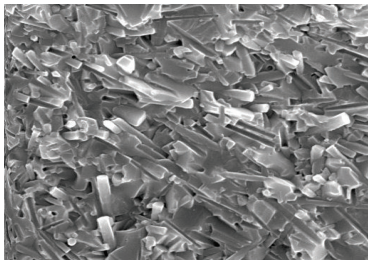
GRADES DESCRIPTION OPIS GATUNKÓW

Grade Information Informacja o gatunkach

Ceramic Caramika	Sic Whisker	S500	Machining for high temperature alloy, inconel, stellite and high nikel alloy Obróbka wysokostopewj stali, niklu i inconel)
	Al2O3+TiC(N)	S300	Finishing for hardened steel and cast iron Obróbka wykańczająca dla hartowanej stali i żeliwa
		S310	General machining for hardened steel and cast iron Ogólna obróbka dla hartowanej stali i żeliwa
		S320	Fine finishing for hardened steel and cast iron Obróbka wykańczająca dla hartowanej stali i żeliwa
		S330	Fine finishing for hardened steel and cast iron in high speed Obróbka wykańczająca dla hartowanej stali i żeliwa przy dużych prędkościach
	TiN Coating Powłoka	S610	TiN coated on S300 grade Dodatkowa Powłoka TiN gatunku S300
		S620	TiN coated on S310 grade Dodatkowa Powłoka TiN gatunku S310
	TiC+Al2O3	S100	Turning & Milling for ductile cast iron in finish Obróbka wykańczająca toczenia i frezowania dla żeliwa sferodialnego
	Al2O3+ZrO2	S400	Medium cutting for cast iron Obróbka średniowykańczająca dla żeliwa
		S410	Medium cutting for high hardness cast iron Obróbka średniowykańczająca dla hartowanego żeliwa
	Si3N4	S025	Roughing and interrupted cutting for cast iron Obróbka zgrubna i przerywana dla żeliwa
		S200	Roughing and heavy interrupted cutting for cast iron Obróbka zgubna i mocno przerywana dla żeliwa
		S210	General machining for cast iron Obróbka ogólna dla żeliwa
		S220	Roughing for hard material in high speed Obróbka zgrubna dla twardych materiałów przy dużych prędkościach
		S230	Roughing for hard material with interrupted in high speed Obróbka zgrubna dla twardych materiałów z przerywaniem przy dużych prędkościach
		S250	General machining for high temperature alloy and inconel Obróbka ogólna dla materiałów wysokostopowuch i inconelu

S500 ceramic cermika

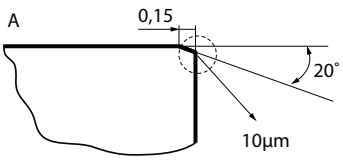
Advanced Silicon-Carbide (SiC). Whisker-reinforced ceramic grade.
Operate up to 3~4 times higher speed than coated carbide tools.
Zaawansowany węglik- krzemu (SiC). Wzmocniony gatunek ceramiki Whisker, pracuje z 3-4 razy większą prędkością niż narzędzia z węglika spiekanego z powłoką .



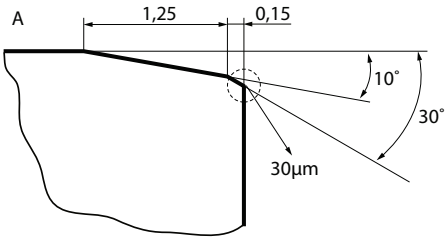
Ultra-strong whiskers makes possible increasing fracture toughness and notch wear resistance.
Ultra silny Whisker umożliwia zwiększenie odporności na pękanie oraz wyszczerbienia krawędzi.

Composition Skład	**Density Gęstość** (g/cm³)	**Hardness** Twardość (Hv)	**Toughness** Wytrzymałość (MPa·m½)	**Thermal expansion coefficient** Współczynnik rozszerzalności cieplnej (* 10-6/K)
Al2O3 + SiC	3.7	2,100	7.0	7.6

Example chanfer - przykadowy łamacz



T031- single chamfer



TBA3 - double chamfer

Chamfer Łamacz	**Edge** Ostrze	Application Zastosowanie	**Feed** Posuw
T010	0,5~0,10*20˚	Continuous cutting Obróbka ciągła	0,1~0,25
T011	0,5~0,10*20˚ + 0,013~0,025	Slightly interrupted Obróbka lekko przerywana	0,1~0,25
T030	0,15~0,2*20˚	Continuous cutting Obróbka ciągła	0,25~0,38
T031	0,15~0,2*20˚ + 0,012-0,025	Interrupted cutting Obróbka przerywana	0,25~0,38
TBA3	1,27~1,52*15˚ + (0,15~0,20*30˚) + 0,025~0,06	Roll turning Walcowanie	
TDA3	2,29~2,54*15˚+ (0,15~0,20*30˚) + 0,025~0,06	Roll turning Walcowanie	

ISO turning inserts designation / Oznaczenie pytek do toczenia według ISO

Ceramic inserts / Płytki ceramiczne /

C	N	G	N	12	04	08	T	020	20
1	2	3	4	5	6	7	8	9	10

1 Shapes
Krztałty

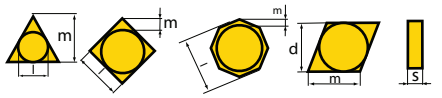
120°	135°	108°	
H	O	P	R
90°	60°	80°	55°
S	T	C	D
75°	86°	35°	80°
E	M	V	W
82°	85°	82°	55°
L	A	B	K

2 Reliefe angle
Kąt przyłożenia

3°	5°
A	B
7°	15°
C	D
20°	25°
E	F
30°	0°
G	N
11°	
P	

3 Tolerance
Tolerancja (mm)

Classe Klasa	m (±)	s (±)	d = l (±)
E	0,025	0,025	0,025
G	0,08	0,13	0,05
K	0,013	0,025	0,05
L	0,013	0,025	0,05
M	0,08	0,13	0,05
U	0,13	0,13	0,05



4 Type
Wykonanie

N	R
F	A
M	G, P
W	T
	Special Special
Q	X

5 Cutting edge lenght
Długość ostrza (mm)

D=l(mm)	A	C	D	K	O	R	S	T	V	W
4,76										
5										
5,56					05					
6						06				
6,35		06	07					11		
6,7	10									
7,94					07					05
8						08				
9,525	15	09	11	16			09	16	16	06
10						10				
12						12				
12,7		12	15				12	22		08
15,87	16	16					15	27		
19,05		19					19			
25,4		25					25			

