FUNIK
CBN Cutting Tools

Our service:

- Global wide sales and service network can provide you with fast product delivery and technical support.
- Perfect agent cooperation mechanism and channel protection measures.
- Funik can design, develop and produce the most suitable CBN tools according to your different requirements, such as equipment, products, work material etc.
- Funik opened 7 * 24-hour service hot-line: 400-878-5556, one button can complete order, service and complaint. Full time recordings and specified supervision can ensure the quality of

FUNIK COMMITMENT

- REDUCE YOUR COMPREHENSIVE CUTTING COSTS BY AT LEAST 30%
- FREE TRIAL INSERTS AND TOOL HOLDERS ARE PROVIDED
- FREE OVERALL SOLUTIONS ARE PROVIDED

FUNIK ULTRAHARD MATERIAL CO., LTD.
[illegible]

Customer service tel:
400-878-5556
[illegible]

FUNIK
CBN Cutting Tools

Funik CBN superhard cutting tools

Inheriting the tradition, Innovating the future

Excellent quality comes from professional manufacturing

SINCE 1988

Company Brief Introduction

FUNIK CBN superhard cutting tools are made of self-produced nano-CBN after Funik became the biggest and the most advanced technology of CBN manufacturer all over the world. [illegible] cutting tools are sintered by combining many patents, under high temperature and high pressure of micro crystal technology. It is also the new product that brings a revolutionary change to cutting industry. The CBN products hold the excellent anti-fracture, wear-resistance and chemical stability. It has been the best substitution of ceramic inserts, coating inserts and alloy inserts. It is widely used in ferrous metal work piece machining such as Automotive industry, Metallurgical roll, Railway transportation, Mining machinery, Construction machinery, Wind power, Gears, Bearings industry etc.

FUNIK CBN superhard cutting tools are widely used in many kinds of metal materials machining in many enterprises. It is fully proved that CBN superhard cutting tools will bring unexpected efficiency and economy for machinery industry processing. Welcome your inquiry and have a test!

Customer service hot line: 400-878-5556

FUNIK

Company Honor

1988	[illegible]
1991	[illegible]
1997	[illegible]
1998	FUNIK won the title of "High-tech Enterprise"
2002	[illegible]
2003	[illegible]
2003	[illegible]
2005	[illegible]
2005	[illegible]
2006	[illegible]
2006	[illegible]
2006	[illegible]
2007	[illegible]
2007	[illegible]
2008	[illegible]
2009	[illegible]
2009	[illegible]
2010	[illegible]
2010	[illegible]
2011	[illegible]
2012	FUNIK CBN Cutting Tools won the title of "Most Potential CBN Cutting Tools Brand"
2012	FUNIK CBN Cutting Tools won the title of "Most Potential CBN Cutting Tools Brand"
2013	Awarded the title of "Top Ten Comprehensive Economic Result Enterprises in China Machine Tool Industry"
2013	[illegible]
2014	[illegible]
2014	[illegible]
2014	[illegible]

FUNIK
CBN Cutting Tools

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What is Cubic Boron Nitride（CBN）

CBN : Cubic Boron Nitride

Cubic boron nitride (CBN) is a high hardness, high heat resistance crystal synthesized by boron and nitrogen under high temperature and high pressure.

The polycrystalline cubic boron nitride (PCBN) is a sintered material synthesized by selecting CBN micro-nano crystal powder and binder under high temperature and high pressure.

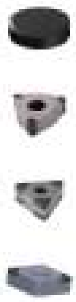
Boron and nitrogen is very rich in the nature. 78% of the air component is nitrogen! The cutting tools made of CBN can replace a larger number of cutting tools made of high pollution and high energy consumption mineral resources, such as tungsten carbide and cobalt.

China is a country with large amount of tungsten resources, but according to a report, 30-120 years later, the world will usher in a shortage of tungsten ore!

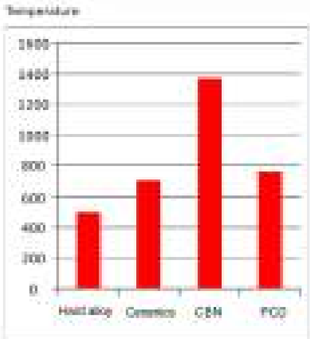
The PCBN cutting tools have been widely used in the field of machining ferrous metal!

Features of Polycrystalline Cubic Boron Nitride (PCBN)

- The best cutting tools material with high hardness and heat-resistance among known material.
- Through twice high-temperature and high-pressure in the manufacturing process:
  1. Transform HBN into CBN under high-temperature and high-pressure.
  2. Then synthesized into PCBN by mixing CBN micro nano powder and binder under high-temperature high pressure.
- PCBN has strong chemically inert, so can't occur chemical reaction with ferrous metal under high temperature.
  1. Used for machining cast iron.
  2. Used for machining high hardness, high wear-resistant alloy cast iron and cast high speed steel.
  3. Used for machining hardened steel.
  4. Used for machining hard processing material, such as high temperature alloys, tungsten carbide etc.

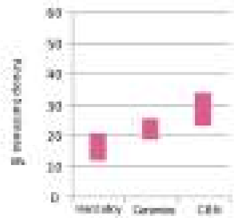


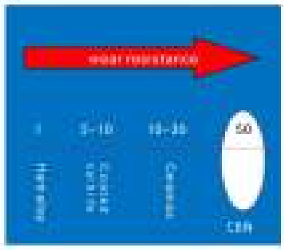
The red hardness contrast of main tool material



The red hardness of CBN can reach 1370℃, almost twice as high as the red hardness of diamond. The hardness of PCBN is higher than the room-temperature hardness of carbide, ceramics, PCD at 800℃. So the cutting speed of CBN cutting tools can be 2-5 times higher than hard alloy, ceramics cutting tools, and has high cutting efficiency.

The hardness and wear resistance contrast of main tool material





The wear resistance of CBN is 3-10 times higher than coated carbide, 2-5 times higher than ceramics, which has extremely long life.

The grades and application industries of Funik innovated CBN superhard cutting tools

Grades		Machining Mode	Work Material	Features Direction	Application industry
FBN FBM FBS	6100	Heavy roughing	Excellent impact and wear resistance ■ Be suitable for roughing high hard alloy cast iron, gray cast iron, nodular cast iron ■ Be suitable for roughing and machining hardened steel	[illegible]	metallurgical mill, pump, mining machinery, etc.
	7200	Roughing and semi-finishing	Excellent wear resistance ■ Be suitable for roughing and semi-finishing of gray cast iron, etc. ■ Be suitable for roughing and semi-finishing of high hard alloy cast iron, etc.	[illegible]	automotive, brake drum, brake disc, metallurgical roll, etc.
	8000	Light interrupted roughing	Excellent impact resistance ■ Be suitable for roughing hardened steel, etc. ■ Be suitable for roughing [illegible] material, etc.		gear industry, bearing industry, etc.
	8300	Semi-finishing and finishing	■ Be suitable for semi-finishing and finishing hardened steel, etc.		gear industry, bearing industry, etc.

The grades and application industry of Funik innovated FBK superhard cutting tools

Grades	Machining Mode	Work Material	Features Direction	Application industry
FBK7510	High strength, suitable for interrupted cutting and roughing	■ [illegible]	[illegible]	Automotive industry
FBK7620	Excellent impact resistance, suitable for [illegible]	■ [illegible]		Automotive, mold, metallurgy, wind power, etc.
FBK7630	Continuous / interval cutting	■ [illegible]		Powder metallurgy, automotive, mold, etc.
FBK8510	Wellbalanced for continuous or medium interval cutting	■ [illegible]		Gearing, bearing, mold, etc.
FBK8520	Continuous or medium interval cutting	■ [illegible]		Automotive, mold, wind power, etc.

