.6		●															
	SNGN 120408T01020	-	T01020	0.8																		●
	120412T01020	-		T01020	1.2																	●
	120416T01020	-		T01020	1.6																	●
	120420T01020	-		T01020	2.0																	●
	SNGN 120404T02025	SNGN 120404	T02025	0.4		●																
	120408T02025	120408		T02025	0.8		●															
	120412T02025	120412		T02025	1.2		●															
	120416T02025	120416		T02025	1.6		●															
	120420T02025	120420		T02025	2.0		●															
	SNGN 120704S01025	SNGN 120704	S01025	0.4	□																	
	120708S01025	120708		S01025	0.8	●																
	120712S01025	120712		S01025	1.2	●																
	120716S01025	120716		S01025	1.6	●																
SNGN 120704S01525	SNGN 120704	S01525	0.4																			
120708S01525	120708		S01525	0.8																		
120712S01525	120712		S01525	1.2																		
120716S01525	120716		S01525	1.6																		
120720S01525	120720		S01525	2.0																		

(mm)

90° Square / Negative

Description	A	T	ød
SN_N1207_	12.70	7.94	-
SNGN1507_	15.875		
SNGX1207_	12.70	7.94	
SNGX1507_	15.875	7.94	

Edge Specification				Classification of usage ✦: Interruption / 1st Choice ✧: Interruption / 2nd Choice ●: Light Interruption / 1st Choice ○: Light Interruption / 2nd Choice ●: Continuous / 1st Choice ○: Continuous / 2nd Choice	Material Compatibility										Ref. Page for Toolholder
Symbol	Cutting Edge Condition	Example	K		Gray Cast Iron (With Scale)		Gray Cast Iron (Without Scale)		Nodular Cast Iron (With Scale)		Nodular Cast Iron (Without Scale)		S	H	
Insert		Description		(Previous Description)	Edge Preparation	Dim. (mm)	Alumina Ceramic	PVD Coated Ceramic	MEGACOAT Ceramic	Silicon Nitride Ceramic	OD Coated Silicon Nitride Ceramic	Cell Fiber			
					rε	KA30	A65	A66N	PT600M	KS6000	KS6050	CS7050	CF1		
 	SNGN	120704S02025	-	S02025	0.4				●					D25 D34 D35 F73	
		120708S02025	-		0.8					●					
		120712S02025	-		1.2					●					
		120716S02025	-		1.6					●					
		120720S02025	-		2.0					●					
	SNGN	120708T01020	-	T01020	0.8										●
		120712T01020	-		1.2										●
		120716T01020	-		1.6										●
		120720T01020	-		2.0										●
	SNGN	120704T02025	SNGN 120704	T02025	0.4		●			●					
		120708T02025	120708		0.8		●			●	□				
		120712T02025	120712		1.2		●			●	□				
		120716T02025	120716		1.6		●			●	□	●	●		
		120720T02025	120720		2.0		●			●					
SNMN	120716T02025	SNMN 120716	T02025	1.6		●									
SNGN	150712T02025	SNGN 150712	T02025	1.2		●			●	□				D25	
	150716T02025	150716		1.6		●			●	□					
 	SNGX	120708T02025	-	T02025	0.8					□			D30 D31 F74		
		120712T02025	-		1.2					●	●	●			
		120716T02025	-		1.6					●	●	●			
		120720T02025	-		2.0						□				
	SNGX	150708T02025	-	T02025	0.8						□			D30 D31	
		150712T02025	-		1.2						□				
		150716T02025	-		1.6						□				
		150720T02025	-		2.0						□				
	SNGX	150712T03030	-	T03030	1.2						□				
		150716T03030	-		1.6						□				
150720T03030		-	2.0							□					

B  
Insert (Turning)

● : Std. Item □ : Check Availability

Inserts are sold in 10 piece boxes.