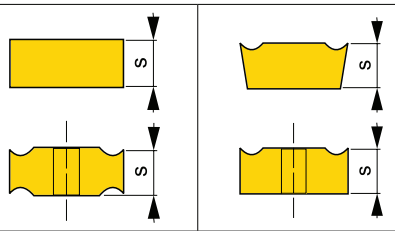
TURNING INSERTS PŁYTKI DO TOCZENIA

ISO turning inserts designation / Oznaczenie pytek do toczenia według ISO

Ceramic inserts / Płytki ceramiczne /

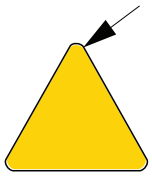
C	N	M	G	12	04	08	T	020	20
1	2	3	4	5	6	7	8	9	10

6 Thickness
Grubość (mm))



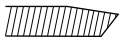
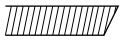
Specification Oznaczenie	S (mm)
01	1,59
T1	1,98
02	2,38
03	3,18
T3	3,97
04	4,76
05	5,56
06	6,35
07	7,94

7 Corner radius
Promień naroża (mm

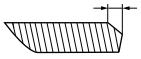


Specification Oznaczenie	r (mm)
00	0
02	0,2
04	0,4
08	0,8
12	1,2
16	1,6
24	2,4
32	3,2

8 Profile of cutting edges
Zarys krawędzi tnącej

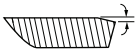
E	
T	
S	
F	

9 Width of chamfer
Szerokość fazowania



010	0.10
015	0.15
020	0.20
025	0.25
030	0.30
035	0.35
040	0.40
045	0.45
050	0.50
100	1.00
200	2.00

10 Width of chamfer
Szerokość fazowania



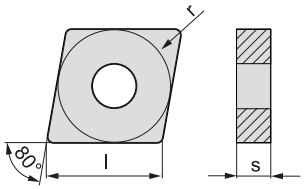
05	5°
10	10°
15	15°
20	20°
25	25°
30	30°

TURNING INSERTS PŁYTKI DO TOCZENIA

CN** Ceramic

Ceramic inserts / Płytki ceramiczne /

CN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		CNGA120404	12.7		4.76	0.4		●		●	●	●	●			●			●					●	
		CNGA120408	12.7		4.76	0.8		●		●	●	●	●	●	●	●	●	●	●	●	●	●		●	
		CNGA120412	12.7		4.76	1.2		●		●	●					●	●		●	●	●	●	●	●	
		CNGA120416	12.7		4.76	1.6		○		●	●					●			●	●	●			●	
		CNGA120704	12.7		7.94	0.4																			
		CNGA120708	12.7		7.94	0.8				●	●						●		●	●					
		CNGA120712	12.7		7.94	1.2				●	●	●					●		●	●				●	
		CNGA120716	12.7		7.94	1.6				●							●		●	●				●	
		CNGA160608	15.875		6.35	0.8		○											●						
		CNGA160612	15.875		6.35	1.2		●											●	●	●				
		CNGA160616	15.875		6.35	1.6		●		●											●				
		CNGA160708	15.875		7.94	0.8				●	●														
		CNGA160712	15.875		7.94	1.2				●	●									●					
		CNGA160716	15.875		7.94	1.6														●					
		CNGA190608	19.05		6.35	0.8				●									●	●					
		CNGA190612	19.05		6.35	1.2													●					●	
		CNGA190616	19.05		6.35	1.6				●	●														
		CNGA190712	19.05		7.94	1.2																			
		CNGA190716	19.05		7.94	1.6				●															

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

- General / Ogólne

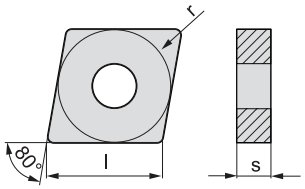
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

CN** Ceramic

Ceramic inserts / Płytki ceramiczne /

CN



P																							
K																							

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	Grade Gatunek S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		CNMA120408	12.70		4.76	0.8														●	●				
		CNMA120412	12.70		4.76	1.2														●	●	●	●	●	
		CNMA120416	12.70		4.76	1.6														●	●	●			
		CNMA160612	15.87		6.35	1.2															●				
		CNMA160616	15.87		6.35	1.6															●				

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

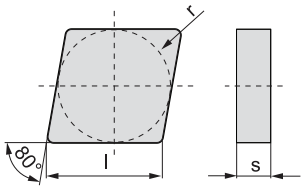
● - Stable / Stabilne
- General / Ogólne
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

CN** Ceramic

Ceramic inserts / Płytki ceramiczne /

CN



P																								
K																								

Application Zastosowanie	IInsert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar				Grade Gatunek																	
			l	l.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		CNGN090304	9.52		3.18	0.4					●														
		CNGN090308	9.52		3.18	0.8						●													
		CNGN090312	9.52		3.18	1.2																			
		CNGN120304	12.7		3.18	0.4				●															
		CNGN120308	12.7		3.18	0.8				●															
		CNGN120312	12.7		3.18	1.2				●															
		CNGN120404	12.7	12.7	4.76	0.4	○	○	○	●	●					●	●								
		CNGN120408	12.7	12.7	4.76	0.8	●	○	●	●	●	●	●		●	●	●	●	●		●	●		●	●
		CNGN120412	12.7	12.7	4.76	1.2	○	○	○	●	●	●	●			●	●		●		●	●	●	●	●
		CNGN120416	12.7	12.7	4.76	1.6	○	○	●	●	●	●				●			●		●	●	●	●	●
		CNGN120704	12.7		7.94	0.4	●	○	○																
		CNGN120708	12.7		7.94	0.8													●	●				●	
		CNGN120712	12.7		7.94	1.2				●	●					●	●		●		●	●		●	●
		CNGN120716	12.7		7.94	1.6				●	●					●	●		●		●	●		●	●
		CNGN160608	15.875		6.35	0.8	○	○	○																
		CNGN160612	15.875		6.35	1.2	○			●															
		CNGN160608	15.875		6.35	1.6	○	○	○	●															
		CNGN160708	15.875		7.94	0.8				●							●								
		CNGN160712	15.875		7.94	1.2				●	●	●							●		●	●			
		CNGN160716	15.875		7.94	1.6				●	●	●				●		●	●	●	●				
		CNGN160720	15.875		7.94	2.0				●									●	●					
		CNGN190612	19.05		6.35	1.2				●															
		CNGN190616	19.05		6.35	1.6				●															
		CNGN190712	19.05		7.94	1.2																			
		CNGN190716	19.05		7.94	1.6				●	●														
		CNGN190720	19.05		7.94	2.0				●															
		CNGN250724	25.40		7.94	2.4				●															
		CNGN250924	25.40		9.52	2.4				●									●						