The grades and application industry of Funik innovated CBN superhard milling cutting tools

Grades	Application Features	Application Fields	Application Industries
FBM7020	Interrupted cutting	■ Be suitable for rough milling, semi-finishing milling, finishing milling of [illegible] ■ Be suitable for rough milling, semi-finishing milling, finishing milling of high hardness alloy cast iron, etc. ■ Be suitable for roughing, semi-finishing milling [illegible]	automotive, [illegible]
FBM8020	Interrupted cutting	■ Be suitable for rough milling, semi-finishing milling, finishing milling of hardened [illegible]	wind power, engine, [illegible]
FBM7520	Continuous and interrupted finishing	■ Be suitable for rough milling, semi-finishing milling, finishing milling of hardened [illegible]	mold industry

The main types of Funik innovated CBN superhard cutting tools

Funik FBN series solid CBN tools

- Better impact resistance
- Both sides of the cutting edge can be used for cutting

Funik FBS series soldering cutting tools

- More cutting edges
- Having straight hole and deep hole, can be easily installed onto standard tool holder

Funik FBM series long cutting edge soldering cutting tools

- Longer cutting edges
- Better impact resistance

Funik soldering patented technology

Funik FBK series super finishing cutting tools

- Used for higher precision and longer tool life cutting
- Diversification of the CBN cutting tools

Common cutting edge types of Funik innovated CBN cutting tools

Type	Edge condition	Description
S	The negative land and honing cutting edge condition	[illegible]
T	The negative land cutting edge condition	[illegible]
E	Honing by Brushing edge condition	[illegible]
F	Sharp cutting edge condition	[illegible]

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The superiority contrast of Funik innovated CBN superhard cutting tools

With the whole industry chain, the advantage of professional technological innovation and focused, meticulous workflow, relying on the international advanced equipment & world-class testing equipment and more than one hundred patents technology throughout all aspects of product manufacturing, Funik can make sure that each cutting tool has unmatched performance and quality.

Funik innovated CBN superhard cutting tools

Turning

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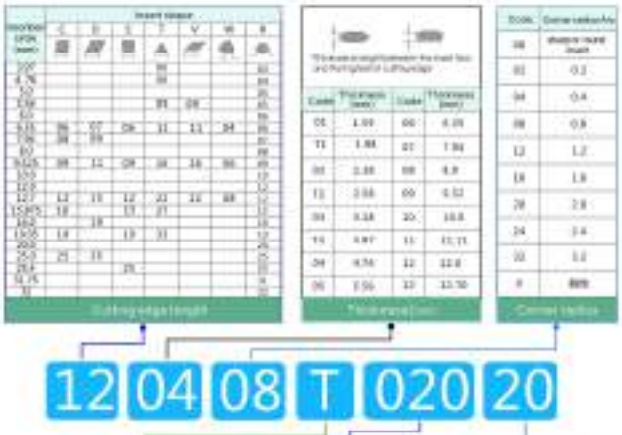
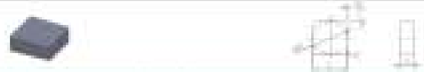
Funik CBN superhard cutting tools Nomination Standard

Funik CBN superhard cutting tools Nomination Standard



Funik FBN series Solid CBN Cutting Tools

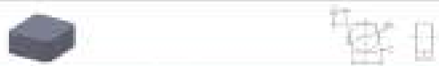


Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	L	Φ I.C	s	r		FBN4100	FBN7200	FBN9500	FBN5100
[illegible]	9	9.525	3.18	0.4	[illegible]	●	●	●	●
[illegible]	9	9.525	3.18	0.8		●	●	●	●
[illegible]	9	9.525	3.18	1.2		●	●	●	●
[illegible]	9	9.525	4.76	0.4		●	●	●	●
[illegible]	9	9.525	4.76	0.8		●	●	●	●
[illegible]	9	9.525	4.76	1.2		●	●	●	●
[illegible]	12	12.7	4.76	0.4		●	●	●	●
[illegible]	12	12.7	4.76	0.8		●	●	●	●
[illegible]	12	12.7	7.94	1.2		●	●	●	●
[illegible]	15	15.875	7.94	0.4		●	●	●	●
[illegible]	15	15.875	7.94	0.8		●	●	●	●
[illegible]	25	25	15	[illegible]		●		●	
[illegible]	25	25	15	[illegible]		●		●	

Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	L	Φ I.C	s	r		FBN4100	FBN7200	FBN9500	FBN5100
[illegible]	6	6.35	4.76	0	[illegible]	●	●	●	●
[illegible]	9	9.525	3.18	0		●	●	●	●
[illegible]	9	9.525	4.76	0		●	●	●	●
[illegible]	12	12.7	4.76	0		●	●	●	●
[illegible]	12	12.7	6.35	0		●	●	●	●
[illegible]	12	12.7	7.94	0		●	●	●	●
[illegible]	15	15.875	7.94	0		●		●	
[illegible]	16	16	7.94	0		●		●	
[illegible]	19	19.05	7.94	0		●		●	
[illegible]	20	20	7.94	0		●		●	
[illegible]	20	20	15	0		●		●	
[illegible]	25	25.4	6.35	0		●		●	
[illegible]	25	25.4	7.94	0		●		●	
[illegible]	25	25.4	[illegible]	0		●		●	
[illegible]	25	25.4	12	0		●		●	

Note: ● Preference
Cutting edge condition can be customized

Funik FBN series Solid CBN Cutting Tools



Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	L	Φ I.C	s	r		FBN4100	FBN7200	FBN9500	FBN5100
CNMN 090304	9	9.525	4.76	0.4	[illegible]	●	●	●	●
CNMN 090308	9	9.525	4.76	0.8		●	●	●	●
CNMN 090312	9	9.525	4.76	1.2		●	●	●	●
CNMN 120404	12	12.7	4.76	0.4		●	●	●	●
CNMN 120408	12	12.7	4.76	0.8		●	●	●	●
CNMN 120412	12	12.7	4.76	1.2		●	●	●	●
CNMN 120704	12	12.7	7.94	0.4		●	●	●	●
CNMN 120708	12	12.7	7.94	0.8		●	●	●	●
CNMN 120712	12	12.7	7.94	1.2		●	●	●	●
CNMN 120804	12	12.7	7.94	0.4		●	●	●	●
CNMN 120808	12	12.7	7.94	0.8		●	●	●	●
CNMN 120812	12	12.7	7.94	1.2		●	●	●	●

Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	L	Φ I.C	s	r		FBN4100	FBN7200	FBN9500	FBN5100
TNGN 110304	11	6.35	3.18	0.4	[illegible]	●	●	●	●
TNGN 110308	11	6.35	3.18	0.8		●	●	●	●
TNGN 110312	11	6.35	3.18	1.2		●	●	●	●
TNGN 160404	16	9.525	4.76	0.4		●	●	●	●
TNGN 160408	16	9.525	4.76	0.8		●	●	●	●
TNGN 160412	16	9.525	4.76	1.2		●	●	●	●