# Turning Indexable Inserts

(mm)

## 60° Triangle / Negative

Description	A	T	ød
TNGA 1604	9.525	4.76	3.81
TNGN 1103	6.35	3.18	-
TNGN 1604	9.525	4.76	-
1607		7.94	

B



Insert (Turning)

Edge Specification				Classification of usage ✂: Interruption / 1st Choice ✂: Interruption / 2nd Choice ●: Light Interruption / 1st Choice ○: Light Interruption / 2nd Choice ●: Continuous / 1st Choice ○: Continuous / 2nd Choice	Material Compatibility										Ref. Page for Toolholder
Symbol	Cutting Edge Condition	Example			K		S		H		Ceramic				
S	Chamfered and Honed Cutting Edge	S01525	0.15mm X 25° Chamfered and Honed Cutting Edge		Gray Cast Iron (With Scale)	Gray Cast Iron (Without Scale)	Nodular Cast Iron (With Scale)	Nodular Cast Iron (Without Scale)	Heat-Resistant Alloys	Hard materials	Alumina Ceramic	PVD Coated Ceramic	MEGACOAT Ceramic	Silicon Nitride Ceramic	
T	Chamfered Cutting Edge	T01525	0.15mm X 25° Chamfered Cutting Edge	Dim. (mm)	KA30	A65	A6N	PT600M	KS6000	KS6050	CS7050	CF1			
Insert	Description	(Previous Description)	Edge Preparation	Dim. (mm)	KA30	A65	A6N	PT600M	KS6000	KS6050	CS7050	CF1			
	TNGA 160408S01025	TNGA 160408	S01025	0.8	●										D14 D15 F65 F70
	TNGA 160404S01525	TNGA 160404	S01525	0.4			●								
	160408S01525	160408		0.8			●								
	160412S01525	160412		1.2			●								
	TNGA 160404S02025	-	S02025	0.4				●							
	160408S02025	-		0.8				●							
	160412S02025	-		1.2				●							
	TNGA 160408S03030	TNGA 160408-T30	S03030	0.8			●								
	160412S03030	160412-T30		1.2			●								
	TNGA 160408T00520	TNGA 160408-T05	T00520	0.8	●										
	TNGA 160404T01525	TNGA 160404T01525	T01525	0.4			●								
	160408T01525	160408T01525		0.8			●								
160412T01525	160412T01525	1.2				●									
TNGA 160404T02025	TNGA 160404	T02025	0.4	●			●								
160408T02025	160408		0.8	●			●	●							
160412T02025	160412		1.2				●	●							
	TNGN 110308S00520	TNGN 110308	S00520	0.8			●								
	TNGN 110304T00520	TNGN 110304		0.4	●			●							
	110308T00520	110308		0.8	●			●							
	110312T00520	110312	1.2	●			●								
	TNGN 110304T01525	TNGN 110304T01525	T01525	0.4			□								
	110308T01525	110308T01525		0.8			□								
	110312T01525	110312T01525		1.2			□								
	TNGN 160404S01025	TNGN 160404	S01025	0.4	●										
	160408S01025	160408		0.8	●										
	160412S01025	160412		1.2	●										
	160416S01025	160416		1.6	●										
	160420S01025	160420		2.0	●										
	TNGN 160404S01525	TNGN 160404	S01525	0.4			●								
	160408S01525	160408		0.8			●								
	160412S01525	160412		1.2			●								
	TNGN 160404S02025	-	S02025	0.4				●							
	160408S02025	-		0.8				●							
	160412S02025	-		1.2				●							
	TNGN 160404T00520	TNGN 160404-T05	T00520	0.4	□	●									
	160408T00520	160408-T05		0.8	●	●									
	160412T00520	160412-T05		1.2	●										
	160416T00520	160416-T05		1.6	□										
	160420T00520	160420-T05		2.0	□										
	TNGN 160404T02025	TNGN 160404	T02025	0.4		●		●							
160408T02025	160408	0.8		●	●		●	●							
160412T02025	160412	1.2			●		●								

(mm)