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

◐ - General / Ogólne

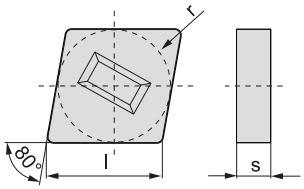
✠ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

CN** Ceramic

Ceramic inserts / Płytki ceramiczne /

CN



P																									
K																									

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar				Grade Gatunek																	
			l	I.C.	s	r	Oznaczenie	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		CNGX120412	12.7		4.76	1.2														●	●				
		CNGX120416	12.7		4.76	1.6															●				
		CNGX120708	12.7		7.94	0.8				●	●									●					
		CNGX120712	12.7		7.94	1.2		●		●	●									●	●	●			
		CNGX120716	12.7		7.94	1.6		●		●	●									●	●	●	●		
		CNX160708	15.875		7.94	0.8														●					
		CNX160712	15.875		7.94	1.2														●	●	●			
		CNX160716	15.875		7.94	1.6														●	●				

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

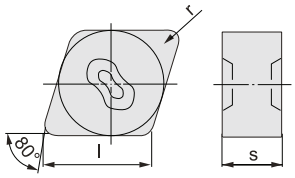
● - Stable / Stabilne
- General / Ogólne
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

CN** Ceramic

Ceramic inserts / Płytki ceramiczne /

CN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	I.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		CNVX120412	12.70		4.76	1.2															●				
		CNVX120416	12.70		4.76	1.6															●				
		CNVX120708	12.70		7.94	0.8				●							●			●					
		CNVX120712	12.70		7.94	1.2				●							●			●	●	●	●	●	
		CNVX120716	12.70		7.94	1.6					●						●			●	●	●	●	●	
		CNVX160708	15.87		7.94	0.8																			
		CNVX160712	15.87		7.94	1.2																			
		CNVX160716	15.87		7.94	1.6																			

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

- General / Ogólne

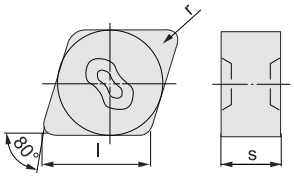
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

CN** Ceramic

Ceramic inserts / Płytki ceramiczne /

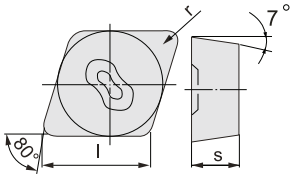
CN



Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	I.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																									
K																									
		CNMX120712	12.70		7.94	1.2															●	●	●		
		CNMX120716	12.70		7.94	1.6															●	●	●	●	

Ceramic inserts / Płytki ceramiczne /

CN



Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	I.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																									
K																									
		CCGX120608	12.70		6.35	0.8															●				
		CCGX120612	12.70		6.35	1.2															●			●	

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

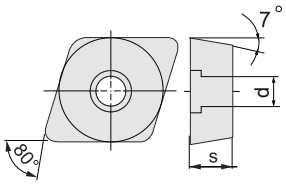
● - Stable / Stabilne
◐ - General / Ogólne
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

CN** Ceramic

Ceramic inserts / Płytki ceramiczne /

CN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	I.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		CCGW09T304	9.52		3.97	0.4														●	●				
		CCGW09T308	9.52		3.97	0.8														●	●				
		CCGW09T312	9.52		3.97	1.2														●	●	●			
		CCGW120408	12.70		4.76	0.8															●				
		CCGW120412	12.70		4.76	1.2															●				

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

- General / Ogólne

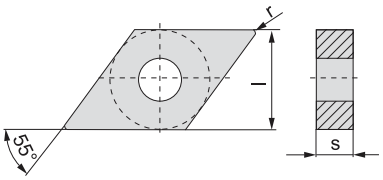
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

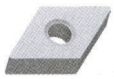
DN** Ceramic

Ceramic inserts / Płytki ceramiczne /

DN



P																									
K																									

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar				Grade Gatunek																		
			l	l.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		DNGA150404	12.7		4.76	0.4				●	●		●												
		DNGA150408	12.7		4.76	0.8				●	●	●	●		●				●	●	●				
		DNGA150412	12.7		4.76	1.2				●	●	●	●							●	●	●		●	
		DNGA150416	12.7		4.76	1.6				●															
		DNGA150604	12.7		6.35	0.4		●		●	●	●	●			●		●							
		DNGA150608	12.7		6.35	0.8		●		●	●	●	●			●			●		●				
		DNGA150612	12.7		6.35	1.2		○		●	●	●	●						●		●	●		●	
		DNGA150616	12.7		6.35	1.6		○		●	●	●													
		DNGA150704	12.7		7.94	0.4				●	●						●		●	●	●				
		DNGA150708	12.7		7.94	0.8				●	●						●			●	●	●		●	
		DNGA150712	12.7		7.94	1.2				●	●														
		DNGA150716	12.7		7.94	1.6																			
		DNGA190608	15.87		6.35	0.8				●	●														
		DNGA190612	15.87		6.35	1.2				●	●						●		●		●			●	
		DNGA190616	15.87		6.35	1.6				●															

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

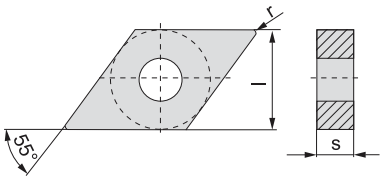
● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne
- General / Ogólne
- Adverse / Niestabilne

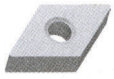
TURNING INSERTS PŁYTKI DO TOCZENIA

DN** Ceramic

DN



P																											
K																											

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar				Grade Gatunek																		
			l	l.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		DNMA150612	12.70		6.35	1.2														●	●				
		DNMA150616	12.70		6.35	1.6															●				

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

- General / Ogólne

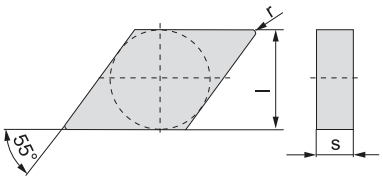
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

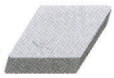
DN** Ceramic

Ceramic inserts / Płytki ceramiczne /

DN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✱																

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	I.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		DNGN150404	12.7		4.76	0.4																			
		DNGN150408	12.7		4.76	0.8	○			●											●				●
		DNGN150412	12.7		4.76	1.2	○			●						●			●		●				●
		DNGN150416	12.7		4.76	1.6																			●
		DNGN150604	12.7		6.35	0.4																			
		DNGN150608	12.7		6.35	0.8				●			●								●			●	
		DNGN150612	12.7		6.35	1.2				●	●		●								●			●	
		DNGN150616	12.7		6.35	1.6																			
		DNGN150704	12.7		7.94	0.4	○	○	○	●	●														
		DNGN150708	12.7		7.94	0.8		○	○	●	●	●	●				●	●	●	●				●	
		DNGN150712	12.7		7.94	1.2	○	○	○	●	●	●	●				●	●	●	●	●			●	
		DNGN150716	12.7		7.94	1.6	○			●	●						●		●	●	●			●	