Note: ● Preference
Cutting edge condition can be customized

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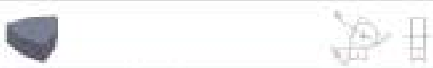
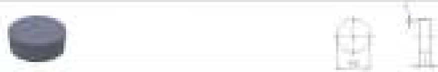
CBN Cutting Tools

Funik FBN series Solid CBN Cutting Tools



Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	L	Φ I.C	s	r		FBN4100	FBN7200	FBN9500	FBN5100
[illegible]	8	12.7	4.76	0.4	[illegible]	●	●	●	●
[illegible]	8	12.7	4.76	0.8		●	●	●	●
[illegible]	8	12.7	4.76	1.2		●	●	●	●
[illegible]	8	12.7	4.76	2.4		●	●	●	●

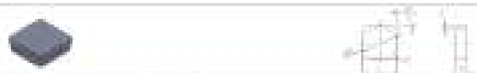


Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	L	Φ I.C	s	r		FBN4100	FBN7200	FBN9500	FBN5100
[illegible]	6	6.35	4.76	0	[illegible]	●	●	●	●
[illegible]	9	9.525	4.76	0		●	●	●	●
[illegible]	9	9.525	6.35	0		●	●	●	●
[illegible]	12	12.7	6.35	0		●	●	●	●
[illegible]	12	12.7	7.94	0		●	●	●	●
[illegible]	15	15.875	7.94	0		●		●	●
[illegible]	19	19.05	7.94	0		●		●	●

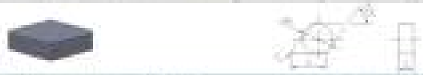
Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	L	Φ I.C	s	r		FBN4100	FBN7200	FBN9500	FBN5100
[illegible]	6	6.35	4.76	0.8	[illegible]	●	●	●	●
[illegible]	6	6.35	6.35	0.8		●	●	●	●
[illegible]	9	9.525	7.94	1		●	●	●	●
[illegible]	12	12.7	7.94	2		●	●	●	●
[illegible]	15	15.875	16.0	2		●		●	
[illegible]	19	19.05	16.0	2		●		●	
[illegible]	25	25.0	16.0	2		●		●	
[illegible]	25	25.4	16.0	2		●		●	

Note: ● Preference
Cutting edge condition can be customized

Funik FBN series Solid CBN Cutting Tools



Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	L	Φ I.C	s	r		FBN4100	FBN7200	FBN9500	FBN5100
SNGN 090304	9	9.525	3.18	0.4	[illegible]	●	●	●	●
SNGN 090308	9	9.525	3.18	0.8		●	●	●	●
SNGN 090312	9	9.525	3.18	1.2		●	●	●	●
SNGN 090404	9	9.525	4.76	0.4		●	●	●	●
SNGN 090408	9	9.525	4.76	0.8		●	●	●	●
SNGN 090412	9	9.525	4.76	1.2		●	●	●	●

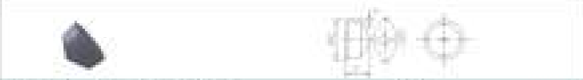


Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	L	Φ I.C	s	r		FBN4100	FBN7200	FBN9500	FBN5100
[illegible]	11	9.525	4.76	0.4	[illegible]	●	●	●	●
[illegible]	11	9.525	4.76	0.8		●	●	●	●
[illegible]	11	9.525	4.76	1.2		●	●	●	●
[illegible]	11	9.525	6.35	0.4		●	●	●	●
[illegible]	11	9.525	6.35	0.8		●	●	●	●
[illegible]	11	9.525	6.35	1.2		●	●	●	●
[illegible]	15	12.7	6.35	0.4		●	●	●	●
[illegible]	15	12.7	6.35	0.8		●	●	●	●
[illegible]	15	12.7	6.35	1.2		●	●	●	●

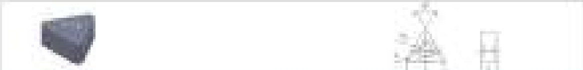
Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	W	s	L	R		FBN4100	FBN7200	FBN9500	FBN5100
STBTCW1	4.8	5.2	17	8.0	[illegible]	●		●	
BL10F1-S	5.55	11.1	17	8.0		●		●	
BL1WF1-S	6.9	10.5	17	8.0		●		●	

Note: ● Preference
Cutting edge condition can be customized

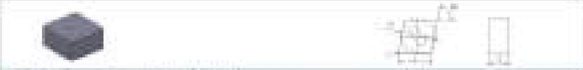
Funik FBN series Solid CBN Cutting Tools



Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	L	Φ I.C	s	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	6	6.35	4.76	0.8	[illegible]	●	●	●	●
[illegible]	6	6.35	[illegible]	0.8	[illegible]	●	●	●	●
[illegible]	6	6.35	7.94	0.8	[illegible]	●	●	●	●
[illegible]	6	9.525	7.94	1	[illegible]	●	●	●	●
[illegible]	12	12.7	7.94	1.2	[illegible]	●	●	●	●



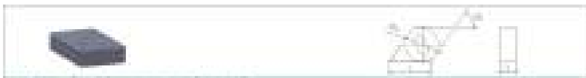
Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	L	Φ I.C	s	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	16	9.525	[illegible]	0.4	[illegible]	●	●	●	●
[illegible]	16	9.525	[illegible]	0.8	[illegible]	●	●	●	●
[illegible]	16	9.525	[illegible]	1.2	[illegible]	●	●	●	●



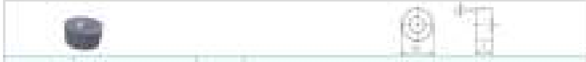
Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	L	Φ I.C	s	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	12	12.7	[illegible]	0.4	[illegible]	●	●	●	●
[illegible]	12	12.7	[illegible]	0.8	[illegible]	●	●	●	●
[illegible]	12	12.7	[illegible]	1.2	[illegible]	●	●	●	●

Note: ● Preference
Cutting edge condition can be customized

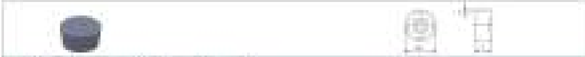
Funik FBN series Solid CBN Cutting Tools



Type	Dimensions (mm)				standard cutting edge	Grades			
ISO	L	Φ I.C	s	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	11	9.525	[illegible]	0.4	[illegible]	●	●	●	●
[illegible]	11	9.525	[illegible]	0.8	[illegible]	●	●	●	●
[illegible]	11	9.525	[illegible]	1.2	[illegible]	●	●	●	●



Type	Dimensions (mm)			standard cutting edge	Grades			
ISO	L	Φ I.C	s		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	12	12.7	[illegible]	[illegible]	●	●	●	●

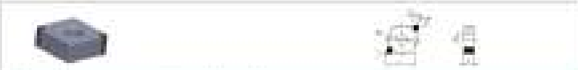


Type	Dimensions (mm)			standard cutting edge	Grades			
ISO	L	Φ I.C	s		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	12	12.7	[illegible]	[illegible]	●	●	●	●

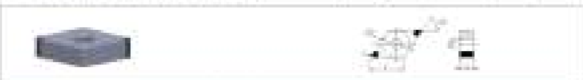
Note: ● Preference
Cutting edge condition can be customized

