



CARBIDEX *Indexable Milling & Turning* 2017~2018 Catalogue



Winstar Cutting Technologies Corp. Is a Taiwanese company that started operations in the year 2008 by Tim Chen following a dream and personal interest in developing solid tools. We are a professional manufacturer of Cutting Tools and Inserts. Since WINSTAR started it has specialized in the Design and Manufacture of High-Quality Cutting Tools. Having more than 4,400 different kinds of items and huge stocks. We are able to meet customer's needs. 90% of our products provide our own brand tools and 10% to do OEM project for world-class cutting group. WINSTAR has become one of the most successful companies in Taiwan. We base our company's success on our long-standing commitment to satisfy our customers' needs. By Utilizing the Finest Raw Materials and introducing Innovative Cutting Tools.

Why Winstar?

Your order will receive personal attention from our sales staff. We offer full technical support for our products and are always just a phone call away. Your satisfaction is very important to us. We stock our shelves to support our full product line. This means we probably have what you need ready to ship today.

Taiwanese made Quality

Your satisfaction is 100% guaranteed! Our complete line of end mills, drills, holders, and insert will stand-up-to or out-perform any premium cutting tool brand on the market.

Privacy and Security

We aggressively protect your privacy rights. All transactions are conducted via our secure, encrypted online system. Your customer information will never be sold, reproduced, or distributed.

Optimized Carbide Grades

Maximum cutting performance is only achieved when the carbide grade characteristics ideally fit the specific application needs.

Superior Grinding Quality

Research on better surface quality remains an area of continuous technological advancement. Since the cutting edge quality determines the tool life and cutting action, a superior grinding quality is critical. WINSTAR provides the latest Swiss and German grinding Technology to get a superior surface finish.

Highly Innovative Tool Geometries

Highest cutting action cannot be accomplished by using only the standard geometries of universal tools. Efficient chip forming and evacuation is critical for optimal cutting performance. Such geometries are designed to manage a broad range of cutting forces and provide the highest cutting action for aerospace applications. As a recognized provider for "special" tools, WINSTAR possesses the engineering know-how to design highly innovative tool geometries for maximum cutting.

Advanced Tool Coating Technology

We are committed to provide our Customers with Crafted precision and Excellence. Longest tool life and maximum application performance require the utilization of advanced coating technology. As this highly innovative field continues to rapidly change.

Winstar Friends and Family

In WINSTAR CUTTING TECHNOLOGIES Corp. We believe in partnership and understands that the best way to grow is together. That is the reason Winstar works as a team, to provide the customer with a better efficient service. We also have partnerships around the globe. With this special friends we work just the same way we work together in WINSTAR. To make bigger and better alliances so we can grow together as a big family.

Welcome to WINSTAR Family



CARBIDEX *Indexable Milling & Turning*

Milling

銑 削

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Turning

車 削

Turning & Parting Inserts 車刀片 & 切斷刀片

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CXXN Shoulder Milling

CXXN 方肩銑系列

Optimize end-milling solution in various applications!!!

- XNMX with economy of 6 cutting edges.
- Low cutting resistance .
- True 90 degree square shoulder range.
- 經濟型的 6 個切削角
- 低切削阻力
- 正 90 度端銑



CXSXN Face Milling

CXSXN 面銑系列

Unique "Type Z" geometry minimizes chatter and vibration!!!

- SNMX with economical 8 cutting edges.
- Guarantees lowest cutting loads and longest tool life.
- High performance machining on various working material.
- 8 個切削角更顯經濟
- 保證刀具的低抗阻和壽命
- 泛用於各種材料的高性能加工



CXBN High Feed Face Milling

CXBN 高進給面銑系列

High Feed Milling Offers Increased Productivity!!!

- BNMX with economical 4 cutting edges.
- Lowest cutting force to insure maximum productivity!
- Optimal insert geometries, wide range cutting applications.
- 4 個切削角
- 確保生產率的最大化
- 多種幾何，適用於廣泛的切削應用



CXWN High Feed Face Milling

CXWN 高進給面銑系列

New Economical Solution for High Feed Milling Applications!!!

- WNMX with economical 6 cutting edges.
- Double sided & negative geometry has been designed for rigidity of cutting edge.
- Designed for multifunctional machining ability.
- 6 個切削角
- 雙面負角的設計，增加刀口剛性
- 多功能加工專用





Negative Types

負角車刀片

- 50+ types to choose from.
- > 10 μ thick coating layer structure for various applications.
- Longitudinal, profile and face turning machining.
- Usable range cover from medium to roughing.
- 超過 50 種幾何可供選擇
- 針對多樣化加工提供厚塗層對應
- 適合端面，輪廓及外徑加工應用
- 加工範圍包含蓋中加工至粗加工



Positive Types

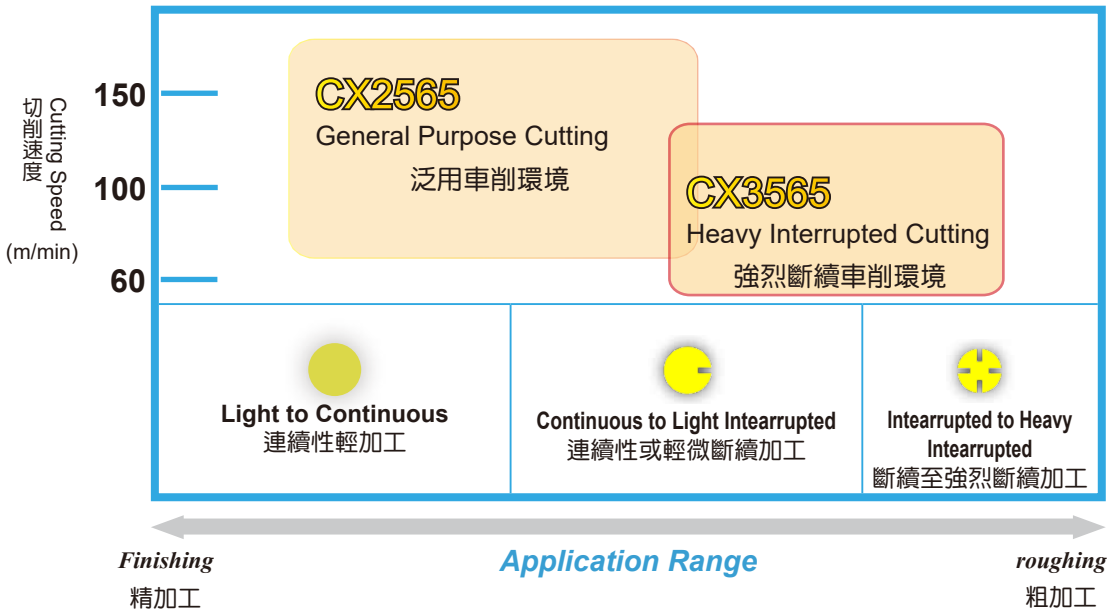
正角車刀片

- 25+ types to choose from.
- Thick or normal coating layer structure for different applications.
- Internal turning, profiling and boring machining.
- Usable range cover from semi-finishing to roughing.
- 超過 25 種幾何可供選擇
- 針對不同加工應用面提供不同塗層對應
- 適合內孔，輪廓及鏜孔加工應用
- 加工範圍包含半精加工至粗加工

NEW

CX2565 / CX3565

2017 New Turning Grades for General Purpose
2017 年全新泛用車刀片新材料



Features:

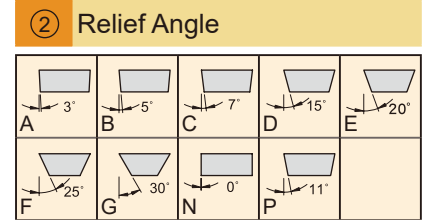
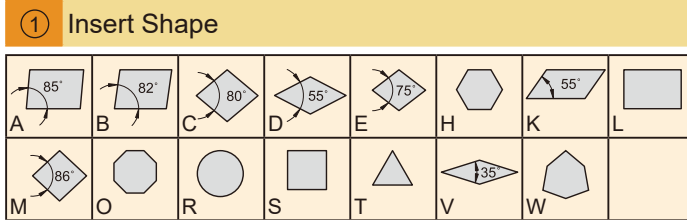
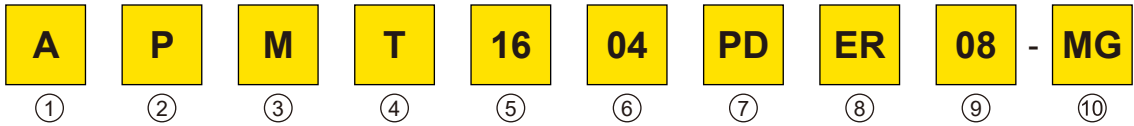
- Excellent heat resistance and wear resistance.
- Improve the adhesion resistance ability.
- Corner visibility with a unique color.
- Extend tool life and thereby reduces tools costs in a wide range of machining applications.

特性：

- 優異的耐磨耗及耐溫性。
- 高抗粘附能力。
- 輕易辨識已使用角。
- 延長刀具壽命，從而在廣泛的加工應用中降低成本。

Designations For Milling Insert

刀片型號編碼

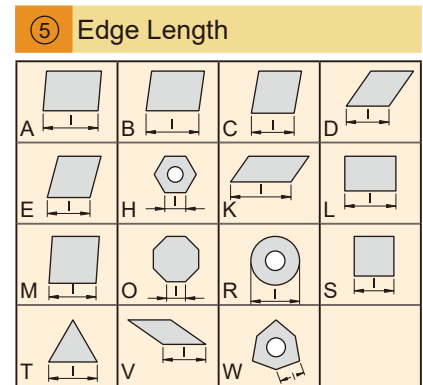


③ Tolerance

Tolerance	Range of tolerance		
	d±	m±	s±
A	0.025	0.005	0.025
C	0.025	0.013	0.025
E	0.025	0.025	0.025
F	0.013	0.005	0.025
G	0.025	0.025	0.05-0.13
H	0.013	0.013	0.025
J	0.05-0.15	0.005	0.025
K	0.05-0.15	0.013	0.025
L	0.05-0.15	0.025	0.025
M	0.05-0.15	0.08-0.2	0.05-0.13
N	0.05-0.15	0.08-0.2	0.025
U	0.08-0.25	0.13-0.38	0.13

④ Insert Features

A		
C		
F		
G		
H		
J		
M		
N		
Q		
R		
T		
U		
W		
X	Special shape	

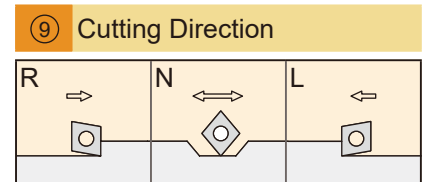


⑧ Cutting Edge

E	F	T	S
Rounded	Sharp	Chamferd	Chamferd and rounded

⑥ Thickness

	Index	01	T1	02	03	T3	04	05	06	07	09
	S(mm)	1.59	1.98	2.38	3.18	3.97	4.76	5.56	6.35	7.94	9.52



⑦ Corner Radius

	A	D	E	F	P	Z				
	45°	60°	75°	85°	90°	other				
	A	B	C	D	E	F	G	N	P	Z
	3°	5°	7°	15°	20°	25°	30°	0°	11°	other

⑩ Manufacturer's Type Designation

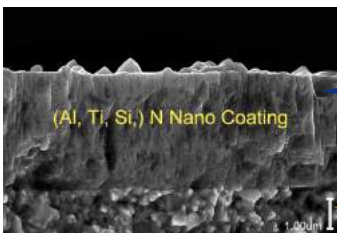
Chip breaker design

SG, MG, RG, HG



“∞” Infinity Nano Coating:

- ✔ High adhesion strength to the substrate improves stable cutting performance and achieves longer tool life.
- ✔ Provide excellent heat resistance and oxidation resistance.
- ✔ Maintain highest performance in wet cutting, dry cutting, even harden materia cutting.



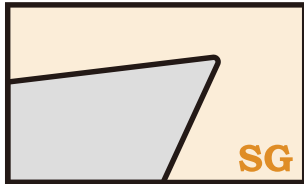
Smooth surface prevents chip adhesion.
Multi-layered structure prevents crack expansion which causes chipping and fracture.

Newly development substrate with better resistance and strength

Grade Type	Substrate (HRA)	Coating Type	Thickness	Coolant		Suitable Condition
				Dry	Wet	
CX21NS	92	Al.Ti.Si.X.N	3~4	★ ★ ★ ★	★ ★ ★ ★	●
<ul style="list-style-type: none"> · First choice for mold steel, hardened steel and Ni-base superalloys. · High-performance premium grade with a high level of shock and heat resistance. · Specially designed to operates at medium to high cutting speeds and is capable of retaining a secure cutting edge at high metal removal condition. 						
CX31NS	91.8	Ti.Si.X.N	3~4	★ ★ ★ ★	★ ★ ★ ★	●
CX31NA	91.7	Al.Ti.X.N	3~4	★ ★ ★ ★	★ ★ ★ ★	●
<ul style="list-style-type: none"> · General machining application. (P,K) · Both wear resistance and impact resistance are well-balanced. · Priority grade for medium cutting. 						
CX41NS	90.2	Ti.Si.X.N	3~4	★ ★ ★ ★	★ ★ ★ ★	⊕
CX41NA	90.3	Al.Ti.X.N	3~4	★ ★ ★ ★	★ ★ ★ ★	⊕
<ul style="list-style-type: none"> · Stainless material machining is recommended. · Priority grade for roughing purpose & interrupted machining, for P, M, K. · Excellent shock resistance ability. 						

* Milling Grade Comparison Chart.....Page B110

Examples of different insert geometries for a specific insert type chart.



SG - Positive and small rounded cutting edge.

Excellent surface for finishing purpose.

精加工及優良的表面光潔度



MG - Positive and rounded cutting edge.

Low cutting force and chattering reduction for light cutting when low forces / power are required.

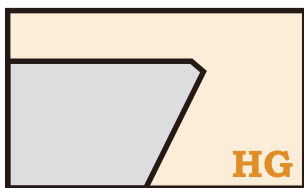
中加工刀口設計，適合低阻力及低功率的機台使用



RG - Negative and chamfering cutting edge.

First recommendation for general machining in mixed production.

一般中粗加工及泛用材料的首選



HG - Negative and big chamfering cutting edge.

Strong edge strength for rough operations, forging, cast skin and vibrations.





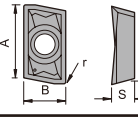

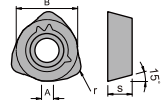

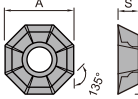


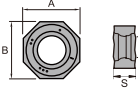
粗加工及鑄件專用的強力刀口

Inserts	Designation	Grade					Dimensions (mm)						Drawing	Cutter Page
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1		
	3PMX 100408-MG <i>T</i>	✓		✓	✓		6.9	-	4	0.8	3	-		B023 ~ B026
	APKT 100304PDER-MG <i>I</i>	✓	✓	✓			10.5	6.7	3.5	0.4	2.8	-		B039 ~ B040
	APKT 100308PDER-MG <i>I</i>	✓	✓	✓			10.5	6.7	3.5	0.8	2.8	-		
	APKT 100304PDER-RG <i>I</i>	✓	✓	✓			10.5	6.7	3.5	0.4	2.8	-		
	APKT 160408PDER-MG <i>I</i>		✓	✓	✓	✓	16.3	9.525	5.25	0.8	4.5	-		B041 ~ B044
	APKT 160408PDER-RG <i>I</i>		✓	✓	✓	✓	16.3	9.525	5.25	0.8	4.5	-		
	APMT 103508PDER-RG <i>S</i>		✓	✓	✓	✓	10.64	6.5	3.5	0.8	3	-		B030 ~ B031
	APMT 113508PDER-MG <i>M</i>	✓	✓	✓	✓	✓	11.0	6.35	3.5	0.8	2.8	-		B032 ~ B034
	APMT 113508PDER-RG <i>M</i>	✓	✓	✓	✓	✓	11.0	6.35	3.5	0.8	2.8	-		
	APMT 113508PDER-HG <i>D</i>		✓	✓	✓	✓	11.0	6.35	3.5	0.8	2.8	-		

*Customize geometries and grades available

Inserts	Designation	Grade					Dimensions (mm)						Drawing	Cutter Page
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1		
	APMT 160408PDER-MG <i>M</i>	✓	✓	✓	✓	✓	16.5	9.525	4.76	0.8	4.4	-		B035 ~ B038
	APMT 160408PDER-RG <i>M</i>	✓	✓	✓	✓	✓	16.5	9.525	4.76	0.8	4.4	-		
	APMT 160408PDER-HG <i>D</i>		✓	✓	✓	✓	16.5	9.525	4.76	0.8	4.4	-		
	AXMT 123508PEER-RG <i>S</i>	✓	✓	✓			12.18	6.93	3.58	0.8	3.4	-		B045 ~ B046
	AXMT 170508PEER-RG <i>S</i>		✓	✓	✓	✓	17.50	10.2	5.56	0.8	4.6	-		B047 ~ B049
	AXMT 170516PEER-RG <i>S</i>		✓	✓	✓	✓	17.50	10.2	5.56	1.6	4.6	-		
	<i>Double Sided</i> BNMX 0603-SG <i>T</i>	✓		✓	✓		9.0	6.3	3.75	-	3.2	-		B085 ~ B088
	<i>Double Sided</i> BNMX 0603-MG <i>T</i>	✓		✓	✓		9.0	6.3	3.75	-	3.2	-		
	<i>Double Sided</i> BNMX 0603-RG <i>T</i>	✓		✓	✓		9.0	6.3	3.75	-	3.2	-		

*Customize geometries and grades available

Inserts	Designation	Grade					Dimensions (mm)						Drawing	Cutter Page	
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1			
	P Steel	◎	◎	◎	○	○							◎ 1st choice ○ 2st choice		
	M Stainless steel	○	○	○	◎	◎									
	K Cast iron	◎	○	○	○	○									
	CPMT 090308-MG <i>H</i>		✓	✓			9.525	-	3.18	0.8	4.4	-		-	
	CPMT 120408-MG <i>H</i>		✓	✓			12.7	-	4.76	0.8	5.5	-		-	
	JDMT 150508R-MG <i>H</i>		✓	✓			15.1	9.12	5.0	0.8	4.5	-		B050 ~ B051	
	JDMW 120420ZDSR-RG <i>M</i>		✓	✓	✓	✓	2.5	12.0	4.76	2.0	4.75	-		B095 ~ B096	
	OFMT 05T3TN-MG <i>T</i>		✓	✓			12.7	-	3.8	0.6	4.6	-		B068 ~ B069	
	OFMT 05T3TN-RG <i>T</i>		✓	✓			12.7	-	3.8	0.6	4.6	-		-	
	ONMX 0505-RG <i>S</i>	✓		✓	✓		12.7	12.7	6.4	-	6	-		B064 ~ B065	

*Customize geometries and grades available

Inserts	Designation	Grade					Dimensions (mm)						Drawing	Cutter Page
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1		
		◎	◎	◎	○	○	◎ 1st choice ○ 2st choice							
		◎	○	○	○	○								
		◎	○	○	○	○								
	RDKW 0501MOE S		✓	✓			5	-	1.59	-	2.2	-		B072 ~ B078
	RDKW 0702MO S		✓	✓			7	-	2.38	-	2.8	-		
	RDKW 0702MOE S	✓	✓	✓	✓	✓	7	-	2.38	-	2.8	-		
	RDKW 0702MOT S	✓	✓	✓	✓	✓	7	-	2.38	-	2.8	-		
	RDMT 1003MOE T		✓	✓			10	-	3.18	-	3.9	-		B072 ~ B078
	RDMT 1003MOT T	✓	✓	✓			10	-	3.18	-	3.9	-		
	RDMX 1003MOE K	✓	✓	✓	✓		10	-	3.18	-	4.15	-		
	RDMX 1003MOT K	✓	✓	✓	✓		10	-	3.18	-	4.15	-		
	RDMT 10T3MOE H		✓	✓			10	-	3.97	-	4.5	-		B072 ~ B078
	RDMT 10T3MOT H	✓	✓	✓	✓		10	-	3.97	-	4.5	-		
	RDMW 10T3MOE H		✓	✓			10	-	3.97	-	4.5	-		

*Customize geometries and grades available

Inserts	Designation	Grade					Dimensions (mm)						Drawing	Cutter Page
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1		
	RDMX 12T3MOS <i>T</i>		✓	✓	✓	✓	12	-	3.97	-	4.1	-		-
	RDMX 12T3MOE <i>L</i>		✓	✓	✓	✓	12	-	3.97	-	4.1	-		
	RDMX 12T3MOT <i>L</i>	✓	✓	✓	✓	✓	12	-	3.97	-	4.1	-		
	RDMT 1204MOT <i>H</i>		✓	✓	✓	✓	12	-	4.76	-	4.4	-		B072 ~ B078
	RDMW 1204MOT <i>W</i>		✓	✓	✓	✓	12	-	4.76	-	4.4	-		
	RDMT 1604MOT <i>H</i>		✓	✓	✓	✓	16	-	4.76	-	5.5	-		B072 ~ B078
	RDMW 1604MOT <i>H</i>		✓	✓	✓	✓	16	-	4.76	-	5.5	-		
	RPMT 08T2MOE <i>M</i>		✓	✓			8	-	2.78	-	3.2	-		B079 ~ B082
	RPMT 08T2MOT <i>M</i>		✓	✓			8	-	2.78	-	3.2	-		
	RPMW 1003MOE <i>M</i>		✓	✓			10	-	3.18	-	4.6	-		B079 ~ B082
	RPMW 1003MOT <i>M</i>	✓	✓	✓			10	-	3.18	-	4.6	-		

*Customize geometries and grades available

Inserts	Designation	Grade					Dimensions (mm)						Drawing	Cutter Page
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1		
	RPMT 10T3MOE <i>M</i>		✓	✓	✓	✓	10	-	3.97	-	4.5	-		B079 ~ B082
	RPMT 10T3MOT <i>M</i>		✓	✓			10	-	3.97	-	4.3	-		
	RPMT 1204MOE <i>M</i>		✓	✓	✓	✓	12	-	4.76	-	4.3	-		B079 ~ B082
	RPMT 1204MOT <i>M</i>		✓	✓	✓	✓	12	-	4.76	-	4.3	-		
	RPMW 1204MOE <i>M</i>		✓	✓	✓	✓	12	-	4.76	-	4.3	-		
	RPMW 1204MOT <i>M</i>		✓	✓	✓	✓	12	-	4.76	-	4.3	-		
	SDMT 1205ZDTN-MG <i>H</i>		✓	✓			12.7	-	5.56	15	4.6	-		B093 ~ B094
	SDMT 1205ZDTN-RG <i>H</i>		✓	✓			12.7	-	5.56	15	4.6	-		
	SDNW 1205ZDTN-RG <i>H</i>		✓	✓	✓	✓	12.7	-	5.56	15	4.6	-		


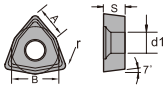





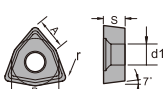




*Customize geometries and grades available

Inserts	Designation	Grade						Dimensions (mm)						Drawing	Cutter Page
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	CX03	A	B	S	r	d1	t1		
	SEKT 1204AFTN-RG <i>L</i>		✓	✓	✓	✓		12	-	4.76	0.8	5.5	-		B070 B071
	SEKW 1204AFEN <i>K</i>		✓	✓	✓	✓		12	-	4.76	0.8	5.5	-		
	SEMR 1203AFSN-RG <i>T</i>		✓	✓				12.7	1.6	3.18	1	2	-		-
	SEMT 13T3AGEN <i>M</i>		✓	✓	✓	✓		13.4	1.9	3.97	1.5	4.2	-		B066 B067
	SEMT 13T3AGSN-MG <i>M</i>		✓	✓	✓	✓		13.4	1.9	3.97	1.5	4.2	-		
	SEMT 13T3AGSN-RG <i>M</i>		✓	✓	✓	✓		13.4	1.9	3.97	1.5	4.2	-		
	SEMT 13T3AGSN-HG <i>S</i>		✓	✓	✓	✓		13.4	1.9	3.97	1.5	4.2	-		
	SEET 13T3AGFN-AL <i>M</i>						✓	13.4	1.9	3.97	1.5	4.2	-		B066 B067
	<i>Double Sided</i> SNMX 1205-RG <i>W</i>	✓		✓	✓			12.7	1.5	6.4	-	6	-		B064 B065
	<i>Double Sided</i> SNMX 1205-MG <i>W</i>	✓		✓	✓			12.7	1.5	6.4	-	6	-		

*Customize geometries and grades available

Inserts	Designation	Grade					Dimensions (mm)						Drawing	Cutter Page
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1		
		◎	◎	◎	○	○	◎ 1st choice ○ 2st choice							
		◎	○	○	○	○								
		◎	○	○	○	○								
	SPMG 050204-MG <i>T</i>		✓	✓			5.00	-	2.38	0.4	2.30	-		B059 ~ B061 B097 ~ B104
	SPMG 060204-MG <i>T</i>		✓	✓			6.00	-	2.38	0.4	2.65	-		
	SPMG 07T308-MG <i>T</i>		✓	✓	✓	✓	7.94	-	3.97	0.8	2.85	-		
	SPMG 090408-MG <i>T</i>		✓	✓	✓	✓	9.80	-	4.3	0.8	4.05	-		
	SPMG 110408-MG <i>T</i>		✓	✓	✓	✓	11.50	-	4.8	0.8	4.45	-		
	SPMN 120308		✓	✓			12.7	-	3.18	0.8	2	-		-
	TPKR 1603PPR-RG <i>I</i>		✓	✓	✓	✓	16.5	9.525	3.1	-	2.2	1.423		-
	W390 11T308-MG <i>S</i>	✓	✓	✓			11	6.9	3.59	0.8	2.8	-		B052 ~ B055

*Customize geometries and grades available


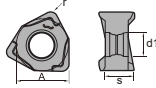



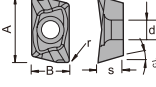

Inserts	Designation	Grade					Dimensions (mm)						Drawing	Cutter Page
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1		
	WCMT 030208-MM C		✓	✓			3.8	5.56	2.38	0.8	2.8	-		-
	WCMT 040208-MM C		✓	✓			4.3	6.35	2.38	0.8	3.0	-		-
	WCMT 050308-MM C		✓	✓			5.4	7.94	3.18	0.8	3.4	-		-
	WCMT 06T308-MM C		✓	✓	✓	✓	6.5	9.53	3.97	0.8	4.0	-		-
	WCMT 080412-MM C		✓	✓	✓	✓	8.7	12.7	4.76	1.2	4.3	-		-
	WCMT 030208-MG S			✓	✓		3.8	5.56	2.38	0.8	2.8	-		-
	WCMT 040208-MG S			✓	✓		4.3	6.35	2.38	0.8	3.0	-		-
	WCMT 050308-MG S			✓	✓		5.4	7.94	3.18	0.8	3.4	-		-
	WCMT 06T308-MG S			✓	✓		6.5	9.53	3.97	0.8	4.0	-		-
	WCMT 080412-MG S			✓	✓		8.7	12.7	4.76	1.2	4.3	-		-

*Customize geometries and grades available

Milling Inserts & Tools

Inserts	Designation	Grade						Dimensions (mm)						Drawing	Cutter Page
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	CX11NS	A	B	S	r	d1	t1		
	<i>Double Sided</i> WNMX 09T316-RG K	✓		✓	✓			9.525	-	3.97	1.6	3.6	-		B090 ~ B092
	WP32 16-RG W							16	14.0	3	-	5	-		B083 ~ B084
	WP32 20-RG W							20	16.0	3	-	5	-		
	WP32 25-RG W							25	21.5	4	-	6	-		
	WP32 16-SG W							16	14.0	3	-	5	-		B083 ~ B084
	WP32 20-SG W							20	16.0	3	-	5	-		
	WP32 25-SG W							25	21.5	4	-	6	-		
	WRT 070204-RG S	✓	✓	✓				4.30	6.4	2.38	0.4	2.2	1.3		B056
	WRT 100308-RG S	✓	✓	✓				6.35	9.3	3.4	0.8	2.9	1.8		B057 ~ B058

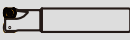


*Customize geometries and grades available

Inserts	Designation	Grade						Dimensions (mm)						Drawing	Cutter Page					
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	CX11NS	A	B	S	r	d1	t1							
																P Steel	M Stainless steel	K Cast iron	◎ 1st choice	○ 2st choice
	<i>Double Sided</i> XNMX 040308-MG S	✓		✓									6.7	-	3.285	0.8	3.15	-		B018 ~ B021
	<i>Double Sided</i> XNMX 040308-RG S	✓		✓									6.7	-	3.285	0.8	3.15	-		
	<i>Double Sided</i> XNMX 080608-MG S	✓		✓	✓								12.53	-	6.5	0.8	4.5	-	B020 ~ B021	
	XOMT 060204-MG S	✓	✓	✓									7	4.09	2.45	0.4	2	-		B028 ~ B029
	XOMT 060208-MG S	✓	✓	✓									7	4.09	2.45	0.8	2	-		




*Customize geometries and grades available

Milling Inserts & Tools

Shoulder Milling 方肩銑削

Cutter Series	Cutter Range			Inserts	Page
					
CXXN	Ø20 ~ Ø32	Ø50 ~ Ø63	Ø20 ~ Ø26	XNMX0403 (<i>DoubleSide</i>)	B018~019
	-	Ø50 ~ Ø160	-	XNMX0806 (<i>DoubleSide</i>)	B020
3P10	Ø20 ~ Ø26	Ø50 ~ Ø63	Ø21 ~ Ø33	3PMX1004	B024~025
XO06	Ø10 ~ Ø17	-	-	XOMT0602	B028
AP10	Ø16 ~ Ø40	Ø50 ~ Ø63	-	APMT1035	B030
BAP3	Ø16 ~ Ø50	Ø40 ~ Ø100	Ø16 ~ Ø33	APMT1135	B032~034
BAP4	Ø25 ~ Ø40	Ø40 ~ Ø160	Ø25 ~ Ø35	APMT1604	B035~037
APK3	Ø16 ~ Ø21	Ø50 ~ Ø80	Ø16 ~ Ø40	APKT1003	B039~040
APK4	Ø25 ~ Ø40	Ø100 ~ Ø160	Ø25 ~ Ø40	APKT1604	B041~043
WEX2	Ø16 ~ Ø35	Ø50 ~ Ø100	-	AXMT1235	B045~046
WEX7	Ø25 ~ Ø40	Ø50 ~ Ø160	-	AXMT1705	B047~48
JD15	Ø25 ~ Ø32	-	-	JDMT1505	B050
R390	Ø16 ~ Ø40	Ø50 ~ Ø100	Ø16 ~ Ø40	W39011T3	B052~54
RT07	Ø11 ~ Ø13	-	Ø10 ~ Ø13	WRT0702	B056
RT10	Ø17 ~ Ø35	-	Ø17 ~ Ø35	WRT1003	B057
SPE	Ø12 ~ Ø40	-	-	SPMG...	B059
SPF	-	Ø40 ~ Ø100	-	SPMG...	B060

Face Milling 平面銑削

Cutter Series	Cutter Range			Inserts	Page
					
CXSN	-	Ø50 ~ Ø200	-	SNMX1205 (<i>DoubleSide</i>)	B064
CXON	-	Ø52.9 ~ Ø102.9	-	ONMX0505 (<i>DoubleSide</i>)	B064
ASX3	-	Ø50 ~ Ø315	-	SEMT13T3	B066
OF05	-	Ø50 ~ Ø125	-	OFMT05T3	B068
SE45	Ø32 ~ Ø63	Ø50 ~ Ø250	-	SEKT1204	B070
				SEKW1204	

Copy Milling 仿形銑削

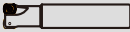


Cutter Series	Cutter Range			Inserts	Page
ARD	Ø10 ~ Ø16	-	Ø12 ~ Ø16	RDKW0501	B072~074
	Ø16 ~ Ø25	-	Ø16 ~ Ø25	RDKW0702	B072~074
	Ø25 ~ Ø32	Ø50 ~ Ø63	Ø25 ~ Ø42	RDMT10T3	B072~074
	Ø25 ~ Ø32	Ø50 ~ Ø63	Ø25 ~ Ø42	RDMW10T3	B072~074
	Ø32 ~ Ø40	Ø50 ~ Ø100	-	RDMT1204	B072~073
	Ø32 ~ Ø40	Ø50 ~ Ø100	-	RDMW1204	B072~073
	-	Ø63 ~ Ø125	-	RDMT1604	B073
	-	Ø63 ~ Ø125	-	RDMW1604	B073
FRD	Ø20 ~ Ø35	Ø50 ~ Ø60	Ø20 ~ Ø35	RDMT1003	B075~076
	Ø20 ~ Ø35	Ø50 ~ Ø60	Ø20 ~ Ø35	RDMX1003	B075~076
BRP	Ø12 ~ Ø20	Ø40 ~ Ø50	-	RPMT08T2	B079~080
	Ø25 ~ Ø35	Ø40 ~ Ø50	-	RPMT10T3	B079~080
	Ø32 ~ Ø50	Ø50 ~ Ø80	-	RPMT1204	B079~080
	Ø32 ~ Ø50	Ø50 ~ Ø80	-	RPMW1204	B079~080
WF21	Ø16	-	Ø16	WP3216	B083
	Ø20	-	Ø20	WP3220	B083
	Ø25	-	Ø25	WP3225	B083

Milling Inserts & Tools




High Feed Face Milling 高進給平面銑削

Cutter Series	Cutter Range			Inserts	Page
CXBN	Ø15 ~ Ø32	Ø40 ~ Ø63	Ø16 ~ Ø35	BNMX0603(DoubleSide)	B086~087
CXWN	Ø25 ~ Ø40	Ø50 ~ Ø80	Ø25	WNMX09T3(DoubleSide)	B090~091
ASRF	-	Ø50 ~ Ø80	-	SDNW1205	B093
				SDMT1205	
AJX12	Ø30 ~ Ø50	Ø50 ~ Ø80	-	JDMW1204	B095

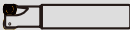


Helical Milling 玉米銑削

Cutter Series	Cutter Range			Inserts	Page
					
SPH	Ø16 ~ Ø40	-	-	SPMG...	B097

Disc Milling 三面刃銑削

Cutter Series	Cutter Range			Inserts	Page
					
SPT	Ø19 ~ Ø95	-	-	SPMG...	B98
SPDM	-	Ø80 ~ Ø200	-	SPMG...	B99
SPDI	-	Ø80 ~ Ø160	-	SPMG...	B100
SPD	-	Ø80 ~ Ø200	-	SPMG...	B101

Chamfer Milling 倒角銑削

Cutter Series	Cutter Range			Inserts	Page
					
SPC	Ø11 ~ Ø50	-	-	SPMG...	B102



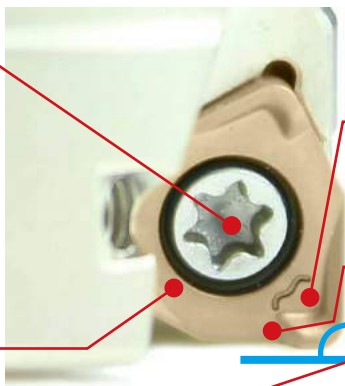
Milling Inserts & Tools

Economical solution in various end-milling applications!!! 經濟多元的端銑解決方案

- CXXN is the best solution with the economy of six cutting edges while providing the highest performance.
- Available in multiple mounting configurations: Endmill, shank and face mill type.
- Especially suited for small and medium sized milling machines.



- Single center lock screw for easy and strong clamping force.
- Suitable for different materials by optimized geometries.

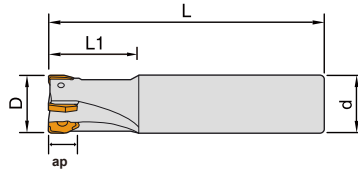
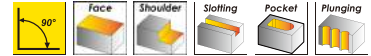


- Chip evacuation improvement design.
- Reduction of cutting load during machining.
- Special flat design for surface roughness improvement.
- Decreasing cutting force during high feed machining.

· True 90° square shoulder angle, one milling operation without mismatch on machining walls.

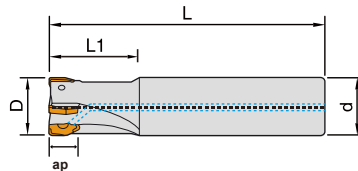
- ◆ Great performance ensured at large depth of cutting operations due to strong cutting edge and low cutting resistance.
- ◆ Innovative curve cutting edge design ensure ideal 90 degree cutting.
- ◆ SKD11 tool steel is used for best rigidity and performance.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

CXXNE



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
ICXXNE03-0200150	20	40	150	20	3	4	XNMX0403	TS2512	TK08
ICXXNE04-0250150	25	40	150	25	4	4			
ICXXNE05-0320200	32	45	200	32	5	4			

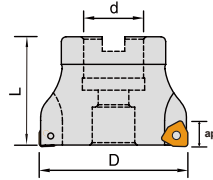
CXXNE (with Coolant Hole)



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
ICXXNE03W0200110	20	28	110	20	3	4	XNMX0403	MS2506E	TK08
ICXXNE03W0200150	20	28	150	20	3	4			
ICXXNE04W0250120	25	28	120	25	4	4			
ICXXNE04W0250170	25	28	170	25	4	4			
ICXXNE05W0320130	32	30	130	30	5	4			
ICXXNE05W0320195	32	30	195	30	5	4			

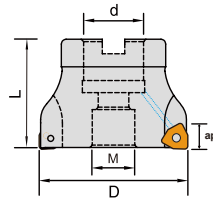
Customize available.