**60°Triangle/ Negative**  
**35°Rhombic / Negative**  
**80°Trigon / Negative**

Description	A	T	ød
TNGN 1607_	9.525	7.94	-
TNGN 2204_	12.70	4.76	-
VN_A 1604_	9.525	4.76	3.81
WNGA 0804_	12.70	4.76	5.16

B



Insert (Turning)

Edge Specification				Classification of usage ✂: Interruption / 1st Choice ✂: Interruption / 2nd Choice ●: Light Interruption / 1st Choice ○: Light Interruption / 2nd Choice ●: Continuous / 1st Choice ○: Continuous / 2nd Choice	Material Compatibility										Ref. Page for Toolholder
Symbol	Cutting Edge Condition	Example			K	Gray Cast Iron (With Scale)		Gray Cast Iron (Without Scale)		Nodular Cast Iron (With Scale)		Nodular Cast Iron (Without Scale)		S	
S	Chamfered and Honed Cutting Edge	S01525	0.15mm X 25° Chamfered and Honed Cutting Edge		●			●							
T	Chamfered Cutting Edge	T01525	0.15mm X 25° Chamfered Cutting Edge												
Insert	Description	(Previous Description)	Edge Preparation	Dim. (mm)	Alumina Ceramic		PVD Coated Ceramic	MEGACOAT Ceramic	Silicon Nitride Ceramic	CVD Coated Silicon Nitride Ceramic	Cell Fiber	Ref. Page for Toolholder			
					KA30	A65	A6N	PT600M	KS6000	KS6050	CS7050		CF1		
	TNGN 160708S01525	TNGN 160708	S01525	0.8			●					D26			
	TNGN 160708S02025	-	S02025	0.8				●							
	TNGN 160704T02025	TNGN 160704	T02025	0.4	●			●							
	160708T02025	160708		0.8	●			●							
	160712T02025	160712		1.2	●			●							
	160716T02025	160716		1.6	●										
	160720T02025	160720		2.0	●										
TNGN 220408T02025	TNGN 220408T02025	T02025	0.8	□							-				
220412T02025	220412T02025		1.2	□											
220416T02025	220416T02025		1.6	□											
	VNGA 160404S01525	VNGA 160404	S01525	0.4			●				D16 D17 D18				
	160408S01525	160408		0.8			●								
	VNGA 160404S02025	-	S02025	0.4				●							
	160408S02025	-		0.8				●							
	VNGA 160404T02025	VNGA 160404	T02025	0.4	●			●							
	160408T02025	160408		0.8	●			●							
160412T02025	-	1.2					●								
VNMA 160408S01525	VNMA 160408	S01525	0.8			●									
	WNGA 080408S01525	WNGA 080408	S01525	0.8			●				D20 F70				
	WNGA 080404T01525	WNGA 080404T01525	T01525	0.4			●								
	080408T01525	080408T01525		0.8			●								
	080412T01525	080412T01525		1.2			●								
	WNGA 080412T02025	WNGA 080412T02025		T02025	1.2				●						

● : Std. Item □ : Check Availability

Inserts are sold in 10 piece boxes.

# Turning Indexable Inserts

(mm)

## Positive

B





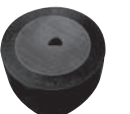

Insert (Turning)

Description	A	T	øa
SPGN 0903_	9.525	3.18	11°
SPGN 1203_	12.70	3.18	

Description	A	T	øa
TBGN 0601_	3.97	1.59	5°
TCGN 1604_	9.525	4.76	7°
TPGN 0902_	5.56	2.38	11°
1103_	6.35	3.18	
1603_	9.525		