Funik FBS series Soldering Cutting Tools

Type	Dimensions (mm)						standard cutting edge	Grades			
ISO	L	Φ I.C	s	[illegible]	[illegible]	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	9	9.525	3.97	4.4	6	0.4	[illegible]		●		●
[illegible]	9	9.525	3.97	4.4	6	0.8	[illegible]		●		●
[illegible]	9	9.525	3.97	4.4	6	1.2			●		●
[illegible]	12	12.7	4.76	5.5	7.8	0.4	[illegible]		●		●
[illegible]	12	12.7	4.76	5.5	7.8	0.8			●		●
[illegible]	12	12.7	4.76	5.5	7.8	1.2	[illegible]		●		●



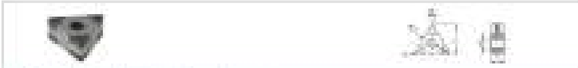
Type	Dimensions (mm)					standard cutting edge	Grades			
ISO	L	Φ I.C	s	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	12	12.7	4.76	5.16	0.4	[illegible]		●		●
[illegible]	12	12.7	4.76	5.16	0.8	[illegible]		●		●
[illegible]	12	12.7	4.76	5.16	1.2	[illegible]		●		●



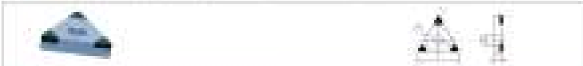
Type	Dimensions (mm)					standard cutting edge	Grades			
ISO	L	Φ I.C	s	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	11	9.525	4.76	3.81	0.4			●		●
[illegible]	11	9.525	4.76	3.81	0.8	[illegible]		●		●
[illegible]	11	9.525	4.76	3.81	1.2			●		●
[illegible]	16	12.7	4.76	5.16	0.4	[illegible]		●		●
[illegible]	16	12.7	4.76	5.16	0.8			●		●
[illegible]	16	12.7	4.76	5.16	1.2	[illegible]		●		●
[illegible]	16	12.7	6.35	5.16	0.4			●		●
[illegible]	16	12.7	6.35	5.16	0.8	[illegible]		●		●
[illegible]	16	12.7	6.35	5.16	1.2			●		●

Note: ● Preference
Cutting edge condition can be customized

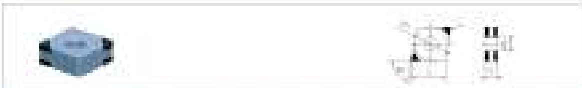
Funik FBM series long cutting edge soldering cutting tools



Type	Dimensions (mm)					standard cutting edge	Grades			
ISO	L	Φ I.C	s	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	22	12.7	7.94	5.16	0.8	[illegible]	●	●	●	
[illegible]	22	12.7	7.94	5.16	1.2	[illegible]	●	●	●	
[illegible]	22	12.7	7.94	5.16	1.6	[illegible]	●	●	●	



Type	Dimensions (mm)					standard cutting edge	Grades			
ISO	L	Φ I.C	s	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	16	9.525	4.76	3.81	0.4	[illegible]	●	●	●	
[illegible]	16	9.525	4.76	3.81	0.8		●	●	●	
[illegible]	16	9.525	4.76	3.81	1.2		●	●	●	
[illegible]	22	12.7	4.76	5.16	0.4		●	●	●	
[illegible]	22	12.7	4.76	5.16	0.8		●	●	●	
[illegible]	22	12.7	4.76	5.16	1.2		●	●	●	

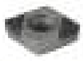


Type	Dimensions (mm)					standard cutting edge	Grades			
ISO	L	Φ I.C	s	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	12	12.7	7.94	5.16	0.8	[illegible]	●	●	●	
[illegible]	12	12.7	7.94	5.16	1.2		●	●	●	
[illegible]	12	12.7	7.94	5.16	1.6		●	●	●	

Note: ● Preference
Cutting edge condition can be customized

Funik FBM series long cutting edge soldering cutting tools

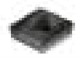

Type	Dimensions (mm)					standard cutting edge	Grades			
ISO	L	ΦI.C	s	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	12	12.7	4.76	5.16	0.4	[illegible]	●	●	●	
[illegible]	12	12.7	4.76	5.16	[illegible]	[illegible]	●	●	●	
[illegible]	12	12.7	4.76	5.16	1.2	[illegible]	●	●	●	




Type	Dimensions (mm)					standard cutting edge	Grades			
ISO	L	ΦI.C	s	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	9	9.525	3.97	4.4	0.2	[illegible]	●	●	●	
[illegible]	9	9.525	3.97	4.4	0.4		●	●	●	
[illegible]	9	9.525	3.97	4.4	0.8	[illegible]	●	●	●	
[illegible]	9	9.525	3.97	4.4	1.2		●	●	●	
[illegible]	12	12.7	4.76	5.5	0.2	[illegible]	●	●	●	
[illegible]	12	12.7	4.76	5.5	0.4		●	●	●	
[illegible]	12	12.7	4.76	5.5	0.8	[illegible]	●	●	●	
[illegible]	12	12.7	4.76	5.5	1.2		●	●	●	

Notes: ■ Preference
Cutting edge condition can be customized

Funik FBM series long cutting edge soldering cutting tools




Type	Dimensions (mm)					standard cutting edge	Grades			
ISO	L	ΦI.C	s	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	12	12.7	4.76	5.5	0.8	[illegible]	●	●	●	
[illegible]	12	12.7	4.76	5.5	1.2	[illegible]	●	●	●	
[illegible]	12	12.7	4.76	5.5	1.6	[illegible]	●	●	●	


Type	Dimensions (mm)					standard cutting edge	Grades			
ISO	L	ΦI.C	s	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	16	9.525	4.76	4.4	0.4	[illegible]	●	●	●	
[illegible]	16	9.525	4.76	4.4	0.8	[illegible]	●	●	●	
[illegible]	16	9.525	4.76	4.4	1.2	[illegible]	●	●	●	
[illegible]	16	9.525	4.76	4.4	1.6	[illegible]	●	●	●	

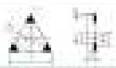

Type	Dimensions (mm)					standard cutting edge	Grades			
ISO	L	ΦI.C	s	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	16	9.525	4.76	4.4	0.4	[illegible]	●	●	●	
[illegible]	16	9.525	4.76	4.4	0.8	[illegible]	●	●	●	
[illegible]	16	9.525	4.76	4.4	1.2	[illegible]	●	●	●	
[illegible]	16	9.525	4.76	4.4	1.6	[illegible]	●	●	●	

Notes: ■ Preference
Cutting edge condition can be customized

FUNIK
CBN Cutting Tools

Funik FBK series super finishing Cutting Tools


Type	Dimensions (mm)					standard cutting edge	Grades				
ISO	L	ΦI.C	s	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	16	9.525	4.76	3.81	0.2	[illegible]	●			●	
[illegible]	16	9.525	4.76	3.81	0.4		●			●	
[illegible]	16	9.525	4.76	3.81	0.8	[illegible]	●			●	
[illegible]	16	9.525	4.76	3.81	1.2		●			●	
[illegible]	16	9.525	4.76	3.81	1.6	[illegible]	●			●	
[illegible]	22	12.7	4.76	5.16	0.2		●			●	
[illegible]	22	12.7	4.76	5.16	0.4	[illegible]	●			●	
[illegible]	22	12.7	4.76	5.16	0.8		●			●	
[illegible]	22	12.7	4.76	5.16	1.2	[illegible]	●			●	
[illegible]	22	12.7	4.76	5.16	1.6		●			●	