CXXNF



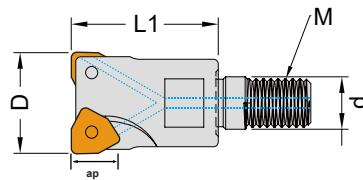
Order No.	D	L	d	T	ap	Inserts	Screw	Wrench
ICXXNF06-0500220	50	50	22	6	4	XNMX0403	TS2512	TK08
ICXXNF07-0630220	63	50	22	7	4			
ICXXNF07-0630254	63	50	25.4	7	4			

CXNNF (with Coolant Hole)



Order No.	D	L	d	M	T	ap	Inserts	Screw	Wrench
ICXXNF07W0400160	40	40	16	8.5	7	4	XNMX0403	TS2515	TK08
ICXXNF09W0500220	50	40	22	11	9	4			

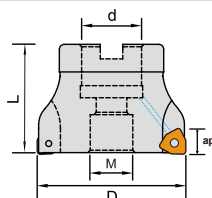
CXXNM (with Coolant Hole)



Order No.	D	L1	d	M	T	ap	Inserts	Screw	Wrench
ICXXNM03W0200100	20	28	10.5	M10	3	4	XNMX0403	TS2512	TK08
ICXXNM03W0210100	21	44	10.5	M10	3	4			
ICXXNM04W0250120	25	30	12.5	M12	4	4			
ICXXNM04W0260120	26	49	12.5	M12	4	4			

Customize available.

CXXNF (with Coolant Hole)



Order No.	D	L	d	M	T	ap	Inserts	Screw	Wrench
ICXX8F04W0500220	50	40	22	11	4	7	XNMX0806	MS4011A	TK15
ICXX8F05W0500220	50	40	22	11	5	7			
ICXX8F06W0630220	63	40	22	11	6	7			
ICXX8F07W0630220	63	40	22	11	7	7			
ICXX8F07W0800270	80	50	27	13	7	7			
ICXX8F09W0800270	80	50	27	13	9	7			
ICXX8F08W1000320	100	50	32	45	8	7			
ICXX8F11W1000320	100	50	32	45	11	7			
ICXX8F11W1250400	125	63	40	53	11	7			
ICXX8F12W1600400	160	63	40	55	12	7			

Customize available.



- ◆ Double sided design, total 6 cutting corners.
- ◆ Suitable for different materials by optimized geometries.
- ◆ True 90° square shoulder angle, one milling operation without mismatch on machining walls.

Specification

Inserts	Designation	Grade					Dimensions (mm)						Drawing
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1	
	P Steel	◎	◎	◎	○	○	◎ 1st choice ○ 2st choice						
	M Stainless steel	○	○	○	◎	◎							
	K Cast iron	◎	○	○	○	○							
	XNMX 040308-MG	✓		✓			6.7	-	3.285	0.8	3.15	-	
	XNMX 040308-RG	✓		✓			6.7	-	3.285	0.8	3.15	-	
	XNMX 080608-MG	✓		✓	✓		12.53	-	6.5	0.8	4.5	-	

Milling Inserts & Tools

Recommended Cutting Conditions

for XNMX0403

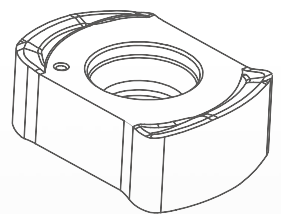
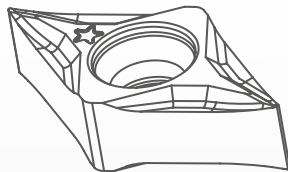
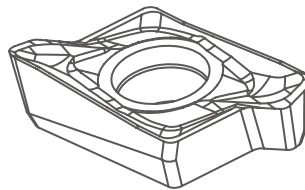
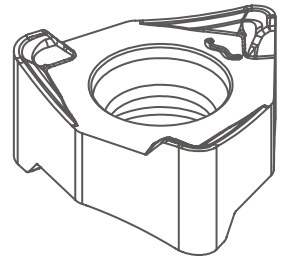
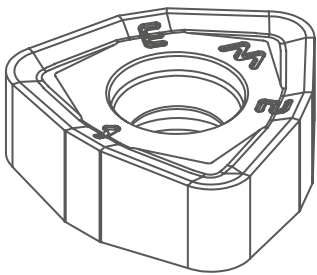
Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 220	0.10 ~ 0.16	~ 3.0
Stainless 300 Series	50 ~ 130	0.08 ~ 0.12	~ 1.6
Cast Iron (HB140-220)	80 ~ 200	0.10 ~ 0.16	~ 3.0

for XNMX0806

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 220	0.13 ~ 0.25	~ 7.0
Stainless 300 Series	50 ~ 130	0.10 ~ 0.20	~ 4.5
Cast Iron (HB140-220)	80 ~ 200	0.13 ~ 0.25	~ 7.0



WINSTAR
Endmills · Inserts · Drills



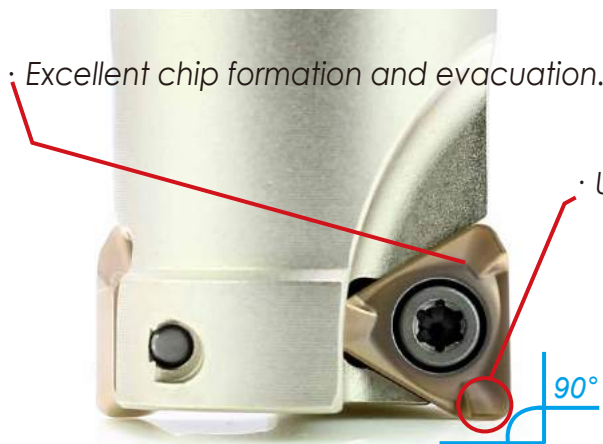
Economical Shoulder Milling Cutter



Milling Inserts & Tools

Innovative shoulder milling series with 3 helical cutting edges!! 創新的三個加工角設計帶來更大的經濟效益

- Ensures productive milling of true 90° shoulders.
- Provide an improved low cost per cutting edge for various milling applications.
- Low cutting force and excellent chip evacuation.



· Excellent chip formation and evacuation.

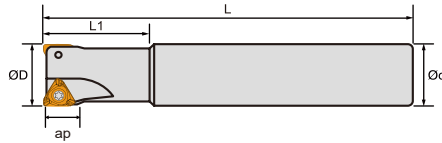
· Unique geometry design for superb surface finish.

· True 90° square shoulder angle.

· Low cutting force due to large rake angle.

- ◆ Economical 3 cutting edges insert.
- ◆ Low cutting force due to large rake angle.
- ◆ Unique geometry design for superb surface finish.
- ◆ SKD11 tool steel is used for best rigidity and performance.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

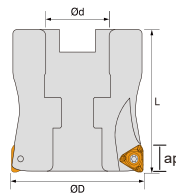
3P10E



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
I3P10E02-0200130	20	50	130	20	2	7	3PMX1004...	TS2517	TK09
I3P10E02-0210130	21	30	130	20	2	7			
I3P10E02-0250250	25	30	250	25	2	7			
I3P10E03-0250150	25	55	150	25	3	7			
I3P10E03-0260150	26	35	150	25	3	7			

Customize available.

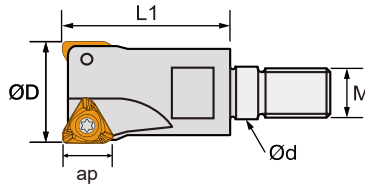
3P10F



Order No.	D	L	d	T	ap	Inserts	Screw	Wrench
I3P10F07-0500220	50	50	22	7	7	3PMX1004...	TS2517	TK09
I3P10F09-0630220	63	50	22	9	7			

Customize available.

3P10M



Order No.	D	L1	d	M	T	ap	Inserts	Screw	Wrench
I3P10M02-0210100	21	35	18	M10	2	7	3PMX1004...	TS3004	TK09
I3P10M03-0260120	26	35	21	M12	3	7			
I3P10M05-0330160	33	43	29	M16	5	7			

Customize available.



3PMX1004

方肩銑削刀片

- ◆ Economical 3 cutting edges insert.
- ◆ Suitable for most materials by one optimized geometry.
- ◆ True 90° square shoulder angle.

Specification

	P	Steel	◎	◎	◎	○	○										◎ 1st choice ○ 2st choice
	M	Stainless steel	○	○	○	◎	◎										
	K	Cast iron	◎	○	○	○	○										
Inserts	Designation	Grade					Dimensions (mm)						Drawing				
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1					
	3PMX 100408-MG	✓		✓	✓		6.9	-	4	0.8	3	-					

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.08 ~ 0.20	~ 5.0
Stainless 300 Series	50 ~ 110	0.05 ~ 0.15	~ 3.0
Cast Iron (HB140-220)	80 ~ 180	0.08 ~ 0.20	~ 5.0



Size Does Matter

Mini Size Cutter In Widely Flexible Applications !!

廣泛靈活的小徑多刃加工

- *Offering excellent tool life and precision on small to medium work piece.*
- *Optimizes milling properties to reduce heat generation and cutting forces.*
- *Flexibility insures increasing your productivity.*



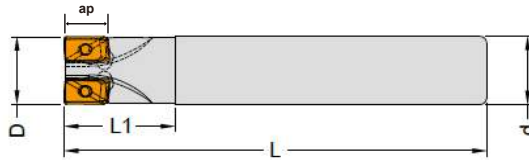
Teeth No.	
Ø10	2
Ø12	3
Ø16	4
Ø20	5

Advantages:

- *Low cutting Force.*
- *Low vibration forces.*
- *High performance.*

- ◆ Low Cutting Force – even possible to use by low power and compact machines such as BT30.
- ◆ High Performance – multi blades design achieve higher feed without creating more vibration.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

XO06E



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
IXO06E02-0100100	10	20	100	10	2	5	XOMT0602..	TS1801	TK06
IXO06E02-0110100	11	20	100	10	2	5			
IXO06E02-0120100	12	20	100	12	2	5			
IXO06E03-0120100	12	20	100	12	3	5			
IXO06E02-0130100	13	20	100	12	2	5			
IXO06E03-0130100	13	20	100	12	3	5			
IXO06E03-0160100	16	20	100	16	3	5			
IXO06E04-0170120	17	30	120	16	4	5			

Customize available.

- ◆ Multiple blades specification, $\varnothing 10/2t$, $\varnothing 12/3t$, $\varnothing 16/4t$.
- ◆ Low cutting force.
- ◆ Excellent way to replace endmill in roughing situation.
- ◆ Achieve higher feed and performance without creating more vibration.

Specification

Inserts	Designation	Grade						Dimensions (mm)						Drawing
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	CX11NS	A	B	S	r	d1	t1	
	XOMT 060204-MG	✓	✓	✓				7	4.09	2.45	0.4	2	-	
	XOMT 060208-MG	✓	✓	✓				7	4.09	2.45	0.8	2	-	

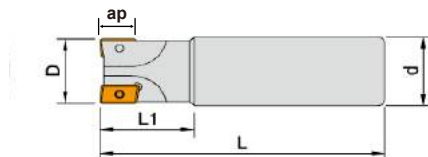
Milling Inserts & Tools

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.05 ~ 0.13	~ 3.0
Stainless 300 Series	50 ~ 110	0.05 ~ 0.10	~ 2.5
Cast Iron (HB140-220)	80 ~ 180	0.05 ~ 0.13	~ 3.0

- ◆ Great performance ensured at large depth of cutting operations due to strong cutting edge and low cutting resistance.
- ◆ Innovative curve cutting edge design ensure ideal 90 degree cutting.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

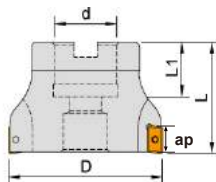
AP10E



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
IAP10E02-0160120	16	25	120	16	2	10	APMT1035	TS2502	TK08
IAP10E03-0200120	20	30	120	20	3	10			
IAP10E04-0250150	25	35	150	25	4	10			
IAP10E05-0320150	32	45	150	32	5	10			
IAP10E06-0400135	40	45	135	32	6	10			

Customize available.

AP10F



Order No.	D	L	L1	d	T	ap	Inserts	Screw	Wrench
IAP10F06-0500220	50	45	20	22	6	10	APMT1035	TS2507	TK08
IAP10F06-0500254	50	45	20	25.4	6	10			
IAP10F06-0630220	63	45	20	22	6	10			
IAP10F06-0630254	63	45	20	25.4	6	10			

Customize available.

- ◆ Strong high rake inserts provide smooth cutting action.
- ◆ Lower cutting force.
- ◆ Good chip evacuation.

Specification

	P	Steel	◎	◎	◎	○	○										◎ 1st choice ○ 2st choice
	M	Stainless steel	○	○	○	◎	◎										
	K	Cast iron	◎	○	○	○	○										
Inserts	Designation	Grade					Dimensions (mm)						Drawing				
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1					
	APMT 103508PDER-RG		✓	✓	✓	✓	10.64	6.5	3.5	0.8	3	-					

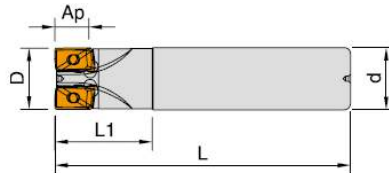
Milling Inserts & Tools

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.08 ~ 0.20	~ 7.0
Stainless 300 Series	50 ~ 110	0.05 ~ 0.15	~ 4.0
Cast Iron (HB140-220)	80 ~ 180	0.08 ~ 0.20	~ 7.0

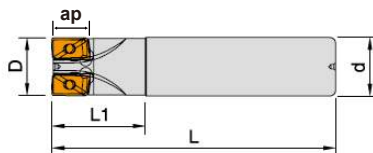
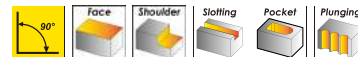
- ◆ Great performance ensured at large depth of cutting operations due to strong cutting edge and low cutting resistance.
- ◆ Innovative curve cutting edge design ensure ideal 90 degree cutting.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

BAP3E



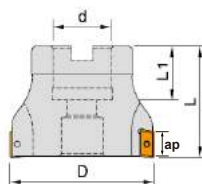
Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
IBAP3E02-0160100	16	25	100	16	2	11	AP...1135	TS2507	TK08
IBAP3E02-0170100	17	30	100	16	2	11			
IBAP3E02-0190100	19	30	100	16	2	11			
IBAP3E03-0200100	20	30	100	20	3	11			
IBAP3E03-0210100	21	30	100	20	3	11			
IBAP3E03-0220100	22	35	100	20	3	11			
IBAP3E03-0230100	23	35	100	20	3	11			
IBAP3E03-0240100	24	35	100	20	3	11			
IBAP3E04-0250100	25	35	100	25	4	11			
IBAP3E04-0260120	26	35	120	25	4	11			
IBAP3E04-0270120	27	40	120	25	4	11			
IBAP3E04-0280120	28	40	120	25	4	11			
IBAP3E04-0290120	29	40	120	25	4	11			
IBAP3E04-0300120	30	40	120	25	4	11			
IBAP3E04-0310120	31	40	120	25	4	11			
IBAP3E05-0320120	32	40	120	32	5	11			
IBAP3E05-0330120	33	40	120	32	5	11			
IBAP3E05-0340120	34	40	120	32	5	11			
IBAP3E05-0350120	35	40	120	32	5	11			

BAP3E



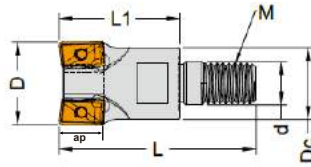
Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
IBAP3E02-0160120	16	35	120	16	2	11	AP...1135	TS2507	TK08
IBAP3E02-0170120	17	35	120	16	2	11			
IBAP3E02-0200150	20	35	150	20	2	11			
IBAP3E03-0200150	20	35	150	20	3	11			
IBAP3E03-0210150	21	35	150	20	3	11			
IBAP3E02-0160160	16	45	160	16	2	11			
IBAP3E02-0170160	17	45	160	16	2	11			
IBAP3E02-0200200	20	50	200	20	2	11			
IBAP3E02-0210200	21	50	200	20	2	11			

BAP3F



Order No.	D	L	L1	d	T	ap	Inserts	Screw	Wrench
IBAP3F05-0400160	40	40	18	16	5	11	AP...1135	TS2507	TK08
IBAP3F06-0500254	50	45	18	25.4	6	11			
IBAP3F07-0630220	63	45	22	22	7	11			
IBAP3F07-0630254	63	45	22	25.4	7	11			
IBAP3F08-0800270	80	50	26	27	8	11			
IBAP3F08-0800254	80	50	26	25.4	8	11			
IBAP3F10-1000320	100	50	32	32	10	11			
IBAP3F10-1000317	100	50	31.75	31.75	10	11			

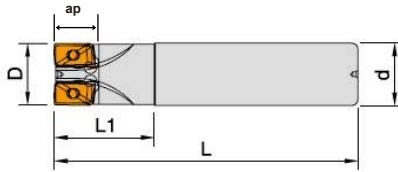
BAP3M



Order No.	D	Dc	L	L1	M	T	ap	Inserts	Screw	Wrench
IBAP3M02-0160080	16	15	43	26	M8	2	11	AP...1135	TS2507	TK08
IBAP3M02-0170080	17	15	43	26	M8	2	11			
IBAP3M02-0200100	20	18	49	30	M10	2	11			
IBAP3M03-0200100	20	18	49	30	M10	3	11			
IBAP3M02-0210100	21	18	49	30	M10	2	11			
IBAP3M03-0210100	21	18	49	30	M10	3	11			
IBAP3M02-0250120	25	23	57	35	M12	2	11			
IBAP3M04-0250120	25	23	57	35	M12	4	11			
IBAP3M02-0260120	26	23	57	35	M12	2	11			
IBAP3M04-0260120	26	23	57	35	M12	4	11			
IBAP3M03-0320160	32	30	63	40	M16	3	11			
IBAP3M05-0320160	32	30	63	40	M16	5	11			
IBAP3M03-0330160	33	30	63	40	M16	3	11			
IBAP3M05-0330160	33	30	63	40	M16	5	11			



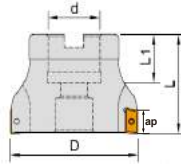
BAP4E



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
IBAP4E02-0250150	25	40	150	25	2	16	AP...1604	TS4023	TK15
IBAP4E02-0260150	26	40	150	25	2	16			
IBAP4E02-0300150	30	40	150	25	2	16			
IBAP4E03-0320150	32	45	150	32	3	16			
IBAP4E03-0350150	35	45	150	32	3	16			
IBAP4E04-0400170	40	45	170	32	4	16			
IBAP4E02-0250200	25	70	200	25	2	16			
IBAP4E02-0250250	25	70	250	25	2	16			
IBAP4E02-0260200	26	50	200	25	2	16			
IBAP4E02-0300200	30	50	200	25	2	16			
IBAP4E03-0320200	32	80	200	32	3	16			
IBAP4E03-0320250	32	80	250	32	3	16			
IBAP4E03-0320300	32	80	300	32	3	16			
IBAP4E03-0350200	35	50	200	32	3	16			
IBAP4E03-0350250	35	50	250	32	3	16			
IBAP4E03-0350300	35	50	300	32	3	16			
IBAP4E04-0400200	40	50	200	32	4	16			
IBAP4E04-0400300	40	50	300	32	4	16			

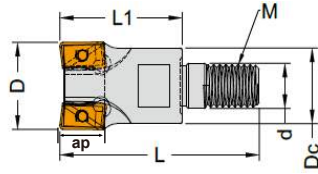
Milling Inserts & Tools

BAP4F



Order No.	D	L	L1	d	T	ap	Inserts	Screw	Wrench
IBAP4F04-0400160	40	40	18	16	4	16	AP...1604	TS4004	TK15
IBAP4F05-0500220	50	45	22	22	5	16			
IBAP4F05-0500254	50	45	18	25.4	5	16			
IBAP4F06-0630220	63	45	22	22	6	16			
IBAP4F06-0630254	63	45	22	25.4	6	16			
IBAP4F07-0800270	80	50	26	27	7	16			
IBAP4F07-0800254	80	50	26	25.4	7	16			
IBAP4F08-1000320	100	50	32	32	8	16			
IBAP4F08-1000317	100	50	32	31.75	8	16			
IBAP4F09-1250400	125	55	36	40	9	16			
IBAP4F09-1250381	125	55	36	38.1	9	16			
IBAP4F10-1600400	160	63	36	40	10	16			
IBAP4F10-1600508	160	63	36	50.8	10	16			

BAP4M



Order No.	D	Dc	L1	L	M	T	ap	Inserts	Screw	Wrench
IBAP4M02-0250120	25	23	35	57	M12	2	16	AP...1604	TS4004	TK08
IBAP4M02-0260120	26	23	35	57	M12	2	16			
IBAP4M03-0320160	32	30	40	63	M16	3	16			
IBAP4M03-0330160	33	30	40	63	M16	3	16			
IBAP4M03-0350160	35	30	40	63	M16	3	16			



Milling Inserts & Tools

- ◆ Various shapes and cutting edge designs for different working purpose.
- ◆ Strong high rake inserts provide smooth cutting action.
- ◆ Lower cutting force.
- ◆ Good chip evacuation.

Specification

Inserts	Designation	Grade					Dimensions (mm)						Drawing
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1	
	P Steel	◎	◎	◎	○	○	◎ 1st choice ○ 2st choice						
	M Stainless steel	○	○	○	◎	◎							
	K Cast iron	◎	○	○	○	○							
	APMT 113508PDER-MG	✓	✓	✓	✓	✓	11.0	6.35	3.5	0.8	2.8	-	
	APMT 113508PDER-RG	✓	✓	✓	✓	✓	11.0	6.35	3.5	0.8	2.8	-	
	APMT 113508PDER-HG		✓	✓	✓	✓	11.0	6.35	3.5	0.8	2.8	-	
	APMT 160408PDER-MG	✓	✓	✓	✓	✓	16.5	9.525	4.76	0.8	4.4	-	
	APMT 160408PDER-RG	✓	✓	✓	✓	✓	16.5	9.525	4.76	0.8	4.4	-	
	APMT 160408PDER-HG		✓	✓	✓	✓	16.5	9.525	4.76	0.8	4.4	-	

Recommended Cutting Conditions

for APMT1135

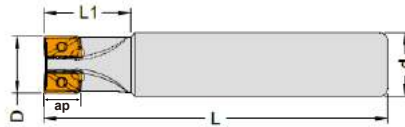
Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.08 ~ 0.20	~ 8.0
Stainless 300 Series	50 ~ 110	0.05 ~ 0.15	~ 5.0
Cast Iron (HB140-220)	80 ~ 180	0.08 ~ 0.20	~ 7.0

for APMT1604

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.12 ~ 0.28	~ 11.0
Stainless 300 Series	50 ~ 110	0.10 ~ 0.22	~ 7.0
Cast Iron (HB140-220)	80 ~ 180	0.12 ~ 0.28	~ 10.0

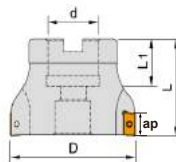
- ◆ Great performance ensured at large depth of cutting operations due to strong cutting edge and low cutting resistance.
- ◆ Innovative curve cutting edge design ensure ideal 90 degree cutting.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

APK3E



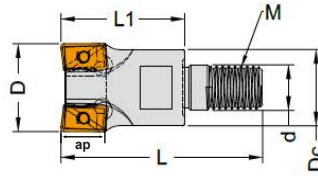
Order No.	D	L	L1	L	d	T	ap	Inserts	Screw	Wrench
IAPK3E02-0160120	16	25	25	120	16	2	10	APKT1003	TS2507	TK08
IAPK3E02-0160160	16	25	25	160	16	2	10			
IAPK3E02-0170120	17	25	25	120	16	2	10			
IAPK3E02-0170160	17	25	25	160	16	2	10			
IAPK3E02-0200120	20	30	30	120	20	2	10			
IAPK3E02-0200150	20	30	30	150	20	2	10			
IAPK3E02-0200200	20	30	30	200	20	2	10			
IAPK3E02-0210150	21	30	30	150	20	2	10			
IAPK3E02-0210200	21	30	30	200	20	2	10			

APK3F



Order No.	D	L	L1	d	T	ap	Inserts	Screw	Wrench
IAPK3F06-0500220	50	40	20	22	6	10	APKT1003	TS2507	TK08
IAPK3F06-0630220	63	45	21	22	6	10			
IAPK3F07-0800270	80	50	23	27	7	10			

APK3M



Order No.	D	Dc	L	L1	M	d	T	ap	Inserts	Screw	Wrench
IAPK3M02-0160080	16	15	43	26	M8	8.5	2	10	APKT1003	TS2504	TK08
IAPK3M02-0170080	17	15	43	26	M8	8.5	2	10			
IAPK3M02-0200100	20	18	50	32	M10	10.5	2	10			
IAPK3M03-0200100	20	18	50	32	M10	10.5	3	10			
IAPK3M02-0210100	21	18	50	32	M10	10.5	2	10			
IAPK3M03-0210100	21	18	50	32	M10	10.5	3	10			
IAPK3M02-0250120	25	23	50	38	M12	12.5	2	10			
IAPK3M04-0250120	25	23	60	38	M12	12.5	4	10			
IAPK3M02-0260120	26	23	60	38	M12	12.5	2	10			
IAPK3M04-0260120	26	23	60	38	M12	12.5	4	10			
IAPK3M05-0320120	32	30	63	41	M12	17	5	10			
IAPK3M05-0330160	33	30	63	41	M16	17	5	10			
IAPK3M06-0400160	40	32	65	43	M16	17	6	10			

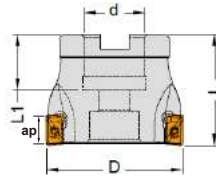
APK4E



Order No.	D	L	L1	d	T	ap	Inserts	Screw	Wrench
IAPK4E02-0250150	25	150	40	25	2	16	APKT1604	TS4005	TK15
IAPK4E02-0250220	25	220	40	25	2	16			
IAPK4E02-0260150	26	150	40	25	2	16			
IAPK4E02-0260220	26	220	40	25	2	16			
IAPK4E02-0320150	32	150	45	32	2	16			
IAPK4E02-0320250	32	250	45	32	2	16			
IAPK4E02-0330150	33	150	45	32	2	16			
IAPK4E03-0350150	35	150	45	32	3	16			
IAPK4E04-0400150	40	150	45	32	4	16			

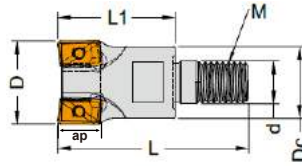
Milling Inserts & Tools

APK4F



Order No.	D	L	L1	d	T	ap	Inserts	Screw	Wrench
IAPK4F09-1000320	100	55	26	32	9	16	APKT1604	TS4005	TK15
IAPK4F07-0500220	50	50	23	22	4	16			
IAPK4F05-0630220	63	50	23	22	5	16			
IAPK4F05-0630254	63	50	23	25.4	5	16			
IAPK4F06-0800270	80	55	32	27	6	16			
IAPK4F06-0800254	80	55	32	25.4	6	16			
IAPK4F08-1000320	100	55	32	32	8	16			
IAPK4F08-1000317	100	55	32	31.75	8	16			
IAPK4F08-1250400	125	63	38	40	8	16			
IAPK4F08-1250381	125	63	38	38.1	8	16			
IAPK4F10-1600400	160	63	38	40	10	16			
IAPK4F10-1600508	160	63	38	50.8	10	16			

APK4M



Order No.	D	Dc	L	L1	M	d	T	ap	Inserts	Screw	Wrench
IAPK4M02-0250120	25	23	60	38	M12	12.5	2	16	APKT1604	TS4004	TK15
IAPK4M02-0260160	26	23	60	38	M16	17	2	16			
IAPK4M02-0320160	32	30	63	41	M16	17	2	16			
IAPK4M03-0320160	32	30	63	41	M16	17	3	16			
IAPK4M02-0330160	33	30	63	41	M16	17	2	16			
IAPK4M03-0330160	33	30	63	41	M16	17	3	16			
IAPK4M04-0400160	40	32	65	43	M16	17	4	16			

Milling Inserts & Tools



- ◆ Innovative strong cutting edge and chip-breaker design.
- ◆ Excellent chip evacuation.
- ◆ Large depth of cutting operations.
- ◆ Lower cutting resistance.

Specification

Inserts	Designation	Grade					Dimensions (mm)						Drawing	
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1		
	P Steel	◎	◎	◎	○	○								
	M Stainless steel	○	○	○	◎	◎								◎ 1st choice ○ 2st choice
	K Cast iron	◎	○	○	○	○								
	APKT 100304PDER-MG	✓	✓	✓			10.5	6.7	3.5	0.4	2.8	-		
	APKT 100308PDER-MG	✓	✓	✓			10.5	6.7	3.5	0.8	2.8	-		
	APKT 100304PDER-RG	✓	✓	✓			10.5	6.7	3.5	0.4	2.8	-		
	APKT 160408PDER-MG		✓	✓	✓	✓	16.3	9.525	5.25	0.8	4.5	-		
	APKT 160408PDER-RG		✓	✓	✓	✓	16.3	9.525	5.25	0.8	4.5	-		

Recommended Cutting Conditions

for APKT1003

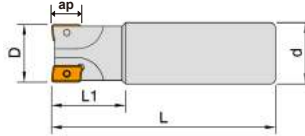
Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.08 ~ 0.20	~ 7.0
Stainless 300 Series	50 ~ 110	0.05 ~ 0.15	~ 4.0
Cast Iron (HB140-220)	80 ~ 180	0.08 ~ 0.20	~ 6.0

for APKT1604

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.12 ~ 0.28	~ 11.0
Stainless 300 Series	50 ~ 110	0.10 ~ 0.22	~ 7.0
Cast Iron (HB140-220)	80 ~ 180	0.12 ~ 0.28	~ 10.0

- ◆ With strong cutting edges, 90 shoulder endmill for high feed rate capabilities
- ◆ High efficiency machining can be achieved due to optimize cutting edge geometry and highly rigid body.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

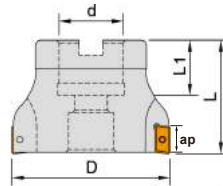
WEX2E



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
IWEX2E02-0160120	16	35	120	16	2	12	AXMT1235	TS3002	TK09
IWEX2E02-0170120	17	35	120	16	2	12			
IWEX2E02-0180120	18	35	120	16	2	12			
IWEX2E02-0190120	19	35	120	16	2	12			
IWEX2E03-0200120	20	40	120	20	3	12			
IWEX2E03-0210120	21	40	120	20	3	12			
IWEX2E03-0220120	22	40	120	20	3	12			
IWEX2E03-0230150	23	40	150	25	3	12			
IWEX2E03-0240150	24	40	150	25	3	12			
IWEX2E03-0250150	25	40	150	25	3	12			
IWEX2E03-0260150	26	40	150	25	3	12			
IWEX2E04-0250150	25	45	150	25	4	12			
IWEX2E04-0260150	26	45	150	25	4	12			
IWEX2E04-0270150	27	45	150	25	4	12			
IWEX2E04-0280150	28	45	150	25	4	12			
IWEX2E04-0290150	29	45	150	25	4	12			
IWEX2E04-0300150	30	45	150	25	4	12			
IWEX2E04-0310150	31	45	150	32	4	12			
IWEX2E04-0320150	32	45	150	32	4	12			
IWEX2E04-0330150	33	45	150	32	4	12			
IWEX2E04-0340150	34	45	150	32	4	12			
IWEX2E04-0350150	35	45	150	32	4	12			
IWEX2E02-0160175	16	50	175	16	2	12			
IWEX2E02-0170175	17	35	175	16	2	12			
IWEX2E02-0200185	20	60	185	20	2	12			
IWEX2E02-0210185	21	40	185	20	2	12			
IWEX2E03-0250200	25	70	200	25	3	12			
IWEX2E03-0260200	26	45	200	25	3	12			
IWEX2E04-0250200	25	70	200	25	4	12			
IWEX2E04-0260200	26	50	200	25	4	12			
IWEX2E04-0320250	32	80	250	32	4	12			
IWEX2E04-0330250	33	50	250	32	4	12			
IWEX2E04-0350250	35	50	250	32	4	12			

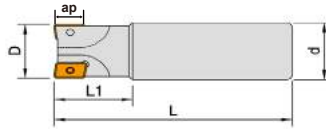
Milling Inserts & Tools

WEX2F



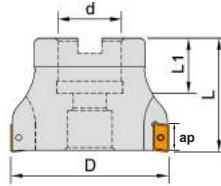
Order No.	D	L	L1	d	T	ap	Inserts	Screw	Wrench
IWEX2F06-0500220	50	45	20	22	6	12	AXMT1235	TS3002	TK09
IWEX2F07-0630220	63	45	20	22	7	12			
IWEX2F07-0630254	63	45	20	25.4	7	12			
IWEX2F08-0800270	80	50	26	27	8	12			
IWEX2F08-0800254	80	50	26	25.4	8	12			
IWEX2F10-1000320	100	50	26	32	10	12			
IWEX2F10-1000317	100	50	26	31.75	10	12			





Order No.	D	L	L1	d	T	ap	Inserts	Screw	Wrench
IWEX7E02-0250150	25	150	40	25	2	17	AXMT1705	TS4004	TK15
IWEX7E02-0260150	26	150	40	25	2	17			
IWEX7E02-0270150	27	150	40	25	2	17			
IWEX7E02-0280150	28	150	40	25	2	17			
IWEX7E02-0290150	29	150	40	25	2	17			
IWEX7E02-0300150	30	150	40	25	2	17			
IWEX7E02-0310150	31	150	40	25	2	17			
IWEX7E03-0320150	32	150	45	32	3	17			
IWEX7E03-0330150	33	150	45	32	3	17			
IWEX7E03-0340150	34	150	45	32	3	17			
IWEX7E03-0350150	35	150	45	32	3	17			
IWEX7E03-0360150	36	150	45	32	3	17			
IWEX7E03-0400150	40	150	45	32	3	17			
IWEX7E02-0250200	25	200	70	25	2	17			
IWEX7E02-0260200	26	200	45	25	2	17			
IWEX7E02-0270200	27	200	45	25	2	17			
IWEX7E02-0280200	28	200	45	25	2	17			
IWEX7E02-0290200	29	200	45	25	2	17			
IWEX7E02-0300200	30	200	45	25	2	17			
IWEX7E02-0310250	31	250	70	32	2	17			
IWEX7E02-0320250	32	250	70	32	2	17			
IWEX7E02-0330250	33	250	50	32	2	17			
IWEX7E02-0340250	34	250	50	32	2	17			
IWEX7E02-0350250	35	250	50	32	2	17			
IWEX7E02-0360250	36	250	50	32	2	17			
IWEX7E04-0400250	40	250	50	32	4	17			


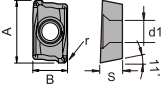

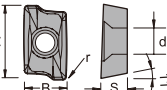

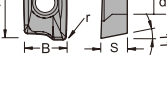
Milling Inserts & Tools



Order No.	D	L	L1	d	T	ap	Inserts	Screw	Wrench
IWEX7F04-0500220	50	45	20	22	4	17	AXMT1705	TS4004	TK15
IWEX7F05-0630220	63	45	20	22	5	17			
IWEX7F05-0630254	63	45	20	25.4	5	17			
IWEX7F06-0800270	80	50	26	27	6	17			
IWEX7F06-0800254	80	50	26	25.4	6	17			
IWEX7F07-1000320	100	50	26	32	7	17			
IWEX7F07-1000317	100	50	26	31.75	7	17			
IWEX7F08-1250400	125	63	38	40	8	17			
IWEX7F08-1250381	125	63	38	38.1	8	17			
IWEX7F10-1600400	160	63	38	40	10	17			
IWEX7F10-1600508	160	63	38	50.8	10	17			

- ◆ 90° shoulder milling with high feed rate.
- ◆ Unique shape and strength cutting edge design.
- ◆ Generates high quality surface finishes.

Specification

Inserts	Designation	Grade					Dimensions (mm)						Drawing
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1	
	P Steel	◎	◎	◎	○	○	◎ 1st choice ○ 2st choice						
	M Stainless steel	○	○	○	◎	◎							
	K Cast iron	◎	○	○	○	○							
	AXMT 123508PEER-RG	✓	✓	✓			12.18	6.93	3.58	0.8	3.4	-	
	AXMT 170508PEER-RG		✓	✓	✓	✓	17.50	10.2	5.56	0.8	4.6	-	
	AXMT 170516PEER-RG		✓	✓	✓	✓	17.50	10.2	5.56	1.6	4.6	-	

Milling Inserts & Tools

Recommended Cutting Conditions

for AXMT1235

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.08 ~ 0.20	~ 9.0
Stainless 300 Series	50 ~ 110	0.05 ~ 0.15	~ 5.0
Cast Iron (HB140-220)	80 ~ 180	0.08 ~ 0.20	~ 8.0

for AXMT1705

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.12 ~ 0.30	~ 12.0
Stainless 300 Series	50 ~ 110	0.10 ~ 0.25	~ 8.0
Cast Iron (HB140-220)	80 ~ 180	0.12 ~ 0.30	~ 11.0

- ◆ Shoulder milling with great cutting performance and low cutting force.
- ◆ Multifunction application with strong cutting edge and great chip evacuation.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

JD15E



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
IJD15E02-0250125	25	40	125	40	2	14	JDMT1505	TS4005	TK15
IJD15E02-0250180	25	75	180	75	2	14			
IJD15E03-0320140	32	45	140	45	3	14			
IJD15E03-0320200	32	90	200	90	3	14			



- ◆ Good cutting performance and cutting edge strength.
- ◆ Lower cutting force.
- ◆ Good chip evacuation.