Edge Specification				Classification of usage ✂: Interruption / 1st Choice ✂✂: Interruption / 2nd Choice ●: Light Interruption / 1st Choice ○: Light Interruption / 2nd Choice ●: Continuous / 1st Choice ○: Continuous / 2nd Choice											Ref. Page for Toolholder
Symbol	Cutting Edge Condition	Example			K	Gray Cast Iron (With Scale)		Gray Cast Iron (Without Scale)		Nodular Cast Iron (With Scale)		Nodular Cast Iron (Without Scale)			
S	Chamfered and Honed Cutting Edge	S01525	0.15mm X 25° Chamfered and Honed Cutting Edge			S	Heat-Resistant Alloys				Hard materials				
T	Chamfered Cutting Edge	T01525	0.15mm X 25° Chamfered Cutting Edge	H											
Insert		Description		(Previous Description)	Edge Preparation	Dim. (mm)	Alumina Ceramic		PVD Coated Ceramic	MEGACOAT Ceramic	Silicon Nitride Ceramic	CVD Coated Silicon Nitride Ceramic	Cell Fiber	Ref. Page for Toolholder	
					rε	KA30	A65	A6N	PT600M	KS6000	KS6050	CS7050	CF1		
		SPGN 090308S00820	SPGN 090308	S00820	0.8			●						E36 F60	
		SPGN 090308T00820	SPGN 090308	T00820	0.8	●			●						
		SPGN 120308S00820	SPGN 120308	S00820	0.8				●	●					
		SPGN 120308T00820	SPGN 120308	T00820	0.8	●			●	●					
		120312T00820	120312	T00820	1.2	●			●	●					
		120316T00820	-	-	1.6				●	●					
		TBGN 060102S00820	TBGN 060102	S00820	0.2			●						-	
		060104S00820	060104		0.4			●	●						
		060108S00820	060108		0.8			●	●						
		TBGN 060102T00820	-	T00820	0.2				□					-	
		060104T00820	-		0.4				●						
		060108T00820	-		0.8				●						
		TCGN 160404T00820	TCGN 160404	T00820	0.4	●								F73	
		160408T00820	160408		0.8	●									
		TPGN 090204T00820	-	T00820	0.4					●				F61	
		090208T00820	-		0.8					●					
		TPGN 110302S00820	TPGN 110302	S00820	0.4				●	●				E37 F61	
		110304S00820	110304		0.8				●	●					
		110308S00820	110308		0.8				●	●					
		TPGN 110304T00820	TPGN 110304	T00820	0.4	●			●	●				E37 F61	
		110308T00820	110308		0.8	●			●	●					
		TPGN 160304S00820	TPGN 160304	S00820	0.4				●	●				E37 F61	
		160308S00820	160308		0.8				●	●					
		160312S00820	160312		1.2				●	●					
TPGN 160302T00820	TPGN 160302	T00820	0.2	●								E37 F61			
160304T00820	160304		0.4	●				●							
160308T00820	160308		0.8	●				●							
160312T00820	160312		1.2	●				●							

## Inserts for High Hardened Roll

Edge Specification				Classification of usage ✦: Interruption / 1st Choice ✧: Interruption / 2nd Choice ●: Light Interruption / 1st Choice ○: Light Interruption / 2nd Choice ●: Continuous / 1st Choice ○: Continuous / 2nd Choice											Ref. Page for Toolholder	
Symbol	Cutting Edge Condition	Example			K	Gray Cast Iron (With Scale)				Gray Cast Iron (Without Scale)		Nodular Cast Iron (With Scale)		Nodular Cast Iron (Without Scale)		
S	Chamfered and Honed Cutting Edge	S01525	0.15mm X 25° Chamfered and Honed Cutting Edge													
T	Chamfered Cutting Edge	T01525	0.15mm X 25° Chamfered Cutting Edge	S	Heat-Resistant Alloys											
				H	Hard materials											
Insert	Description	(Previous Description)	*Edge Preparation	Dim.(mm)					Alumina Ceramic		PVD Coated Ceramic	MEGACOAT Ceramic	Silicon Nitride Ceramic	OD Coated Sintered Ceramic	Cell Fiber	Ref. Page for Toolholder
				øD	ød	A	B	F	KA30	A65	A66N	PT600M	KS6000	KS6050	CS7050	
	RBG 12K20003	-	K20003	12	6	6	3	0.2								
	16K20003	RBG 16W	K20003	16	8	8	5	0.2	●							
	20K20003	RBG 20W	K20003	20	10	10	5	0.3	●							
	RCGX 090700P20015	-	P20015						●	●	●					
	090700S01020	-	S01020	9.525	-	8	-	-						●		
	090700T01525	RCGX090700T01525	T01525							●						
	120700P20015	-	P20015						●	●	●					
	120700S01020	-	S01020	12.7	-	8	-	-						●		
	120700T01525	RCGX120700T01525	T01525							●						
	RCGX160700K20015	RCGX160700	K20015	15.875	-	8			●							
RCGX191000P20015	RCGX191000	P20015	19.05	-	10			●								
	RCGX251200P20015	RCGX251200	P20015	25.40	-	12			●							
	LNUN 381232P20015	LNUN 381232	P20015	W=38.1	T=12.70	A=19.05	rε=3.18	-		□						