Type	Dimensions (mm)						standard cutting edge	Grades				
ISO	L	ΦI.C	s	Φd1	Φd2	r		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	9	5.56	3.18	2.5	2.2	0.2	[illegible]	●			●	
[illegible]	9	5.56	3.18	2.5	2.2	0.4		●			●	
[illegible]	9	5.56	3.18	2.5	2.2	0.8	[illegible]	●			●	
[illegible]	11	6.35	3.18	2.4	2.75	0.2		●			●	
[illegible]	11	6.35	3.18	2.4	2.75	0.4	[illegible]	●			●	
[illegible]	11	6.35	3.18	2.4	2.75	0.8		●			●	
[illegible]	11	6.35	3.18	2.4	2.75	1.2	[illegible]	●			●	

Notes: ■ Preference
Cutting edge condition can be customized

Funik FBK series super finishing Cutting Tools

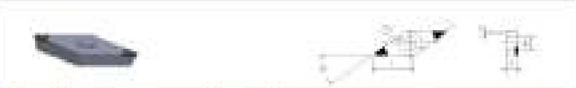

Type	Dimensions (mm)					standard cutting edge	Grades				
ISO	L	ΦI.C	s	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	12	12.7	4.76	5.16	0.2	[illegible]	●			●	
[illegible]	12	12.7	4.76	5.16	0.4	[illegible]	●			●	
[illegible]	12	12.7	4.76	5.16	0.8	[illegible]	●			●	
[illegible]	12	12.7	4.76	5.16	1.2	[illegible]	●			●	


Type	Dimensions (mm)					standard cutting edge	Grades				
ISO	L	ΦI.C	s	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	9	9.525	3.97	4.4	0.2	[illegible]	●			●	
[illegible]	9	9.525	3.97	4.4	0.4		●			●	
[illegible]	9	9.525	3.97	4.4	0.8	[illegible]	●			●	
[illegible]	9	9.525	3.97	4.4	1.2		●			●	
[illegible]	12	12.7	4.76	5.5	0.2	[illegible]	●			●	
[illegible]	12	12.7	4.76	5.5	0.4		●			●	
[illegible]	12	12.7	4.76	5.5	0.8	[illegible]	●			●	
[illegible]	12	12.7	4.76	5.5	1.2		●			●	

Notes: ■ Preference
Cutting edge condition can be customized

Funik FBK series super finishing Cutting Tools

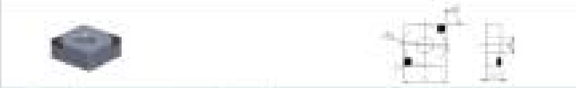
Type	Dimensions (mm)					standard cutting edge	Grades				
ISO	L	Φ I.C	S	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	16	9.525	4.76	3.81	0.2	[illegible]	●			●	
[illegible]	16	9.525	4.76	3.81	0.4	[illegible]	●			●	
[illegible]	16	9.525	4.76	3.81	0.8	[illegible]	●			●	
[illegible]	16	9.525	4.76	3.81	1.2	[illegible]	●			●	



Type	Dimensions (mm)					standard cutting edge	Grades				
ISO	L	Φ I.C	S	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	16	9.525	4.76	4.4	0.2	[illegible]	●			●	
[illegible]	16	9.525	4.76	4.4	0.4	[illegible]	●			●	
[illegible]	16	9.525	4.76	4.4	0.8	[illegible]	●			●	
[illegible]	16	9.525	4.76	4.4	1.2	[illegible]	●			●	

Note: ● Preference
Cutting edge condition can be customized

Funik FBK series super finishing Cutting Tools



Type	Dimensions (mm)					standard cutting edge	Grades				
ISO	L	Φ I.C	S	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	12	12.7	4.76	5.16	0.2	[illegible]	●			●	
[illegible]	12	12.7	4.76	5.16	0.4	[illegible]	●			●	
[illegible]	12	12.7	4.76	5.16	0.8	[illegible]	●			●	
[illegible]	12	12.7	4.76	5.16	1.2	[illegible]	●			●	

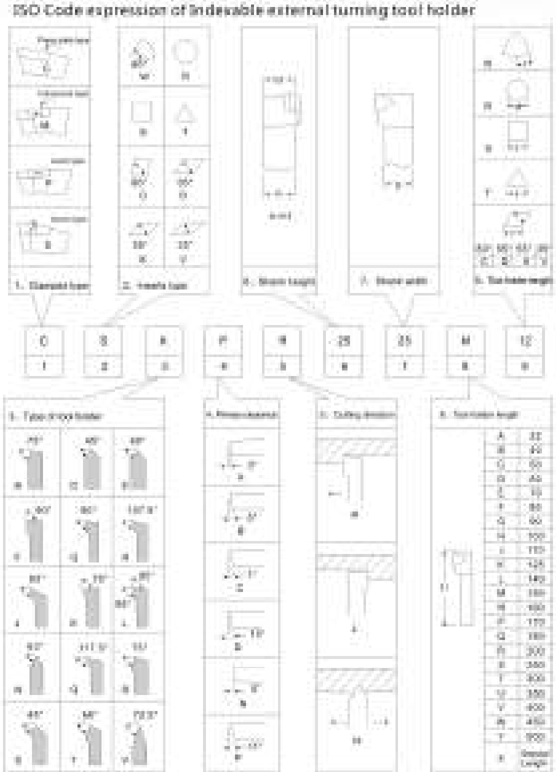
Type	Dimensions (mm)					standard cutting edge	Grades				
ISO	L	Φ I.C	S	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	12	12.7	4.76	5.16	0.2	[illegible]	●			●	
[illegible]	12	12.7	4.76	5.16	0.4	[illegible]	●			●	
[illegible]	12	12.7	4.76	5.16	0.8	[illegible]	●			●	
[illegible]	12	12.7	4.76	5.16	1.2	[illegible]	●			●	

Type	Dimensions (mm)					standard cutting edge	Grades				
ISO	L	Φ I.C	S	Φd	r		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	8	12.7	4.76	5.16	0.2	[illegible]	●			●	
[illegible]	8	12.7	4.76	5.16	0.4	[illegible]	●			●	
[illegible]	8	12.7	4.76	5.16	0.8	[illegible]	●			●	
[illegible]	8	12.7	4.76	5.16	1.2	[illegible]	●			●	

Note: ● Preference
Cutting edge condition can be customized

ISO Code expression of Indexable external turning tool holder

ISO Code expression of Indexable external turning tool holder

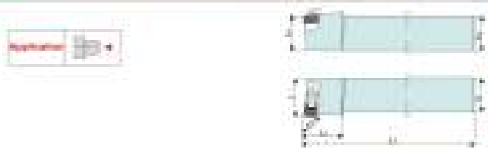


Funik Innovated CBN superhard cutting toolsTool Holder Series

25° Tool Holder

Type specifications	h1=h2	b	L1	L2	f	[illegible]	[illegible]	[illegible]
[illegible]	32	32	170	40	32	[illegible]	[illegible]	[illegible]
[illegible]	32	32	170	47	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	40	40	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	40	40	[illegible]	[illegible]	[illegible]
[illegible]	40	40	[illegible]	40	40	[illegible]	[illegible]	[illegible]
[illegible]	40	40	[illegible]	[illegible]	40	[illegible]	[illegible]	[illegible]
[illegible]	50	50	[illegible]	40	50	[illegible]	[illegible]	[illegible]
[illegible]	50	50	[illegible]	[illegible]	50	[illegible]	[illegible]	[illegible]