Specification

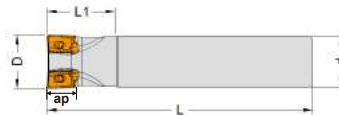
	P	Steel	◎	◎	◎	○	○										◎ 1st choice ○ 2st choice
	M	Stainless steel	○	○	○	◎	◎										
	K	Cast iron	◎	○	○	○	○										
Inserts	Designation	Grade					Dimensions (mm)						Drawing				
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1					
	JDMT 150508R-MG		✓	✓			15.1	9.12	5.0	0.8	4.5	-					

Milling Inserts & Tools

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.12 ~ 0.30	~ 12.0
Stainless 300 Series	50 ~ 110	0.10 ~ 0.25	~ 7.0
Cast Iron (HB140-220)	80 ~ 180	0.12 ~ 0.30	~ 11.0

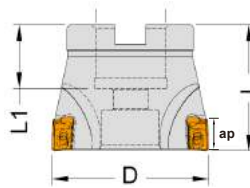
- ◆ Finishing and roughing capability in one optimized tool, specially designed for high speed machining.
- ◆ High removal rates can be achieved even at smaller low powered machines.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

R390E


Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
IR390E02 - 0160150	16	30	150	16	2	11	W390 11T3	TS2507	TK08
IR390E02 - 0170150	17	30	150	16	2	11			
IR390E02 - 0180150	18	30	150	16	2	11			
★ IR390E02W0200150	20	30	150	20	2	11			
IR390E03 - 0200150	20	30	150	20	3	11			
IR390E02 - 0210150	21	30	150	20	2	11			
IR390E03 - 0220150	22	30	150	20	3	11			
IR390E02 - 0250150	25	30	150	25	2	11			
IR390E03 - 0250150	25	30	150	25	3	11			
IR390E03 - 0300150	30	30	150	25	3	11			
IR390E03 - 0320150	32	35	150	32	3	11			
IR390E05 - 0320150	32	35	150	32	5	11			
IR390E03 - 0330150	33	35	150	32	3	11			
IR390E05 - 0330150	33	35	150	32	5	11			
IR390E03 - 0350150	35	35	150	32	3	11			
IR390E05 - 0350150	35	35	150	32	5	11			
IR390E04 - 0400150	40	35	150	32	4	11			
IR390E05 - 0400150	40	35	150	32	5	11			
IR390E06 - 0400150	40	35	150	32	6	11			

★ with Coolant Hole

R390F

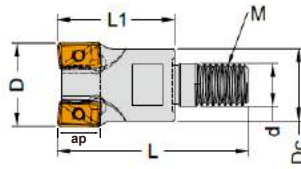


Order No.	D	L	L1	d	Dc	T	ap	Inserts	Screw	Wrench
IR390F04-0500220	50	40	21	22	42	4	11	W390 11T3	TS2503-8	TK08
IR390F05-0500220	50	40	21	22	42	5	11			
IR390F05-0630220	63	40	21	22	50	5	11			
IR390F06-0630220	63	40	21	22	50	6	11			
IR390F06-0800270	80	50	23	27	60	6	11			
IR390F08-0800270	80	50	23	27	60	8	11			
IR390F07-0100320	100	50	23	32	70	7	11			
IR390F10-0100320	100	50	23	32	70	10	11			



Milling Inserts & Tools

R390M



Order No.	D	Dc	L	L1	M	d	T	ap	Inserts	Screw	Wrench
IR390M02-0160080	16	15	43	26	M8	6.5	2	11	W390 11T3	TS2503-8	TK08
IR390M02-0170080	17	15	43	26	M8	8.5	2	11			
IR390M02-0180080	18	15	43	32	M8	8.5	2	11			
IR390M02-0200010	20	18	50	32	M10	10.5	2	11			
IR390M03-0200010	20	18	50	32	M10	10.5	3	11			
IR390M02-0210010	21	18	50	32	M10	10.5	2	11			
IR390M03-0220010	22	18	50	32	M10	10.5	3	11			
IR390M02-0250012	25	23	60	38	M12	12.5	2	11			
IR390M03-0250012	25	23	60	38	M12	12.5	3	11			
IR390M03-0300012	30	23	60	41	M12	12.5	3	11			
IR390M03-0320016	32	29	63	41	M16	17	3	11			
IR390M05-0320016	32	29	63	41	M16	17	5	11			
IR390M03-0330016	33	29	63	41	M16	17	3	11			
IR390M05-0330016	33	29	63	41	M16	17	5	11			
IR390M03-0350016	35	32	63	41	M16	17	3	11			
IR390M05-0350016	35	32	63	41	M16	17	5	11			
IR390M04-0400016	40	32	65	43	M16	17	4	11			
IR390M06-0400016	40	32	65	43	M16	17	6	11			

- ◆ Large depths of cut and wide feed range.
- ◆ Designed for high speed machining.
- ◆ Finishing and roughing capability.

Specification

	P	Steel	◎	◎	◎	○	○										◎ 1st choice ○ 2st choice
	M	Stainless steel	○	○	○	◎	◎										
	K	Cast iron	◎	○	○	○	○										
Inserts	Designation	Grade					Dimensions (mm)						Drawing				
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1					
	W390 11T308-MG	✓	✓	✓			11	6.9	3.59	0.8	2.8	-					

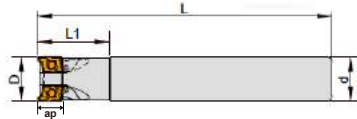
Milling Inserts & Tools

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.08 ~ 0.20	~ 8.0
Stainless 300 Series	50 ~ 110	0.05 ~ 0.15	~ 4.0
Cast Iron (HB140-220)	80 ~ 180	0.08 ~ 0.20	~ 7.0

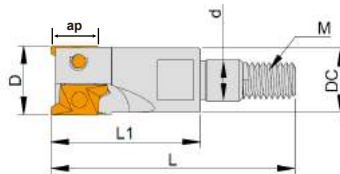
- ◆ Strong Pocket design with excellent chip evacuation.
- ◆ Extreme well ramping and slotting capabilities.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

RT07E



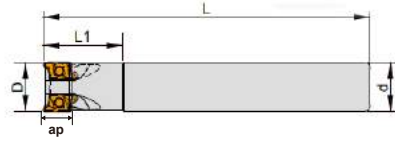
Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
IRT07E02-0110100	11	18	100	10	2	6	WRT0702	TS2003	TK06
IRT07E02-0130100	13	20	100	12	2	6			

RT07M



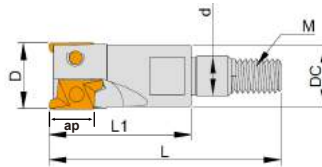
Order No.	D	L	L1	M	d	T	ap	Inserts	Screw	Wrench
IRT07M02-0100050	10	31	18	M5	5.5	2	6	WRT0702	TS2003	TK06
IRT07M02-0110050	11	31	18	M5	5.5	2	6			
IRT07M02-0120060	12	34	20	M5	6.5	2	6			
IRT07M02-0130060	13	34	20	M5	6.5	2	6			

RT10E



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
IRT10E02-0170150	17	30	150	16	2	9	WRT1003	TS2515	TK08
IRT10E03-0210150	21	30	150	20	3	9			
IRT10E03-0260150	26	40	150	25	3	9			
IRT10E04-0330150	33	40	150	32	4	9			
IRT10E04-0350150	35	40	150	32	4	9			

RT10M



Order No.	D	L	L1	M	d	T	ap	Inserts	Screw	Wrench
IRT10M02-0170080	17	47	30	M8	25	2	9	WRT1003	TS2515	TK08
IRT10M03-0210100	21	49	32	M10	32	3	9			
IRT10M03-0260120	26	110	40	M12	20	3	9			
IRT10M04-0330160	33	110	40	M16	25	4	9			
IRT10M04-0350160	35	115	40	M16	32	4	9			

Milling Inserts & Tools

- ◆ Suitable for mold and 3D machining industry.
- ◆ Achieve higher performance in high speed condition.
- ◆ Unique cutting edge designed for low cutting force.

Specification

Inserts	Designation	Grade					Dimensions (mm)						Drawing	
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1		
	P Steel	◎	◎	◎	○	○								◎ 1st choice ○ 2st choice
	M Stainless steel	○	○	○	◎	◎								
	K Cast iron	◎	○	○	○	○								
	WRT 070204-RG	✓	✓	✓			4.30	6.4	2.38	0.4	2.2	1.3		
	WRT 100308-RG	✓	✓	✓			6.35	9.3	3.4	0.8	2.9	1.8		

Recommended Cutting Conditions

for WRT0702

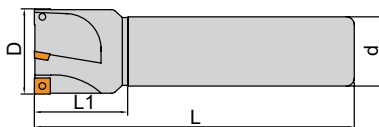
Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.08 ~ 0.20	~ 5.0
Stainless 300 Series	50 ~ 110	0.05 ~ 0.15	~ 3.0
Cast Iron (HB140-220)	80 ~ 180	0.08 ~ 0.20	~ 4.0

for WRT1003

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.10 ~ 0.22	~ 7.0
Stainless 300 Series	50 ~ 110	0.08 ~ 0.18	~ 4.0
Cast Iron (HB140-220)	80 ~ 180	0.10 ~ 0.22	~ 6.0

- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

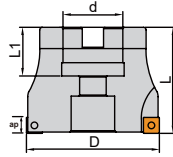
SPE05E/06E/07E



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
ISP05E02-0120100	12	20	100	12	2	5	SPMG0502	TS2003	TK06
ISP05E02-0130100	13	20	100	12	2	5			
ISP05E02-0140100	14	20	100	12	2	5			
ISP05E02-0150100	15	20	100	12	2	5			
ISP06E02-0160120	16	25	120	16	2	6	SPMG0602	TS2205	TK06
ISP06E02-0170120	17	25	120	16	2	6			
ISP06E02-0180120	18	25	120	16	2	6			
ISP06E02-0190120	19	25	120	16	2	6			
ISP06E02-0200120	20	30	120	20	2	6			
ISP06E02-0210120	21	30	120	20	2	6			
ISP06E03-0220120	22	30	120	20	3	6			
ISP06E03-0230120	23	30	120	20	3	6			
ISP06E03-0240120	24	30	120	20	3	6			
ISP06E03-0250120	25	30	120	25	3	6			
ISP06E03-0260120	26	30	120	25	3	6			
ISP06E04-0270120	27	30	120	25	4	6			
ISP06E04-0280120	28	30	120	25	4	6			
ISP06E04-0290120	29	30	120	25	4	6			
ISP06E04-0300120	30	30	120	25	4	6			
ISP06E04-0310120	31	30	120	25	4	6			
ISP06E05-0320120	32	30	120	25	5	6			
ISP06E05-0330120	33	30	120	25	5	6			
ISP06E05-0340120	34	30	120	25	5	6			
ISP06E05-0350120	35	30	120	25	5	6			
ISP07E03-0250150	25	35	150	25	3	7	SPMG07	TS3504	TK15
ISP07E03-0260150	26	35	150	25	3	7			
ISP07E03-0300150	30	35	150	25	3	7			
ISP07E04-0300150	30	40	150	32	4	7			
ISP09E04-0320150	32	40	150	32	4	7			
ISP07E04-0330150	33	40	150	32	4	7			
ISP07E04-0350150	35	40	150	32	4	7			
ISP07E04-0400150	40	40	150	32	4	7			

Milling Inserts & Tools

SPF06F/09F



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
ISP06F06-0400160	40	18	40	16	6	6	SPMG0602	TS2205	TK06
ISP06F07-0500220	50	20	45	22	7	6			
ISP06F07-0500254	50	20	45	25.4	7	6			
ISP06F09-0630220	63	20	45	22	9	6			
ISP06F09-0630254	63	20	45	25.4	9	6			
ISP06F11-0800270	80	23	50	27	11	6			
ISP06F11-0800254	80	23	50	25.4	11	6			
ISP09F04-0400160	40	18	40	16	4	9	SPMG0904	TS3504	TK15
ISP09F05-0500220	50	20	45	22	5	9			
ISP09F05-0500254	50	20	45	25.4	5	9			
ISP09F06-0630220	63	20	45	22	6	9			
ISP09F06-0630254	63	20	45	25.4	6	9			
ISP09F07-0800270	80	23	50	27	7	9			
ISP09F07-0800254	80	23	50	25.4	7	9			
ISP09F09-1000320	100	23	50	32	9	9			
ISP09F09-1000317	100	23	50	31.75	9	9			

SPMG Inserts

方肩銑削刀片

- ◆ Economical 4 cutting edges insert.
- ◆ Suitable for most materials by one optimized geometry.
- ◆ True 90° square shoulder angle.

Specification

Inserts	Designation	Grade					Dimensions (mm)						Drawing
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1	
	P Steel	◎	◎	◎	○	○	◎ 1st choice ○ 2st choice						
	M Stainless steel	○	○	○	◎	◎							
	K Cast iron	◎	○	○	○	○							
	SPMG 050204-MG		✓	✓			5.00	-	2.38	0.4	2.30	-	
	SPMG 060204-MG		✓	✓			6.00	-	2.38	0.4	2.65	-	
	SPMG 07T308-MG		✓	✓	✓	✓	7.94	-	3.97	0.8	2.85	-	
	SPMG 090408-MG		✓	✓	✓	✓	9.80	-	4.3	0.8	4.05	-	

Milling Inserts & Tools

Recommended Cutting Conditions

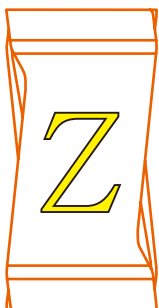
Working Material	Vc	fz
Carbon Steel (HB85-225)	80 ~ 200	0.08 ~ 0.20
Stainless 300 Series	50 ~ 110	0.05 ~ 0.15
Cast Iron (HB140-220)	80 ~ 180	0.08 ~ 0.20



Unique "Type Z" geometry minimizes chatter and vibration!!!

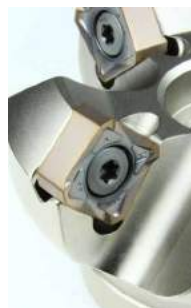
獨特的刀口幾何設計將平面銑削的震動頻率最小化

- *CXSN Face Mill Series is one of innovations that provides more available cutting edges by double sided insert and longer tool life for our customers.*
- *Unique "Type Z" design and special cutting edge guarantees lowest cutting loads and longest tool life.*
- *Negative inserts makes it even stronger and higher performance while machining various working material.*



Type Z features

- Sharper cutting edge.
- Low cutting resistance.
- Positive land and rake angle.
- Excellent chip evacuation.



SNMX1205 Inserts features

- Double sided.
- Total 8 cutting edges.
- Less interference and contact with the unused corner.



Brings a top performance in face milling operation



Milling Inserts & Tools

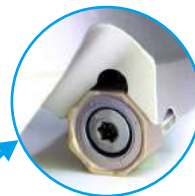
Economical machining achieved with Octagonal or Square shaped insert!!

以八角與四角型刀片達成最經濟的面銑加工效益!!

- 2 types of double sided inserts fit in the same pocket. (Octagonal & Square shaped)
- Single center lock screw for easy and rigid clamping ability.
- High cutting edges strength and high efficiency machining for general purpose application.

· Octagonal insert

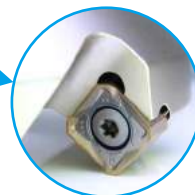
ONMX0505 (Total 16 cutting edges)



RG

· Square insert

SNMX1205 (Total 8 cutting edges)



MG

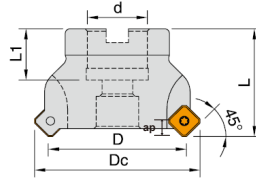
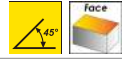


RG



- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

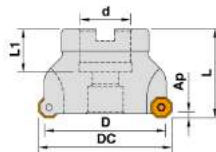
CXSNF



Order No.	D	L	d	T	ap	Inserts	Screw	Wrench
ICXSNF04-050220	50	40	22	4	6	SNMX1205	TS4015	TK15
ICXSNF05-063220	63	40	22	5	6			
ICXSNF05-063254	63	40	25.4	5	6			
ICXSNF06-080270	80	50	27	6	6			
ICXSNF06-080254	80	50	25.4	6	6			
ICXSNF07-100320	100	50	32	8	6			
ICXSNF07-100317	100	50	31.75	8	6			
ICXSNF08-125400	125	63	40	10	6			
ICXSNF08-125381	125	63	38.1	10	6			
ICXSNF10-160400	160	63	40	12	6			
ICXSNF10-160508	160	63	50.8	12	6			
ICXSNF14-200476	200	63	47.625	14	6			
ICXSNF14-200600	200	63	60	14	6			

Customize available.

CXONF




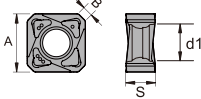

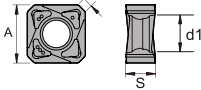

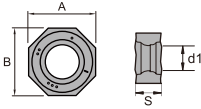
Order No.	D		L	d	T	ap	Inserts	Screw	Wrench
	ON05	SN12							
ICXONF04-050220	52.9	50	40	22	4	3	ONMX0505 SNMX1205	TS4015	TK15
ICXONF05-063220	65.9	63	40	22	5	3			
ICXONF06-080270	82.9	80	50	27	6	3			
ICXONF07-100320	102.9	100	50	32	7	3			
ICXONF07-100317	102.9	100	50	31.75	7	3			

*ONMX0505 and SNMX1205 insert can be used interchangeably on the CXON body.
Cutter will have different diameter, height and ap.

Customize available.

- ◆ Total 8 cutting edges per insert. (SNMX 1205)
- ◆ Total 16 cutting edges per insert. (ONMX 0505)
- ◆ Low cost effective and high efficiency for general purpose face milling.
- ◆ Low cutting force action due to the extremely positive geometry.
- ◆ Wide wiper flat for better surface finish.

Specification

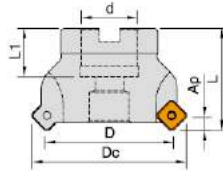
Inserts	Designation	Grade					Dimensions (mm)						Drawing	
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1		
		P	Steel	⊙	⊙	⊙	○	○						
M	Stainless steel	○	○	○	⊙	⊙								⊙ 1st choice ○ 2st choice
K	Cast iron	⊙	○	○	○	○								
	SNMX 1205-MG	✓		✓	✓		12.7	1.5	6.4	-	6	-		
	SNMX 1205-RG	✓		✓	✓		12.7	1.5	6.4	-	6	-		
	ONMX 0505-RG	✓		✓	✓		12.7	12.7	6.4	-	6	-		

Recommended Cutting Conditions

Working Material	Vc	fz	ap	
			SNMX1205	ONMX0505
Carbon Steel (HB85-225)	80 ~ 200	0.10 ~ 0.30	~ 6.0	~ 2.0
Stainless 300 Series	50 ~ 110	0.08 ~ 0.25	~ 3.6	~ 1.5
Cast Iron (HB140-220)	80 ~ 180	0.10 ~ 0.30	~ 6.0	~ 2.0

- ◆ Great performance ensured at large depth of cutting operations due to strong cutting edge and low cutting resistance.
- ◆ Innovative curve cutting edge design ensure ideal 45 degree cutting.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

ASX3F



Order No.	D	L	L1	d	Dc	T	ap	Inserts
IASX3F04-0500220	50	40	20	22	63	4	5.5	SEMT13T3AGSN
IASX3F05-0630220	63	40	20	22	75.9	5	5.5	
IASX3F05-0630254	63	40	20	25.4	75.9	5	5.5	
IASX3F06-0800270	80	50	26	27	93.2	6	5.5	
IASX3F06-0800254	80	50	26	25.4	93.2	6	5.5	
IASX3F07-1000320	100	50	32	32	113.2	7	5.5	
IASX3F07-1000317	100	50	32	31.75	113.2	7	5.5	
IASX3F08-1250410	125	63	38	41	138	8	5.5	
IASX3F08-1250381	125	63	38	38.1	138	8	5.5	
IASX3F10-1600400	160	63	38	40	173	10	5.5	
IASX3F10-1600508	160	63	38	50.8	173	10	5.5	
IASX3F12-2000600	200	63	38	60	212.9	12	5.5	
IASX3F12-2000476	200	63	38	47.625	212.9	12	5.5	
IASX3F14-2500600	250	63	38	60	262.9	14	5.5	
IASX3F14-2500476	250	63	38	47.625	262.9	14	5.5	
IASX3F14-3150476	315	63	40	47.625	327.9	14	5.5	

Shim	Screw	Screw	Wrench	Wrench
AS445N	PS35T	TS3505	TK15	TY3.5

- ◆ Suitable for high speed machining.
- ◆ Various shapes and cutting edge designs for different working purpose.
- ◆ Improves metal removal rates, flatness, dimensional accuracy, and surface finish.

Specification

Inserts	Designation	Grade						Dimensions (mm)						Drawing
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	CX03	A	B	S	r	d1	t1	
	SEMT 13T3AGEN		✓	✓	✓	✓		13.4	1.9	3.97	1.5	4.2	-	
	SEMT 13T3AGSN-MG		✓	✓	✓	✓		13.4	1.9	3.97	1.5	4.2	-	
	SEMT 13T3AGSN-RG		✓	✓	✓	✓		13.4	1.9	3.97	1.5	4.2	-	
	SEMT 13T3AGSN-HG		✓	✓	✓	✓		13.4	1.9	3.97	1.5	4.2	-	
	SEET 13T3AGFN-AL						✓	13.4	1.9	3.97	1.5	4.2	-	

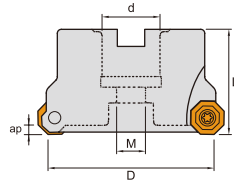
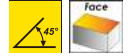
Milling Inserts & Tools

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.10 ~ 0.30	~ 5.5
Stainless 300 Series	50 ~ 110	0.08 ~ 0.25	~ 3.0
Cast Iron (HB140-220)	80 ~ 180	0.10 ~ 0.30	~ 5.0
Aluminium Alloy	300 ~ 1000	0.10 ~ 0.40	~ 5.5

- ◆ Great performance ensured at small to medium depth of cutting operations due to strong cutting edge and low cutting resistance.
- ◆ Innovative curve cutting edge design ensure ideal 45 degree cutting.
- ◆ Great surface finishing availability.

OF05F



Order No.	D	d	L	M	T	ap	Inserts	Screw	Wrench
IOF05F05-0500220	50	22	40	11	5	3	OFMT05T3...	TS4006	TK15
IOF05F06-0630220	63	22	40	11	6	3			
IOF05F06-0630254	63	25.4	50	13	6	3			
IOF05F07-0800254	80	25.4	50	13	7	3			
IOF05F07-0800270	80	27	50	38	7	3			
IOF05F08-1000317	100	31.75	50	46	8	3			
IOF05F08-1000320	100	32	50	46	8	3			
IOF05F09-1250381	125	38.1	63	60	9	3			
IOF05F09-1250400	125	40	63	60	9	3			
IOF05F11-1600508	160	50.8	63	80	11	3			



- ◆ OF05 series offer economical and efficient cutting of all 8 cutting edges.
- ◆ Two types of geometry cover general operating conditions.
- ◆ High positive insert ensures less vibration and less power consumption.

Specification

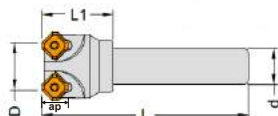
Inserts	Designation	Grade					Dimensions (mm)						Drawing																											
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1																												
		<table border="1"> <tr> <td>P</td> <td>Steel</td> <td>◎</td><td>◎</td><td>◎</td><td>○</td><td>○</td> <td colspan="6" rowspan="3">◎ 1st choice ○ 2st choice</td> </tr> <tr> <td>M</td> <td>Stainless steel</td> <td>○</td><td>○</td><td>○</td><td>◎</td><td>◎</td> </tr> <tr> <td>K</td> <td>Cast iron</td> <td>◎</td><td>○</td><td>○</td><td>○</td><td>○</td> </tr> </table>		P	Steel	◎	◎	◎	○	○	◎ 1st choice ○ 2st choice						M	Stainless steel	○	○	○	◎	◎	K	Cast iron	◎	○	○	○	○										
P	Steel	◎	◎	◎	○	○	◎ 1st choice ○ 2st choice																																	
M	Stainless steel	○	○	○	◎	◎																																		
K	Cast iron	◎	○	○	○	○																																		
	OFMT 05T3TN-MG		✓	✓			12.7	-	3.8	0.6	4.6	-																												
	OFMT 05T3TN-RG		✓	✓			12.7	-	3.8	0.6	4.6	-																												

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.10 ~ 0.20	~ 2.8
Stainless 300 Series	50 ~ 110	0.07 ~ 0.13	~ 1.7
Cast Iron (HB140-220)	80 ~ 180	0.10 ~ 0.20	~ 2.8

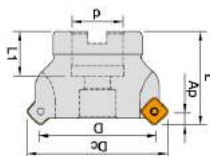
- ◆ Great performance ensured at large depth of cutting operations due to strong cutting edge and low cutting resistance.
- ◆ Innovative curve cutting edge design ensure ideal 45 degree cutting.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

SE45E



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
ISE45E02-0320110	32	45	110	20	2	6	SEKT1204 SEKW1204	TS5006	TK20
ISE45E03-0400110	40	45	110	20	3	6			
ISE45E04-0500120	50	45	120	20	4	6			
ISE45E04-0500120	50	45	120	25	4	6			
ISE45E05-0630120	63	45	120	25	5	6			
ISE45E05-0630120	63	45	120	32	5	6			

SE45F



Order No.	D	L	L1	d	Dc	T	ap	Inserts	Screw	Wrench
ISE45F04-0500220	50	40	20	22	64	4	6	SEKT1204 SEKW1204	TS5006	TK20
ISE45F05-0630220	63	45	21	22	77	5				
ISE45F05-0630254	63	45	21	25.4	77	5				
ISE45F06-0800270	80	50	26	27	94	6				
ISE45F06-0800317	80	50	26	31.75	94	6				
ISE45F06-1000320	100	32	32	32	114	6				
ISE45F06-1000317	100	32	32	31.75	114	6				
ISE45F08-1250400	125	63	38	40	139	8				
ISE45F08-1250381	125	63	38	38.1	139	8				
ISE45F10-1600400	160	63	38	40	174	10				
ISE45F10-1600508	160	63	38	50.8	174	10				
ISE45F12-2000476	200	63	38	47.625	214	12				
ISE45F14-2500476	250	63	38	47.625	264	14				

- ◆ Face milling insert with 90° lead angle.
- ◆ Multi Purpose 45° milling insert, designed for high depths of cut.
- ◆ Suitable for roughing to finishing-face milling operations.

Specification

Inserts	Designation	Grade					Dimensions (mm)						Drawing
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1	
	P Steel	◎	◎	◎	○	○	◎ 1st choice ○ 2st choice						
	M Stainless steel	○	○	○	◎	◎							
	K Cast iron	◎	○	○	○	○							
	SEKT 1204AFTN-RG		✓	✓	✓	✓	12	-	4.76	0.8	5.5	-	
	SEKW 1204AFEN		✓	✓	✓	✓	12	-	4.76	0.8	5.5	-	

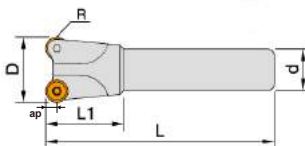
Milling Inserts & Tools

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.10 ~ 0.30	~ 6.0
Stainless 300 Series	50 ~ 110	0.08 ~ 0.25	~ 3.0
Cast Iron (HB140-220)	80 ~ 180	0.10 ~ 0.30	~ 5.0

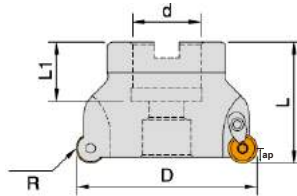
- ◆ Great performance ensured at large depth of cutting operations due to strong cutting edge and low cutting resistance.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

ARD05E/07E/10E/12E



Order No.	D	L1	L	d	R	T	ap	Inserts	Screw	Wrench
IARD05E02-010010	10	25	100	10	2.5	2	2.5	RDKW0501	TS2003	TK06
IARD05E02-012010	12	25	100	12	2.5	2	2.5			
IARD05E03-012013	12	25	130	12	2.5	3	2.5			
IARD05E03-016013	16	35	130	16	2.5	3	2.5			
IARD05E03-016018	16	35	180	16	2.5	3	2.5	RDKW0702	TS2015	TK08
IARD07E03-016013	16	40	130	16	3.5	3	3.5			
IARD07E03-016018	16	35	180	16	3.5	3	3.5			
IARD07E04-020015	20	40	150	20	3.5	4	3.5			
IARD07E04-020020	20	40	200	20	3.5	4	3.5			
IARD07E04-025015	25	40	150	25	3.5	4	3.5	RDKW0702	TS2015	TK08
IARD07E04-025020	25	60	200	25	3.5	4	3.5			
IARD10E02-025015	25	45	150	25	5.0	2	5	RDMT10T3 RDMW10T3	TS3504	TK15
IARD10E02-025025	25	70	200	25	5.0	2	5			
IARD10E02-030015	30	45	150	25	5.0	2	5			
IARD10E02-030025	30	40	200	25	5.0	2	5			
IARD10E03-032015	32	45	150	32	5.0	3	5	RDMT1204 RDMW1204	TS4008	TK15
IARD10E03-032025	32	70	200	32	5.0	3	5			
IARD12E02-032015	32	50	150	32	6.0	2	6			
IARD12E02-032025	32	70	250	32	6.0	2	6			
IARD12E03-040017	40	45	170	32	6.0	3	6	RDMT1204 RDMW1204	TS4008	TK15
IARD12E03-040022	40	45	220	32	6.0	3	6			

ARD10F/12F/16F

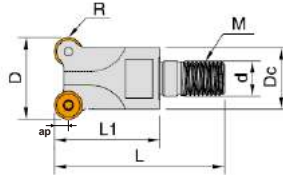


Order No.	D	L	L1	d	R	T	ap	Inserts	Screw	Wrench	Clamp	Clamp Screw
IARD10F04-050022	50	45	22	22	5	4	5	RDMT10T3 RDMW10T3	TS3504	TK15	RD-45	TS4009
IARD10F06-063022	63	45	22	22	5	6	5					
IARD12F04-050022	50	45	22	22	6	4	6	RDMT1204 RDMW1204	TS4008	TK15	RD-6R	TS5004
IARD12F05-050022	50	45	22	22	6	5	6					
IARD12F05-063022	63	45	22	22	6	5	6					
IARD12F06-063022	63	45	22	22	6	6	6					
IARD12F07-080027	80	50	26	27	6	7	6					
IARD12F08-100032	100	50	32	32	6	8	6					
IARD16F04-063022	63	45	22	22	8	4	8	RDMT1604 RDMW1604	TS5007	TK20	RD-68	TS5009
IARD16F05-063022	63	45	22	22	8	5	8					
IARD16F06-080027	80	50	26	27	8	6	8					
IARD16F07-100032	100	50	32	32	8	7	8					
IARD16F08-125040	125	55	36	40	8	8	8					



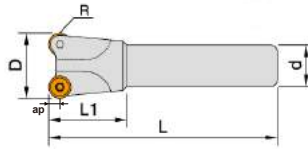
Milling Inserts & Tools

ARD05M/07M/10M



Order No.	D	Dc	L	L1	M	d	T	ap	Inserts	Screw	Wrench
IARD05M02-012006	12	11	36	21	M06	6.5	2	2.5	RDKW0501	TS2003	TK06
IARD05M03-012006	12	11	36	21	M06	6.5	3	2.5			
IARD05M03-016008	16	15	43	26	M08	8.5	3	2.5			
IARD05M04-016008	16	15	43	26	M08	8.5	4	2.5			
IARD07M02-016008	16	15	43	26	M08	8.5	2	3.5	RDKW0702	TS2515	TK08
IARD07M03-016008	16	15	43	26	M08	8.5	3	3.5			
IARD07M03-020010	20	18	50	32	M10	10.5	3	3.5			
IARD07M04-020010	20	18	50	32	M10	10.5	4	3.5			
IARD07M04-025012	25	23	60	38	M12	12.5	4	3.5			
IARD07M05-025012	25	23	60	38	M12	12.5	5	3.5	RDMT10T3 RDMW10T3	TS3504	TK10
IARD10M02-025012	25	23	60	38	M12	12.5	2	5			
IARD10M03-025012	25	23	60	38	M12	12.5	3	5			
IARD10M03-030012	30	23	60	38	M12	12.5	3	5			
IARD10M04-030012	30	23	60	38	M12	12.5	4	5			
IARD10M04-035012	35	23	60	38	M12	12.5	4	5			
IARD10M05-035012	35	23	60	38	M12	12.5	5	5			
IARD10M05-042016	42	29	66	43	M16	17	5	5			
IARD10M06-042016	42	29	66	43	M16	17	6	5			



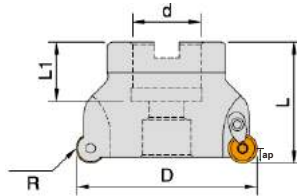


Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
IFRDE02-0200150	20	40	150	20	2	5	RDMT1003 RDMX1003	MS3507A	TF15
IFRDE02-0200200	20	40	200	20	2	5			
IFRDE02-0210150	21	25	150	20	2	5			
IFRDE02-0210200	21	25	200	20	2	5			
IFRDE03-0250150	25	40	150	25	3	5			
IFRDE03-0250200	25	40	200	25	3	5			
IFRDE03-0250250	25	40	250	25	3	5			
IFRDE03-0260150	26	25	150	25	3	5			
IFRDE03-0260200	26	25	200	25	3	5			
IFRDE03-0260250	26	25	250	25	3	5			
IFRDE03-0300150	30	25	150	25	3	5	RDMT1003 RDMX1003	MS3509A	
IFRDE03-0300200	30	25	200	25	3	5			
IFRDE03-0300250	30	25	250	25	3	5			
IFRDE03-0350150	35	40	150	32	3	5			
IFRDE03-0350200	35	40	200	32	3	5			
IFRDE03-0350250	35	40	250	32	3	5			
IFRDE03-0350300	35	40	300	32	3	5			
IFRDE04-0350150	35	40	150	32	4	5			
IFRDE04-0350200	35	40	200	32	4	5			
IFRDE04-0350250	35	40	250	32	4	5			
IFRDE04-0350300	35	40	300	32	4	5			

Milling Inserts & Tools

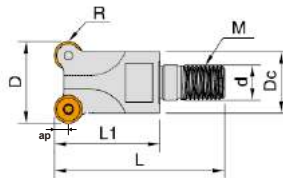


FRDF



Order No.	D	d	L	M	T	ap	Inserts	Screw	Wrench	Screw
IFRDF04-0500220	50	22	40	11	4	5	RDMT1003 RDMX1003	MS3509A	TF15	MS3509A
IFRDF05-0500220	50	22	40	11	5	5				
IFRDF04-0500254	50	25.4	40	11	4	5				
IFRDF05-0500254	50	25.4	40	11	5	5				
IFRDF05-0630254	63	25.4	50	13	5	5				
IFRDF06-0630254	63	25.4	50	13	6	5				
IFRDF06-0660254	66	25.4	50	13	6	5				
IFRDF06-0660270	66	27.0	50	13	6	5				

FRDM



Order No.	D	L	M	d	T	ap	Inserts	Screw	Wrench
IFRDM02-0200180	20	30	M10	10.5	2	5	RDMT1003 RDMX1003	MS3507A	TF15
IFRDM03-0250230	21	30	M10	10.5	2	5			
IFRDM03-0350290	25	35	M12	12.5	3	5			
IFRDM02-0210180	26	35	M12	12.5	3	5		MS3509A	
IFRDM03-0260230	30	35	M12	12.5	3	5			
IFRDM04-0350290	35	43	M16	17	3	5			
IFRDM03-0300230	35	43	M16	17	4	5			

RD.. Inserts

仿形銑削刀片

- ◆ Uses 15° positive round inserts with chip breakers.
- ◆ Can perform direct pocket cutting.
- ◆ Wide coverage for medium to roughing.
- ◆ 4-8 cutting edges available per insert.