\* For cutting edge "K" and "P," please refer to the table below.

Edge Preparation			
Symbol	Cutting Edge Condition	Example	
K	Double Chamfered Cutting Edges	K20003	2.00mm X 3° Chamfered Cutting Edge
P	Double Chamfered + Honed Cutting Edge	P20015	2.00mm X 15° Chamfered + Honed Cutting Edge

\* Note: Symbol "K" and "P" describe only the largest chamfer width and its angle.

● : Std. Item □ : Check Availability

RBG Inserts are sold in 1 piece boxes.

Inserts are sold in 10 piece boxes.

B



Insert (Turning)



# Turning Indexable Inserts

## Grooving Inserts

B



Insert (Turning)

Edge Specification				Classification of usage ✦: Interruption / 1st Choice ✧: Interruption / 2nd Choice ●: Light Interruption / 1st Choice ○: Light Interruption / 2nd Choice ●: Continuous / 1st Choice ○: Continuous / 2nd Choice	Material										Ref. Page for Toolholder		
Symbol	Cutting Edge Condition	Example			Gray Cast Iron (With Scale)	Gray Cast Iron (Without Scale)	Nodular Cast Iron (With Scale)	Nodular Cast Iron (Without Scale)	Heat-Resistant Alloys	Hard materials	Alumina Ceramic	PVD Coated Ceramic	MEGACOAT Ceramic	Silicon Nitride Ceramic		OD Coated Silicon Nitride Ceramic	Cell Fiber
S	Chamfered and Honed Cutting Edge	S01525	0.15mm X 25° Chamfered and Honed Cutting Edge	K					S	H	Alumina Ceramic		PVD Coated Ceramic	MEGACOAT Ceramic	Silicon Nitride Ceramic	OD Coated Silicon Nitride Ceramic	Cell Fiber
					KA30	A65	A66N	PT600M			KS6000	KS6050					
T	Chamfered Cutting Edge	T01525	0.15mm X 25° Chamfered Cutting Edge	K					S	H	Alumina Ceramic		PVD Coated Ceramic	MEGACOAT Ceramic	Silicon Nitride Ceramic	OD Coated Silicon Nitride Ceramic	Cell Fiber
					KA30	A65	A66N	PT600M			KS6000	KS6050					
Insert		Description		(Previous Description)	Dim.(mm)				Ceramic								
					W	rε	L	H	KA30	A65	A66N	PT600M	KS6000	KS6050	CS7050	CF1	
		GH	4020-05	-	S01020	4.0	0.5	20	7.5			●					G20 G57
			4020-05		T01020					●	●						
			5020-05		S01020					●							
			5020-05		T01020					●	●						
			6020-05		T01020					●	●						
7020-05	T01020		●	●													
		GS	91-5	-	T01020	5.0	0.8	15	7.5								G19
			91-6		T01020												
			91-7		T01020												
			91-8		T01020												