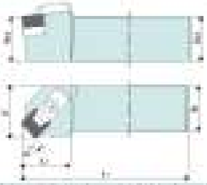
83° Tool Holder



Type specifications	h1=h2	b	L1	L2	f	[illegible]	[illegible]	[illegible]
[illegible]	32	32	170	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	40	[illegible]	[illegible]	40	[illegible]	[illegible]	[illegible]
[illegible]	40	40	[illegible]	40	40	[illegible]	[illegible]	[illegible]
[illegible]	50	50	[illegible]	[illegible]	50	[illegible]	[illegible]	[illegible]

45° Tool Holder

Application



Type specifications	h1=h2	b	L1	L2	f			
CSDNR/L2020P12	20	20	125	22	22	PS1204	S12F	SNHN1203
CSDNR/L2525P12	25	32	200	35	38	PS1204	S12F	SNHN1207
CSDNR/L3232P15	32	32	200	40	39.2	PS1504	S15F	SNHN1507
CSDNR/L4040S12	40	40	250	40	46.5	PS1204	S12F	SNHN1207
CSDNR/L4040S15	50	40	400	40	50	PS1504	S15F	SNHN1507
CSDNR/L4040S20	40	40	250	48	48	PS2004	S20F	SNHN2010
CSDNR/L5050T15	50	50	300	44	60	PS2004	S15F	SNHN1507
CSDNR/L5050T20	50	50	300	50	50	PS2004	S20F	SNHN2010

Middle Laying 45°　Tool Holder

Application

Type specifications	h1=h2	b	L1	L2	f			
CSDNN3232P12	32	32	170	40	16	PS1204	S12F	SNHN1207
CSDNN4040S15	40	40	250	51	20	PS1504	S15F	SNHN1507
CSDNN5050T20	50	50	300	60	25	PS2004	S20F	SNHN2010

Funik Innovated CBN superhard cutting toolsTool Holder Series

FUNIK
CBN Cutting Tools

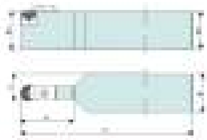
Arc Tool Holder

Application

Type specifications	h1=h2	b	L1	L2	f			
CRGNR/L3232P12	32	32	170	40	17	GR12N4	R120	RNMN120800
CRGNR/L3232P15	32	32	170	40	17	GR15N4	R150	RNMN150700
CRGNR/L4040S20	40	40	250	40	40	GR20N4	R200	RNMN200700
CRGNR/L5050T20	50	50	300	42	50	GR20N5	R200	RNMN200700
CRGNR/L5050T25	50	50	300	42	55	GR25N4	R250	RNMN251000
CRGNR/L5050T25	50	50	300	44	55	GR25N4	R250	RNMN251000

Middle Laying Tool Holder

Application



Type specifications	h1=h2	b	L1	L2	f			
CRBCN3232P09-A	32	25	170	30	11.3	GR09N3	R09Y	RCBA090700
CRBCN3232P12-A	32	25	170	33	14.4	GR12N4	R12Y	RCBA120700
CRBCN4040S15-18	40	40	250	38	27.6	GR15N4	R15Y	RCBA151000
CRBCN5040T19-18	50	40	300	45	25.3	GR19N4	R19Y	RCBA191000
CRBCN5040T20-18	50	40	300	45	30	GR20N4	R20Y	RCBA201000
CRBCN5040T25-18	50	40	300	45	35	GR25N4	R25Y	RCBA251200

Funik Innovated CBN superhard cutting toolsTool Holder Series

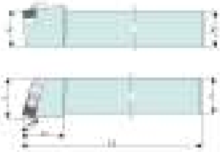
Front 75° Tool Holder

Application

Type specifications	h1=h2	b	L1	L2	f			
CSKNR/L3232P12	32	32	170	40	44	PS1204	S12Y	SNHN1207
CSKNR/L3232P15	32	32	175	45	40	PS1504	S15Y	SNHN1507
CSKNR/L4040S15	40	40	250	46	44	PS1504	S15Y	SNHN1507
CSKNR/L5050S20	40	50	250	60	60	PS2004	S20Y	SNHN2010
CSKNR/L5050T15	50	50	300	46	60	PS1504	S15Y	SNHN1507
CSKNR/L5050T20	50	50	300	50	60	PS2004	S20Y	SNHN2010

75° Tool Holder

Application



Type specifications	h1=h2	b	L1	L2	f			
CSRNR/L3232P12	32	32	170	38	38	PS1204	S12Y	SNHN1207
CSRNR/L4040S15	40	40	250	60	60	PS1504	S15Y	SNHN1507
CSRNR/L5050T20	50	50	300	55	56	PS2004	S20Y	SNHN2010

Funik Innovated CBN superhard cutting toolsTool Holder Series

FUNIK
CBN Cutting Tools

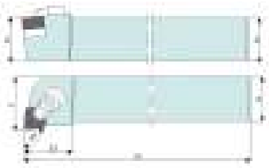
90° Tool Holder

Application

Type specifications	h1=h2	b	L1	L2	f			
CSSNR/L3232P12	32	32	150	35	35	PS1204	S12Y	SNHN1207
CSSNR/L4040S15	40	40	250	40	45	PS1504	S15Y	SNHN1507

95° Tool Holder

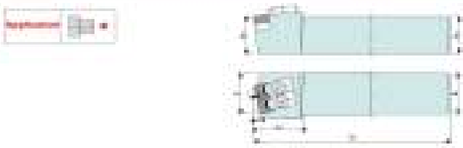
Application



Type specifications	h1=h2	b	L1	L2	f			
CCLNR/L3232P12	32	32	170	34	38	PC1204	C12Y	CNHN1207
CCLNR/L4040S16	40	40	250	40	45	PC1604	C16Y	CNHN1607

Funik Innovated CBN superhard cutting toolsTool Holder Series

γ 1= γ 2 Double Inserts Tool Holder



Type specifications	ε1=ε2	a	L1	L2	f	γ1	γ2			
[illegible]	32	35	150	43	48	15°	15°	[illegible]	[illegible]	[illegible]
[illegible]	32	35	150	43	48	20°	20°	[illegible]	[illegible]	[illegible]
[illegible]	32	35	150	43	48	20°	30°	[illegible]	[illegible]	[illegible]
[illegible]	32	35	150	43	43	15°	15°	[illegible]	[illegible]	[illegible]
[illegible]	32	35	150	43	43	20°	20°	[illegible]	[illegible]	[illegible]
[illegible]	32	35	150	43	43	20°	30°	[illegible]	[illegible]	[illegible]
[illegible]	32	35	150	46	46	15°	15°	[illegible]	[illegible]	[illegible]
[illegible]	32	35	150	46	46	20°	20°	[illegible]	[illegible]	[illegible]
[illegible]	32	35	150	46	46	20°	30°	[illegible]	[illegible]	[illegible]
[illegible]	40	45	150	45	48	15°	15°	[illegible]	[illegible]	[illegible]
[illegible]	40	45	150	45	48	20°	20°	[illegible]	[illegible]	[illegible]
[illegible]	40	45	150	45	48	20°	30°	[illegible]	[illegible]	[illegible]
[illegible]	40	45	150	45	48	15°	15°	[illegible]	[illegible]	[illegible]
[illegible]	40	45	150	46	48	20°	20°	[illegible]	[illegible]	[illegible]
[illegible]	40	45	150	46	48	20°	30°	[illegible]	[illegible]	[illegible]
[illegible]	50	55	320	56	56	15°	15°	[illegible]	[illegible]	[illegible]
[illegible]	50	55	320	56	56	20°	20°	[illegible]	[illegible]	[illegible]
[illegible]	50	55	320	56	56	20°	30°	[illegible]	[illegible]	[illegible]
[illegible]	60	55	320	61	71	15°	15°	[illegible]	[illegible]	[illegible]
[illegible]	60	55	320	64	71	20°	20°	[illegible]	[illegible]	[illegible]
[illegible]	60	55	320	63	71	30°	30°	[illegible]	[illegible]	[illegible]
[illegible]	60	63	320	70	65	15°	15°	[illegible]	[illegible]	[illegible]
[illegible]	60	63	320	56	65	15°	15°	[illegible]	[illegible]	[illegible]

Note: Patent products owned by Funik company, counterfeiting will be prosecuted.