Specification

Inserts	Designation	Grade					Dimensions (mm)						Drawing	
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1		
														Material
	P Steel	⊙	⊙	⊙	○	○								
	M Stainless steel	○	○	○	⊙	⊙								
	K Cast iron	⊙	○	○	○	○								

		Material												
		⊙	○	○	○	○	⊙ 1st choice ○ 2st choice							
	RDKW 0501MOE		✓	✓			5	-	1.59	-	2.2	-		
	RDKW 0702MO		✓	✓			7	-	2.38	-	2.8	-		
	RDKW 0702MOE	✓	✓	✓	✓	✓	7	-	2.38	-	2.8	-		
	RDKW 0702MOT	✓	✓	✓	✓	✓	7	-	2.38	-	2.8	-		
	RDMT 1003MOE		✓	✓			10	-	3.18	-	4.15	-		
	RDMT 1003MOT	✓	✓	✓			10	-	3.18	-	4.15	-		
	RDMX 1003MOE	✓	✓	✓	✓		10	-	3.18	-	4.15	-		
	RDMX 1003MOT	✓	✓	✓	✓		10	-	3.18	-	4.15	-		

Specification

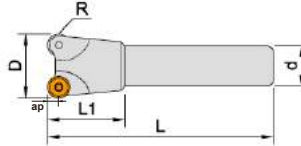
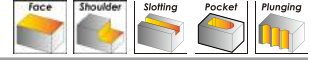
Inserts	Designation	Grade					Dimensions (mm)						Drawing
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1	
		◎	◎	◎	○	○	◎ 1st choice ○ 2st choice						
		○	○	○	◎	◎							
		◎	○	○	○	○							
	RDMT 10T3MOE		✓	✓			10	-	3.97	-	4.5	-	
	RDMT 10T3MOT	✓	✓	✓	✓		10	-	3.97	-	4.5	-	
	RDMW 10T3MOE		✓	✓			10	-	3.97	-	4.5	-	
	RDMT 1204MOT		✓	✓	✓	✓	12	-	4.76	-	4.4	-	
	RDMW 1204MOT		✓	✓	✓	✓	12	-	4.76	-	4.4	-	
	RDMT 1604MOT		✓	✓	✓	✓	16	-	4.76	-	5.5	-	
	RDMW 1604MOT		✓	✓	✓	✓	16	-	4.76	-	5.5	-	

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.08 ~ 0.40	≤ 0.4 x Dim_A
Stainless 300 Series	50 ~ 110	0.05 ~ 0.35	≤ 0.3 x Dim_A
Cast Iron (HB140-220)	80 ~ 180	0.08 ~ 0.40	≤ 0.4 x Dim_A

- ◆ Finishing and roughing capability in one optimized tool, specially designed for high speed machining.
- ◆ High removal rates can be achieved even at smaller low powered machines.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

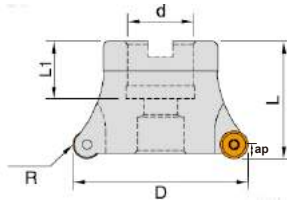
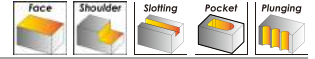
BRP08E/10E/12E



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench			
IBRP08E01-012010	12	30	100	12	1	4	RPMT08T2	TS3004	TK09			
IBRP08E02-016015	16	50	150	16	2	4						
IBRP08E02-020015	20	50	150	20	2	4						
IBRP08E03-025015	25	40	150	25	3	4						
IBRP08E02-020020	20	50	200	20	2	4						
IBRP08E02-020025	20	50	250	20	2	4						
IBRP10E02-025015	25	40	150	25	2	5	RPMT10T3	TS3503	TK15			
IBRP10E03-030015	30	40	150	25	3	5						
IBRP10E03-032015	32	40	150	32	3	5						
IBRP10E03-035015	35	40	150	32	3	5						
IBRP10E03-025020	25	50	200	25	3	5						
IBRP10E02-025020	25	50	200	25	2	5						
IBRP10E02-025025	25	50	250	25	2	5						
IBRP10E03-030020	30	70	200	25	3	5						
IBRP10E03-032020	32	70	200	32	3	5						
IBRP10E03-032025	32	50	250	32	3	5						
IBRP10E03-035020	35	50	200	32	3	5						
IBRP12E02-032017	32	45	170	32	2	6				RPMT1204 RPMW1204	TS4006	TK15
IBRP12E03-040017	40	45	170	32	3	6						
IBRP12E04-050017	50	45	170	42	4	6						
IBRP12E02-032025	32	80	250	32	2	6						
IBRP12E03-040023	40	50	230	32	3	6						
IBRP12E04-050023	50	50	230	42	4	6						

Milling Inserts & Tools

BRP08F/10F/12F



Order No.	D	L	L1	d	R	T	ap	Inserts	Screw	Wrench
IBRP08F05-040016	40	40	18	16	4	5	4	RPMT08T2	TS3004	TK09
IBRP08F06-050022	50	45	22	22	4	6	4			
IBRP10F04-040016	40	40	18	16	5	4	5	RPMT10T3	TS3503	TK15
IBRP10F05-050022	50	45	22	22	5	5	5			
IBRP10F05-050025	50	45	22	25.4	5	5	5			
IBRP10F06-063022	63	45	22	22	5	6	5			
IBRP10F06-063025	63	45	22	25.4	5	6	5			
IBRP12F04-050022	50	45	22	22	6	4	5			
IBRP12F04-050025	50	45	22	25.4	6	4	6	RPMT1204 RPMW1204	TS4006	TK15
IBRP12F05-063022	63	45	22	22	6	5	6			
IBRP12F05-063025	63	45	22	25.4	6	5	6			
IBRP12F06-080025	80	50	26	25.4	6	6	6			
IBRP12F06-080027	80	50	26	27	6	6	6			

RP.. Inserts

仿形銑削刀片

- ◆ Uses 11° positive round inserts with chip breakers.
- ◆ Can perform direct pocket cutting.
- ◆ Wide coverage for medium to roughing.
- ◆ 4-8 cutting edges available per insert.

Specification

Inserts	Designation	Grade					Dimensions (mm)						Drawing
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1	
	RPMT 08T2MOE		✓	✓			8	-	2.78	-	3.2	-	
	RPMT 08T2MOT		✓	✓			8	-	2.78	-	3.2	-	
	RPMT 10T3MOE		✓	✓	✓	✓	10	-	3.97	-	4.5	-	
	RPMT 10T3MOT		✓	✓			10	-	3.97	-	4.3	-	

Specification

Inserts	Designation	Grade					Dimensions (mm)						Drawing
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1	
							◎ 1st choice ○ 2st choice						
	P Steel	◎	◎	◎	○	○							
	M Stainless steel	○	○	○	◎	◎							
	K Cast iron	◎	○	○	○	○							
	RPMT 1204MOE		✓	✓	✓	✓	12	-	4.76	-	4.3	-	
	RPMT 1204MOT		✓	✓	✓	✓	12	-	4.76	-	4.3	-	
	RPMW 1204MOE		✓	✓	✓	✓	12	-	4.76	-	4.3	-	
	RPMW 1204MOT		✓	✓	✓	✓	12	-	4.76	-	4.3	-	

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	80 ~ 200	0.08 ~ 0.40	≤ 0.4 x Dim_A
Stainless 300 Series	50 ~ 110	0.05 ~ 0.35	≤ 0.3 x Dim_A
Cast Iron (HB140-220)	80 ~ 180	0.08 ~ 0.40	≤ 0.4 x Dim_A

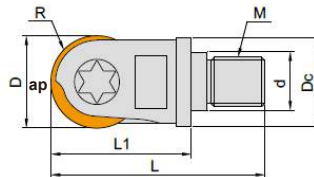
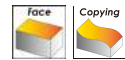
- ◆ Indexable ball type for molds in finishing applications.
- ◆ Long tool life can be achieved due to the excellent edge design and special grade.
- ◆ With consistent machining and high accurate finishing at high speed cutting.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

WF21E



Order No.	D	L1	L	d	R	Inserts	Screw	Wrench
IWF21E00-0160150	16	36	150	16	8	WP3216	B08R	TK20
IWF21E00-0200160	20	45	160	20	10	WP3220	B10R	TK20
IWF21E00-0250180	25	45	180	25	12.5	WP3225	B12R	TK30
IWF21E00-0160200	16	30	200	20	8	WP3216	B08R	TK20
IWF21E00-0200250	20	30	250	25	10	WP3220	B10R	TK20
IWF21E00-0250250	25	35	250	32	12.5	WP3225	B12R	TK30

WF21M



Order No.	D	d	Dc	L1	L	M	R	Inserts	Screw	Wrench
IWF21M00-0160080	16	8.5	15	26	45	M8	8	WP3216	B08R	TK20
IWF21M00-0200100	20	10.5	18	35	53	M10	10	WP3220	B10R	TK20
IWF21M00-0250120	25	12.5	23	41	63	M12	12.5	WP3225	B12R	TK30

WP32.. Inserts

仿形銑削刀片

- ◆ High precision finishing purpose.
- ◆ High accurate ball nose radius tolerance.
- ◆ High performance and rigidity.

Specification

Inserts	Designation	Grade						Dimensions (mm)						Drawing
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	CX11NS	A	B	S	r	d1	t1	
	P Steel	◎	◎	◎	○	○	◎	◎ 1st choice ○ 2st choice						
	M Stainless steel	○	○	○	◎	◎	◎							
	K Cast iron	◎	○	○	○	○	◎							
	WP32 16-RG						✓	16	14.0	3	-	5	-	
	WP32 20-RG						✓	20	16.0	3	-	5	-	
	WP32 25-RG						✓	25	21.5	4	-	6	-	
	WP32 16-SG						✓	16	14.0	3	-	5	-	
	WP32 20-SG						✓	20	16.0	3	-	5	-	
	WP32 25-SG						✓	25	21.5	4	-	6	-	

※ CX11NS, CX11NA special grade available.

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	100 ~ 250	0.10 ~ 0.30	≤ 0.07 x Dim_A
Stainless 300 Series	80 ~ 150	0.08 ~ 0.25	≤ 0.04 x Dim_A
Cast Iron (HB140-220)	100 ~ 250	0.10 ~ 0.30	≤ 0.07 x Dim_A



High Feed Milling Offers Increased Productivity!!!

高進給銑削提升加工效率及生產率

- *The CXBN Mini milling cutters offer exceptional milling performance.*
- *The smaller 6mm BNMX0603 high feed insert allows lowest cutting force to insure maximum productivity!*
- *Optimal insert geometries, wide range cutting applications, strong insert clamping and solid high feed design ensure higher efficient performance!*
- *Let the CXBN stream line your milling process!*

FEATURES AND BENEFITS

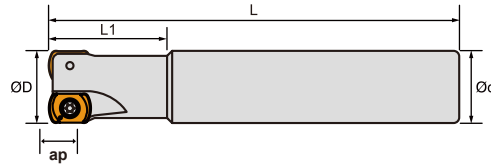
- *Double sided designed with total 4 indexes provide for cost-effective machining.*
- *Available in end mill, modular head and face mill type.*
- *Up to 1 mm DOC capability.*
- *Strong positive insert rake face angles for lower cutting force and efficient milling.*
- *Single screw design for high rigid & tensile clamping.*



These double-sided inserts provide four cutting edges for cost-effective machining, especially efficient in the machining of most common workpiece materials.

- ◆ Suitable for high-velocity, high-speed cutter of steel materials, especially when performed on smaller machines equipped with high-speed and low torque spindles.
- ◆ Provides low cutting resistance for cost-effective and high-performance machining of common work piece materials when using cutter body diameters from 15mm to 63mm.
- ◆ SKD11 tool steel is used for best rigidity and performance.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

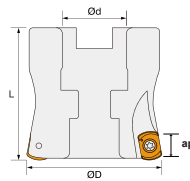
CXBNE



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
ICXBNE02-0150130	15	26	130	16	2	1	BNMX0603	TS3004	TK08
ICXBNE02-0160130	16	26	130	16	2	1			
ICXBNE02-0170130	17	26	130	16	2	1			
ICXBNE02-0180150	18	25	150	20	2	1			
ICXBNE03-0200150	20	40	150	20	3	1			
ICXBNE03-0210150	21	40	150	20	3	1			
ICXBNE04-0250150	25	40	150	25	4	1			
ICXBNE04-0260150	26	30	150	25	4	1			
ICXBNE04-0320200	32	45	200	32	4	1			

Customize available.

CXBNF

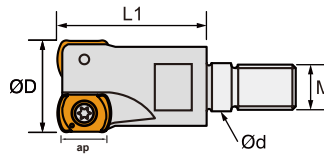


Order No.	D	L	d	T	ap	Inserts	Screw	Wrench
ICXBNF06 - 0400220	40	50	22	6	1	BNMX0603	TS3004	TK08
ICXBNF06 - 0500220	50	50	22	6	1			
ICXBNF07 - 0500220	50	50	22	7	1			
★ ICXBNF07W0500220	50	50	22	7	1			
ICXBNF08 - 0500220	50	50	22	8	1			
ICXBNF08 - 0520220	52	50	22	8	1			
ICXBNF07 - 0630220	63	50	22	7	1			
ICXBNF08 - 0630220	63	50	22	8	1			
ICXBNF08 - 0630254	63	50	25.4	8	1			
ICXBNF09 - 0630220	63	50	22	9	1			

★ with Coolant Hole

Customize available.

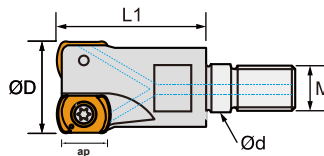
CXBNM



Order No.	D	L1	d	M	T	ap	Inserts	Screw	Wrench
ICXBNM02-0160080	16	26	8.5	M8	2	1	BNMX0603	TS3004	TK08
ICXBNM03-0210100	21	30	10.8	M10	3	1			
ICXBNM02-0200100	20	30	10.8	M10	2	1			
ICXBNM03-0200100	20	30	10.8	M10	3	1			
ICXBNM03-0250120	25	35	12.5	M12	3	1			
ICXBNM04-0250120	25	35	12.5	M12	4	1			
ICXBNM03-0260120	26	35	12.5	M12	3	1			
ICXBNM05-0320160	32	40	17	M16	5	1			

Customize available.

CXBNM (with Coolant Hole)



Order No.	D	L	d	M	T	ap	Inserts	Screw	Wrench
ICXBNM02W0160080	16	25	8.5	M8	2	1	BNMX0603	TS3004	TK08
ICXBNM02W0170080	17	30	8.5	M8	2	1			
ICXBNM03W0200100	20	30	10.8	M10	3	1			
ICXBNM03W0210100	21	30	10.8	M10	3	1			
ICXBNM04W0250120	25	35	12.5	M12	4	1			
ICXBNM04W0260120	26	35	12.5	M12	4	1			
ICXBNM05W0350160	35	43	17	M16	5	1			

Customize available.

- ◆ High feed machining, low cutting force.
- ◆ Double sided design, total 4 cutting corners.
- ◆ High metal remove rate & low vibration.

Specification

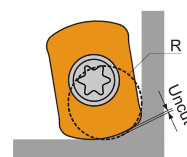
Material	P	Steel	◎	◎	◎	○	○	◎ 1st choice ○ 2st choice					
	M	Stainless steel	○	○	○	◎	◎						
K	Cast iron	◎	○	○	○	○							
Inserts	Designation	Grade					Dimensions (mm)						Drawing
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1	
	BNMX 0603-SG	✓		✓	✓		9.0	6.3	3.75	-	3.2	-	
	BNMX 0603-MG	✓		✓	✓		9.0	6.3	3.75	-	3.2	-	
	BNMX 0603-RG	✓		✓	✓		9.0	6.3	3.75	-	3.2	-	

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	120 ~ 220	0.5 ~ 1.6	~ 0.9
Stainless 300 Series	70 ~ 150	0.3 ~ 1.2	~ 0.7
Cast Iron (HB140-220)	120 ~ 220	0.5 ~ 1.6	~ 0.9

Corner R Programming

Designation	Approx. R (mm)	
	Input. R	Uncut
BNMX0603	2.0	0.42





Milling Inserts & Tools

New Economical Solution for High Feed Milling Applications!!!

專為高進給銑削應用而生的經濟型銑刀片

- CXWN High Feed Mill Series is more economical due to the use of 6 cutting edges compared to conventional tool with a 3/4 edges positive insert.
- Double sided & negative geometry has been designed for rigidity of cutting edge.
- Unique insert design for multifunctional machining ability.

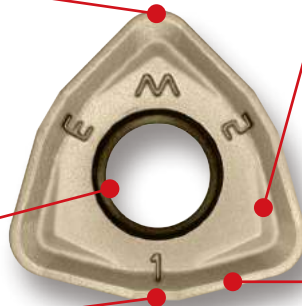


· Round edge geometry design secure edge rigidity, suitable for high feed rates.

- Chip evacuation improvement design.
- Reduction of cutting load during machining.

· Single screw for easy and strong clamping force.

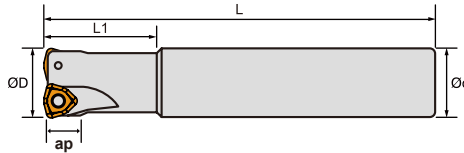
- High rake angle cutting edge achieve superior cutting performance.
- Low cutting resistance design.



- Special flat design for surface roughness improvement.
- Decreasing force during high feed machining.

- ◆ Particularly suitable for high feed milling purpose.
- ◆ Provides low cutting resistance for cost-effective and high-performance machining of common work piece materials.
- ◆ SKD11 tool steel is used for best rigidity and performance.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

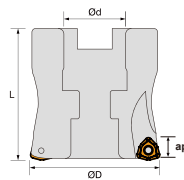
CXWNE



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench
ICXWNE02-0250150	25	40	150	25	2	1.5	WNMX09T3	TS3006	TK10
ICXWNE02-0260150	26	40	150	25	2	1.5			
ICXWNE03-0300150	30	40	150	32	3	1.5			
ICXWNE03-0320150	32	40	200	32	3	1.5			
ICXWNE04-0350120	35	45	200	32	4	1.5			
ICXWNE04-0400120	40	45	200	32	4	1.5			

Customize available.

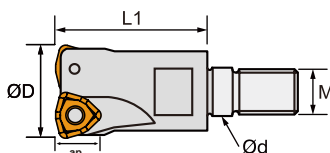
CXWNF



Order No.	D	L	d	T	ap	Inserts	Screw	Wrench
ICXWNF05-0500220	50	50	22	5	1.5	WNMX09T3	TS3006	TK10
ICXWNF05-0630220	63	50	22	5	1.5			
ICXWNF06-0630254	63	50	25.4	6	1.5			
ICXWNF06-0800270	80	55	27	6	1.5			

Customize available.

CXWNM



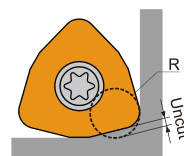
Order No.	D	L1	d	M	T	ap	Inserts	Screw	Wrench
ICXWNM02-0250120	25	12.5	43	M12	2	1.5	WNMX09T3	TS3006	TK10

Customize available.

Milling Inserts & Tools

■ Corner R Programming

Designation	Approx. R (mm)	
	Input. R	Uncut
WNMX09T3	2.5	0.6



WNMX09T3

高進給平面銑削刀片

- ◆ Double sided with 6 cutting edges.
- ◆ Round edge suitable for high feed purpose.
- ◆ Better chip evacuation in various cutting applications.
- ◆ High rake angle design for low cutting force.

Specification

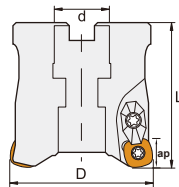
	P	Steel	◎	◎	◎	○	○	◎									◎ 1st choice	○ 2st choice
	M	Stainless steel	○	○	○	◎	◎	◎										
	K	Cast iron	◎	○	○	○	○	◎										
Inserts	Designation	Grade						Dimensions (mm)						Drawing				
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	CX11NS	A	B	S	r	d1	t1					
	WNMX 09T316-RG	✓		✓	✓			9.525	-	3.97	1.6	3.6	-					

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	120 ~ 220	0.8 ~ 1.5	~ 1.35
Stainless 300 Series	70 ~ 150	0.5 ~ 1.2	~ 1.0
Cast Iron (HB140-220)	120 ~ 220	0.8 ~ 1.5	~ 1.35

- ◆ Economical 4 cutting edges, has a unique R shape to enable maximum cutting depth of 2mm.
- ◆ Special design for high feed machining, offers 3 to 5 times the deep cutting of conventional products, reducing cutting time and processing costs.
- ◆ Black oxide processing applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

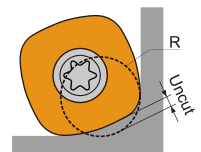
ASRFF



Order No.	D	L	d	T	ap	Inserts	Screw	Wrench	Clamp	Clamp Screw
IASRFF03-0500220	50	22	50	3	2	SDMT1205 SDNW1205	MS4011A	TF15	YR-06	MS4008ES
IASRFF03-0500222	50	22.225	50	3	2					
IASRFF04-0500220	50	22	50	4	2					
IASRFF04-0500222	50	22.225	50	4	2					
IASRFF03-0630220	63	22	50	3	2					
IASRFF03-0630222	63	22.225	50	3	2					
IASRFF04-0630220	63	22	50	4	2					
IASRFF04-0630222	63	22.225	50	4	2					
IASRFF04-0800317	80	31.75	55	4	2					
IASRFF04-0800320	80	32	55	4	2					
IASRFF05-0800317	80	31.75	55	5	2					
IASRFF05-0800320	80	32	55	5	2					

■ Corner R Programming

Designation	Approx. R (mm)	
	Input. R	Uncut
SDNW1205 / SDMT1205	4.5	0.83



- ◆ Economical 4-corner type, especially design for high feed cutting.
- ◆ Reducing cutting time and processing costs.
- ◆ Unique R shape to achieve maximum cutting depth of 2mm.

Specification

Inserts	Designation	Grade					Dimensions (mm)						Drawing			
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1				
	P Steel	◎	◎	◎	○	○										
	M Stainless steel	○	○	○	◎	◎										
	K Cast iron	◎	○	○	○	○										
							◎ 1st choice ○ 2st choice									
	SDMT 1205ZDTN-MG		✓	✓			12.7	-	5.56	15	4.6	-				
	SDMT 1205ZDTN-RG		✓	✓			12.7	-	5.56	15	4.6	-				
	SDNW 1205ZDTN-RG		✓	✓	✓	✓	12.7	-	5.56	15	4.6	-				

MG: Low cutting force and chattering reduction.

HG: Strong edge strength for roughing.

Recommended Cutting Conditions

Working Material	Vc	fz	ap
Carbon Steel (HB85-225)	100 ~ 220	0.8 ~ 1.8	~ 1.5
Stainless 300 Series	70 ~ 150	0.6 ~ 1.2	~ 1.2
Cast Iron (HB140-220)	100 ~ 220	0.8 ~ 1.8	~ 1.5

- ◆ Great performance ensured at large depth of cutting operations due to strong cutting edge and low cutting resistance.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

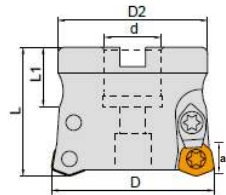
AJX12E



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench	Clamp	Clamp Screw
IAJX12E02-030015	30	35	150	25	2	2	JDMW1204	TS4004	TK15	AS04	AJ4012
IAJX12E02-032015	32	35	150	32	2	2					
IAJX12E02-035015	35	35	150	32	2	2					
IAJX12E03-040017	40	35	170	32	3	2					
IAJX12E04-050017	50	47	170	32	4	2					

Milling Inserts & Tools

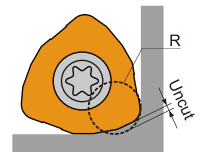
AJX12F



Order No.	D	L1	L	d	T	ap	Inserts	Screw	Wrench	Clamp	Clamp Screw
IAJX12F04-050022	50	23	50	22	4	2	JDMW1204	TS4008	TK15	AS04	AJ4012
IAJX12F05-063022	63	23	50	22	5	2					
IAJX12F06-080027	80	26	55	27	6	2					

■ Corner R Programming

Designation	Approx. R (mm)	
	Input. R	Uncut
JDMW1204	3.0	0.47



- ◆ Special inserts design with 3 cutting edges.
- ◆ Suitable for high feed machining.
- ◆ High metal remove rate & low vibration.

Specification

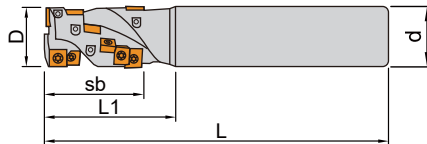
	P	Steel	◎	◎	◎	○	○											◎ 1st choice ○ 2st choice
	M	Stainless steel	○	○	○	◎	◎											
	K	Cast iron	◎	○	○	○	○											
Inserts	Designation	Grade					Dimensions (mm)						Drawing					
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1						
	JDMW 120420ZDSR-RG		✓	✓	✓	✓	2.5	12.0	4.76	2.0	4.75	-						

Recommended Cutting Conditions

Working Material	Vc	ap	fz30-50(dia)	fz50-80(dia)
Carbon Steel (HB85-225)	100 ~ 220	0.8 ~ 1.3	0.9 ~ 1.5	~ 1.5
Stainless 300 Series	70 ~ 150	0.6 ~ 1.0	0.7 ~ 1.2	~ 1.2
Cast Iron (HB140-220)	100 ~ 220	0.8 ~ 1.3	0.9 ~ 1.5	~ 1.5

- ◆ Great performance ensured at large depth of cutting operations.
- ◆ Innovative curve cutting edge design ensure ideal 90 degree cutting.
- ◆ SKD11 tool steel is used for best rigidity and performance.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

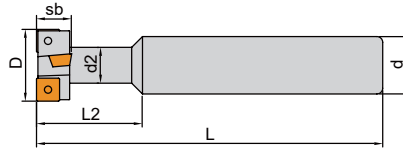
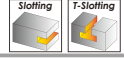
SP05H/06H/07H/09H



Order No.	D	sb	L1	L	d	T	Inserts	Screw	Wrench
ISP05H02-0160100	16	20	30	100	16	2	SPMG0502	TS2003	TK06
ISP06H02-0200110	20	30	40	110	20	2	SPMG0602	TS2205	TK06
ISP07H02-0250130	25	40	55	130	25	2	SPMG07T3	TS2511	TK08
ISP09H02-0320150	32	50	65	150	32	2	SPMG0904	TS3504	TK15
ISP09H03-0400180	40	70	90	180	32	3	SPMG0904	TS3504	TK15
ISP09H03-0400200	40	90	110	200	42	3	SPMG0904	TS3504	TK15

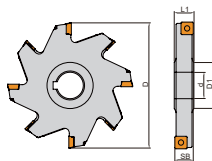
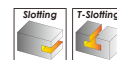
- ◆ SKD11 tool steel is used for best rigidity and performance.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

SP05T/06T/07T/09T/11T



Order No.	D	sb	d2	L2	L	d	Inserts	Screw	Wrench
ISP05T04-0190095	19	8	9.5	25	90	16	SPMG0502	TS2203	TK06
ISP06T04-0210100	21	9	11	27	100	16	SPMG0602	TS2205	TK06
ISP05T04-0220090	22	6.3	15	15	90	20	SPMG0502	TS2203	TK06
ISP07T04-0250110	25	11	12	31	110	20	SPMG07T3	TS2511	TK08
ISP09T04-0320110	32	14	17	39	110	25	SPMG0904	TS3504	TK15
ISP07T04-0326100	32.6	10.5	23	30	100	25	SPMG07T3	TS2511	TK08
ISP11T04-0400125	40	18	21	49	125	25	SPMG1104	TS4006	TK15
ISP09T04-0600160	60	15	25	40	160	25	SPMG0904	TS3504	TK15
ISP06T10-0950160	95	10	25	40	160	25	SPMG0602	TS2205	TK06

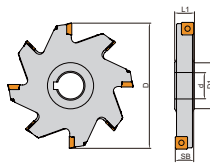
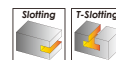
SP05D/06D/07D/09D/11D



Order No.	D	L1	Sb	d	T	D1	Inserts	Screw	Wrench
ISP05D06-0800220	80	12	6	22	2 x 4	44	SPMG0502	TS2203	TK06
ISP05D07-0800220	80	12	7	22	2 x 4	44			
ISP06D08-0800220	80	12	8	22	2 x 4	44	SPMG0602	TS2205	TK06
ISP06D09-0800220	80	12	9	22	2 x 4	44			
ISP06D10-0800220	80	12	10	22	2 x 4	44			
ISP07D11-0800220	80	12	11	22	2 x 4	44	SPMG0703	TS2511	TK08
ISP07D12-0800220	80	12	12	22	2 x 4	44			
ISP05D06-1000270	100	12	6	27	2 x 5	50			
ISP05D07-1000270	100	12	7	27	2 x 5	50			
ISP06D09-1000270	100	12	9	27	2 x 5	50	SPMG0602	TS2205	TK06
ISP07D10-1000270	100	12	10	27	2 x 5	50	SPMG0703	TS2511	TK08
ISP07D11-1000270	100	12	11	27	2 x 5	50			
ISP07D12-1000270	100	12	12	27	2 x 5	50			
ISP09D14-1000270	100	16	14	27	2 x 5	50	SPMG0904	TS3504	TK15
ISP09D16-1000270	100	16	16	27	2 x 5	50			
ISP05D06-1250320	125	12	6	32	2 x 6	65	SPMG0502	TS2203	TK06
ISP05D07-1250320	125	12	7	32	2 x 6	65			
ISP06D08-1250320	125	12	8	32	2 x 6	65	SPMG0602	TS2205	TK06
ISP06D10-1250320	125	12	10	32	2 x 6	65			
ISP07D11-1250320	125	12	11	32	2 x 6	65			
ISP07D12-1250320	125	12	12	32	2 x 6	65	SPMG0703	TS2511	TK08
ISP09D14-1250320	125	16	14	32	2 x 6	65	SPMG0904	TS3504	TK15
ISP09D16-1250320	125	16	16	32	2 x 6	65			
ISP11D18-1250320	125	20	18	32	2 x 5	65	SPMG1104	TS4006	TK15
ISP11D20-1250320	125	20	20	32	2 x 5	65			
ISP07D11-1600400	160	12	11	40	2 x 8	75	SPMG0703	TS2511	TK08
ISP07D12-1600400	160	12	12	40	2 x 8	75			
ISP09D14-1600400	160	16	14	40	2 x 8	75	SPMG0904	TS3504	TK15
ISP09D16-1600400	160	16	16	40	2 x 8	75			
ISP11D18-1600400	160	20	18	40	2 x 6	75	SPMG1104	TS4006	TK15
ISP11D20-1600400	160	20	20	40	2 x 6	75			
ISP09D14-2000400	200	16	14	40	2 x 9	80	SPMG0904	TS3504	TK15
ISP09D16-2000400	200	16	16	40	2 x 9	80			
ISP11D18-2000400	200	20	18	40	2 x 9	80	SPMG1104	TS4006	TK15
ISP11D20-2000400	200	20	20	40	2 x 7	80			

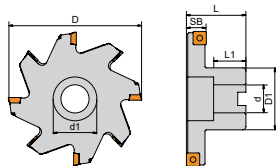
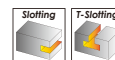
Milling Inserts & Tools

SP05D/06D/07D/09D/11D



Order No.	D	Sb	d	L1	D1	T	Inserts	Screw	Wrench
ISP05D06-0800254	80	6	25.4	12	44	2 x 4	SPMG0502	TS2003	TK06
ISP05D07-0800254	80	7	25.4	12	44	2 x 4			
ISP06D08-0800254	80	8	25.4	12	44	2 x 4	SPMG0602	TS2205	TK06
ISP06D09-0800254	80	9	25.4	12	44	2 x 4			
ISP06D10-0800254	80	10	25.4	12	44	2 x 4			
ISP07D11-0800254	80	11	25.4	12	44	2 x 4	SPMG07T3	TS2511	TK08
ISP07D12-0800254	80	12	25.4	12	44	2 x 4			
ISP05D06-1000254	100	6	25.4	12	50	2 x 5	SPMG0502	TS2003	TK06
ISP05D07-1000254	100	7	25.4	12	50	2 x 5			
ISP06D08-1000254	100	8	25.4	12	50	2 x 5	SPMG0602	TS2205	TK06
ISP06D09-1000254	100	9	25.4	12	50	2 x 5			
ISP06D10-1000254	100	10	25.4	12	50	2 x 5			
ISP07D11-1000254	100	11	25.4	12	50	2 x 5	SPMG07T3	TS2511	TK08
ISP07D12-1000254	100	12	25.4	12	50	2 x 5			
ISP09D14-1000254	100	14	25.4	16	50	2 x 5	SPMG0904	TS3504	TK15
ISP09D16-1000254	100	16	25.4	16	50	2 x 5			
ISP05D06-1250317	125	6	31.75	12	65	2 x 6	SPMG0502	TS2003	TK06
ISP05D07-1250317	125	7	31.75	12	65	2 x 6			
ISP06D08-1250317	125	8	31.75	12	65	2 x 6	SPMG0602	TS2205	TK06
ISP06D10-1250317	125	10	31.75	12	65	2 x 6			
ISP07D11-1250317	125	11	31.75	12	65	2 x 6			
ISP07D12-1250317	125	12	31.75	12	65	2 x 6	SPMG07T3	TS2511	TK08
ISP09D14-1250317	125	14	31.75	16	65	2 x 6	SPMG0904	TS3504	TK15
ISP09D16-1250317	125	16	31.75	16	65	2 x 6			
ISP11D18-1250317	125	18	31.75	20	65	2 x 5	SPMG1104	TS4006	TK15
ISP11D20-1250317	125	20	31.75	20	65	2 x 5			
ISP07D11-1600317	160	11	31.75	12	75	2 x 8	SPMG07T3	TS2511	TK08
ISP07D12-1600317	160	12	31.75	12	75	2 x 8			
ISP09D14-1600317	160	14	31.75	16	75	2 x 8	SPMG0904	TS3504	TK15
ISP09D16-1600317	160	16	31.75	16	75	2 x 8			
ISP11D18-1600317	160	18	31.75	20	75	2 x 6	SPMG1104	TS4006	TK15
ISP11D20-1600317	160	20	31.75	20	75	2 x 6			

SP05D/06D/07D/09D/11D

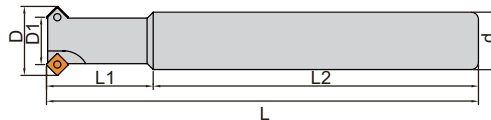
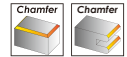




Order No.	D	SB	L	L1	D1	d1	d	T	Inserts	Screw	Wrench
ISP05D06S0800220	80	6	40	22	42	32	22	2 x 4	SPMG0502	TS2203	TK06
ISP05D07S0800220	80	7	40	22	42	32	22	2 x 4			
ISP06D08S0800220	80	8	40	22	42	32	22	2 x 4	SPMG0602	TS2205	TK06
ISP06D09S0800220	80	9	40	22	42	32	22	2 x 4			
ISP06D10S0800220	80	10	40	22	42	32	22	2 x 4			
ISP07D11S0800220	80	11	40	22	42	32	22	2 x 4	SPMG0703	TS2511	TK08
ISP07D12S0800220	80	12	40	22	42	32	22	2 x 4			
ISP05D06S1000270	100	6	40	22	50	32	27	2 x 5	SPMG0502	TS2203	TK06
ISP05D07S1000270	100	7	40	22	50	32	27	2 x 5			
ISP06D09S1000270	100	9	40	22	50	32	27	2 x 5	SPMG0602	TS2205	TK06
ISP07D10S1000270	100	10	40	22	50	32	27	2 x 5			
ISP07D11S1000270	100	11	40	22	50	32	27	2 x 5			
ISP07D12S1000270	100	12	40	22	50	32	27	2 x 5	SPMG0703	TS2511	TK08
ISP09D14S1000270	100	14	40	22	50	32	27	2 x 5			
ISP09D16S1000270	100	16	40	22	50	32	27	2 x 5	SPMG0904	TS3504	TK15
ISP05D06S1250320	125	6	45	25	70	46	32	2 x 6			
ISP05D07S1250320	125	7	45	25	70	46	32	2 x 6	SPMG0502	TS2203	TK06
ISP06D08S1250320	125	8	45	25	70	46	32	2 x 6			
ISP06D10S1250320	125	10	45	25	70	46	32	2 x 6	SPMG0602	TS2205	TK06
ISP07D11S1250320	125	11	45	25	70	46	32	2 x 6			
ISP07D12S1250320	125	12	45	25	70	46	32	2 x 6			
ISP09D14S1250320	125	14	45	25	70	46	32	2 x 6	SPMG0703	TS2511	TK08
ISP09D16S1250320	125	16	45	25	70	46	32	2 x 6			
ISP05D06S1600400	160	6	50	28	80	52	40	2 x 8	SPMG0904	TS3504	TK15
ISP05D07S1600400	160	7	50	28	80	52	40	2 x 8			
ISP06D08S1600400	160	8	50	28	80	52	40	2 x 8	SPMG0904	TS3504	TK15
ISP06D10S1600400	160	10	50	28	80	52	40	2 x 8			
ISP07D11S1600400	160	11	50	28	80	52	40	2 x 8			
ISP07D12S1600400	160	12	50	28	80	52	40	2 x 8	SPMG0904	TS3504	TK15
ISP09D14S1600400	160	14	50	28	80	52	40	2 x 8			
ISP09D16S1600400	160	16	50	28	80	52	40	2 x 8	SPMG1104	TS4006	TK15
ISP11D18S1600400	160	18	50	28	80	52	40	2 x 6			
ISP11D20S1600400	160	20	50	28	80	52	40	2 x 6			
ISP09D14S2000400	200	14	50	28	90	52	40	2 x 9	SPMG0904	TS3504	TK15
ISP09D16S2000400	200	16	50	28	90	52	40	2 x 9			
ISP11D18S2000400	200	18	50	28	90	52	40	2 x 9	SPMG1104	TS4006	TK15
ISP11D20S2000400	200	20	50	28	90	52	40	2 x 7			

Milling Inserts & Tools

- ◆ Great performance ensured at large depth of cutting operations due to strong cutting edge and low cutting resistance.
- ◆ Innovative curve cutting edge design ensure ideal 90 degree cutting.
- ◆ SKD11 tool steel is used for best rigidity and performance.
- ◆ Nickel contain plating applied for excellent corrosion resistance effect also increase surface hardness.
- ◆ To avoid the strain in second processing, finishing will be done after pre-harden.