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

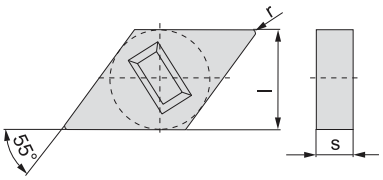
● - Stable / Stabilne
◐ - General / Ogólne
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

DN** Ceramic

Ceramic inserts / Płytki ceramiczne /

DN



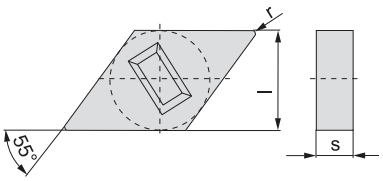
	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✱																

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		DNGX120708	10.00		7.94												●				●				
		DNGX120712	10.00		7.94												●			●	●	●	●	●	
		DNGX120716	10.00		7.94												●			●	●	●			
		DNGX150708	12.7		7.94																				
		DNGX150712	12.7		7.94	1.2		●									●			●	●				
		DNGX150716	12.7		7.94	1.6		●												●	●	●	●	●	

DN** Ceramic

Ceramic inserts / Płytki ceramiczne /

DN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		DNMX120708	10.00		7.94	0.8																●			
		DNMX120712	10.00		7.94	1.2															●	●			
		DNMX120716	10.00		7.94	1.6															●	●			

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

◐ - General / Ogólne

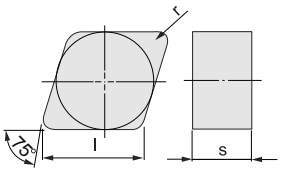
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

EN** Ceramic

Ceramic inserts / Płytki ceramiczne /

EN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	I.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		ENGN130404	12.70		4.76	0.4																			
		ENGN130408	12.70		4.76	0.8					●								●		●				
		ENGN130412	12.70		4.76	1.2					●								●		●				
		ENGN130704	12.70		7.94	0.4				●	●														
		ENGN130708	12.70		7.94	0.8				●	●	●					●	●	●	●	●				
		ENGN130712	12.70		7.94	1.2				●	●	●							●	●	●			●	
		ENGN130716	12.70		7.94	1.6				●	●					●			●	●	●				

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

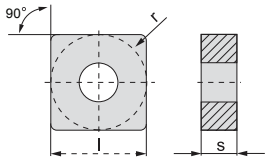
● - Stable / Stabilne
- General / Ogólne
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

SN** Ceramic

Ceramic inserts / Płytki ceramiczne /

SN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✱																

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		SNGA090304	9.52		3.18	0.4				●	●														
		SNGA090308	9.52		3.18	0.8				●	●														
		SNGA090312	9.52		3.18	1.2				●	●														
		SNGA090404	9.52		4.76	0.4																			
		SNGA090408	9.52		4.76	0.8																			
		SNGA0904012	9.52		4.76	1.2																			
		SNGA090416	9.52		4.76	1.6																			
		SNGA120404	12.7		4.76	0.4		○		●		●				●			●						
		SNGA120408	12.7		4.76	0.8		●		●	●	●	●			●			●	●		●		●	
		SNGA120412	12.7		4.76	1.2		●		●	●	●	●			●	●		●	●	●		●	●	
		SNGA120416	12.7		4.76	1.6		○		●						●			●				●	●	
		SNGA120708	12.7		7.94	0.8				●															
		SNGA120712	12.7		7.94	1.2				●									●	●					
		SNGA120716	12.7		7.94	1.6				●							●		●	●					
		SNGA150608	15.87		6.35	0.8					●														
		SNGA150612	15.87		6.35	1.2				●	●														
		SNGA150616	15.87		6.35	1.6					●														
		SNGA190612	19.05		6.35	1.2				●									●	●					
		SNGA190616	19.05		6.35	1.6																			

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

◐ - General / Ogólne

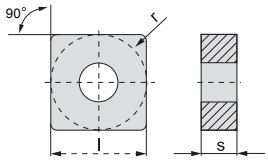
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

SN** Ceramic

Ceramic inserts / Płytki ceramiczne /

SN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		SNMA120408	12.70		4.76	0.8															●				
		SNMA120412	12.70		4.76	1.2														●	●		●		
		SNMA120416	12.70		4.76	1.6														●	●				
		SNMA150616	15.87		6.35	1.6														●	●				

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

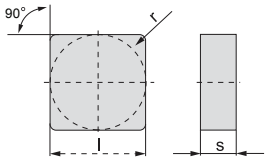
● - Stable / Stabilne
◐ - General / Ogólne
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

SN** Ceramic

Ceramic inserts / Płytki ceramiczne /

SN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✠																

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	l.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		SNGN090304	9.525		3.18	0.4				●	●														
		SNGN090308	9.525		3.18	0.8	○			●	●	●				●			●		●				
		SNGN090312	9.525		3.18	1.2	○			●	●														
		SNGN090404	9.525		4.76	0.4																			
		SNGN090408	9.525		4.76	0.8				●											●				
		SNGN090412	9.525		4.76	1.2											●				●				
		SNGN120404	12.7		4.76	0.4	○			●									●						
		SNGN120408	12.7		4.76	0.4	●	●	○	●	●	●	●		●	●			●	●	●			●	●
		SNGN120412	12.7		4.76	1.2	●	●	●	●	●	●	●		●	●		●	●	●	●		●	●	●
		SNGN120416	12.7		4.76	1.6	○	○	○	●					●	●		●	●	●	●	●		●	●
		SNGN120420	12.7		4.76	2.0				●									●	●	●	●			
		SNGN120604	12.7		6.35	0.4																			
		SNGN120608	12.7		6.35	0.8				●															
		SNGN120612	12.7		6.35	1.2				●															
		SNGN120616	12.7		6.35	1.6				●															
		SNGN120704	12.7		7.94	0.4	●		●		●										●				
		SNGN120708	12.7		7.94	0.8	○			●	●	●	●				●		●	●	●			●	●
		SNGN120712	12.7		7.94	1.2	●			●	●	●	●			●	●		●	●	●	●	●	●	●
		SNGN120716	12.7		7.94	1.6	●			●	●	●	●			●	●	●	●	●	●	●	●	●	●
		SNGN120720	12.7		7.94	2.0				●	●	●				●	●		●	●	●				