Funik Innovated CBN superhard cutting toolsTool Holder Series

FUNIK
CBN Cutting Tools

Middle Laying Arc Tool Holder

[illegible]	ε1=ε2	a	L1	L2	f	α			
[illegible]	32	32	170	64	22.33	20°	[illegible]	[illegible]	[illegible]
[illegible]	40	40	250	88	27.83	20°	[illegible]	[illegible]	[illegible]
[illegible]	50	60	300	88	33	20°	[illegible]	[illegible]	[illegible]
[illegible]	32	32	170	48	22.33	30°	[illegible]	[illegible]	[illegible]
[illegible]	40	40	250	57	27.83	30°	[illegible]	[illegible]	[illegible]
[illegible]	50	50	300	13	33	30°	[illegible]	[illegible]	[illegible]

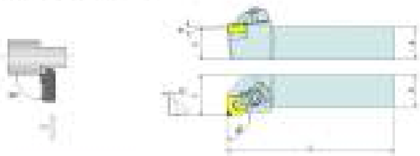
95° External Turning Tool Holder

Type specifications	ε1=ε2	a	L1	L2	f			
[illegible]	22	22	150	22	12	[illegible]	[illegible]	[illegible]

Funik innovated CBN superhard cutting tools

CBN cutting tools with hole common excircle turning tool holder series

95° TCLNR/L



Type	Dimension					Corner radius							
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								
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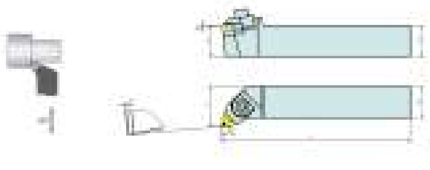
95° WWLNR/L



Type	Dimension					Corner radius							
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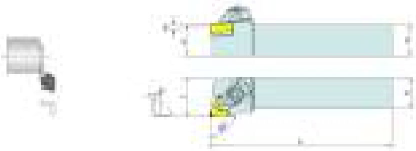
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								

FUNIK
CBN Cutting Tools

Funik innovated CBN superhard cutting tools

CBN cutting tools with hole common excircle turning tool holder series

93° TTJNR/L



Type	Dimension					Corner radius							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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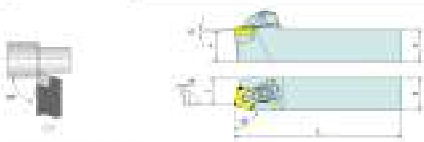
75° TSBNR/L



Type	Dimension					Corner radius							
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								
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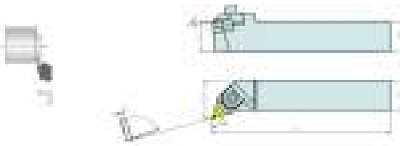
105° WTQNR/L



• Ordering example: [illegible]
• Supply lower: [illegible]

Type	Dimension					Corner radius							
	h	b	L	f	l								
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								

75° TSKNR/L

• Ordering example: [illegible]
• Supply lower: [illegible]

Type	Dimension						Corner radius							
	D	L	L1	F	H	Dmin								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								
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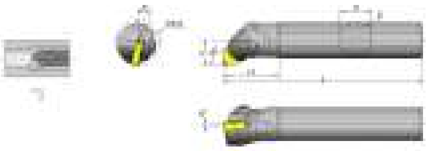
95° WWLNR/L



• Ordering example: [illegible]
• Supply lower: [illegible]

Type	Dimension						Corner radius						
	D	L	L1	F	H	Dmin							
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
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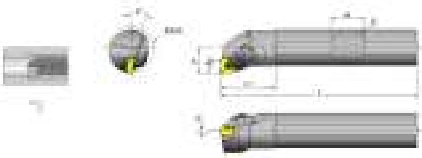
95° TCLNR/L



• Ordering example: [illegible]
• Supply lower: [illegible]

Type	Dimension						Corner radius							
	D	L	L1	F	H	Dmin								
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]								
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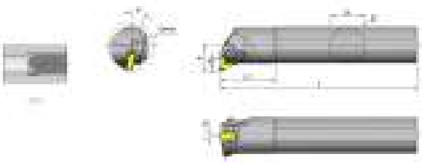
93° WTUNR/L



• Ordering example: [illegible]
• Supply lower: [illegible]

Type	Dimension						Corner radius						
	D	L	L1	F	H	Dmin							
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							

Funik Innovated CBN Superhard Cutting Tools

Milling

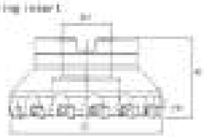
Compared with coated carbide and ceramics cutting tools, using Funik CBN superhard cutting tools to milling cast iron and hardened steel has the following obvious advantages:

- Faster material removal rate
- Longer life of tools
- Lower comprehensive processing costs

Funik Innovated CBN Superhard Cutting Tools

Surface Milling Cutter Series

Indexable CBN efficient surface milling insert



Type specifications	Tooth number	Size			Insert type	Spare parts		
		Φ D	Φ D1	H		Wedg	Connect screw	Wrench
FMC01-063-A22-SNGP-07	7	63	22	40	[illegible]	FMC01-1	FMC01-2	FMC01-3
FMC01-080-A27-SNGP-09	9	80	27	50				
FMC01-100-B32-SNGP-12	12	100	32	50				
FMC01-125-B40-SNGP-14	14	125	40	63				
FMC01-160-B40-SNGP-18	18	160	40	63				
FMC01-200-B60-SNGP-24	24	200	60	63				
FMC01-250-B60-SNGP-30	30	250	60	63				
FMC01-315-B60-SNGP-36	36	315	60	70				

Indexable CBN precision surface milling insert

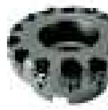
Size

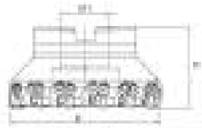
Type specifications	Tooth number		Size			Insert type		Spare parts			
	Milling insert	Wiper insert	Φ D	Φ D1	H	Milling insert	Wiper insert	Wedge	[illegible]	[illegible]	Wrench
FMC02-063-A22-SNGN-07	6	1	63	22	40	[illegible]	[illegible]	FMC02-1	FMC02-2	FMC02-3	FMC02-4
FMC02-080-A27-SNGN-09	8	1	80	27	50						
FMC02-100-B32-SNGN-12	10	2	100	32	50						
FMC02-125-B40-SNGN-14	12	2	125	40	63						
FMC02-160-B40-SNGN-18	15	3	160	40	63						
FMC02-200-B60-SNGN-24	20	4	200	60	63						
FMC02-250-B60-SNGN-30	25	5	250	60	63						
FMC02-315-B60-SNGN-36	30	6	315	60	70						