SP05C/06C/09C



Order No.	D	D1	d	L1	L2	L	Inserts	 Screw	 Wrench
ISP05C01-0110100	11	17	100	10	83	100	SPMG0502	TS2003	TK06
ISP05C02-0150120	15	20	120	12	100	120			
ISP05C03-0170150	17	25	150	16	125	150			
ISP05C03-0190150	19	30	150	16	120	150			
ISP05C04-0250150	24	35	150	20	115	150			
ISP06C03-0220120	22	30	120	16	80	120	SPMG0602	TS2205	TK06
ISP09C03-0270120	27	30	120	20	80	120	SPMG07T3	TS2511	TK08
ISP09C02-0300150	30	40	150	20	110	150	SPMG0904	TS3504	TK15
ISP09C03-0400150	40	40	150	25	110	150			
ISP09C04-0500150	50	40	150	25	110	150			

SPMG Inserts

多功能銑削刀片

- ◆ Economical 4 cutting edges insert.
- ◆ Suitable for most materials by one optimized geometry.
- ◆ True 90° square shoulder angle.

Specification

Inserts	Designation	Grade					Dimensions (mm)						Drawing
		CX21NS	CX31NA	CX31NS	CX41NS	CX41NA	A	B	S	r	d1	t1	
	P Steel	⊙	⊙	⊙	○	○	⊙ 1st choice ○ 2st choice						
	M Stainless steel	○	○	○	⊙	⊙							
	K Cast iron	⊙	○	○	○	○							
	SPMG 050204-MG		✓	✓			5.00	-	2.38	0.4	2.30	-	
	SPMG 060204-MG		✓	✓			6.00	-	2.38	0.4	2.65	-	
	SPMG 07T308-MG		✓	✓	✓	✓	7.94	-	3.97	0.8	2.85	-	
	SPMG 090408-MG		✓	✓	✓	✓	9.80	-	4.3	0.8	4.05	-	
	SPMG 110408-MG		✓	✓	✓	✓	11.50	-	4.8	0.8	4.45	-	

Milling Inserts & Tools

Recommended Cutting Conditions

for SPH

Working Material	Vc	fz
Carbon Steel (HB85-225)	110 ~ 140	0.08 ~ 0.13
Stainless 300 Series	130 ~ 170	0.06 ~ 0.15
Cast Iron (HB140-220)	90 ~ 180	0.10 ~ 0.15

for SPT

Working Material	Vc	fz
Carbon Steel (HB85-225)	180 ~ 220	0.08 ~ 0.12
Stainless 300 Series	100 ~ 120	0.07 ~ 0.10
Cast Iron (HB140-220)	140 ~ 280	0.07 ~ 0.10

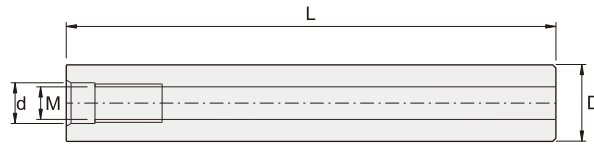
for SPDM / SPDI / SPD

Working Material	Vc	fz
Carbon Steel (HB85-225)	100 ~ 220	0.10 ~ 0.35
Stainless 300 Series	130 ~ 200	0.12 ~ 0.30
Cast Iron (HB140-220)	100 ~ 210	0.10 ~ 0.20

for SPC

Working Material	Vc	fz				
		Ø13~15	Ø16~22	Ø23~33	Ø34~41	Ø42~50
Carbon Steel (HB85-225)	160 ~ 250	0.06 ~ 0.12	0.06 ~ 0.10	0.06 ~ 0.12	0.12 ~ 0.24	0.12 ~ 0.25
Stainless 300 Series	120 ~ 180	0.05 ~ 0.10	0.06 ~ 0.12	0.08 ~ 0.15	0.10 ~ 0.17	0.12 ~ 0.20
Cast Iron (HB140-220)	160 ~ 220	0.06 ~ 0.12	0.08 ~ 0.16	0.12 ~ 0.20	0.16 ~ 0.25	0.18 ~ 0.26

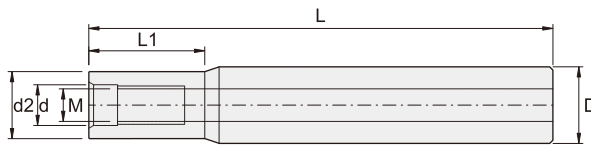
WSEA Carbide Extension Adapter (Anti-Vibration) - Straight Shank



Order No.	Dimensions (mm)			
	d	L	D	M
IWSEA050750	5.5	75	10	M5
IWSEA051000	5.5	100	10	M5
IWSEA051500	5.5	150	10	M5
IWSEA061001	5.5	100	10	M6
IWSEA061501	5.5	150	10	M6
IWSEA060750	6.5	75	12	M6
IWSEA061000	6.5	100	12	M6
IWSEA061500	6.5	150	12	M6
IWSEA062000	6.5	200	12	M6
IWSEA081000	8.5	100	16	M8
IWSEA081500	8.5	150	16	M8
IWSEA082000	8.5	200	16	M8
IWSEA082500	8.5	250	16	M8
IWSEA101000	10.5	100	20	M10
IWSEA101500	10.5	150	20	M10
IWSEA102000	10.5	200	20	M10
IWSEA102500	10.5	250	20	M10
IWSEA103000	10.5	300	20	M10
IWSEA121000	12.5	100	25	M12
IWSEA121500	12.5	150	25	M12
IWSEA122000	12.5	200	25	M12
IWSEA122500	12.5	250	25	M12
IWSEA123000	12.5	300	25	M12

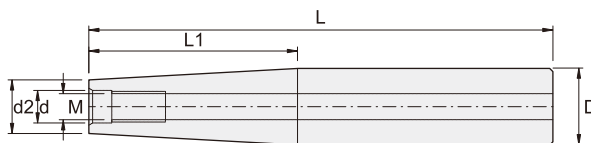
Milling Inserts & Tools

WSEB Carbide Extension Adapter (Anti-Vibration)



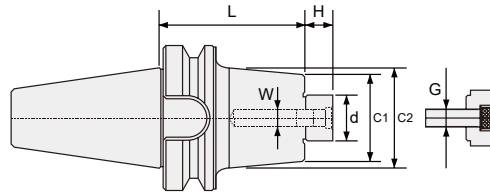
Order No.	Dimensions (mm)					
	d	d2	L1	L	D	M
IWSEB0610024	6.5	11.8	24	100	12	M6
IWSEB0615024	6.5	11.5	24	150	12	M6
IWSEB0815030	8.5	15	30	150	16	M8
IWSEB0820040	8.5	15	40	200	16	M8
IWSEB1015040	10.5	19	40	150	20	M10
IWSEB1020040	10.5	19	40	200	20	M10
IWSEB1215048	12.5	24	48	150	25	M12
IWSEB1220048	12.5	24	48	200	25	M12

WTEA Carbide Extension Adapter (Anti-Vibration) - Taper Shank



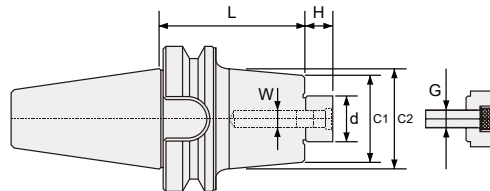
Order No.	Dimensions (mm)					
	d	d2	L1	L	D	M
IWTEA051500	5.5	9.8	60	150	12	M5
IWTEA061500	6.5	11.8	70	150	16	M6
IWTEA082000	8.5	15.5	90	200	20	M8
IWTEA102000	10.5	19.8	90	200	25	M10
IWTEA122000	12.5	24.5	90	200	32	M12

BT40FMA Face Mill Holder



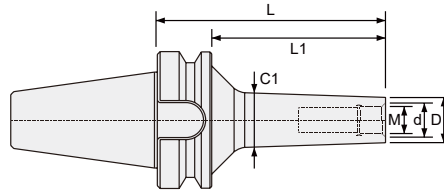
Order No.	Dimensions (mm)							
	Cutter dia.	d	L	C1	C2	H	W	G
IBT40FMA25045	76	25.4	45	50	-	20	9.5	M12
IBT40FMA25090	76	25.4	90	50	60	20	9.5	M12
IBT40FMA31045	100	31.75	45	60	-	22	12.5	M12
IBT40FMA31075	100	31.75	75	60	70	22	12.5	M12
IBT40FMA31105	100	31.75	105	60	70	22	12.5	M12

BT40FMB Face Mill Holder



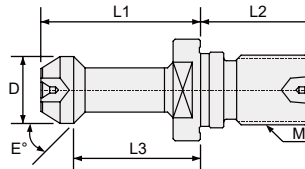
Order No.	Dimensions (mm)							
	Cutter dia.	d	L	C1	C2	H	W	G
IBT40FMB22045	60	22	45	50	-	18	10	M10
IBT40FMB22060	60	22	60	50	60	81	10	M10
IBT40FMB22090	60	22	90	50	60	18	10	M10
IBT40FMB27045	80	27	45	60	-	20	12	M12
IBT40FMB27060	80	27	60	60	-	20	12	M12
IBT40FMB27090	80	27	90	60	-	20	12	M12
IBT40FMB27105	80	27	105	60	-	20	12	M12
IBT40FMB32045	100	32	45	78	-	20	14	M16
IBT40FMB40060	125	40	60	85	-	22	16	M16

BT40DM Replaceable Integrated Shank



Order No.	Dimensions (mm)					
	d	L	L1	D	C1	M
IBT40DM08050	8.5	50	23	13	15	M8
IBT40DM10057	10.5	57	30	18	21	M10
IBT40DM12080	12.5	80	53	21	25	M12

P40T Pull Studs



Order No.	Dimensions (mm)						For Shank
	L1	L2	L3	D	E°	M	
IP40T01	35	25	28	15	45	M16	BT40
IP40T02	35	25	28	15	60	M16	BT40



FEATURES

- When the Torque is Reached, you will hear “CLICK”.
- Perfect positioning and quick release in the bits. Easy to pull the bit out to change new one
- You don't have to guess - a precision torque tool for a Secure hold
- Because of proper testing equipment and system, we will make sure that you don't have to question our products accuracy and quality.
- Convenient for CNC cutting tool of milling and turning machining.

Contents

- Case x 1
- Torque Screwdriver x 1
- 25mm Bits x 1
- 50mm Bits x 1

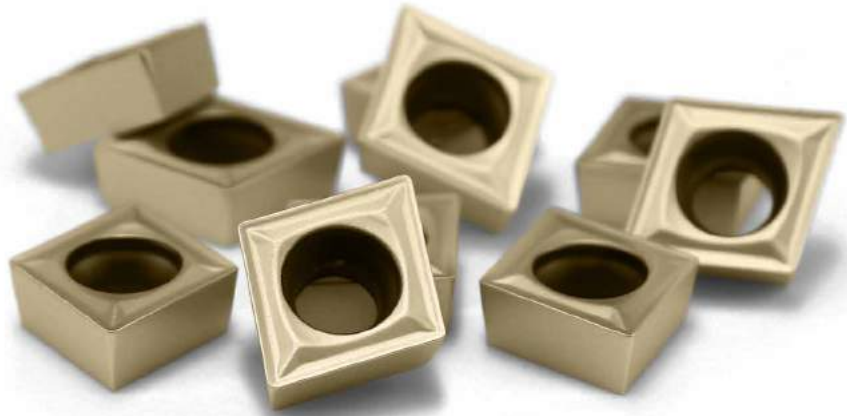
Parts No.	Contents					N.W.
	Adapter			Bit		
	Nm	KgfcM	In-lb	Size	25mm + 50mm	
ITX06	0.6	6.1	5.3	TX6	1pcs + 1pcs	124g
ITX08	1.2	12	10.6	TX8	1pcs + 1pcs	

Milling Inserts Grade Comparison Chart

銑刀片材質等級比較表

ISO Code	CARBIDEX	Mitsubishi	Sumiotmo	TaugeTec	SECO	
P Steel	P10		ACP100	TT2510		
	P20	CX21NS CX31NX	MP6120 VP15TF	ACP200	TT7080 TT7030	F25M MP3000
	P30	CX31NX CX31NS	VP15TF MP6120 MP6130 VP30RT	ACP300	TT9080 TT9030	F30M F40M MP3000
	P40	CX41NX CX41NS	VP30RT		TT8080 TT8020	F40M T60M
M Stainless Steel	M10		ACM100 ACK300			
	M20	CX31NX CX31NS	VP15TF MP7130 MP7140 VP20RT	ACM200	TT9080 TT9030	F25M F30M MP30000
	M30	CX31NX CX41NX CX41NS	VP15TF MP7130 MP7140 VP30RT	ACM300	TT8080 TT8020	F30M F40M MP3000
	M40	CX41NX CX41NS	MP7140 VP30RT			F40M
K Cast Iron	K01		MP8010			
	K10	CX21NS	MP8010		TT7515	MK1500
	K20	CX31NX CX31NS	VP15TF VP20RT	ACK200	TT7515 TT6080	MK1500 MK2000 T150M
	K30			ACK300	TT6080	MK2000 MK2050

The above table is selected from a publication for reference only, which is not obtained approval from each brand.

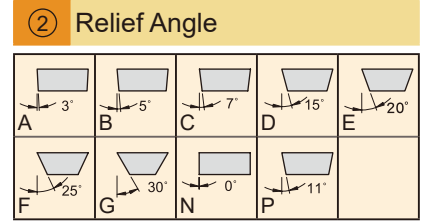
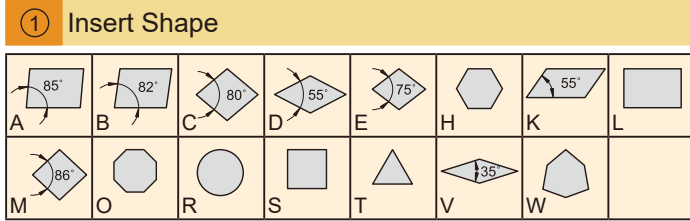
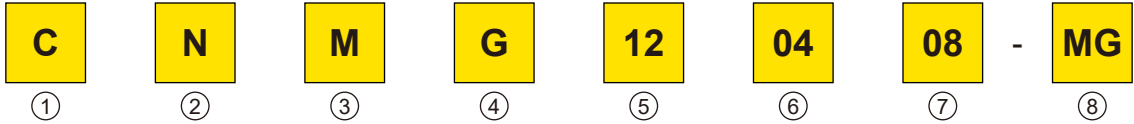


Turning

車 削

Designations For Turning Inserts

車刀片型號編碼



③ Tolerance

Class	d (±mm)	m (±mm)	s (±mm)
A	0.025	0.005	0.025
F	0.013	0.005	0.025
C	0.025	0.013	0.025
H	0.013	0.013	0.025
E	0.025	0.025	0.025
G	0.025	0.025	0.05~0.13
J	0.05~0.15	0.005	0.025
K	0.05~0.15	0.013	0.025
L	0.05~0.15	0.025	0.025
M	0.05~0.15	0.08~0.2	0.05~0.13
N	0.05~0.15	0.08~0.2	0.025
U	0.08~0.25	0.13~0.38	0.13

④ Cross Section Type

Class	Insert	Class	Insert
A		N	
C		Q	
F		R	
G		T	
H		U	
J		W	
M		X	Special shape

⑤ Edge Length

C	D	S	T	R	V	W	I.C.
Metric							mm
03	04	03	06	03	-	02	3.97
04	05	04	08	04	08	S3	4.76
05	06	05	09	05	09	03	5.56
-	-	-	-	06	-	-	6.00
06	07	06	11	06	11	04	6.35
08	09	07	13	07	13	05	7.94
-	-	-	-	08	-	-	8.00
09	11	09	16	09	16	06	9.525
-	-	-	-	10	-	-	10.00
11	13	11	19	11	19	07	11.11
-	-	-	-	12	-	-	12.00
12	15	12	22	12	22	08	12.70
14	17	14	24	14	24	09	14.29
16	19	15	27	15	27	10	15.875
-	-	-	-	16	-	-	16.00
17	21	17	30	17	30	11	17.46
19	23	19	33	19	33	13	19.05
-	-	-	-	20	-	-	20.00
22	27	22	38	22	38	15	22.225
-	-	-	-	25	-	-	25.00
25	31	25	44	25	44	17	25.40
32	38	31	54	31	54	21	31.75
-	-	-	-	32	-	-	32.00

⑥ Thickness

Symbol	01	T1	02	03	T3	04	05	06	07	09
S(mm)	1.59	1.98	2.38	3.18	3.97	4.76	5.56	6.35	7.94	9.52

⑦ Radius

Symbol	01	02	04	08	12	16	20	24	28	32
r(mm)	0.1	0.2	0.4	0.8	1.2	1.6	2.0	2.4	2.8	3.2

⑧ Chip Breaker

Positive Type	
MP, MG	
Negative Type	
SM, SP, MM, MS, ME, MP, MK, MG, RP, RG	



“ ∞ “ Infinity Nano Coating:

- ✔ Adopting new Infinty Coating Technology with high hardness and oxidation resistance.
- ✔ High toughness substrate and adopting special coating technology.
- ✔ Excellent turning machining of steel, stainless steel and cast iron.
- ✔ Machining with high temperature stability and improved wear resistance.

Turning Inserts & Tools



Grade Type	Substrate (HRA)	Coating Type	Thickness	Application	Material			Suitable Condition
					P	K	M	
CX2565	91.7	Al.Ti.N	>10	Medium to Simi-Finishing	P	K	M	☺
					★★	★★	★	
CX2555	91.6	Al.Ti.Si.N	>3	Medium to Simi-Finishing	P	K	M	☺
					★★	★	★★	
CX3565	90	Al.Ti.N	>10	Medium to Roughing	M	P	K	☹
					★★	★★	★★	
CX3555	89.8	Al.Ti.Si.N	>3	Medium to Roughing	M	P	K	☹
					★★	★	★	

* Turning Grade Comparison Chart.....Page B185



Negative Types

- 50+ types to choose from.
- > 10 μ thick coating layer structure for various applications.
- Longitudinal, profile and face turning machining.
- Usable range cover from medium to roughing.



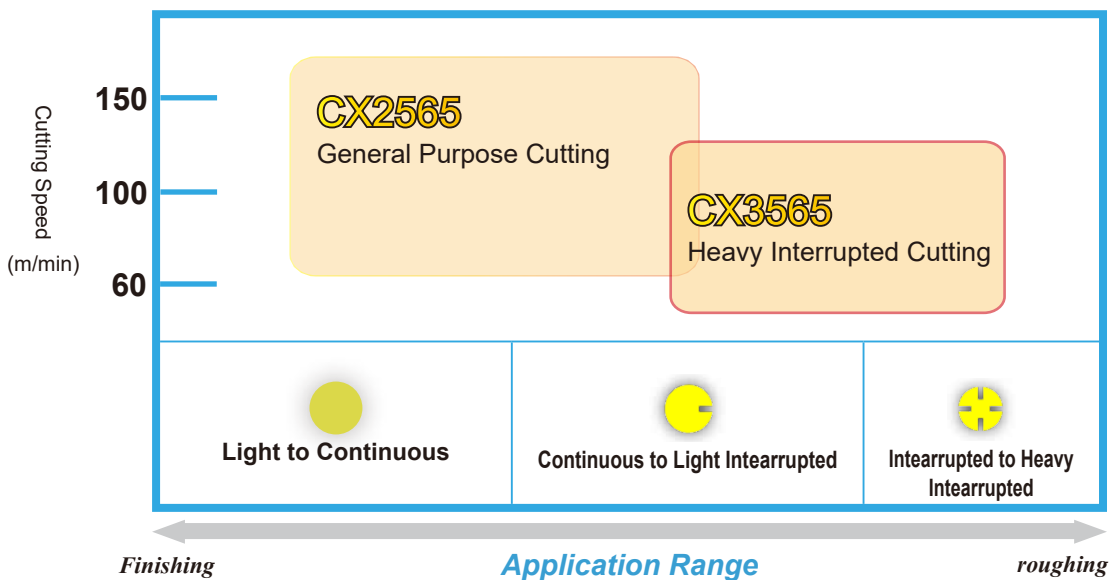
Positive Types

- 25+ types to choose from.
- Thick or normal coating layer structure for different applications.
- Internal turning, profiling and boring machining.
- Usable range cover from semi-finishing to roughing.

NEW

CX2565 / CX3565

2017 New Turning Grades for General Purpose


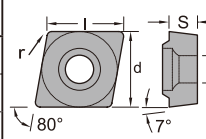

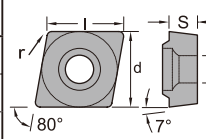


Features:

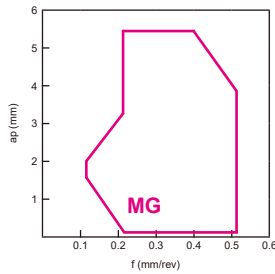
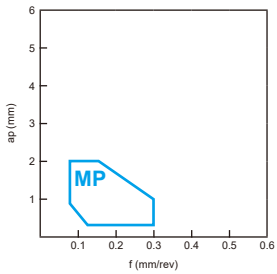
- Excellent heat resistance and wear resistance.
- Improve the adhesion resistance ability.
- Corner visibility with a unique color.
- Extend tool life and thereby reduces tools costs in a wide range of machining applications.

CCMT - Positive Turning Insert

正角車刀片


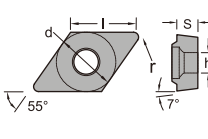

Inserts	Designation	Grade				Dimensions (mm)					Drawing	Tool Page
		CX2565	CX2555	CX3565	CX3555	d	l	S	r	h		
	P Steel	●	●	✳							Cutting Type : ● General ✳ Interrupted	
	M Stainless steel	●		✳	✳							
	K Cast iron	●		✳								
	CCMT 060204-MP	✓	✓			6.35	6.4	2.38	0.4	2.8		B143 ~ B146
	09T304-MP	✓	✓			9.53	9.7	3.97	0.4	4.4		
	09T308-MP	✓	✓			9.53	9.7	3.97	0.8	4.4		
	CCMT 060202-MG	✓	✓			6.35	6.4	2.38	0.4	2.8		B168 ~ B170
	060204-MG	✓	✓			6.35	6.4	2.38	0.4	2.8		
	09T304-MG	✓	✓			9.53	9.7	3.97	0.4	4.4		
	09T308-MG	✓	✓			9.53	9.7	3.97	0.8	4.4		
	120408-MG	✓	✓			12.7	12.9	4.76	0.8	5.5		

Turning Inserts & Tools

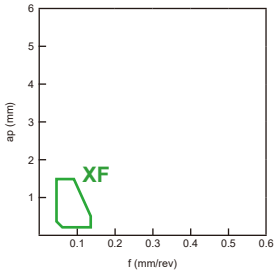


DCGT - Positive Turning Insert

正角車刀片


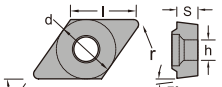

Inserts	Designation	Grade					Dimensions (mm)					Drawing	Tool Page			
		CX1555	CX2565	CX2555	CX3565	CX3555	d	l	S	r	h					
	P Steel	●	●	●	●							Cutting Type : ● General ● Interrupted				
	M Stainless steel	●	●		●	●										
	K Cast iron	●	●		●											
	DCGT 11T301R-XF	✓					9.53	11.6	3.97	0.1	4.4		B147 ~ B151			
	11T302R-XF	✓					9.53	11.6	3.97	0.2	4.4					
	11T304R-XF	✓					9.53	11.6	3.97	0.4	4.4					
	DCGT 11T301L-XF	✓					9.53	11.6	3.97	0.1	4.4		B170 ~ B172			
	11T302L-XF	✓					9.53	11.6	3.97	0.2	4.4					
	11T304L-XF	✓					9.53	11.6	3.97	0.4	4.4					

*Customize radius and geometries available

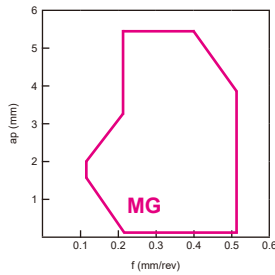
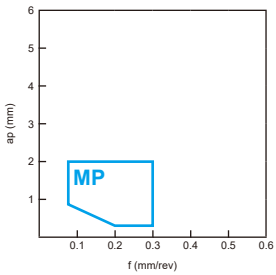


DCMT - Positive Turning Insert

正角車刀片


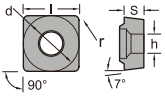
Inserts	Designation	Grade					Dimensions (mm)					Drawing	Tool Page
		CX1555	CX2565	CX2555	CX3565	CX3555	d	l	S	r	h		
	P Steel	●	●	●	●		Cutting Type : ● General ● Interrupted						
	M Stainless steel	●	●		●	●							
	K Cast iron	●	●		●								
	DCMT 11T304-MP		✓	✓			9.53	11.6	3.97	0.4	4.4		B147 ~ B151
	11T308-MP		✓	✓			9.53	11.6	3.97	0.8	4.4		
	DCMT 070202-MG		✓	✓			6.35	7.75	2.38	0.2	2.8		B170 ~ B172
	070204-MG		✓	✓			6.35	7.75	2.38	0.4	2.8		
	11T304-MG		✓	✓			9.53	11.6	3.97	0.4	4.4		
	11T308-MG		✓	✓			9.53	11.6	3.97	0.8	4.4		

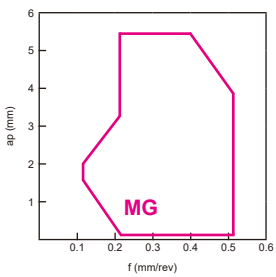
Turning Inserts & Tools



SCMT - Positive Turning Insert

正角車刀片

	P	Steel	●	●	✳								Cutting Type : ● General ✳ Interrupted
	M	Stainless steel	●		✳	✳							
	K	Cast iron	●		✳								
Inserts	Designation	Grade					Dimensions (mm)					Drawing	Tool Page
		CX2565	CX2555	CX3565	CX3555		d	l	S	r	h		
	SCMT 09T304-MG	✓	✓				9.53	9.53	3.97	0.4	4.4		B173 ~ B175
	09T308-MG	✓	✓				9.53	9.53	3.97	0.8	4.4		

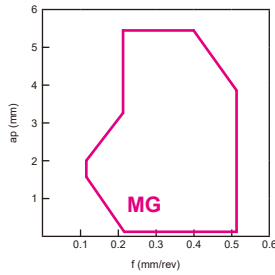
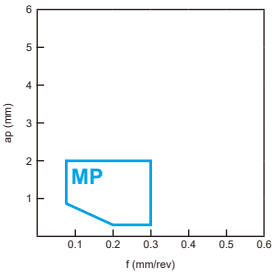


TCMT - Positive Turning Insert

正角車刀片


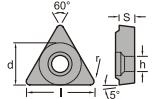
Inserts	Designation	Grade				Dimensions (mm)					Drawing	Tool Page	
		CX2565	CX2555	CX3565	CX3555	d	l	S	r	h			
	P Steel	☉	☉	☉									
	M Stainless steel	☉	☉	☉	☉								
	K Cast iron	☉		☉									
							Cutting Type : ☉ General ☉ Interrupted						
	TCMT 110204-MP	✓	✓				6.35	11.0	2.38	0.4	2.8		B152 ~ B154
	TCMT 110204-MG	✓	✓				6.35	11.0	2.38	0.4	2.8		B176 ~ B177
	16T304-MG	✓	✓				9.53	16.5	3.97	0.4	4.4		
	16T308-MG	✓	✓				9.53	16.5	3.97	0.8	4.4		

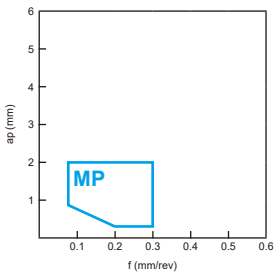
Turning Inserts & Tools



TPMH - Positive Turning Insert


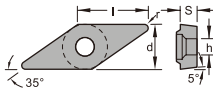
正角車刀片

	P	Steel	●	●	✳								Cutting Type : ● General ✳ Interrupted
	M	Stainless steel	●		✳	✳							
	K	Cast iron	●		✳								
Inserts	Designation	Grade					Dimensions (mm)					Drawing	Tool Page
		CX2565	CX2555	CX3565	CX3555		d	l	S	r	h		
	TPMH 160304-MP	✓	✓				9.53	16.5	3.18	0.4	4.4		-

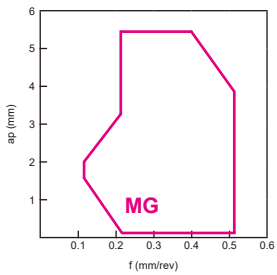


VBMT - Positive Turning Insert

正角車刀片


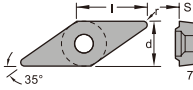


Inserts	Designation	Grade					Dimensions (mm)					Drawing	Tool Page	
		CX2565	CX2555	CX3565	CX3555		d	l	S	r	h			
	P Steel	☉	☉	☉			Cutting Type : ☉ General ☘ Interrupted							
	M Stainless steel	☉	☘	☘										
	K Cast iron	☉	☘											
	VBMT 160404-MG 160408-MG	✓	✓				9.53	16.6	4.76	0.4	4.4		B155 B158 B178 B179	
		✓	✓				9.53	16.6	4.76	0.8	4.4			

Turning Inserts & Tools

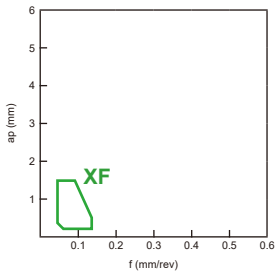


VCGT - Positive Turning Insert

正角車刀片

Inserts	Designation	Grade					Dimensions (mm)					Drawing	Tool Page
		CX2565	CX2555	CX3565	CX3555	CX1555	d	l	S	r	h		
	P Steel	●	●	●	●	●						Cutting Type : ● General ● Interrupted	
	M Stainless steel	●		●	●	●							
	K Cast iron	●		●		●							
	VCGT 110301R-XF					✓	11.1	6.35	3.18	0.1	2.8		B156 B158 B178 B179
	110302R-XF					✓	11.1	6.35	3.18	0.2	2.8		
	110304R-XF					✓	11.1	6.35	3.18	0.4	2.8		
	VCGT 110301L-XF					✓	11.1	6.35	3.18	0.1	2.8		
	110302L-XF					✓	11.1	6.35	3.18	0.2	2.8		
	110304L-XF					✓	11.1	6.35	3.18	0.4	2.8		
	VCGT 110304-FG					✓	11.1	6.35	3.18	0.4	2.8		

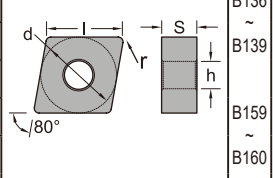
*Customize radius and geometries available



CNMG - Negative Turning Insert

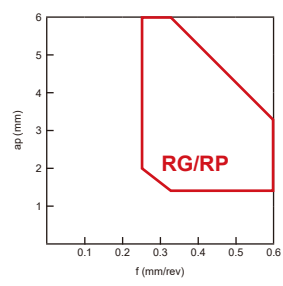
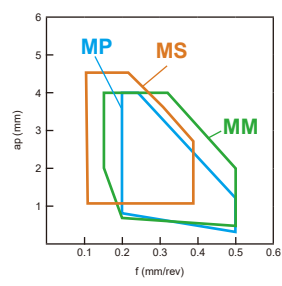
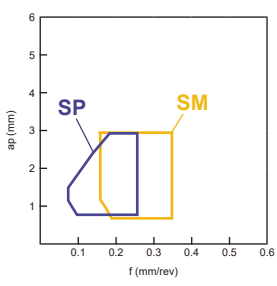
負角車刀片

Inserts	Designation	Grade				Dimensions (mm)					Drawing	Tool Page	
		CX2565	CX2555	CX3565	CX3555	d	l	S	r	h			
	P Steel	☐	☐	☐									
	M Stainless steel	☐	☐	☐									
	K Cast iron	☐	☐	☐									
	Cutting Type : ☐ General ☐ Interrupted												
	CNMG 120404-SM		✓			12.7	12.9	4.76	0.4	5.16			
	120408-SM	✓	✓	✓	✓	12.7	12.9	4.76	0.8	5.16			
	CNMG 120404-SP		✓	✓	✓	12.7	12.9	4.76	0.4	5.16			
	120408-SP	✓	✓	✓	✓	12.7	12.9	4.76	0.8	5.16			
	CNMG 120404-MM	✓	✓			12.7	12.9	4.76	0.4	5.16			
	120408-MM	✓	✓	✓	✓	12.7	12.9	4.76	0.8	5.16			
	CNMG 120408-MS	✓	✓	✓	✓	12.7	12.9	4.76	0.8	5.16			
	CNMG 120404-MP	✓	✓	✓	✓	12.7	12.9	4.76	0.4	5.16			
	120408-MP	✓	✓	✓	✓	12.7	12.9	4.76	0.8	5.16			
	120412-MP	✓	✓			12.7	12.9	4.76	1.2	5.16			
	CNMG 120408-MK	✓	✓			12.7	12.9	4.76	0.8	5.16			
	CNMG 120408-MG	✓	✓	✓	✓	12.7	12.9	4.76	0.8	5.16			
	CNMG 120408-RG	✓	✓	✓	✓	12.7	12.9	4.76	0.8	5.16			
	CNMG 120408-RP	✓	✓	✓	✓	12.7	12.9	4.76	0.4	5.16			
	120412-RP	✓	✓			12.7	12.9	4.76	0.8	5.16			




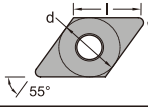
Turning Inserts & Tools

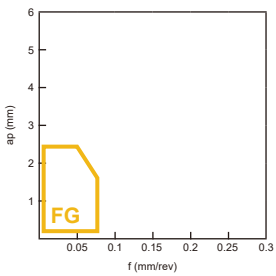
B136
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B139
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B159
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B160



DNMG - Negative Turning Insert


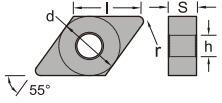
負角車刀片

	P	Steel	●	●	✳								Cutting Type : ● General ✳ Interrupted
	M	Stainless steel	●		✳	✳							
	K	Cast iron	●		✳								
Inserts	Designation	Grade					Dimensions (mm)					Drawing	Tool Page
		CX2565	CX2555	CX3565	CX3555		d	l	S	r	h		
	DNMG 110408-MG	✓	✓				9.53	11.6	4.76	0.8	3.81		B138 B161
	150408-MG	✓	✓				12.7	15.5	4.76	0.8	5.16		

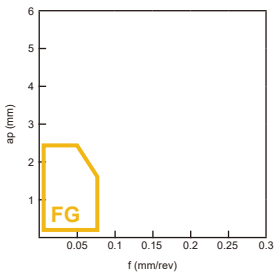


DNGX - Negative Turning Insert

負角車刀片


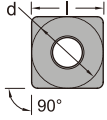



	P	Steel	●	●	✳										Cutting Type : ● General ✳ Interrupted
	M	Stainless steel	●		✳	✳									
	K	Cast iron	●		✳										
Inserts	Designation	Grade					Dimensions (mm)					Drawing	Tool Page		
		CX2565	CX2555	CX3565	CX3555		d	l	S	r	h				
	DNGX 110401-FG					✓	9.525	11.6	4.76	0.1	4.5		-		

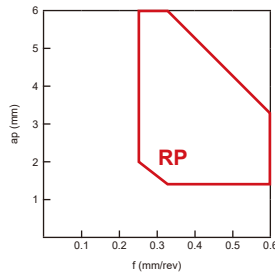
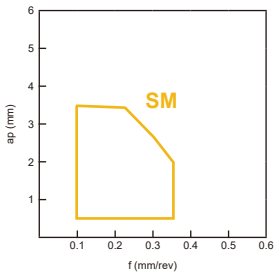
*Customize radius available



SNMG - Negative Turning Insert


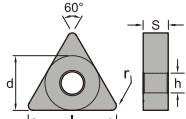















負角車刀片

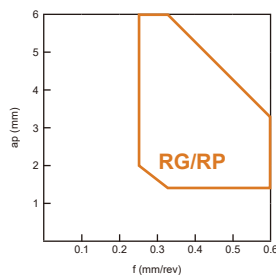
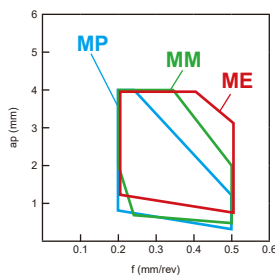
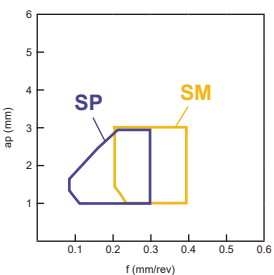
Inserts	Designation	Grade					Dimensions (mm)					Drawing	Tool Page	
		CX2565	CX2555	CX3565	CX3555		d	l	S	r	h			
	P Steel	☐	☐	☐			Cutting Type : ☐ General ☐ Interrupted							
	M Stainless steel	☐	☐	☐										
	K Cast iron	☐		☐										
	SNMG 120404-SM	✓	✓				12.7	12.7	4.76	0.4	5.16	  90°	B162	
	SNMG 120408-MG	✓	✓				12.7	12.7	4.76	0.8	5.16			
	SNMG 120408-RP 120412-RP	✓	✓				12.7	12.7	4.76	0.8	5.16			
		✓	✓				12.7	12.7	4.76	1.2	5.16			