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

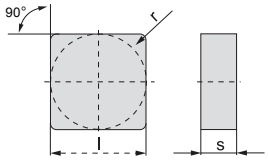
◐ - General / Ogólne

✠ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

SN** Ceramic

SN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✠																

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	l.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		SNGN150404	15.875		4.76	0.4					●														
		SNGN150408	15.875		4.76	0.8					●														
		SNGN150412	15.875		4.76	1.2				●						●			●	●					
		SNGN150416	15.875		4.76	1.6				●									●						
		SNGN150708	15.875		7.94	0.8	○			●															
		SNGN150712	15.875		7.94	1.2	●	○	○	●	●					●	●		●	●	●				
		SNGN150716	15.875		7.94	1.6	●	○	○	●							●	●	●	●	●	●	●		
		SNGN190608	19.05		6.35	0.8																			
		SNGN190612	19.05		6.35	1.2				●									●		●			●	
		SNGN190616	19.05		6.35	1.6				●									●					●	●
		SNGN190708	19.05		7.94	0.8	○																		
		SNGN190712	19.05		7.94	1.2	○			●															
		SNGN190716	19.05		7.94	1.6	○			●	●	●	●			●	●		●		●			●	
		SNGN190720	19.05		7.94	2.0				●							●		●						
		SNGN190724	19.05		7.94	2.4	○																		
		SNGN191024	19.05		10.5	2.4	○																		
		SNGN250720	25.4		7.94	2.0				●									●						
		SNGN250724	25.4		7.94	2.4				●	●								●	●					
		SNGN250924	25.4		9.52	2.4				●		●	●				●		●	●	●			●	
		SNGN251024	25.4		10.5	2.4	○																		

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

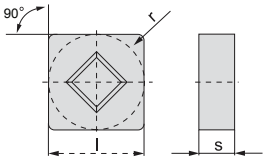
● - Stable / Stabilne
◐ - General / Ogólne
✠ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

SN** Ceramic

Ceramic inserts / Płytki ceramiczne /

SN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✱																

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	I.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		SNGX120408	12.7		4.76	0.8															●				
		SNGX120412	12.7		4.76	1.2															●				
		SNGX120416	12.7		4.76	1.6															●				
		SNGX120708	12.7	12.7	7.94	0.8		○		●										●		●			
		SNGX120712	12.7	12.7	7.94	1.2		○		●	●									●	●	●		●	
		SNGX120716	12.7	12.7	7.94	1.6		●												●	●	●	●	●	
		SNGX150708	15.875		7.94	0.8				●	●									●		●			
		SNGX150712	15.875		7.94	1.2				●	●									●		●		●	
		SNGX150716	15.875		7.94	1.6														●	●	●			

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

◐ - General / Ogólne

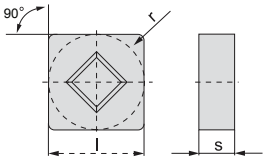
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

SN** Ceramic

Ceramic inserts / Płytki ceramiczne /

SN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	I.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		SNMX120712	12.70		7.94	1.2														●	●	●		●	
		SNMX120716	12.70		7.94	1.6															●				
		SNMX121007	12.70		10.00	0.7											●								
		SNMX121009	12.70		10.00	0.9											●								
		SNMX121012	12.70		10.00	1.2											●								
		SNMX121015	12.70		10.00	1.5											●								
		SNMX121020	12.70		10.00	2.0											●								
		SNMX121025	12.70		10.00	2.5											●								
		SNMX121030	12.70		10.00	3.0											●								
		SNMX121040	12.70		10.00	4.0											●								
		SNMX121050	12.70		10.00	5.0											●								

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

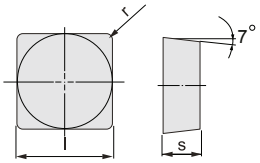
● - Stable / Stabilne
- General / Ogólne
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

SC** Ceramic

Ceramic inserts / Płytki ceramiczne /

SC



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✱																

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	I.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		SCGN090412	9.52		4.76	1.2				●											●				
		SCGN090416	9.52		4.76	1.6				●															
		SCGN120404	12.70		4.76	0.4				●															
		SCGN120408	12.70		4.76	0.8				●	●														
		SCGN120412	12.70		4.76	1.2												●		●	●			●	
		SCGN120416	12.70		4.76	1.6				●	●														

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

◐ - General / Ogólne

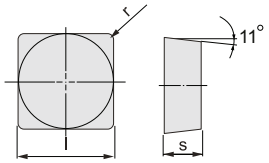
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

SN** Ceramic

Ceramic inserts / Płytki ceramiczne /

SN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	I.C.	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		SPGN090304	9.52		3.18	0.4				●	●								●						
		SPGN090308	9.52		3.18	0.8				●	●					●				●	●	●			●
		SPGN090312	9.52		3.18	1.2				●															
		SPGN120304	12.70		3.18	0.4				●	●														
		SPGN120308	12.70		3.18	0.8				●	●						●		●		●				●
		SPGN120312	12.70		3.18	1.2				●	●					●			●		●				
		SPGN120404	12.70		4.76	0.4																			
		SPGN120408	12.70		4.76	0.8				●	●	●							●		●				●
		SPGN120412	12.70		4.76	1.2				●	●					●			●	●	●	●		●	●
		SPGN120416	12.70		4.76	1.6				●	●					●				●	●	●			●
		SPGN150408	15.87		4.76	0.8																			
		SPGN150412	15.87		4.76	1.2					●									●					
		SPGN190412	19.05		4.76	1.2				●															
		SPGN190416	19.05		4.76	1.6				●	●										●	●			

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

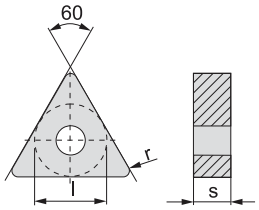
● - Stable / Stabilne
◐ - General / Ogólne
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