FUNIK
CBN Cutting Tools

Funik Innovated CBN Superhard Cutting Tools

Surface Milling Cutter Series

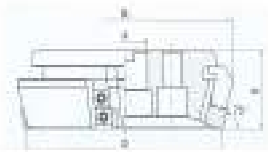




Type specifications	Tooth number		Size			Insert type		Spare parts			
	Milling insert	Wiper insert	Φ D	Φ D1	H	Milling insert	Wiper insert	Wedge	[illegible]	[illegible]	Wrench
FMC03-063-A22-SNGN-07	6	1	63	22	40	[illegible]	[illegible]	FMC03-1	FMC03-2	FMC03-3	FMC03-4
FMC03-080-A27-SNGN-09	8	1	80	27	50						
FMC03-100-B32-SNGN-12	12	2	100	32	50						
FMC03-125-B40-SNGN-14	12	2	125	40	63						
FMC03-160-B40-SNGN-18	15	3	160	40	63						
FMC03-200-B60-SNGN-24	20	4	200	60	63						
FMC03-250-B60-SNGN-30	25	5	250	60	63						
FMC03-315-B60-SNGN-36	30	6	315	60	70						

Surface Milling Cutter Series

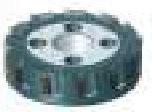
Indexable CBN surface milling insert Kr 75°

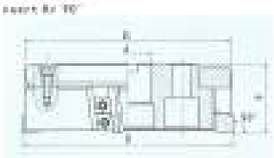


Type specifications	Tooth number	Size				Insert type	Spare parts			
		D	D1	H	d		Clamp	Wedge	Screw	Wrench
T5M125R/L	7	125	141	63	40	SNEN120712	TJMR/L-01	TJMR/L-02	SM6120-08 / M10×1×22	□5.0
T5M160R/L	9	160	177	63	40					
T5M200R/L	12	200	218	63	60					
T5M250R/L	16	250	268	63	60					
T5M315R/L	18	315	333	80	60					

Funik Innovated CBN Superhard Cutting Tools

Indexable CBN surface milling insert Kr 90°

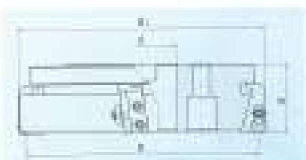




Type specifications	Tooth number	Size				Insert type	Spare parts			
		D	D1	H	d		Clamp	Wedge	Screw	Wrench
T2M125R/L	7	125	141	63	40	SNEN120712	TJMR/L-03	TJMR/L-03	SM6120-08 / M10×1×22	□5.0
T2M160R/L	7	160	177	63	40					
T2M200R/L	12	200	218	63	60					
T2M250R/L	16	250	268	63	60					
T2M315R/L	18	315	333	80	60					

Surface Milling Cutter Series

Indexable CBN surface milling insert (Round insert)



Type specifications	Tooth number	Size				Insert type	Spare parts				
		D	D1	H	d		Clamp	Wedge	Fixed screw	Adjust screw	Wrench
TRM125R/L	7	125	141	63	40	RNGN120712	TRMR/L-01	TRMR/L-02	TRM04	TRM05	□4.0
TRM160R/L	9	160	177	63	40						
TRM200R/L	12	200	218	63	60						
TRM250R/L	15	250	268	63	60						
TRM315R/L	18	315	333	80	60						

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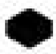
Funik Innovated CBN Superhard Milling Cutting Tools

Higher CNC grinding precision, more professional milling insert shape design, and more stringent ultra-fine cutting edge grinding created more excellent Funik CBN Milling Inserts.

Milling Insert

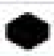


Type	Dimensions (mm)				Grades		
ISO	L	Φ I.C	S	r	[illegible]	[illegible]	[illegible]
SNGN090308	9	9.525	3.18	0.8	●	●	●
SNGN090408	9	9.525	4.76	0.8	●	●	●
SNGN120708	12	12.7	7.94	1.2	●	●	●
SNGN120712	12	12.7	7.94	1.2	●	●	●
[illegible]	19	19.05	6.4	1.6	●	●	●

Wiper Insert

Type	Dimensions (mm)				Grades		
ISO	L	Φ I.C	S	r	[illegible]	[illegible]	[illegible]
SNEX120327	12	12.7	3.18	1.2	●	●	●
SNEX120427	12	12.7	4.76	1.2	●	●	●

Milling Insert



Type	Dimensions (mm)				Grades		
ISO	L	Φ I.C	S	r	[illegible]	[illegible]	[illegible]
[illegible]	9	9.525	4.76	0.8	●	●	●
[illegible]	12	12.7	7.94	1.2	●	●	●

Milling Insert

Type	Dimensions (mm)				Grades		
ISO	L	Φ I.C	S	r	[illegible]	[illegible]	[illegible]
RNGN090300	9	9.525	3.18	0	●	●	●
RNGN090400	9	9.525	4.76	0	●	●	●
RNGN120700	12	12.7	7.94	0	●	●	●

Note: Cutting edge condition can be customized.

Funik Innovated CBN Superhard Milling Cutting Tools

[illegible]

Milling Insert 

Type	Dimensions (mm)		Grades		
ISO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	12.7	4.76	●	●	●

Milling Insert 

Type	Dimensions (mm)				Grades		
ISO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	15	[illegible]	[illegible]	[illegible]	●	●	●

Milling Insert 

Type	Dimensions (mm)		Grades		
ISO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	15	[illegible]	●	●	●

Milling Insert 

Type	Dimensions (mm)		Grades		
ISO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	12.7	4.76	●	●	●

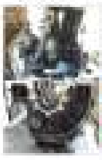
Milling Insert 

Type	Dimensions (mm)		Grades		
ISO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	9.525	4.76	●	●	●

Note: Cutting edge condition can be customized.

The application of Funik innovated CBN superhard cutting tool in automotive industry

The application cases of Funik innovated CBN superhard cutting tool in automotive industry



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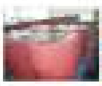

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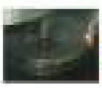

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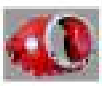

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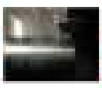

[illegible]

[illegible]

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Advantages of turning high carbide cast iron by using Funik innovated CBN superhard cutting tools

Advantages of turning high carbide cast iron by using Funik innovated CBN superhard cutting tools

[illegible]

[illegible]

[illegible]

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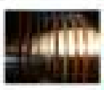
[illegible]

[illegible]



[illegible]

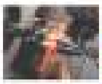
[illegible]

Funik innovated CBN superhard cutting tools
The advantages of "turning instead of grinding machine" finishing process hardened steel

The application cases of Funik innovated CBN superhard cutting tools in gear and bearing industry

[illegible]

[illegible]



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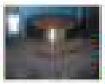

[illegible]

[illegible]

[illegible]

The application cases of Funik innovated CBN superhard cutting tools in air condition compressor industry

[illegible]

[illegible]

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The application cases of Funik innovated CBN superhard cutting tools in Machine tools, mining and construction machinery industry

[illegible]

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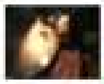

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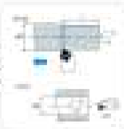
Precautions of using Funik innovated CBN superhard cutting tools

conventional cutting parameter formula

turning



[illegible]

milling

[illegible]

Precautions of installation and change insert

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

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Recommended cutting parameters of Funik innovated CBN superhard cutting tools

Conventional cutting parameters of Funik CBN Cutting Tools [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Conventional cutting parameters of Funik Milling CBN Cutting Tools [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	15°	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]