TNMG - Negative Turning Insert


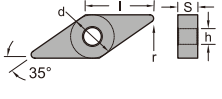

負角車刀片

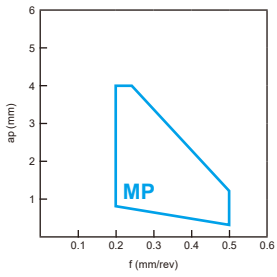
Inserts	Designation	Grade				Dimensions (mm)					Drawing	Tool Page		
		CX2565	CX2555	CX3565	CX3555	d	l	S	r	h				
	P Steel	☉	☉	☉									Cutting Type : ☉ General ☘ Interrupted	
	M Stainless steel	☉	☘	☘										
	K Cast iron	☉	☘	☘										
	TNMG 160408-SM	✓	✓			9.53	16.5	4.76	0.8	3.81				B139 ~ B141 B161 B163 ~ B164
	TNMG 160404-SP 160408-SP	✓	✓			9.53	16.5	4.76	0.4	3.81				
		✓	✓	✓	✓	9.53	16.5	4.76	0.8	3.81				
	TNMG 160408-MM	✓	✓	✓	✓	9.53	16.5	4.76	0.8	3.81				
	TNMG 160404R-ME 160408R-ME	✓	✓	✓	✓	9.53	16.5	4.76	0.4	3.81				
		✓	✓	✓	✓	9.53	16.5	4.76	0.8	3.81				
	TNMG 160404L-ME 160408L-ME	✓	✓	✓	✓	9.53	16.5	4.76	0.4	3.81				
		✓	✓	✓	✓	9.53	16.5	4.76	0.8	3.81				
	TNMG 160404-MP 160408-MP	✓	✓			9.53	16.5	4.76	0.4	3.81				
		✓	✓	✓	✓	9.53	16.5	4.76	0.8	3.81				
	160412-MP	✓	✓	✓	✓	9.53	16.5	4.76	1.2	3.81				
	TNMG 220408-MP	✓	✓	✓	✓	12.7	22	4.76	0.8	5.16				
	TNMG 160404-MG	✓				9.53	16.5	4.76	0.4	3.81				
	TNMG 160408-RG	✓	✓	✓	✓	9.53	16.5	4.76	0.8	3.81				
	TNMG 160408-RP 160412-RP	✓	✓	✓	✓	9.53	16.5	4.76	0.8	3.81				
		✓	✓			9.53	16.5	4.76	1.2	3.81				



VNMG - Negative Turning Insert


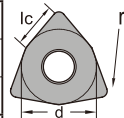




負角車刀片

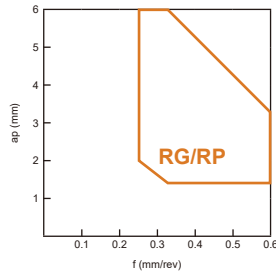
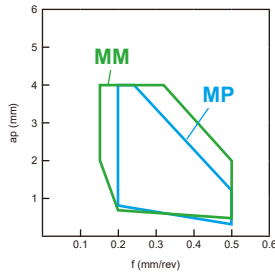
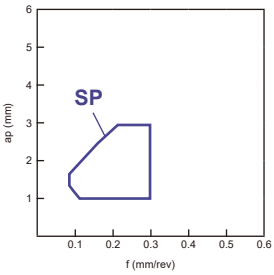
Inserts	Designation	Grade					Dimensions (mm)					Drawing	Tool Page
		CX2565	CX2555	CX3565	CX3555		d	l	S	r	h		
	P Steel	☐	☐	☐			Cutting Type : ☐ General ☐ Interrupted						
	M Stainless steel	☐	☐	☐									
	K Cast iron	☐	☐	☐									
	VNMG 160404-MP	✓	✓				9.53	16.5	4.76	0.8	3.81		B141
	VNMG 160408-MG	✓	✓	✓	✓		9.53	16.5	4.76	0.8	3.81		B165 B166



WNMG - Negative Turning Insert




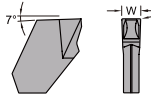

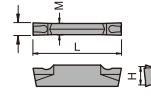
負角車刀片

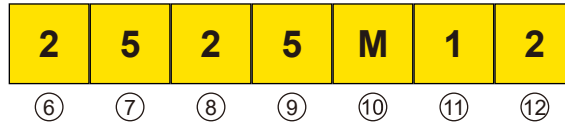
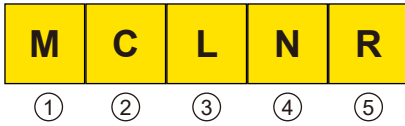
Inserts	Designation	Grade					Dimensions (mm)					Drawing	Tool Page
		CX2565	CX2555	CX3565	CX3555		d	l	S	r	h		
	P Steel	☐	☐	☐			Cutting Type : ☐ General ☐ Interrupted						
	M Stainless steel	☐	☐	☐									
	K Cast iron	☐	☐	☐									
	WNMG 080404-SP 080408-SP	✓	✓	✓	✓		12.7	8.7	4.76	0.4	5.16	 B142 B166 B167	Turning Inserts & Tools
	WNMG 080408-MM	✓	✓	✓	✓		12.7	8.7	4.76	0.8	5.16		
	WNMG 080404-MP 080408-MP 080412-MP	✓	✓				12.7	8.7	4.76	0.4	5.16		
	WNMG 080408-RG	✓	✓	✓	✓		12.7	8.7	4.76	0.4	5.16		
	WNMG 080408-RP 080412-RP	✓	✓	✓	✓		12.7	8.7	4.76	0.8	5.16		
		✓	✓				12.7	8.7	4.76	1.2	5.16		



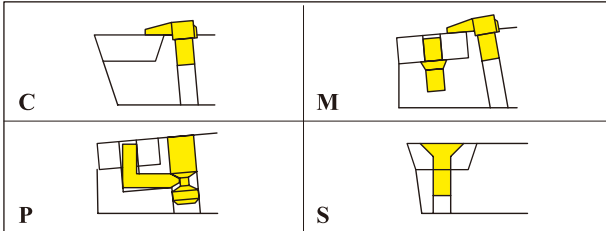
TGTN, GMM - Parting Insert

切斷刀片

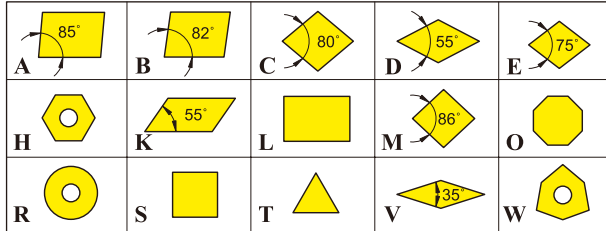
Inserts	Designation	Grade						Dimensions (mm)					Drawing	Cutter Page			
		CX30NS	CX40NS					w	r	h	m						
	P Steel	☛	☛					Cutting Type : ☛ General ☛ Interrupted									
	M Stainless steel																
	K Cast iron	☛	☛														
	TGTN 0220	✓	✓					2.2	0.2					B181			
	TGTN 0310	✓	✓					3.1	0.15					B181			
	GMM 2020-RG	✓	✓					2.2	2.0	4.3	1.5			B183			



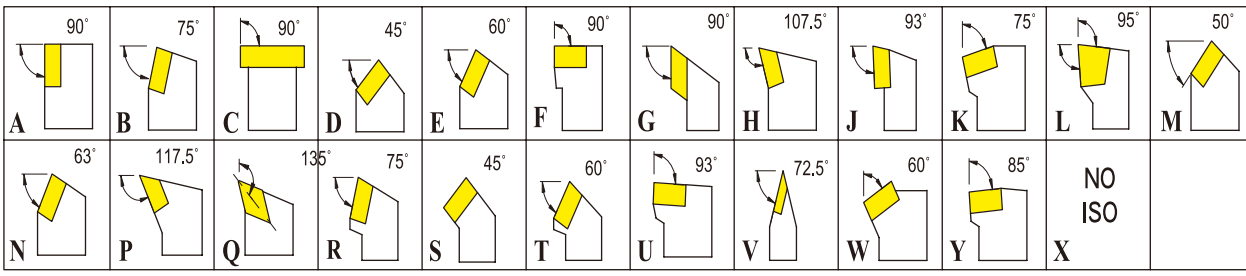
① TYPE OF LOCJING



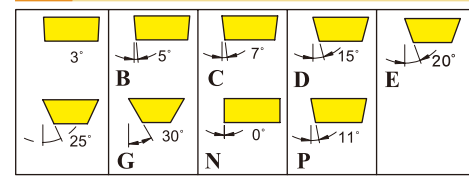
② INSERT SHAPE



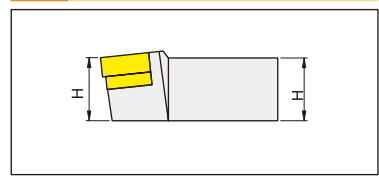
③ INSERT SHAPE



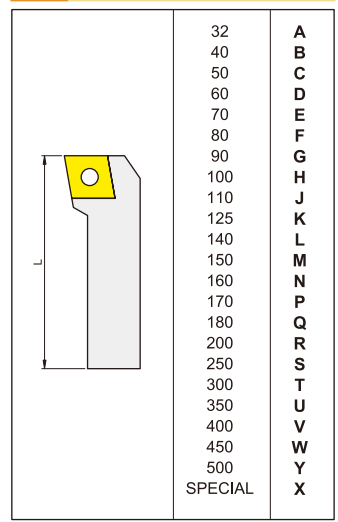
④ RAKE



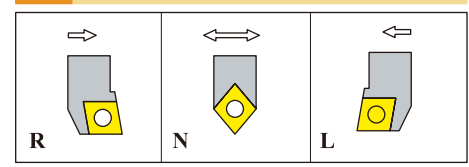
⑥/⑦ SHANK HEIGHT



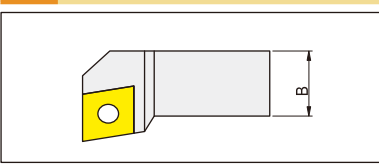
⑩ SHANK LENGTH



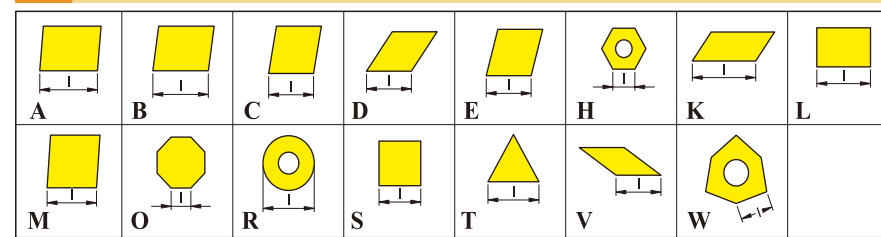
⑤ HAND OF TOOL



⑧/⑨ SHANK WIDTH

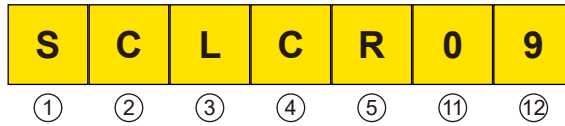
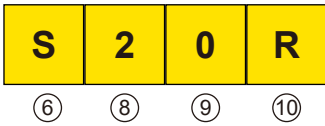


⑤ HAND OF TOOL



⑧/⑨ SHANK WIDTH



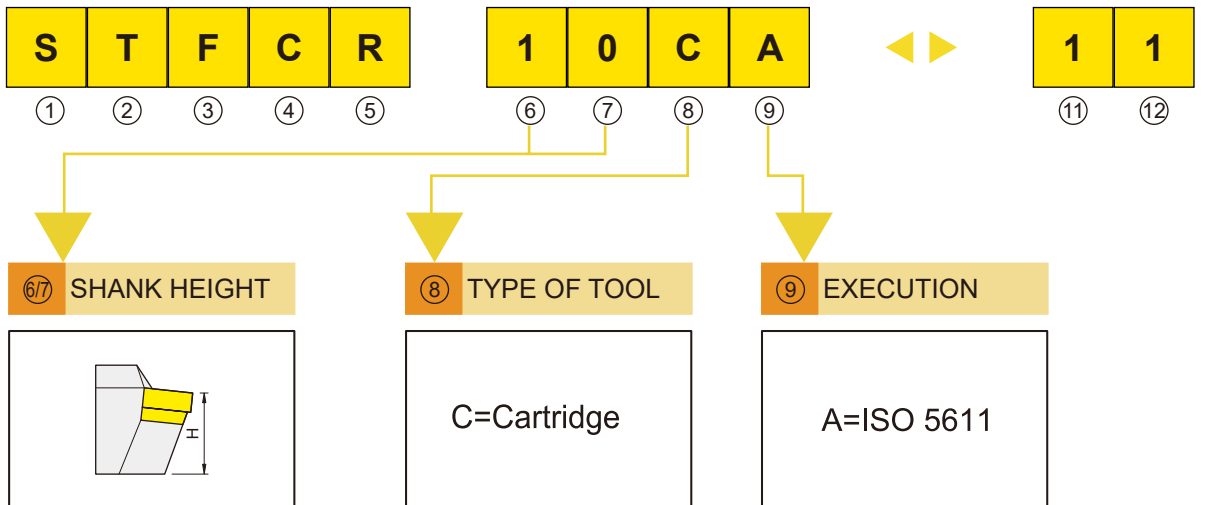


Turning Inserts & Tools

































⑥ SHANK

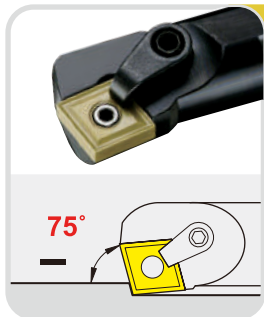
- S** = Steel shank
- A** = Steel shank+coolant hole
- B** = Steel shank+device anti-vibration
- C** = Cemented carbide shank with steel head
- D** = Steel shank+device anti-vibration+coolant hole
- E** = Cemented carbide shank with steel head+coolant hole
- F** = Cemented carbide shank with steel head+device anti-vibration
- G** = Cemented carbide shank with steel head+device anti-vibration+coolant hole
- H** = Heavy metal shank
- J** = Heavy metal shank+coolant hole

CARTRIDGES DESIGNATION



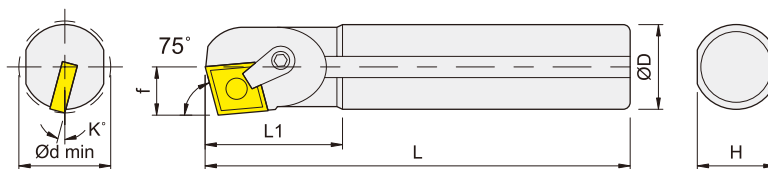


 MCBN B159	 MCKN B159	 MCLN B160	 MCNN B160	 MDJN B161	 MTQN B161
 MSDN B162	 MSSN B162	 MTJN B163	 MTEN B163	 DTFN B164	 MTFN B164
 MVJN B165	 MVQN B165	 MVVN B166	 WWLN B166	 MWLN B167	 MWLN-N B167
 SCBC B168	 SCKC B168	 SCLC B169	 SCL2C B169	 SCNC B170	 SDJC B170
 SDJ2C B171	 SDNC B171	 SDQC B172	 SDFC B172	 SSAC B173	 SSBC B173
 SSDC B174	 SSEC B174	 SSXC B175	 SSYC B175	 STAC B176	 STFC B176
 STGC B177	 CTYC B177	 SVJB B178	 SVJ2B B178	 SVQB B179	 SVVB B179



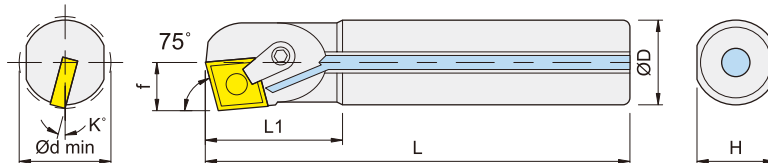
MCKN

■ S.-MCKNR/L-12 Steel shank



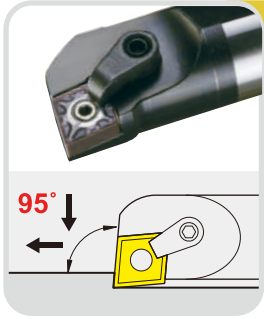
Right-hand shown

■ A.-MCKNR/L-12 Steel shank+coolant hole



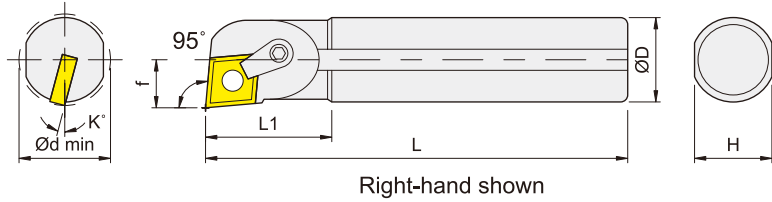
Right-hand shown

Item Code	Dimensions, mm							Insert	Shim	Pin	Wrench	Clamp	Screw	Wrench
	D	L	L1	f	H	K	dmin							
IS20R-MCKNR/L-12	20	200	36	13	18	15	25	CN..1204..	--	MLP44	PL25	MC620	MS620	PL30
IS25R-MCKNR/L-12	25	200	40	15	23	13	30							
IS32S-MCKNR/L-12	32	250	48	20	30	13	40							
IS40T-MCKNR/L-12	40	300	55	25	37	12	50							
IS50U-MCKNR/L-12	50	350	60	30	47	10	60	CN..1204..	CMS432	MLP46	PL25	MC620	MS625	PL30
IS60V-MCKNR/L-12	60	400	60	35	57	9	70							
IA20R-MCKNR/L-12	20	200	36	13	18	15	25	CN..1204..	--	MLP44	PL25	MC620	MS620	PL30
IA25R-MCKNR/L-12	25	200	40	15	23	13	30							
IA32S-MCKNR/L-12	32	250	48	20	30	13	40							
IA40T-MCKNR/L-12	40	300	55	25	37	12	50	CN..1204..	CMS432	MLP46	PL25	MC620	MS625	PL30

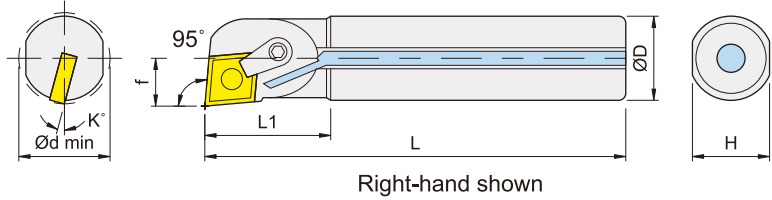


MCLN

■ S.-MCKNR/L-12 Steel shank



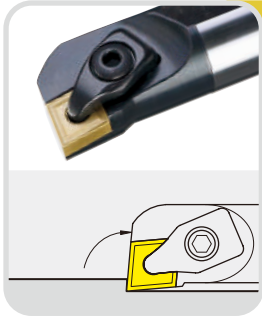
■ A.-MCKNR/L-12 Steel shank+coolant hole



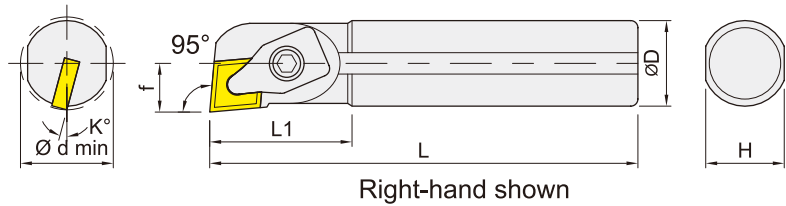
Item Code	Dimensions, mm							Insert	Shim	Pin	Wrench	Clamp	Screw	Wrench
	D	L	L1	f	H	K	dmin							
IS20R-MCLNR/L-12	20	200	36	13	18	15	25	CN..1204..	--	MLP44	PL25	MC620	MS620	PL30
IS25R-MCLNR/L-12	25	200	40	15	23	13	30							
IS32S-MCLNR/L-12	32	250	48	20	30	13	40							
IS40T-MCLNR/L-12	40	300	55	25	37	12	50							
IS50U-MCLNR/L-12	50	350	60	30	47	10	60							
IS60V-MCLNR/L-12	60	400	60	35	57	9	70							
IA20R-MCLNR/L-12	20	200	36	13	18	15	25	CN..1204..	--	MLP44	PL25	MC620	MS620	PL30
IA25R-MCLNR/L-12	25	200	40	15	23	13	30							
IA32S-MCLNR/L-12	32	250	48	20	30	13	40							
IA40T-MCLNR/L-12	40	300	55	25	37	12	50							

Internal Turning Tools

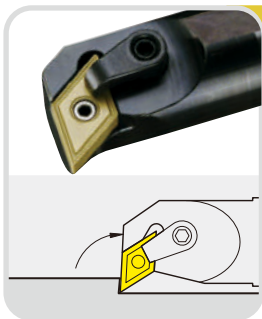
內徑車刀桿



DCLN



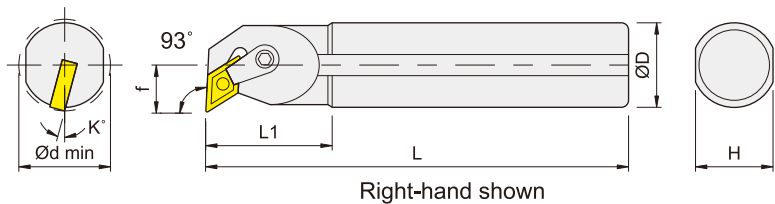
Item Code	Dimensions, mm							Insert	Shim	Screw	Wrench	Clamp	Wrench
	D	L	L1	f	H	K	dmin						
IS20R-DCLNR/L-12	20	200	36	14	18	15	28	CN..1204..	--	--	--	MCD425	PL40
IS25R-DCLNR/L-12	25	200	40	15	23	15	30						



MDUN

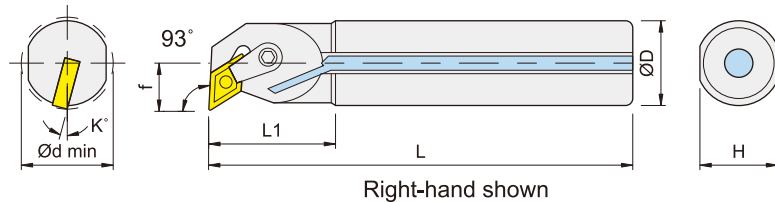
S.-MDUNR/L-15 Steel shank

Steel shank



A.-MDUNR/L-15 Steel shank+coolant hole

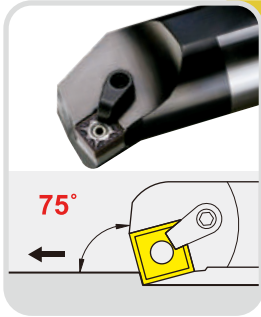
Steel shank+coolant hole



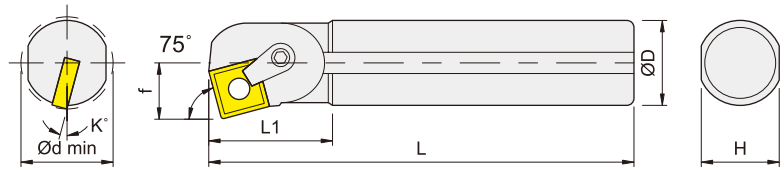
Item Code	Dimensions, mm							Insert	Shim	Pin	Wrench	Clamp	Screw	Wrench
	D	L	L1	f	H	K	dmin							
IS25R-MDUNR/L-15	25	200	40	17	23	13	32	DN..1504..	--	MLP44	PL25	MC620	MS620	PL30
IS32S-MDUNR/L-15	32	250	50	21	30	13	40	DN..1504..	DMS432	MLP46	PL25	MC620	MS625	PL30
IA25R-MDUNR/L-15	25	200	40	17	23	13	32	DN..1504..	--	MLP44	PL25	MC620	MS620	PL30
IA32S-MDUNR/L-15	32	250	50	21	30	13	40	DN..1504..	DMS432	MLP46	PL25	MC620	MS625	PL30

Internal Turning Tools

內徑車刀桿

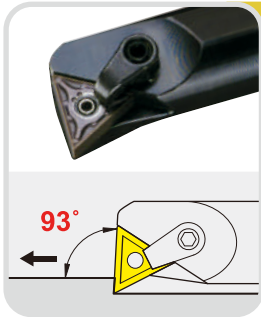


MSKN



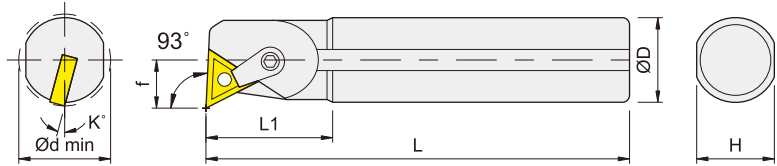
Right-hand shown

Item Code	Dimensions, mm							Insert	Shim	Pin	Wrench	Clamp	Screw	Wrench
	D	L	L1	f	H	K	dmin							
IS40T-MSKNR/L-12	40	300	55	25	37	12	50	CN..1204..	SMS432	MLP46	PL25	MC620	MS625	PL30
IS50U-MSKNR/L-12	50	350	60	30	47	10	60							
IS60V-MSKNR/L-12	60	400	60	36	57	9	70							



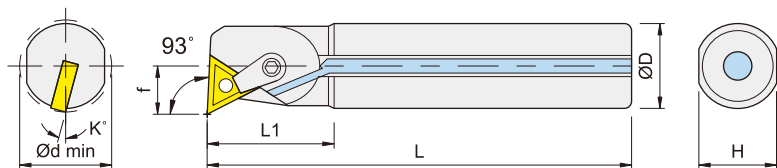
MTUN

■ S..-MTUNR/L-16 Steel shank



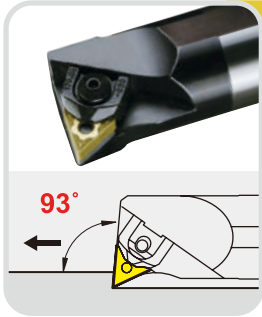
Right-hand shown

■ A..-MTUNR/L-16 Steel shank+coolant hole



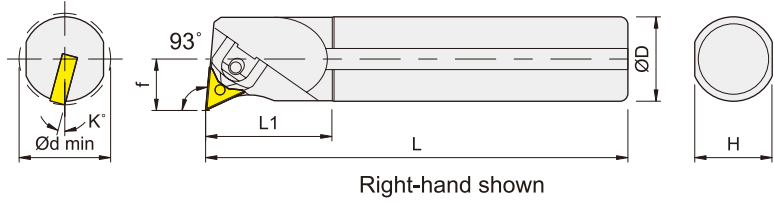
Right-hand shown

Item Code	Dimensions, mm							Insert	Shim	Pin	Wrench	Clamp	Screw	Wrench
	D	L	L1	f	H	K	dmin							
IS20R-MTUNR/L-16	20	200	36	13	18	15	25	TN..1604..	--	MLP33L	PL20	MC515	MS520	PL25
IS25R-MTUNR/L-16	25	200	40	15	23	13	30	TN..1604..	TMS322	MLP34L	PL20	MC620	MS625	PL30
IS32S-MTUNR/L-16	32	250	48	20	30	13	40							
IS40T-MTUNR/L-16	40	300	55	26	37	10	50							
IS50U-MTUNR/L-16	50	350	60	31	47	9	60	TN..1604..	--	MLP33L	PL20	MC515	MS520	PL25
IS60V-MTUNR/L-16	60	400	60	36	57	8	70							
IA20R-MTUNR/L-16	20	200	36	13	18	15	25							
IA25R-MTUNR/L-16	25	200	40	15	23	13	30	TN..1604..	TMS322	MLP34L	PL20	MC620	MS625	PL30
IA32S-MTUNR/L-16	32	250	48	20	30	13	40							
IA40T-MTUNR/L-16	40	300	55	26	37	10	50							



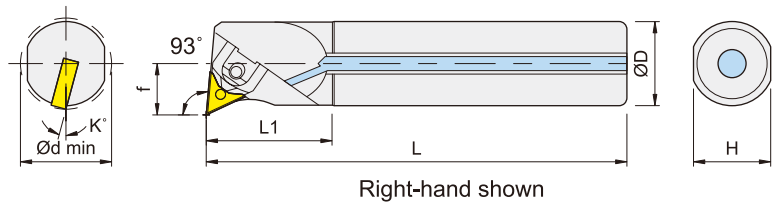
WTUN

■ S.-WTUNR/L-16 Steel shank

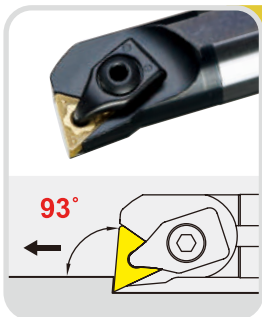


■ A.-WTUNR/L-16 Steel shank+coolant

hole

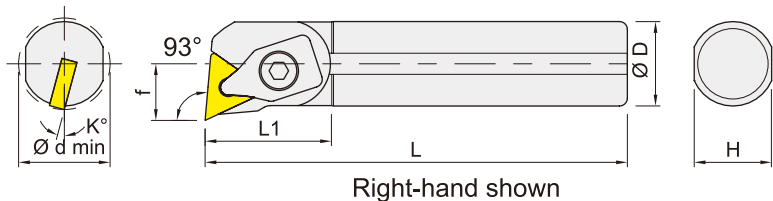


Item Code	Dimensions, mm							Insert	Shim	Pin	Clamp	Wrench
	D	L	L1	f	H	K	dmin					
IS32S-WTUNR/L-16	32	250	48	20	30	13	40	TN..1604..	TMS322	SCP315	MCW3-P25	PL25
IS40T-WTUNR/L-16	40	300	55	26	37	10	50					
IS40U-WTUNR/L-16	40	350	55	26	37	10	50					
IS50U-WTUNR/L-16	50	350	60	31	47	9	60					
IS50V-WTUNR/L-16	50	400	60	31	47	9	60					
IS60V-WTUNR/L-16	60	400	60	36	57	8	70					
IA32S-WTUNR/L-16	32	250	48	20	30	13	40	TN..1604..	TMS322	SCP318	MCW3-P25	PL25
IA40T-WTUNR/L-16	40	300	55	26	37	10	50					
IA40U-WTUNR/L-16	40	350	55	26	37	10	50					

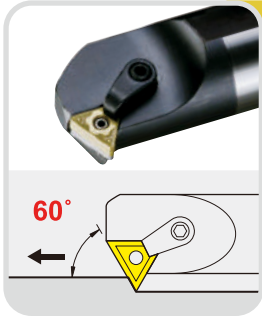


DTUN

■ S.-DTUNR/L-16 Steel shank

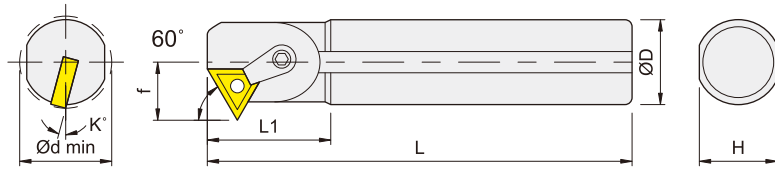


Item Code	Dimensions, mm							Insert	Shim	Screw	Wrench	Clamp	Wrench
	D	L	L1	f	H	K	dmin						
IS20R-DTUNR/L-16	20	200	36	14	18	15	28	TN..1604..	--	--	--	MCD324	PL40
IS25R-DTUNR/L-16	25	200	40	15	23	13	30						
IS32S-DTUNR-16	32	250	48	20	30	13	40	TN..1604..	TWS322	MS4008ES	PL25	MCD324B	PL40



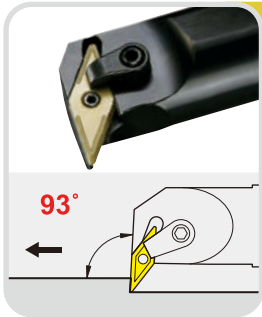
MTWN

■ S.-MTWNR/L-16 Steel shank



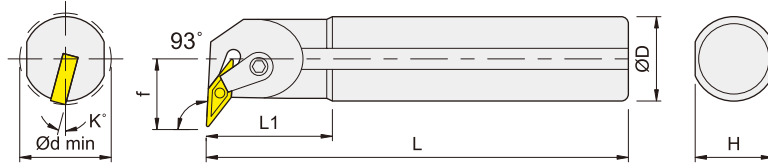
Right-hand shown

Item Code	Dimensions, mm							Insert	Shim	Pin	Wrench	Clamp	Screw	Wrench
	D	L	L1	f	H	K	dmin							
IS20R-MTWNR/L-16	20	200	36	13.5	18	15	27	TN..1604..	--	MLP33L	PL20	MC515	MS520	PL25
IS25R-MTWNR/L-16	25	200	40	16	23	13	32							
IS32S-MTWNR/L-16	32	250	48	20	30	13	40							



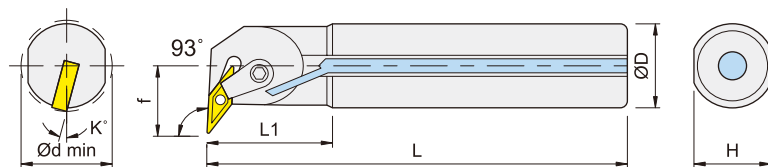
MVUN

■ S.-MVUNR/L-16 Steel shank



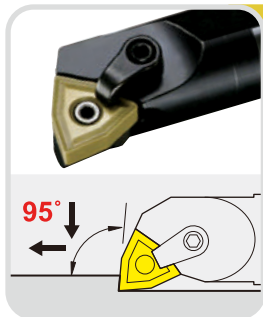
Right-hand shown

■ A.-MVUNR/L-16 Steel shank+coolant hole



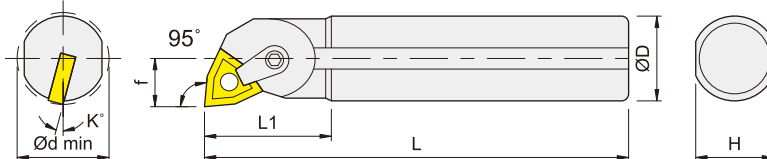
Right-hand shown

Item Code	Dimensions, mm							Insert	Shim	Pin	Wrench	Clamp	Screw	Wrench
	D	L	L1	f	H	K	dmin							
IS25R-MVUNR/L-16	25	200	40	18	23	13	32	VN..1604..	--	MLP33L	PL20	MC515	MS520	PL25
IS32S-MVUNR/L-16	32	250	50	22	30	15	40	VN..1604..	VMS322	MLP34L	PL20	MC620	MS625	PL30
IA25R-MVUNR/L-16	25	200	40	18	23	13	32	VN..1604..	--	MLP33L	PL20	MC515	MS520	PL25
IA32S-MVUNR/L-16	32	250	50	22	30	15	40	VN..1604..	VMS322	MLP34L	PL20	MC620	MS625	PL30



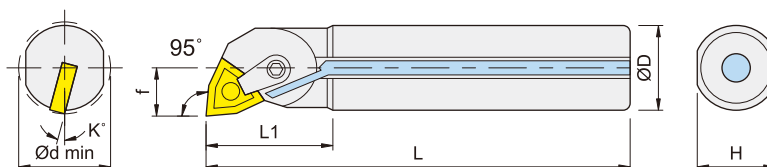
MWLN

■ S..MWLNR/L-08 Steel shank



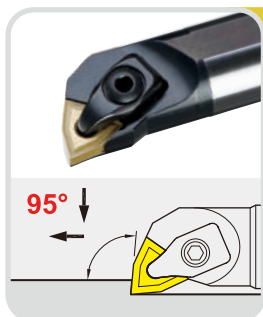
Right-hand shown

■ A..MWLNR/L-08 Steel shank+coolant hole



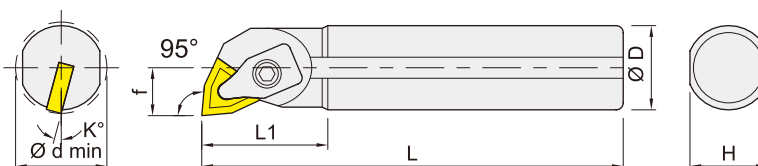
Right-hand shown

Item Code	Dimensions, mm							Insert	Shim	Pin	Wrench	Clamp	Screw	Wrench
	D	L	L1	f	H	K	dmin							
IS20R-MWLNR/L-08	20	200	36	13	18	15	25	WN..0804..	--	MLP44	PL25	MC515	MS520	PL25
IS25R-MWLNR/L-08	25	200	40	15	23	13	30							
IS32S-MWLNR/L-08	32	250	48	20	30	13	40	WN..0804..	WMS432	MLP4	PL25	MC515	MS520	PL25
IS40T-MWLNR/L-08	40	300	55	26	37	10	50					MC620	MS625	PL30
IS50U-MWLNR/L-08	50	350	60	31	47	9	60					MC620	MS625	PL30
IS60V-MWLNR/L-08	60	400	60	36	57	8	70							
IA20R-MWLNR/L-08	20	200	36	13	18	15	25	WN..0804..	--	MLP44	PL25	MC515	MS520	PL25
IA25R-MWLNR/L-08	25	200	40	15	23	13	30							
IA32S-MWLNR/L-08	32	250	48	20	30	13	40							