TN** Ceramic

Ceramic inserts / Płytki ceramiczne /

TN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✠																

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	D	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		TNGA110304	6.35	2.26	3.18	0.4				●	●														
		TNGA110308	6.35	2.26	3.18	0.8				●	●														
		TNGA160304	9.52	3.81	3.18	0.4				●	●														
		TNGA160308	9.52	3.81	3.18	0.8				●	●						●		●						
		TNGA160312	9.52	3.81	3.18	1.2				●	●														
		TNGA160404	9.52	3.81	4.76	0.4		●		●	●	●	●			●			●	●	●	●		●	
		TNGA160408	9.52	3.81	4.76	0.8		●		●	●	●	●			●		●	●	●	●	●		●	
		TNGA160412	9.52	3.81	4.76	1.2		●		●	●	●	●			●		●	●	●	●	●		●	
		TNGA160416	9.52	3.81	4.76	1.6				●	●	●					●		●	●	●	●		●	
		TNGA220404	12.7	5.16	4.76	0.4				●	●								●						
		TNGA220408	12.7	5.16	4.76	0.8		○		●	●								●		●			●	
		TNGA220412	12.7	5.16	4.76	1.2		○		●	●								●		●			●	
		TNGA220416	12.7	5.16	4.76	1.6		○		●	●						●		●		●				
		TNGA220708	12.7	5.16	7.94	0.8				●	●														
		TNGA220712	12.7	5.16	7.94	1.2				●															
		TNGA270608	15.87	6.35	6.35	0.8					●														
		TNGA270612	15.87	6.35	6.35	1.2					●														
		TNGA330924	19.05	7.94	9.52	2.4					●														

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

◐ - General / Ogólne

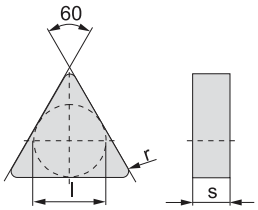
✠ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

TN** Ceramic

Ceramic inserts / Płytki ceramiczne /

TN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✱																

Application / Zastosowanie	Insert shape / Kształt płytki	Description / Oznaczenie	Dimension (mm) / Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		TNGN110304	6.35		3.18	0.4				●	●								●						
		TNGN110308	6.35		3.18	0.8				●	●						●		●						
		TNGN160404	9.525		4.76	0.4	○	○	○	●	●					●	●		●						
		TNGN160408	9.525		4.76	0.8	●	○	○	●	●	●	●		●	●	●		●	●	●		●		
		TNGN160412	9.525		4.76	1.2	●	○	●	●	●	●	●		●				●	●	●				●
		TNGN160412	9.525		4.76	1.6	●	○	●	●	●	●	●			●			●	●	●				
		TNGN160704	9.525		7.94	0.4	○	○	○	●															
		TNGN160708	9.525		7.94	0.8	○	●		●	●					●				●					
		TNGN160712	9.525		7.94	1.2	○	○	○	●	●						●		●	●					
		TNGN160716	9.525		7.94	1.6	○	○	○	●	●								●						
		TNGN220404	12.7		4.76	0.4	○	○	○	●															
		TNGN220408	12.7		4.76	0.8	○			●	●								●		●			●	●
		TNGN220412	12.7		4.76	1.2	○			●	●								●		●			●	●
		TNGN220416	12.7		4.76	1.6	○				●								●		●				●
		TNGN220708	12.7		7.94	0.8				●															
		TNGN220712	12.7		7.94	1.2					●														
		TNGN220716	12.7		7.94	1.6					●														
		TNGN270608	15.87		6.35	0.8				●	●														
		TNGN270612	15.87		6.35	1.2				●	●														
		TNGN270616	15.87		6.35	1.6					●													●	
		TNGN330924	19.05		9.52	2.4					●														
		TNGN440932	25.40		9.52	3.2				●	●								●						

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

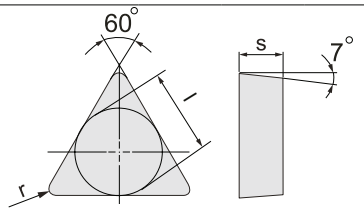
● - Stable / Stabilne
◐ - General / Ogólne
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

TC** Ceramic

Ceramic inserts / Płytki ceramiczne /

TC



P																									
K																									

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar				Grade Gatunek																		
			l	D	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		TCUN160408	9.52		4.76	0.8														●	●				
		TCUN160412	9.52		4.76	1.2														●	●				
		TCUN160416	9.52		4.76	1.6														●					

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

- General / Ogólne

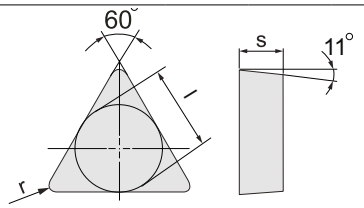
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

TP** Ceramic

Ceramic inserts / Płytki ceramiczne /

TP



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✱																

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		TPGN090204	5.56		2.38	0.4					●														
		TPGN090208	5.56		2.38	0.8					●														
		TPGN110304	6.35		3.18	0.4				●	●					●			●		●				●
		TPGN110308	6.35		3.18	0.8				●	●					●			●	●	●			●	●
		TPGN160304	9.52		3.18	0.4				●	●	●				●	●		●		●				●
		TPGN160308	9.52		3.18	0.8				●	●					●	●		●	●	●	●		●	●
		TPGN160312	9.52		3.18	1.2				●	●										●	●			●
		TPGN160316	9.52		3.18	1.6																			●
		TPGN160404	9.52		4.76	0.4				●		●													
		TPGN160408	9.52		4.76	0.8				●	●													●	
		TPGN160412	9.52		4.76	1.2				●														●	
		TPGN160416	9.52		4.76	1.6				●															
		TPGN220404	12.70		4.76	0.4				●	●														●
		TPGN220408	12.70		4.76	0.8				●	●								●						●
		TPGN220412	12.70		4.76	1.2				●	●									●	●				●
		TPGN220416	12.70		4.76	1.6				●	●	●													●
		TPGN220712	12.70		7.94	1.2																			
		TPGN220716	12.70		7.94	1.6																			
		TPGN271232	15.87		12.70	3.2					●														

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

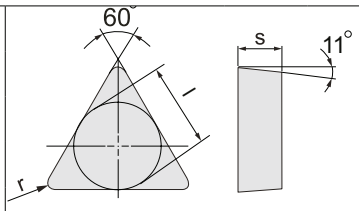
● - Stable / Stabilne
◐ - General / Ogólne
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

TP** Ceramic

Ceramic inserts / Płytki ceramiczne /

TP



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	D	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		TPUN110308	6.35		3.18	0.8															●				
		TPUN110312	6.35		3.18	1.2															●				

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

- General / Ogólne

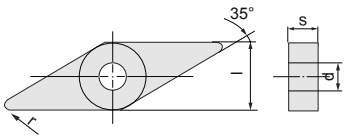
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

VN** Ceramic

Ceramic inserts / Płytki ceramiczne /

VN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		VNGA160404	9.52		4.76	0.4				●	●	●							●						
		VNGA160408	9.52		4.76	0.8				●	●	●			●			●	●	●		●		●	
		VNGA160412	9.52		4.76	1.2				●	●	●						●	●	●	●	●			
		VNGA160604	9.52		6.35	0.4				●	●														
		VNGA160608	9.52		6.35	0.8				●	●														
		VNGA160612	9.52		6.35	1.2				●	●														
		VNGA220404	12.70		4.76	0.4				●	●														
		VNGA220408	12.70		4.76	0.8				●	●										●				
		VNGA220412	12.70		4.76	1.2				●	●										●				