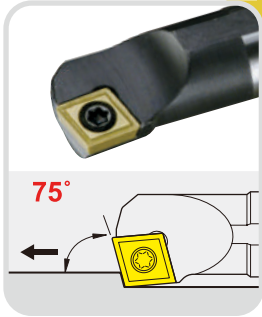
DWLN

■ S..DWLNR/L-.. Steel shank



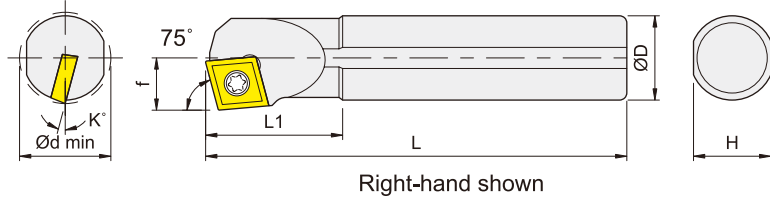
Right-hand shown

Item Code	Dimensions, mm							Insert	Shim	Screw	Wrench	Clamp	Wrench
	D	L	L1	f	H	K	dmin						
IS20R-DWLNR/L-08	20	200	36	14	18	15	28	WN..0804..	--	--	--	MCD425	PL40
IS25R-DWLNR/L-08	25	200	40	15	23	13	30						

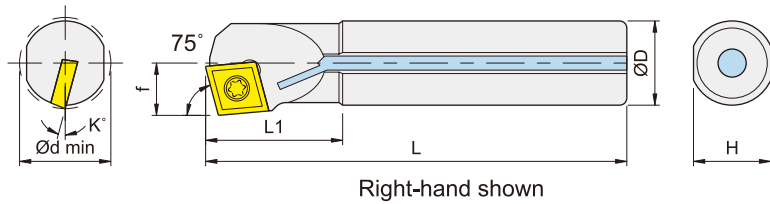


SCKC

■ S..-SCKC/PR/L-.. Steel shank

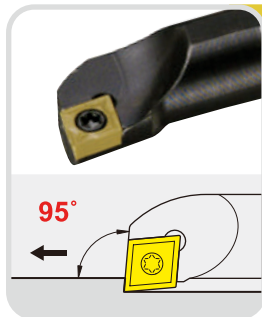


■ A..-SCKC/PR/L-.. Steel shank+coolant hole



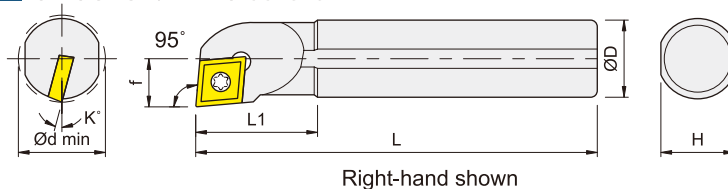
Turning Inserts & Tools

Item Code	Dimensions, mm							Insert	Screw 	Wrench
	D	L	L1	f	H	K	dmin			
IS08K-SCKCR/L-06	8	125	18	5	7	15	10	CC..0602..	MS2506A	TF9
IS10K-SCKCR/L-06	10	125	22	6	9	13	12			
IS12M-SCKCR/L-06	12	150	26	8	11	10	16			
IS16Q-SCKCR/L-06	16	180	32	10	15	7	20			
IS12M-SCKCR/L-09	12	150	26	8	11	11	16	CC..09T3..	MS4009A	TF15
IS16Q-SCKCR/L-09	16	180	32	10	15	7	20			
IS20R-SCKCR/L-09	20	200	36	13	18	5	25			
IA08K-SCKCR/L-06	8	125	18	5	7	15	10	CC..0602..	MS2506A	TF9
IA10K-SCKCR/L-06	10	125	22	6	9	13	12			
IA12M-SCKCR/L-06	12	150	26	8	11	10	16			
IA16Q-SCKCR/L-06	16	180	32	10	15	7	20			
IA12M-SCKCR/L-09	12	150	26	8	11	11	16	CC..09T3..	MS4009A	TF15
IA16Q-SCKCR/L-09	16	180	32	10	15	7	20			
IA20R-SCKCR/L-09	20	200	36	13	18	5	25			



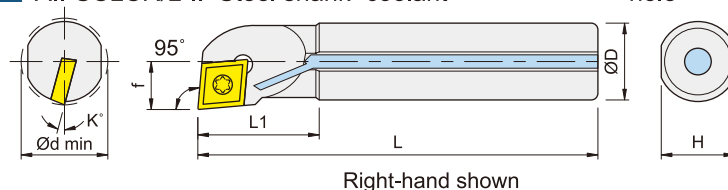
SCLC

S...SCLCR/L... Steel shank

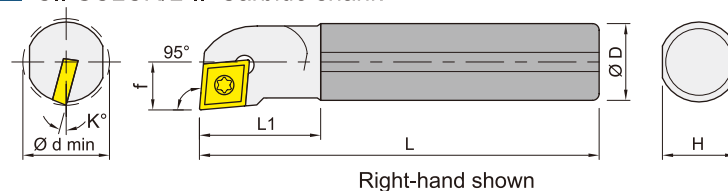


A...SCLCR/L... Steel shank+coolant

hole





C...SCLCR/L... Carbide shank

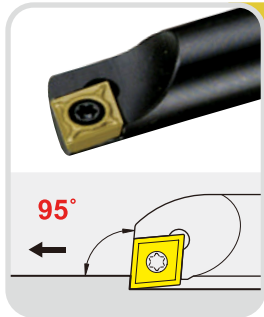


Item Code	Dimensions, mm							Insert	Screw 	Wrench
	D	L	L1	f	H	K	dmin			
IS08K-SCLCR/L-06	8	125	18	5	7	15	10	CC..0602..	MS2506A	TF9
IS08K-SCLCR/L-06-D09	8	125	18	4.5	7	15	9			
IS10K-SCLCR/L-06	10	125	22	6	9	13	12			
IS10K-SCLCR/L-06-D11	10	125	22	5.5	9	13	11			
IS12M-SCLCR/L-06	12	150	26	8	11	10	16			
IS12M-SCLCR/L-06-D13	12	150	26	6.5	11	10	13			
IS14Q-SCLCR/L-06	14	180	26	8	13	10	16			
IS16Q-SCLCR/L-06	16	180	32	10	15	7	20	CC..09T3..	MS4009A	TF15
IS12M-SCLCR/L-09	12	150	26	8	11	10	16			
IS14Q-SCLCR/L-09	14	180	26	8	13	10	16			
IS15Q-SCLCR/L-09	15	180	32	8.5	14	10	17			
IS16Q-SCLCR/L-09	16	180	32	10	15	7	20			
IS16Q-SCLCR/L-09-D18	16	180	32	9	15	7	18			
IS18Q-SCLCR-09	18	180	32	10	17	7	20			
IS20R-SCLCR/L-09	20	200	36	13	18	5	25			
IS22R-SCLCR/L-09	22	200	40	12.5	20	5	25			
IS25R-SCLCR/L-09	25	200	40	15	23	5	30			

Internal Turning Tools

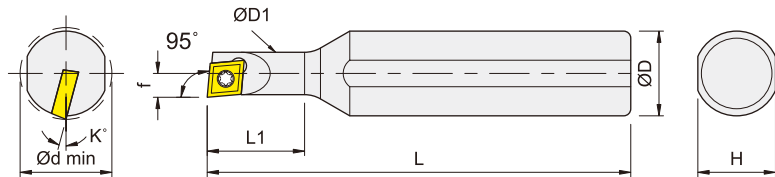
內徑車刀桿

Item Code	Dimensions, mm							Insert	Screw 	Wrench 
	D	L	L1	f	H	K	dmin			
IS32S-SCLCR/L-12	32	250	48	20	30	5	38	CC..1204..	MS5011A	TF20
IS40T-SCLCR/L-12	40	300	55	26	37	3	50			
IS40V-SCLCR/L-12	40	400	55	26	37	3	50			
IA08K-SCLCR/L-06	8	125	18	5	7	15	10	CC..0602..	MS2506A	TF9
IA08K-SCLCR/L-06-D09	8	125	18	4.5	7	15	9			
IA10K-SCLCR/L-06	10	125	22	6	9	13	12			
IA10K-SCLCR/L-06-D11	10	125	22	5.5	9	13	11			
IA12M-SCLCR/L-06	12	150	26	8	11	10	16			
IA12M-SCLCR/L-06-D13	12	150	26	6.5	11	10	13			
IA14Q-SCLCR/L-06	14	180	26	8	13	10	16			
IA16Q-SCLCR/L-06	16	180	32	10	15	7	20			
IA12M-SCLCR/L-09	12	150	26	8	11	10	16			
IA16Q-SCLCR/L-09	16	180	32	10	15	7	20			
IA16Q-SCLCR/L-09-D18	16	180	32	9	15	7	18	CC..09T3..	MS4009A	TF15
IA20R-SCLCR/L-09	20	200	36	13	18	5	25			
IA25R-SCLCR/L-09	25	200	40	15	23	5	30			
IA32S-SCLCR/L-12	32	250	48	20	30	5	38	CC..1204..	MS5011A	TF20
IC06J-SCLCR/L-04	6	110	15	3.5	5.7	15	7	CC..0401..	MS2004A	TF6
IC07J-SCLCR/L-06	7	110	18	4	6.7	15	10	CC..0602..	MS2506A	TF9
IC08K-SCLCR/L-06	8	125	18	5	7.2	15	10	CC..0602..	MS2506A	TF9
IC08K-SCLCR-06-D09	8	125	18	4.5	7.2	15	9			
IC10K-SCLCR/L-06	10	125	22	6	9.2	13	12			
IC10K-SCLCR-06-D11	10	125	22	5.5	9.2	13	11			
IC12M-SCLCR/L-06	12	150	26	8	11.2	10	16			
IC12M-SCLCR-06-D13	12	150	26	6.5	11.2	10	13			
IC12M-SCLCR/L-09	12	150	26	8	11.2	10	16			
IC16Q-SCLCR/L-09	16	180	32	10	15.2	7	20			
IC16Q-SCLCR/L-09-D18	16	180	32	9	15.2	7	18			



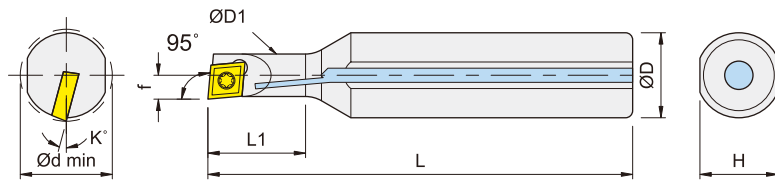
SCLC

■ S..-SCLCR/L-.. Steel shank



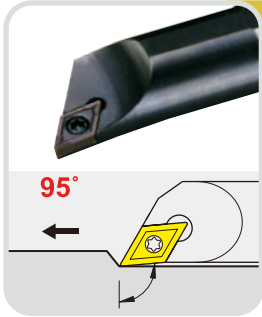
Right-hand shown

■ A..-SCLCR/L-.. Steel shank+coolant hole



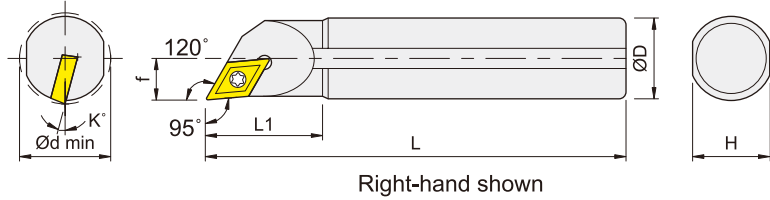
Right-hand shown

Item Code	Dimensions, mm								Insert	Screw 	Wrench
	D	D1	L	L1	f	H	K	dmin			
IS1607K-SCLCR/L-06	16	7	125	20	4	15	13	8	CC..0602..	MS2506A	TF9
IS1608K-SCLCR/L-06A	16	8	125	20	4.5	15	11	9			
IS1608K-SCLCR/L-06	16	8	125	25	4.5	15	11	9			
IS1609K-SCLCR/L-06	16	9	125	25	5	15	11	10	CC..0602..	MS2506A	TF9
IA1607K-SCLCR/L-06	16	7	125	20	4	15	13	8			
IA1608K-SCLCR/L-06A	16	8	125	20	4.5	15	11	9			
IA1608K-SCLCR-06	16	8	125	25	4.5	15	11	9			
IA1609K-SCLCR/L-06	16	9	125	25	5	15	11	10			

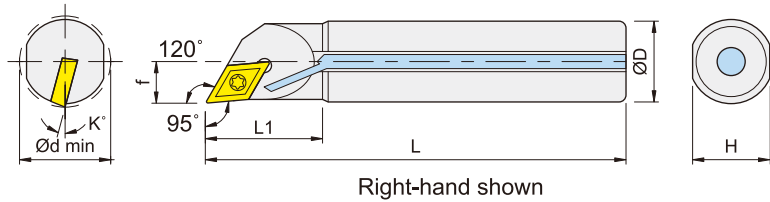


SDJC

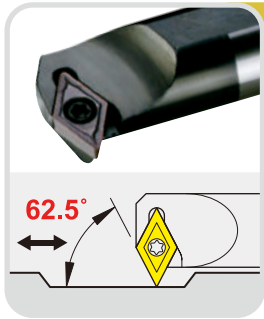
■ S..-SDJCR/L-.. Steel shank



■ A..-SDJCR/L-.. Steel shank+coolant hole

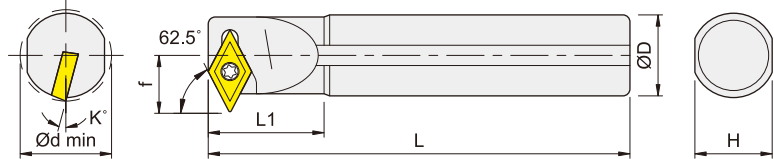


Item Code	Dimensions, mm							Insert	Screw 	Wrench
	D	L	L1	f	H	K	dmin			
IS08K-SDJCR/L-07	8	125	22	5	7	15	10	DC..0702..	MS2506A	TF9
IS10K-SDJCR/L-07	10	125	25	6	9	13	12			
IS12M-SDJCR/L-07	12	150	30	7	11	10	14			
IS16Q-SDJCR/L-07	16	180	38	9.5	15	7	19			
IS16Q-SDJCR/L-11	16	180	38	9.5	15	7	19	DC..11T3..	MS4009A	TF15
IS20R-SDJCR/L-11	20	200	42	11.5	18	7	23			
IS25R-SDJCR/L-11	25	200	45	14	23	5	28	DC..11T3..	MS4009A	TF15
IS32S-SDJCR/L-11	32	250	48	17.5	30	5	35			
IA08K-SDJCR/L-07	8	125	22	5	7	15	10	DC..0702..	MS2506A	TF9
IA10K-SDJCR/L-07	10	125	25	6	9	13	12			
IA12M-SDJCR/L-07	12	150	30	7	11	10	14			
IA16Q-SDJCR/L-07	16	180	38	9.5	15	7	19			
IA16Q-SDJCR/L-11	16	180	38	9.5	15	7	19	DC..11T3..	MS4009A	TF15
IA20R-SDJCR/L-11	20	200	42	11.5	18	7	23			
IA25R-SDJCR/L-11	25	200	45	14	23	5	28			



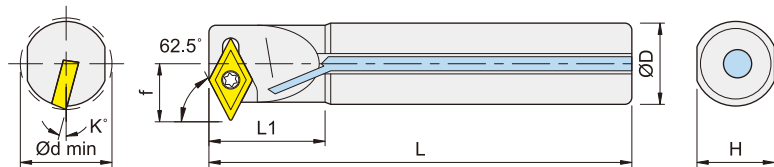
SDNC

■ S.-SDNCR/L-.. Steel shank



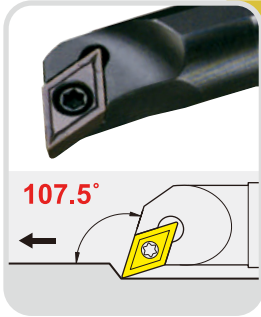
Right-hand shown

■ A.-SDNCR/L-.. Steel shank+coolant hole



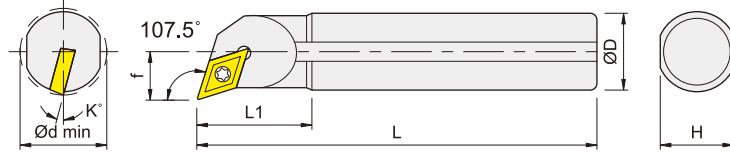
Right-hand shown

Item Code	Dimensions, mm							Insert	Screw 	Wrench
	D	L	L1	f	H	K	dmin			
IS12M-SDNCR/L-07	12	150	25	9	11	7	16	DC..0702..	MS2506A	TF9
IS16Q-SDNCR/L-07	16	180	30	11	15	7	20			
IS20R-SDNCR/L-11	20	200	35	15	18	7	25	DC..11T3..	MS4009A	TF15
IS25R-SDNCR/L-11	25	200	35	17	23	5	32			
IS32S-SDNCR/L-11	32	250	40	20.5	30	5	40			
IA12M-SDNCR/L-07	12	150	25	9	11	7	16	DC..0702..	MS2506A	TF9
IA16Q-SDNCR/L-07	16	180	30	11	15	7	20			
IA20R-SDNCR/L-11	20	200	35	15	18	7	25	DC..11T3..	MS4009A	TF15
IA25R-SDNCR/L-11	25	200	35	17	23	5	32			



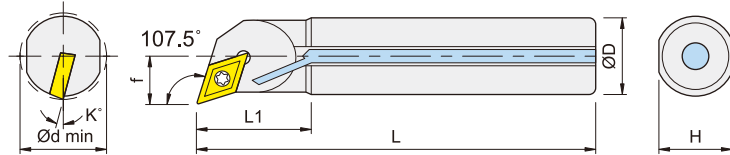
SDQC

■ S...SDQCR/L... Steel shank



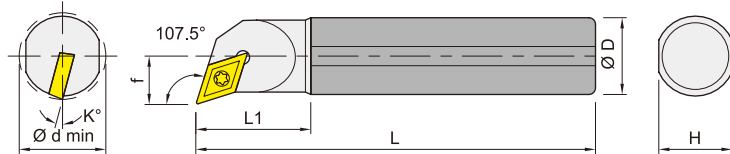
Right-hand shown

■ A...SDQCR/L... Steel shank+coolant hole



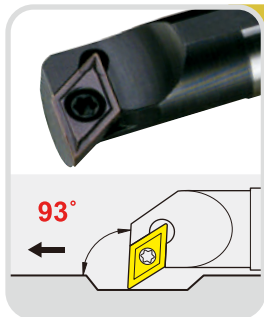
Right-hand shown

■ C...SDQCR/L... Carbide shank



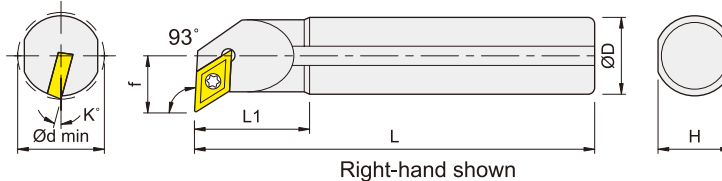
Right-hand shown

Item Code	Dimensions, mm							Insert	Screw	Wrench
	D	L	L1	f	H	K	dmin			
IS10K-SDQCR/L-07	10	125	22	6	9	13	13	DC..0702..	MS2506A	TF9
IS12M-SDQCR/L-07	12	150	30	8	11	10	16			
IS16Q-SDQCR/L-07	16	180	35	10	15	7	20			
IS20R-SDQCR/L-07	20	200	40	13	18	7	25	DC..11T3..	MS4009A	TF15
IS16Q-SDQCR/L-11	16	180	35	10	15	7	20			
IS20R-SDQCR/L-11	20	200	40	13	18	7	25			
IS25R-SDQCR/L-11	25	200	45	15	23	5	32			
IS32S-SDQCR/L-11	32	250	48	20	30	5	40			
IS40T-SDQCR/L-11	40	300	55	25	37	3	50			
IS50U-SDQCR/L-11	50	350	60	30	47	2	60	DC..11T3..	MS4009A	TF15
IA10K-SDQCR/L-07	10	125	22	6	9	13	13			
IA12M-SDQCR/L-07	12	150	30	8	11	10	16			
IA16Q-SDQCR/L-07	16	180	35	10	15	7	20			
IA16Q-SDQCR/L-11	16	180	35	10	15	7	20			
IA20R-SDQCR/L-11	20	200	40	13	18	7	25			
IA25R-SDQCR/L-11	25	200	45	15	23	5	32			
IA32S-SDQCR/L-11	32	250	48	20	30	5	40			
IA40T-SDQCR/L-11	40	300	55	25	37	3	50	DC..0702..	MS2506A	TF9
IA50U-SDQCR/L-11	50	350	60	30	47	2	60			
IC10M-SDQCR-07	10	150	22	6	9	13	13			
IC12Q-SDQCR-07	12	180	30	8	11	10	16			
IC16Q-SDQCR-07	16	180	35	10	15	7	20			

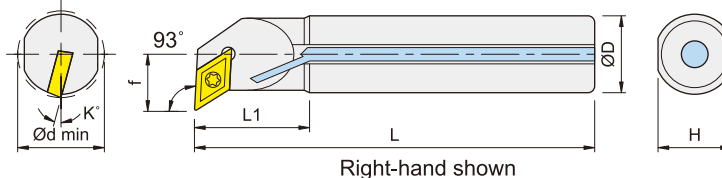


SDUC

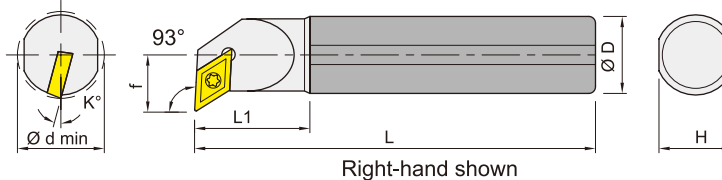
■ S..SDUCR/L.. Steel shank



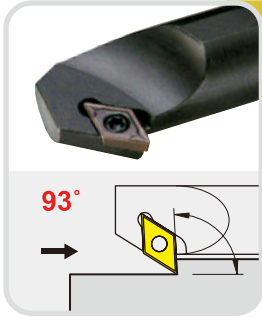
■ A..SDUCR/L.. Steel shank+coolant hole



■ C..SDUCR/L.. Carbide shank

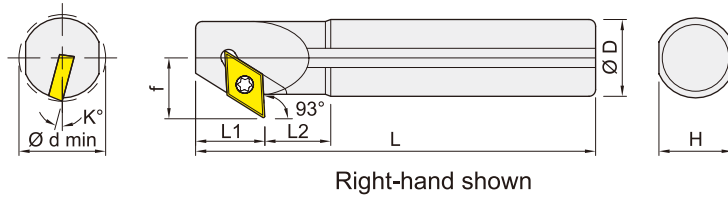


Item Code	Dimensions, mm							Insert	Screw 	Wrench
	D	L	L1	f	H	K	dmin			
IS10K-SDUCR/L-07	10	125	25	7	9	13	13	DC..0702..	MS2506A	TF9
IS12M-SDUCR/L-07	12	150	30	9	11	10	16			
IS16Q-SDUCR/L-07	16	180	30	11	15	7	20			
IS20R-SDUCR/L-07	20	200	40	13	18	7	25			
IS16Q-SDUCR/L-11	16	180	30	11	15	7	20	DC..11T3..	MS4009A	TF15
IS20R-SDUCR/L-11	20	200	40	13	18	7	25			
IS25R-SDUCR/L-11	25	200	45	17	23	5	32			
IS32S-SDUCR/L-11	32	250	48	20	30	5	40			
IS40T-SDUCR/L-11	40	300	55	25	37	3	50	DC..11T3..	MS4009A	TF15
IA10K-SDUCR/L-07	10	125	25	7	9	13	13			
IA12M-SDUCR/L-07	12	150	30	9	11	10	16			
IA16Q-SDUCR/L-07	16	180	30	11	15	7	20			
IA16Q-SDUCR/L-11	16	180	30	11	15	7	20	DC..11T3..	MS4009A	TF15
IA20R-SDUCR/L-11	20	200	40	13	18	7	25			
IA25R-SDUCR/L-11	25	200	45	17	23	5	32			
IA32S-SDUCR/L-11	32	250	48	20	30	5	40			
IA40T-SDUCR/L-11	40	300	55	25	37	3	50	DC..0702..	MS2506A	TF9
IC10M-SDUCR-07	10	150	25	7	9	13	13			
IC12Q-SDUCR-07	12	180	30	9	11	10	16			
IC16R-SDUCR-11	16	200	30	11	15	7	20			

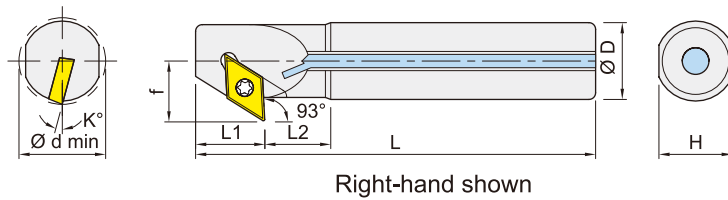


SDZC

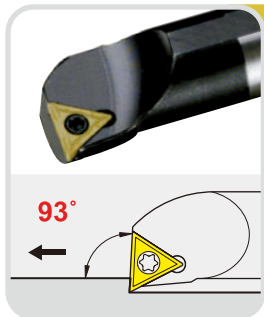
■ S..-SDZCR/L.. Steel shank



■ A..-SDZCR/L.. Steel shank+coolant hole

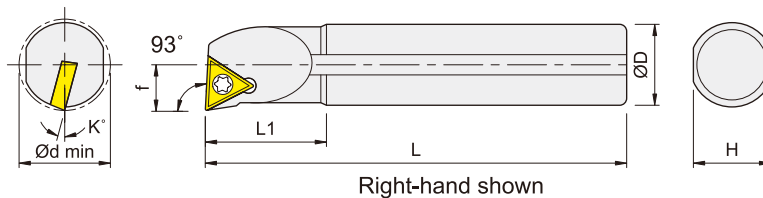


Item Code	Dimensions, mm								Insert	Screw	Wrench
	D	L	L1	L2	f	H	K	dmin			
IS10M-SDZCR/L-07	10	150	12	13	8.5	9	13	14	DC..0702..	MS2506A	TF9
IS12M-SDZCR/L-07	12	150	12	16	10.5	11	10	17			
IS16Q-SDZCR/L-07	16	180	12	18	12.5	15	7	21			
IS20R-SDZCR/L-11	20	200	18	17	15.5	18	7	26	DC..11T3..	MS4009A	TF15
IS25R-SDZCR/L-11	25	200	18	22	18	23	5	33			
IS32S-SDZCR/L-11	32	250	18	42	21.5	30	5	40			
IA10M-SDZCR/L-07	10	150	12	13	8.5	9	13	14	DC..0702..	MS2506A	TF9
IA12M-SDZCR/L-07	12	150	12	16	10.5	11	10	17			
IA16Q-SDZCR/L-07	16	180	12	18	12.5	15	7	21			
IA20R-SDZCR/L-11	20	200	18	17	15.5	18	7	26	DC..11T3..	MS4009A	TF15
IA25R-SDZCR/L-11	25	200	18	22	18	23	5	33			
IA32S-SDZCR/L-11	32	250	18	42	21.5	30	5	40			

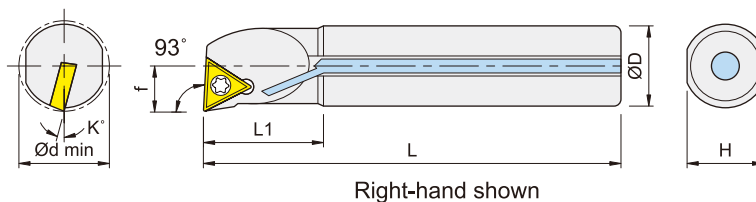


STUC

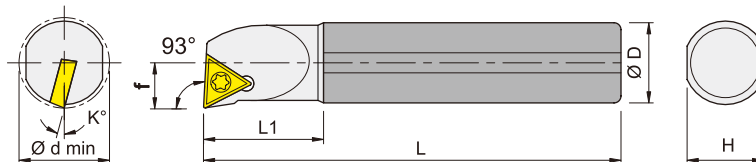
■ S..-STUCR/L-.. Steel shank



■ A..-STUCR/L-.. Steel shank+coolant hole





■ C..-STUCR/L-.. Carbide shank

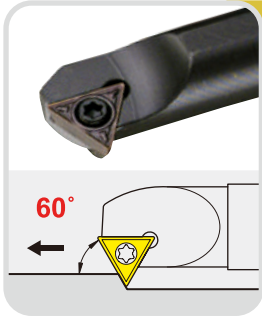


Item Code	Dimensions, mm							Insert	Screw 	Wrench
	D	L	L1	f	H	K	dmin			
IS08K-STUCR/L-09	8	125	18	5.5	7	15	10	TC..0902..	MS2205A	TF7
IS10K-STUCR/L-09	10	125	22	6	9	13	12			
IS10K-STUCR/L-09-D11	10	125	22	5.5	9	13	12			
IS12M-STUCR-09	12	150	26	8	11	10	16			
IS14M-STUCR-09	14	150	26	8	13	10	16			
IS10K-STUCR/L-11	10	125	22	6	9	13	12	TC..1102..	MS2506A	TF9
IS12M-STUCR/L-11	12	150	26	8	11	10	16			
IS12M-STUCR/L-11-D13	12	150	26	6.5	11	10	13			
IS16Q-STUCR/L-11	16	180	32	10	15	7	20			
IS16Q-STUCR/L-11-D18	16	180	32	9	15	7	18	TC..16T3..	MS4011A	TF15
IS20R-STUCR/L-16	20	200	36	13	18	7	25			
IS25R-STUCR/L-16	25	200	40	15	23	5	30			
IS32S-STUCR/L-16	32	250	48	20	30	5	38			
IS32T-STUCR/L-16	32	300	48	20	30	5	38			

Internal Turning Tools

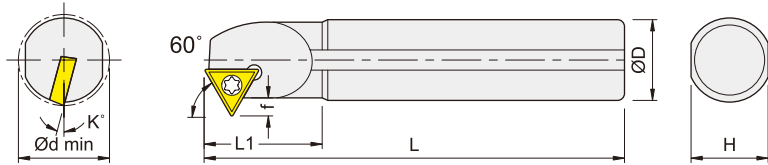
內徑車刀桿

Item Code	Dimensions, mm							Insert	Screw 	Wrench 
	D	L	L1	f	H	K	dmin			
IA08K-STUCR/L-09	8	125	18	5.5	7	15	10	TC..0902..	MS2205A	TF7
IA10K-STUCR/L-09	10	125	22	6	9	13	12		MS2206A	
IA10K-STUCR/L-11	10	125	22	6	9	13	12	TC..1102..	MS2506A	TF9
IA12M-STUCR/L-11	12	150	26	8	11	10	16			
IA16Q-STUCR/L-11	16	180	32	10	15	7	20			
IA20R-STUCR/L-16	20	200	36	13	18	7	25	TC..16T3..	MS4011A	TF15
IA25R-STUCR/L-16	25	200	40	15	23	5	30			
IA32S-STUCR/L-16	32	250	48	20	30	5	38			
IA32T-STUCR/L-16	32	300	48	20	30	5	38			
IC08K-STUCR/L-09	8	125	18	5.5	7.2	15	10	TC..0902..	MS2205A	TF7
IC10K-STUCR/L-09	10	125	22	6	9.2	13	12		MS2206A	
IC10K-STUCR/L-11	10	125	22	6	9.2	13	12	TC..1102..	MS2506A	TF9
IC12M-STUCR/L-11	12	150	26	8	11.2	10	16			
IC16R-STUCR/L-11	16	200	32	10	15.2	7	20			
IC16R-STUCR/L-11-D18	16	200	32	9	15.2	7	18			



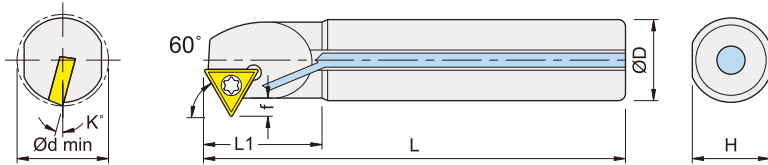
STWC

■ S...-STWCR/L... Steel shank



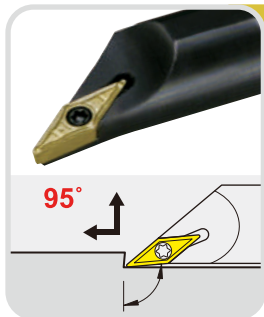
Right-hand shown

■ A...-STWCR/L... Steel shank+coolant hole



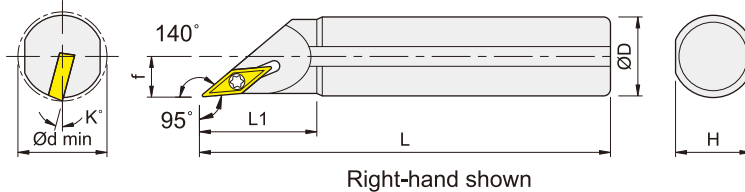
Right-hand shown

Item Code	Dimensions, mm							Insert	Screw	Wrench
	D	L	L1	f	H	K	dmin			
IS08K-STWCR/L-09	8	125	23	2	7	15	11	TC..0902..	MS2205A	TF7
IS10K-STWCR/L-11	10	125	23	2.5	9	15	13	TC..1102..	MS2506A	TF9
IS12M-STWCR/L-11	12	150	30	2.5	11	13	16			
IS16Q-STWCR/L-11	16	180	30	2.5	15	10	20			
IS20R-STWCR/L-11	20	200	40	2.5	18	7	25			
IS20R-STWCR/L-16	20	200	40	4.5	18	8	26			
IS25R-STWCR/L-16	25	200	45	4.5	23	6	30	TC..16T3..	MS4011A	TF15
IS32S-STWCR/L-16	32	250	45	4.5	30	4	40	TC..1102..	MS2506A	TF9
IA10K-STWCR/L-11	10	125	23	2.5	9	15	13			
IA12M-STWCR/L-11	12	150	30	2.5	11	13	16			
IA16Q-STWCR/L-11	16	180	30	2.5	15	10	20			
IA20R-STWCR/L-11	20	200	40	2.5	18	7	25			
IA20R-STWCR/L-16	20	200	40	4.5	18	8	26	TC..16T3..	MS4011A	TF15
IA25R-STWCR/L-16	25	200	45	4.5	23	6	30			
IA32S-STWCR/L-16	32	250	45	4.5	30	4	40			

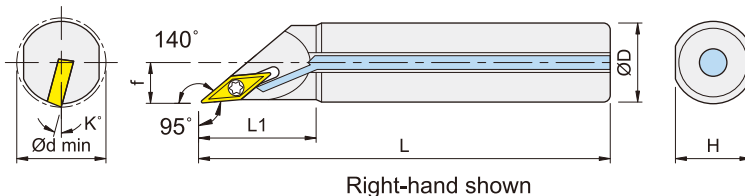




SVJB

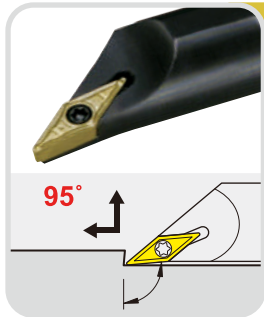
■ S..-SVJBR/L-.. Steel shank



■ A..-SVJBR/L-.. Steel shank+coolant hole

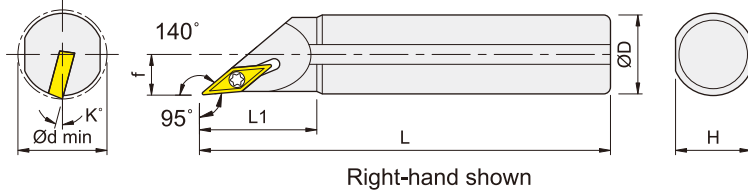


Item Code	Dimensions, mm							Insert	Screw 	Wrench 
	D	L	L1	f	H	K	dmin			
IS16Q-SVJBR/L-16	16	180	38	9.5	15	7	19	VB..1604..	MS3509B	TF15
IS20R-SVJBR/L-16	20	200	42	11.5	18	7	23			
IS25R-SVJBR/L-16	25	200	45	14	23	5	28			
IS32S-SVJBR/L-16	32	250	50	17.5	30	4	35			
IA16Q-SVJBR/L-16	16	180	38	9.5	15	7	19	VB..1604..	MS3509B	TF15
IA20R-SVJBR/L-16	20	200	42	11.5	18	7	23			
IA25R-SVJBR/L-16	25	200	45	14	23	5	28			
IA32S-SVJBR/L-16	32	250	50	17.5	30	4	35			