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

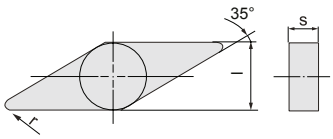
● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne
- General / Ogólne
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

VN** Ceramic

VN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	D	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		VNGN160704	9.52		7.94	0.4					●														
		VNGN160708	9.52		7.94	0.8					●														
		VNGN160712	9.52		7.94	1.2					●														
		VNGN160716	9.52		7.94	1.6					●														

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

- General / Ogólne

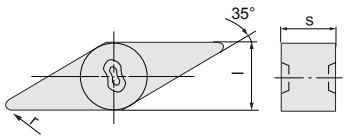
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

VN** Ceramic

Ceramic inserts / Płytki ceramiczne /

VN



	P	K

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		VNGX160708	9.52		7.94	0.8															●				
		VNGX160712	9.52		7.94	1.2															●				
		VNGX160716	9.52		7.94	1.6															●				

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

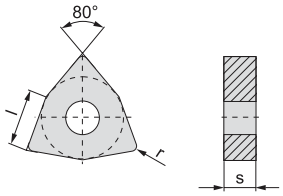
● - Stable / Stabilne
- General / Ogólne
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

WN** Ceramic

Ceramic inserts / Płytki ceramiczne /

WN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✱																

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		WNGA080404	12.7		4.76	0.4				●	●	●							●	●	●	●	●	●	
		WNGA080408	12.7		4.76	0.8		●		●	●	●							●	●	●	●	●	●	
		WNGA080412	12.7		4.76	1.2		●		●	●	●													
		WNGA080416	12.7		4.76	1.6		●																	

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

◐ - General / Ogólne

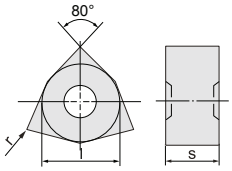
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

WN** Ceramic

Ceramic inserts / Płytki ceramiczne /

WN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		WNGX080708	12.70		7.94	0.8															●				
		WNGX080712	12.70		7.94	1.2															●				
		WNGX080716	12.70		7.94	1.6															●				

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

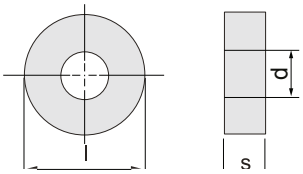
● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne
- General / Ogólne
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

RN** Ceramic

RN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✱																

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		RNGA120400	12.70		4.76	5.16				●															
		RNGA120700	12.70		7.94	5.16				●	●														

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

◐ - General / Ogólne

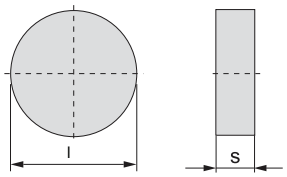
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

RN** Ceramic

Ceramic inserts / Płytki ceramiczne /

RN



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✱																

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		RNGN060200	6.35		2.38	-													●						
		RNGN060300	6.35		3.18	-																			
		RNGN060400	6.35		4.76	-				●		●													
		RNGN090300	9.52		3.18	-				●		●							●	●					
		RNGN090400	9.52		4.76	-	○			●	●	●				●			●					●	●
		RNGN120300	12.7		3.18	-													●					●	
		RNGN120400	12.7		4.76	-	○	○	●	●	●	●				●	●		●	●	●	●	●	●	●
		RNGN120600	12.7		6.35	-																			
		RNGN120700	12.7		7.94	-	●	○	●	●	●	●	●		●		●	●	●	●	●				
		RNGN150700	15.87		7.94	-	●	○		●									●	●					
		RNGN190600	19.05		6.35	-				●	●								●						
		RNGN190700	19.05		7.94	-	○	○	○	●	●	●					●			●					
		RNGN250700	25.40		7.94	-				●		●	●				●	●	●	●					
		RNGN250900	25.40		9.52	-																			
		RNGN320900	31.75		9.52	-				●															
		RNGN0807MO	8.00		7.94	-				●															
		RNGN1007MO	10.00		7.94	-				●															
		RNGN1207MO	12.00		7.94	-				●															

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

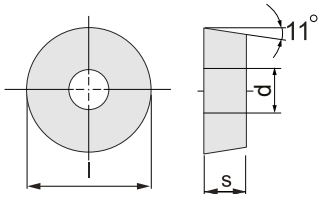
● - Stable / Stabilne
◐ - General / Ogólne
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

RP** Ceramic

Ceramic inserts / Płytki ceramiczne /

RP



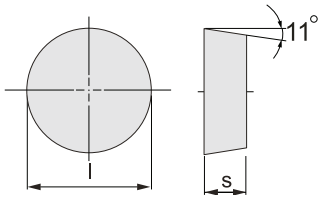
	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✱																

Application / Zastosowanie	Insert shape / Kształt płytki	Description / Oznaczenie	Dimension (mm) / Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		RPGA120400	12.70		4.76	5.16				●															
		RPGA120700	12.70		7.94	5.16				●	●														

RN** Ceramic

Ceramic inserts / Płytki ceramiczne /

RP



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✱																

Application / Zastosowanie	Insert shape / Kształt płytki	Description / Oznaczenie	Dimension (mm) / Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		RPGN090300	9.52		3.18					●	●													●	
		RPGN090400	9.52		4.76					●	●													●	
		RPGN120300	12.70		3.18																				
		RPGN120400	12.70		4.76					●	●										●			●	
		RPGN120700	12.70		7.94					●	●													●	
		RPGN150700	15.87		7.94																				
		RPGN190700	19.05		7.94						●														

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

◐ - General / Ogólne

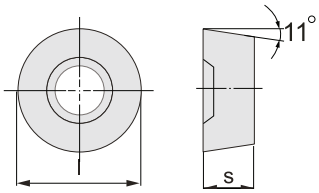
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

RP** Ceramic

Ceramic inserts / Płytki ceramiczne /

RP

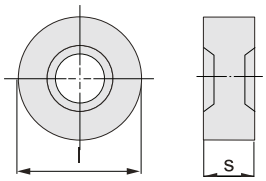


Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	Grade Gatunek S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																									
K																									
		RPGX1204	12.70		4.76																			●	
		RPGX1207	12.70		7.94																			●	

RN** Ceramic

Ceramic inserts / Płytki ceramiczne /

RN



Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	Grade Gatunek S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																									
K																									
		RNGX1207	12.70		4.76																		●	●	

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

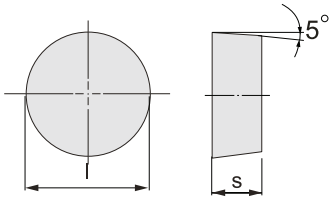
● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne
◐ - General / Ogólne
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

RB** Ceramic

RB



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P	●																		
K	●	●	✱																

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		RBGN060300	6.35		3.18						●														
		RBGN060400	6.35		4.76						●														
		RBGN090300	9.52		3.18					●															
		RBGN090400	9.52		4.76					●															
		RBGN120400	12.70		4.76					●	●	●									●				
		RBGN120600	12.70		6.35					●															
		RBGN120700	12.70		7.94					●	●									●	●			●	
		RBGN0604MO	6.00		4.76						●														
		RBGN0804MO	8.00		4.76						●														
		RBGN1007MO	10.00		7.94					●												●			
		RBGN1207MO	12.00		7.94																				
		RBGN1607MO	16.00		7.94																				

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

◐ - General / Ogólne

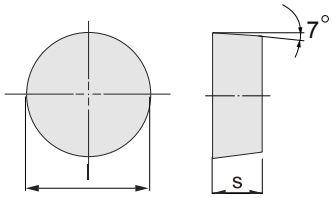
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

RC** Ceramic

Ceramic inserts / Płytki ceramiczne /

RC



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		RCGN060400	6.35		4.76					●	●													●	
		RCGN060600	6.35		6.35					●	●	●							●					●	
		RCGN060700	6.35		7.94					●	●	●					●								
		RCGN070400	7.94		4.76						●														
		RCGN090700	9.52		7.94					●	●	●							●					●	
		RCGN120700	12.70		7.94					●	●	●					●		●					●	
		RCGN151000	15.87		10.00					●	●	●					●		●					●	
		RCGN191000	19.05		10.00					●	●	●					●		●					●	
		RCGN251200	25.40		12.70					●	●	●					●		●					●	

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

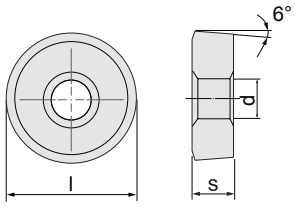
● - Stable / Stabilne
- General / Ogólne
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

CD** Ceramic

Ceramic inserts / Płytki ceramiczne /

CD



	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
P																			
K																			

Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l		s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		CDP120600	12.70		6.35	3.18				●	●	●													
		CDP120900	12.70		9.52	3.18				●															
		CDP190900	19.05		9.52	6.35				●	●	●							●						
		CDP191200	19.05		12.70	6.35				●															
		CDP251200	25.40		12.70	6.75				●	●	●					●		●					●	
		CDP251900	25.40		19.05	6.75				●							●		●						
		CDP320900	31.75		9.52	10.00				●	●						●		●						
		CDP321900	31.75		19.05	10.00				●	●	●					●		●	●				●	
		CDP381100	38.10		11.11	9.93				●															

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

- General / Ogólne

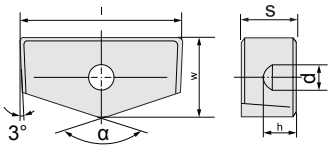
- Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

FS** Ceramic

Ceramic inserts / Płytki ceramiczne /

FS

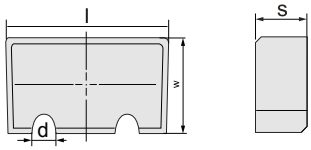


Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	w	s	d	h	α	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		FSN13941	32.00	19.05	12.00	6.50	6.00	120°				●	●						●		●						
		FSN10537	44.50	25.40	14.20	6.50	7.00	140°				●	●						●		●						

FS** Ceramic

Ceramic inserts / Płytki ceramiczne /

FS



Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	w	s	d	h	α	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		FSN10537V	44.00	26.00	15.00	5.00						●	●						●								

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

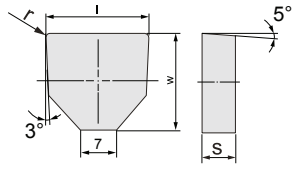
● - Stable / Stabilne
◐ - General / Ogólne
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

FS** Ceramic

Ceramic inserts / Płytki ceramiczne /

FS

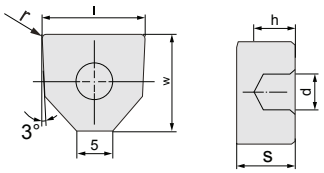


Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	w	s	r	h	α	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		FSN250723	25.00	23.00	7.94	1.20						●															

FS** Ceramic

Ceramic inserts / Płytki ceramiczne /

FS



Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	w	s	d	h	α	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		FSN251425	25.00	25.40	14.40	9.17	10.00														●						
		FSN251425H65	25.40	25.40	14.40	6.50	10.00														●						

▲ - Recommended grade / Zalecany gatunek

P P, M, S M K

● - On stock / Na magazynie

○ - On request / Na zamówienie

Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne

◐ - General / Ogólne

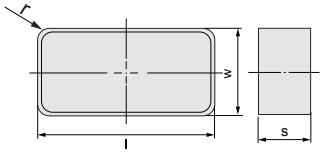
✱ - Adverse / Niestabilne

TURNING INSERTS PŁYTKI DO TOCZENIA

LC** Ceramic

Ceramic inserts / Płytki ceramiczne /

LC

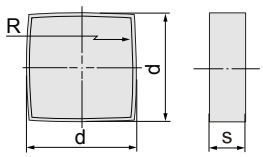


Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar l	w	s	r	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		LCT5464	25.40	15.87	9.52	1.6				●	●								●						
		LCT5568	31.75	15.87	9.52	3.2													●						
		LCT6588	31.75	19.05	12.70	3.2				●	●	●					●		●	●					
		LCT6688	38.10	19.05	12.70	3.2				●	●	●					●		●	●				●	
		LCT6898	48.10	21.05	12.70	3.2																			

SNGN3812R Ceramic

Ceramic inserts / Płytki ceramiczne /

SN



Application Zastosowanie	Insert shape Kształt płytki	Description Oznaczenie	Dimension (mm) Wymiar d	s	r	R	S001	S002	S003	S300	S310	S320	S330	S610	S620	S100	S400	S410	S025	S200	S210	S220	S230	S250	S500
		SNGN3812R	38.10	12.70	0.4	114				●	●	●													

▲ - Recommended grade / Zalecany gatunek
P P, M, S M K

● - On stock / Na magazynie
○ - On request / Na zamówienie
Insert order :Description+grade
Zamówienie płytki: Oznaczenie +gatunek

● - Stable / Stabilne
- General / Ogólne
- Adverse / Niestabilne