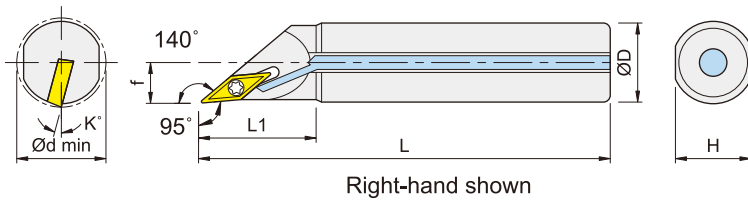


SVJC

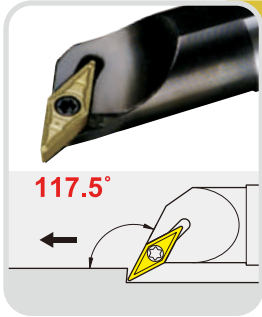
■ S..-SVJCR/L-.. Steel shank



■ A..-SVJCR/L-.. Steel shank+coolant hole

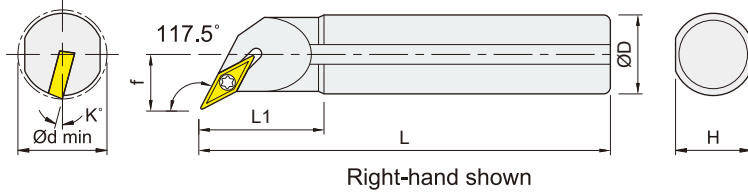


Item Code	Dimensions, mm							Insert	Screw 	Wrench
	D	L	L1	f	H	K	dmin			
IS10K-SVJCR/L-11	10	125	25	6	9	13	12	VC..1103..	MS2506A	TF9
IS12M-SVJCR/L-11	12	150	30	7	11	10	14			
IS16Q-SVJCR/L-11	16	180	38	9.5	15	7	19			
IS20R-SVJCR/L-11	20	200	42	11.5	18	7	23			
IA10K-SVJCR/L-11	10	125	25	6	9	13	12			
IA12M-SVJCR/L-11	12	150	30	7	11	10	14			
IA16Q-SVJCR/L-11	16	180	38	9.5	15	7	19			
IA20R-SVJCR/L-11	20	200	42	11.5	18	7	23			

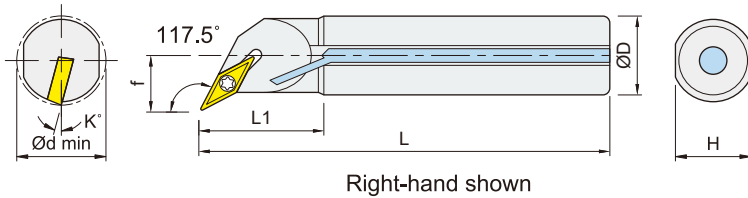


SVQB

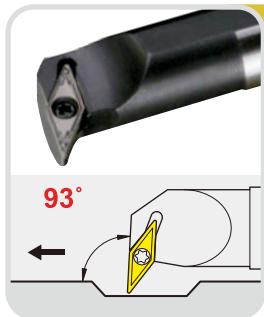
■ S..SVQB/CR/L.. Steel shank



■ A..SVQB/CR/L.. Steel shank+coolant hole

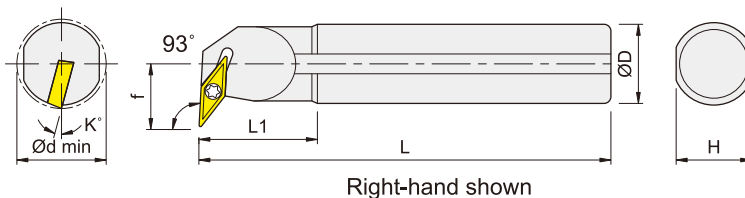


Item Code	Dimensions, mm							Insert	Shim	Screw	Wrench	Screw	Wrench
	D	L	L1	f	H	K	dmin						
IS25R-SVQBR/L-16	25	200	45	17	23	5	32	VB..1604..	--	--	--	MS3509B	TF15
IS32S-SVQBR/L-16	32	250	48	20	30	5	40		VSS322	MDS5035	PL35	MS3512B	
IS40T-SVQBR/L-16	40	300	60	25.5	37	5	50		--	--	--	MS3509B	
IA25R-SVQBR/L-16	25	200	45	17	23	5	32		VSS322	MDS5035	PL35	MS3512B	
IA32S-SVQBR/L-16	32	250	48	20	30	5	40		--	--	--	MS3509B	
IS12M-SVQCR/L-11	12	150	28	9	11	10	16	VC..1103..	--	--	--	MS2506A	TF9
IS16Q-SVQCR/L-11	16	180	35	11	15	7	20		--	--	--	MS2506A	
IS20R-SVQCR/L-11	20	200	40	13	18	7	25		--	--	--	MS2506A	
IA16Q-SVQCR/L-11	16	180	35	11	15	7	20		--	--	--	MS2506A	
IA25R-SVQCR/L-16	20	200	40	13	18	7	25		--	--	--	MS2506A	

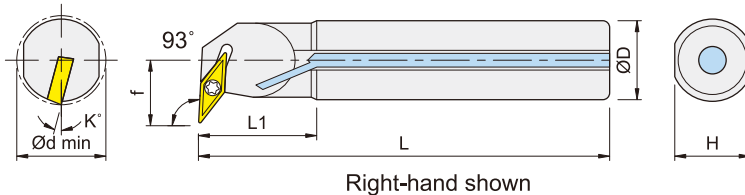


SVUB

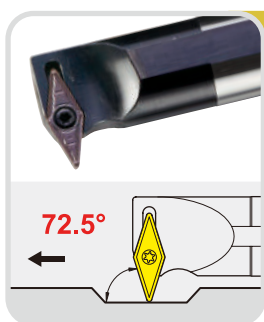
■ S..-SVUBR/L-.. Steel shank



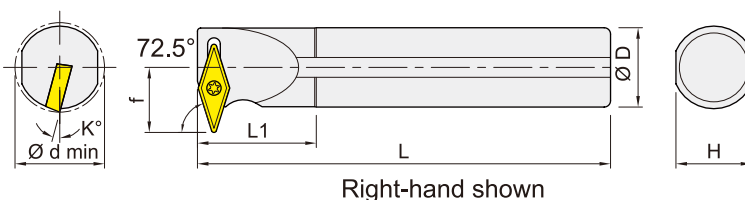
■ A..-SVUBR/L-.. Steel shank+coolant hole



Item Code	Dimensions, mm							Insert	Shim	Screw	Wrench	Screw	Wrench
	D	L	L1	f	H	K	dmin						
IS25R-SVUBR/L-16	25	200	45	18	23	5	32	VB..1604..	--	--	--	MS3509B	TF15
IS32S-SVUBR/L-16	32	250	50	22	30	5	40		VSS322	MDS5035	PL35	MS3512B	
IS40T-SVUBR/L-16	40	300	55	27	37	5	50		--	--	--	MS3509B	
IA25R-SVUBR/L-16	25	200	45	18	23	5	32	VC..1103..	--	--	--	MS2506A	TF9
IS16Q-SVUCR/L-11	16	180	30	13	15	7	22						
IS20R-SVUCR/L-11	20	200	40	15	18	7	27						
IA16Q-SVUCR/L-11	16	180	30	13	15	7	22						
IA20R-SVUCR/L-11	20	200	40	15	18	7	27						



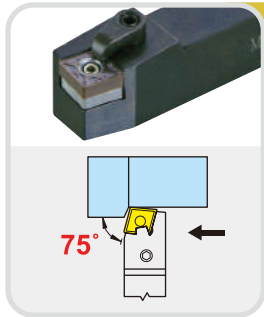
SVVB



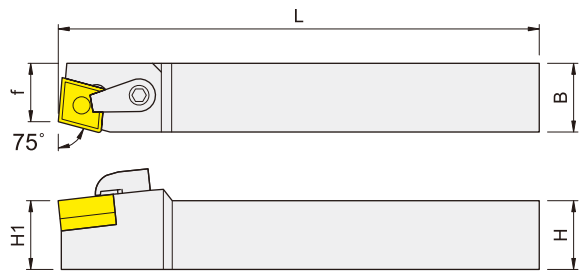
Item Code	Dimensions, mm							Insert	Shim	Screw	Wrench	Screw	Wrench
	D	L	L1	f	H	K	dmin						
IS25R-SVVB/L-16	25	200	45	20.5	23	5	34	VB..1604..	--	--	--	MS3509B	TF15
IS25S-SVVB/L-16	25	250	45	20.5	23	5	34						
IS32S-SVVB/L-16	32	250	50	25	30	5	42	VB..1604..	VSS322	MDS5035	PL35	MS3512B	TF15

External Turning Tools

外徑車刀桿

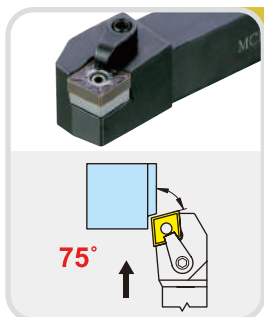


MCBN

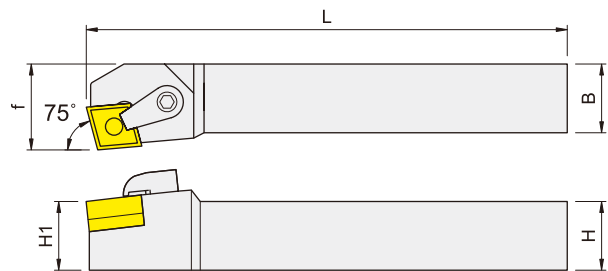


Right-hand shown

Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f							
IMCBNR/L-2020K-12	20	20	125	20	17	CN..1204..	MLP46	CMS432	PL25	MS625	MC620	PL30
IMCBNR/L-2525M-12	25	25	150	25	22					MS630		
IMCBNR/L-3232P-12	32	32	170	32	29							



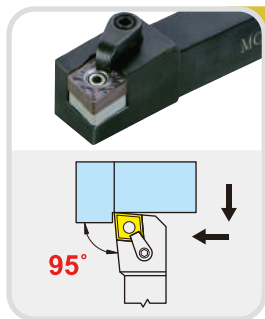
MCKN



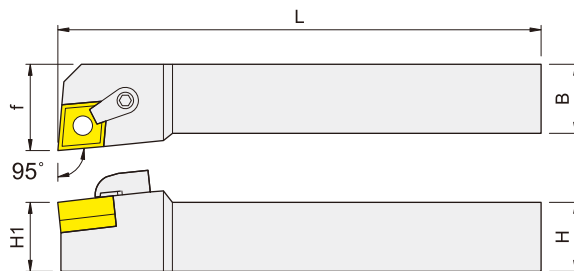
Right-hand shown

Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f							
IMCKNR/L-1616K-12	16	16	125	16	20	CN..1204..	MLP46	CMS432	PL25	MS625	MC620	PL30
IMCKNR/L-2020K-12	20	20	125	20	25					MS630		
IMCKNR/L-2525M-12	25	25	150	25	32							
IMCKNR/L-3232P-12	32	32	170	32	40							

Turning Inserts & Tools

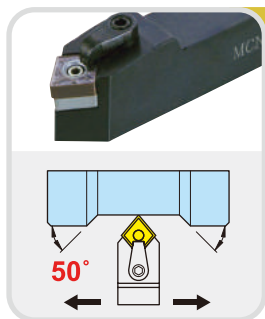


MCLN

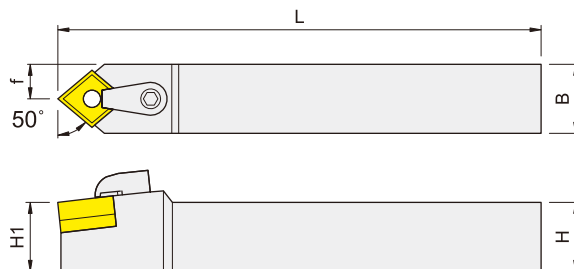


Right-hand shown

Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f							
IMCLNR/L-1616K-12	16	16	125	16	20	CN..1204..	MLP46	CMS432	PL25	MS625	MC620	PL30
IMCLNR/L-2020K-12	20	20	125	20	25							
IMCLNR/L-2525M-12	25	25	150	25	32							
IMCLNR/L-3232P-12	32	32	170	32	40							



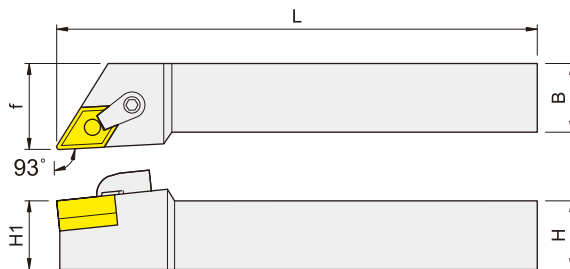
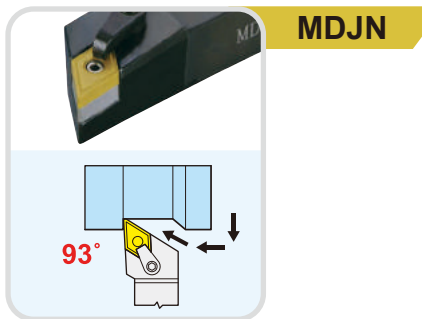
MCNN



Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f							
IMCNNN-1616K-12	16	16	125	16	8	CN..1204..	MLP46	CMS432	PL25	MS625	MC620	PL30
IMCNNN-2020K-12	20	20	125	20	10							
IMCNNN-2525M-12	25	25	150	25	12.5							
IMCNNN-3232P-12	32	32	170	32	16							

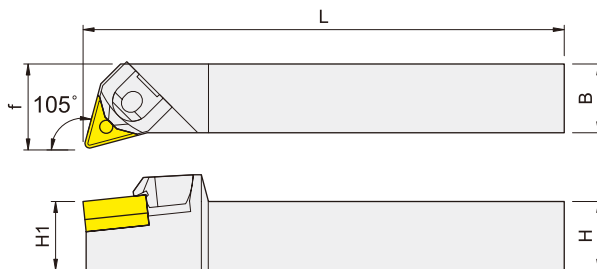
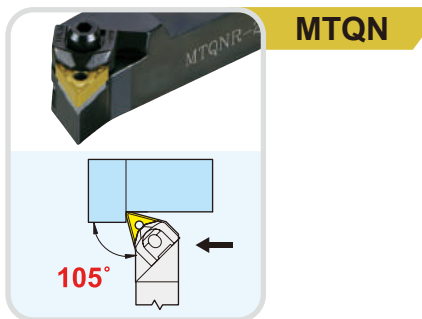
External Turning Tools

外徑車刀桿



Right-hand shown

Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f							
IMDJNR/L-2020K-15	20	20	125	20	25	DN..1504..	MLP46L	DMS442	PL25	MS625	MC622	PL30
IMDJNR/L-2525M-15	25	25	150	25	32					MS630		
IMDJNR/L-2020K-1506	20	20	125	20	25	DN..1506..	MLP46L	DMS432	PL25	MS625	MC622	PL30
IMDJNR/L-2525M-1506	25	25	150	25	32					MS630		



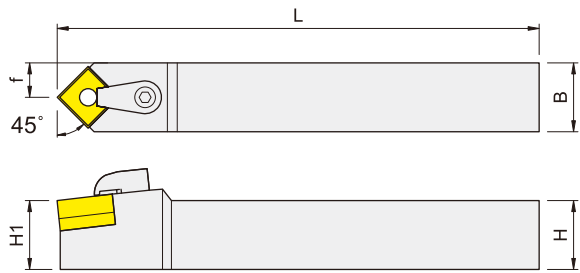
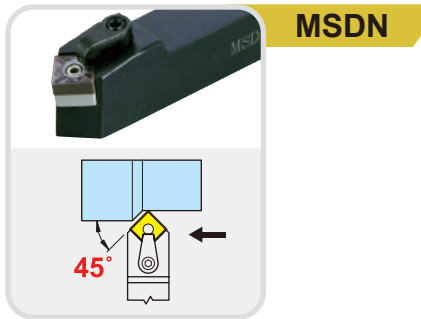
Right-hand shown

Item Code	Dimensions, mm					Insert	Pin	Screw	Wrench	Shim	Clamp	Wrench
	H	B	L	L1	f							
IMTQNR/L-2020K-16	20	20	125	20	25	TN..1604..	MCP3	MCS3S-11	PL30	TWS322	MCW3-P40	PL40
IMTQNR/L-2525K-16	25	25	150	25	32							

Turning Inserts & Tools

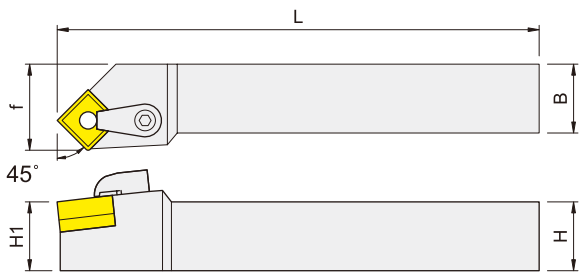
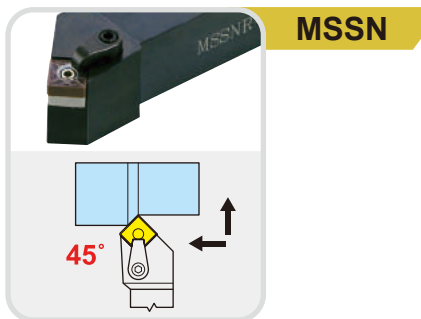
External Turning Tools

外徑車刀桿



Right-hand shown

Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f							
IMSDNN-2020K-12	20	20	125	20	10	SN..1204..	MLP46	SMS432	PL25	MS625	MC620	PL30
IMSDNN-2525M-12	25	25	150	25	12.5					MS630		

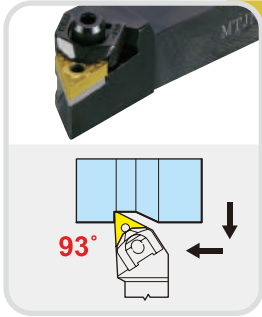


Right-hand shown

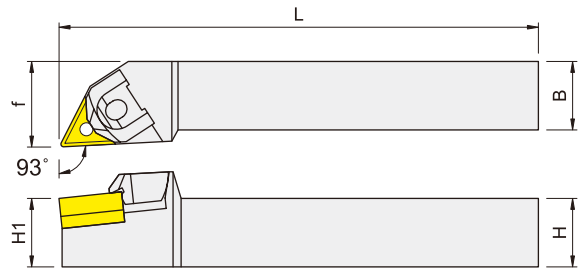
Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f							
IMSSNR-1616K-12	16	16	125	16	20	SN..1204..	MLP46	SMS432	PL25	MS625	MC620	PL30
IMSSNR/L-2020K-12	20	20	125	20	25					MS630		
IMSSNR/L-2525M-12	25	25	150	25	32					MS630		

External Turning Tools

外徑車刀桿

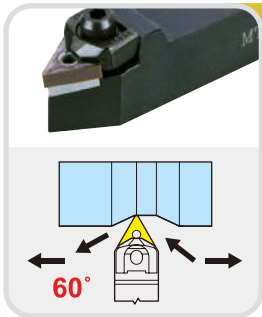


MTJN

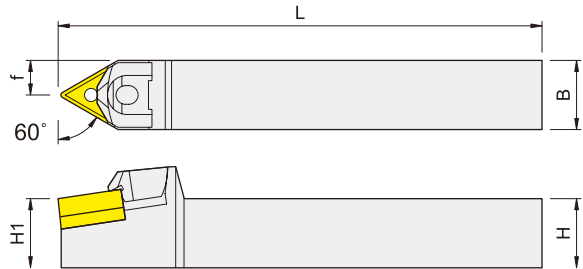


Right-hand shown

Item Code	Dimensions, mm					Insert	Pin	Screw	Wrench	Shim	Clamp	Wrench
	H	B	L	L1	f							
IMTJNR/L-1216K-16	12	16	125	16	21	TN..1604..	MCP3	MCS3S-11	PL30	TWS322	MCW3-P40	PL40
IMTJNR/L-1616K-16	16	16	125	16	21							
IMTJNR/L-2020K-16	20	20	125	20	25							
IMTJNR/L-2525M-16	25	25	150	25	32							
IMTJNR/L-3232P-16	32	32	170	32	40							



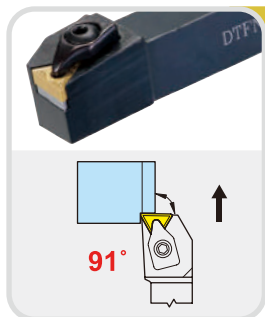
MTEN



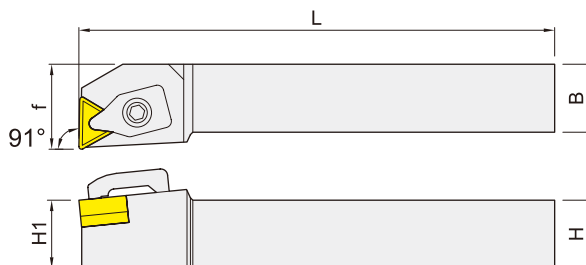
Item Code	Dimensions, mm					Insert	Pin	Screw	Wrench	Shim	Clamp	Wrench
	H	B	L	L1	f							
IMTENN-1216K-16	12	16	125	16	8	TN..1604..	MCP3	MCS3S-08	PL30	TWS322	MCW3-P40	PL40
IMTENN-1616K-16	16	16	125	16	8							
IMTENN-2020K-16	20	20	125	20	10							
IMTENN-2525M-16	25	25	150	25	12.5							

External Turning Tools

外徑車刀桿

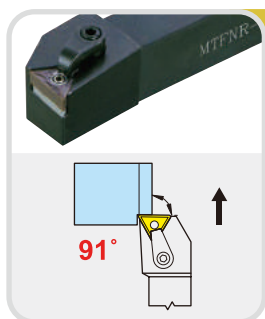


DTFN

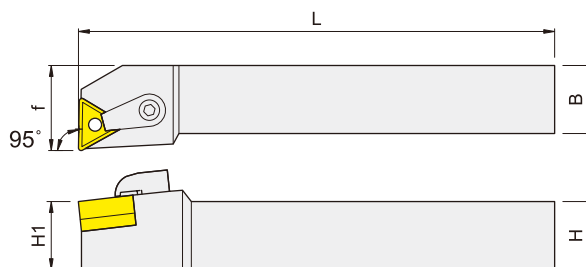


Right-hand shown

Item Code	Dimensions, mm					Insert	Shim	Screw	Wrench	Clamp	Wrench
	H	B	L	L1	f						
IDTFNR/L-1616K-16	16	16	125	16	20	TN..1604..	TWS322	MS4008ES	PL25	MCD324	PL40
IDTFNR/L-2020K-16	20	20	125	20	25						
IDTFNR/L-2525M-16	25	25	150	25	32						

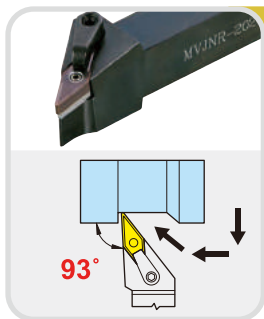


MTFN

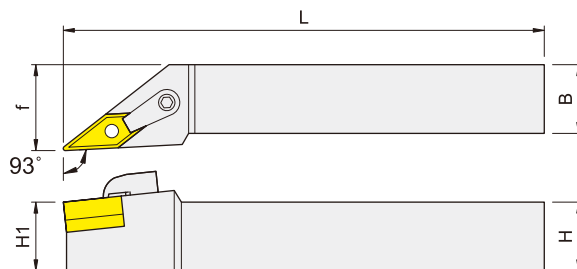


Right-hand shown

Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f							
IMTFNR-1616K-16	16	16	125	16	20	TN..1604..	MLP34L	TMS322	PL20	MS625	MC620	PL30
IMTFNR-2020K-16	20	20	125	20	25							
IMTFNR-2525M-16	25	25	150	25	32							

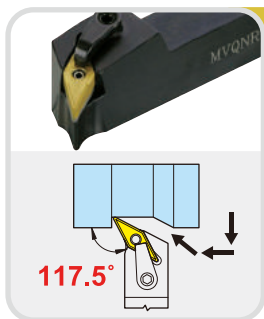


MVJN

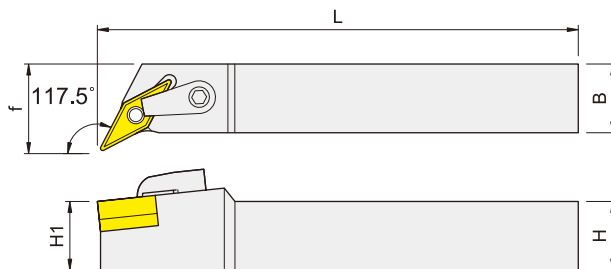


Right-hand shown

Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f							
IMVJNR/L-1616K-16	16	16	125	16	21	VN..1604..	MLP34L	VMS322	PL20	MS625	MC622	PL30
IMVJNR/L-2020K-16	20	20	125	20	25					MS630		
IMVJNR/L-2525M-16	25	25	150	25	32							



MVQN

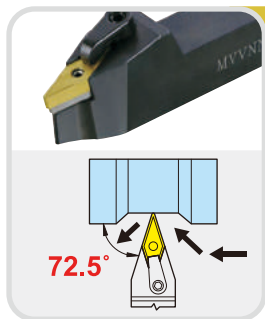


Right-hand shown

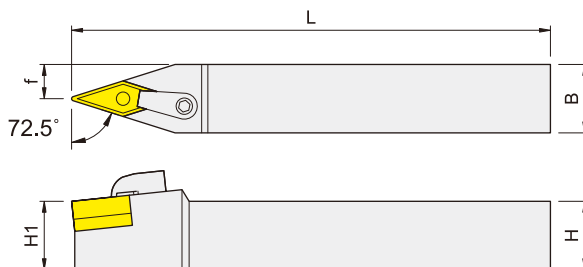
Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f							
IMVQNR/L-2020K-16	20	20	125	20	25	VN..1604..	MLP34L	VMS322	PL20	MS625	MC622	PL30
IMVQNR/L-2525M-16	25	25	150	25	32					MS630		

External Turning Tools

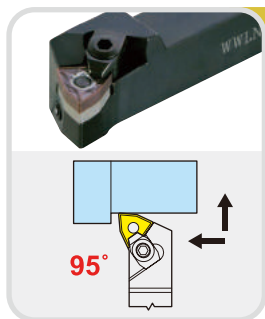
外徑車刀桿



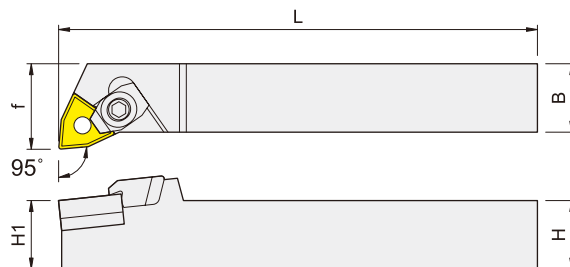
MVVN



Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f							
IMVVNN-1616K-16	16	16	125	16	8	VN..1604..	MLP34L	VMS322	PL20	MS625	MC622	PL30
IMVVNN-2020K-16	20	20	125	20	10					MS630		
IMVVNN-2525M-16	25	25	150	25	12.5							



WWLN



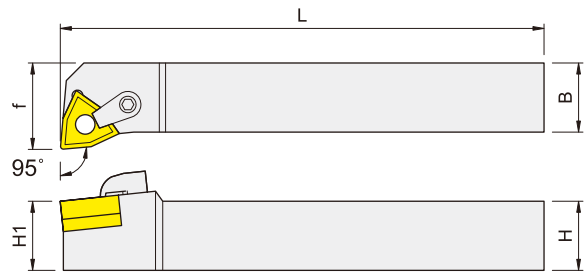
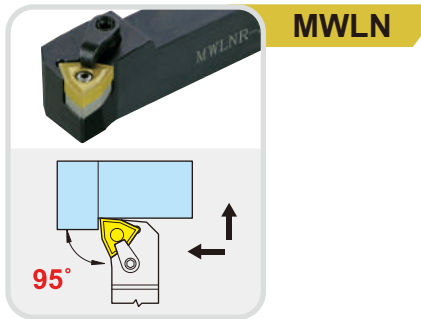
Right-hand shown

Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Clamp	Wrench
	H	B	L	L1	f						
IWWLNL-2020K-08	20	20	125	20	25	WN..0804..	SCO418	WMS432	PL30	WCW6-P4	PL40
IWWLNL-2525M-08	25	25	150	25	32						

Item Code	Dimensions, mm					Insert	Pin	Screw	Wrench	Shim	Clamp	Wrench
	H	B	L	L1	f							
IWWLNR-2020K-08	20	20	125	20	25	WN..0804..	MCP4	MCS3S-08	PL30	WMS432	WCW6-P4	PL40
IWWLNR-2525M-08	25	25	150	25	32							

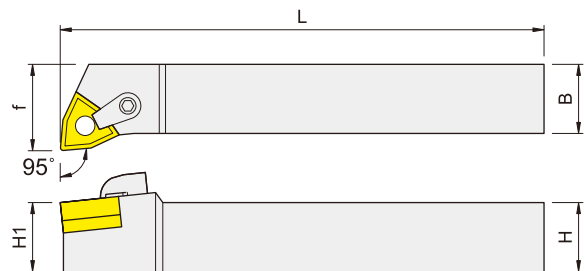
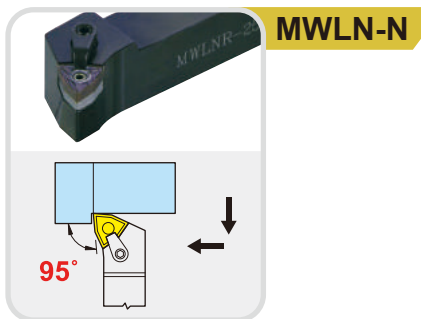
External Turning Tools

外徑車刀桿



Right-hand shown

Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f							
IMWLN/L-2020K-08	20	20	125	20	25	WN..0804..	MLP46	WMS432	PL25	MS625	MC620	PL30
IMWLN/L-2525M-08	25	25	150	25	32					MS630		



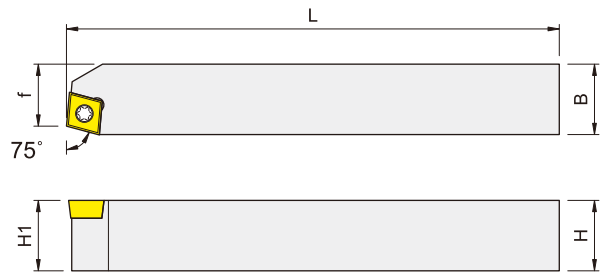
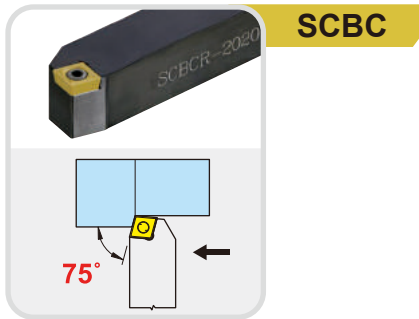
Right-hand shown

Item Code	Dimensions, mm					Insert	Pin	Shim	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f							
IMWLN/L-2020K-08N	20	20	125	20	25	WN..0804..	MLP46	WMS432	PL25	MS625	MC620	PL30
IMWLN/L-2525M-08N	25	25	150	25	32					MS630		

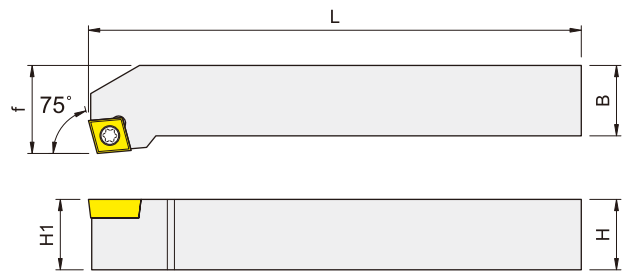
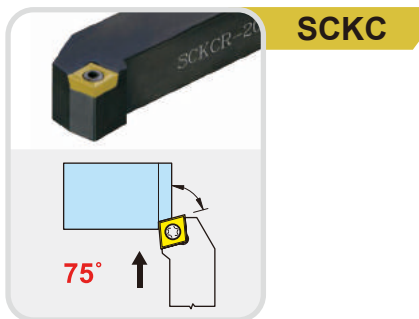
Turning Inserts & Tools

External Turning Tools

外徑車刀桿



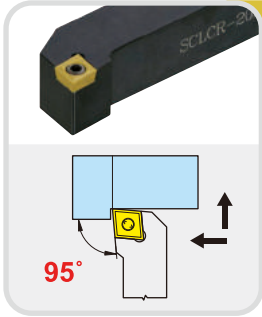
Item Code	Dimensions, mm					Insert	Clamp 	Wrench
	H	B	L	L1	f			
ISBCBR/L-2020K-09	20	20	125	20	17.5	CC..09T3..	MS4011A	TF15



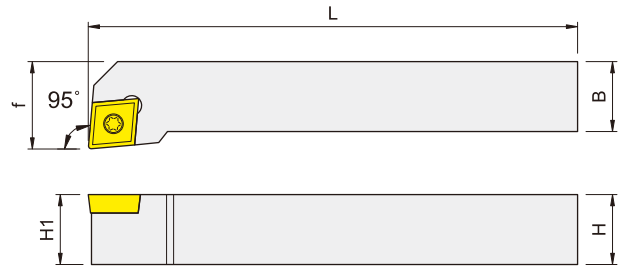
Item Code	Dimensions, mm					Insert	Clamp 	Wrench
	H	B	L	L1	f			
ISCKCR/L-1212K-09	12	12	125	12	16	CC..09T3..	MS4011A	TF15
ISCKCR/L-1616K-09	16	16	125	16	20			
ISCKCR/L-2020K-09	20	20	125	20	25			
ISCKCR/L-2525M-09	25	25	150	25	32			

External Turning Tools

外徑車刀桿

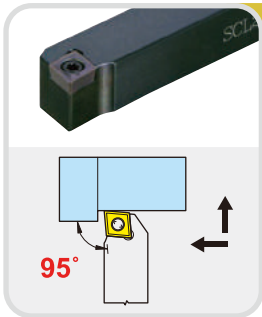


SCLC

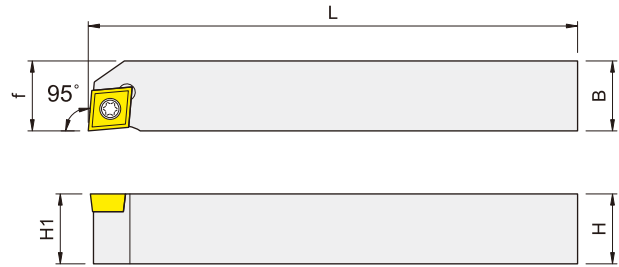


Right-hand shown

Item Code	Dimensions, mm					Insert	Clamp 	Wrench
	H	B	L	L1	f			
ISCLCR/L-1010H-06	10	10	100	10	12	CC..0602..	MS2506A	TF9
ISCLCR/L-1010K-06	10	10	125	10	12			
ISCLCR/L-1212H-09	12	12	100	12	16	CC..09T3..	MS4011A	TF15
ISCLCR/L-1212K-09	12	12	125	12	16			
ISCLCR/L-1616K-09	16	16	125	16	20			
ISCLCR/L-2020K-09	20	20	125	20	25			
ISCLCR/L-2525M-09	25	25	150	25	32	CC..1204..	MS5011A	TF20
ISCLCR/L-2020K-12	20	20	125	20	25			
ISCLCR/L-2525K-12	25	25	150	25	32			

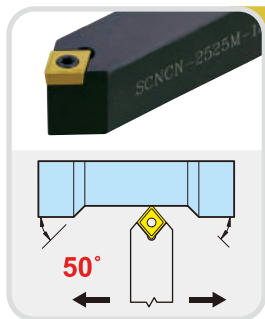


SCL2C

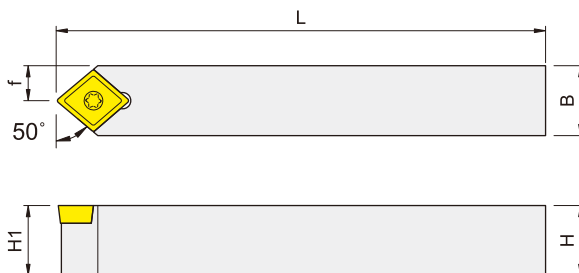


Right-hand shown

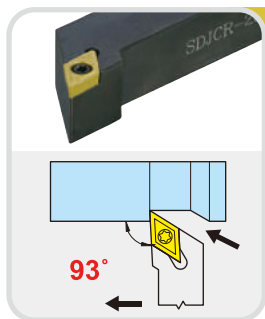
Item Code	Dimensions, mm					Insert	Clamp 	Wrench
	H	B	L	L1	f			
ISCL2CR/L-1010H-06	10	10	100	10	10	CC..0602..	MS2506A	TF9
ISCL2CR/L-1212H-09	12	12	100	12	12			
ISCL2CR/L-1616K-09	16	16	125	16	16	CC..09T3..	MS4011A	TF15
ISCL2CR/L-2020K-09	20	20	125	20	25			



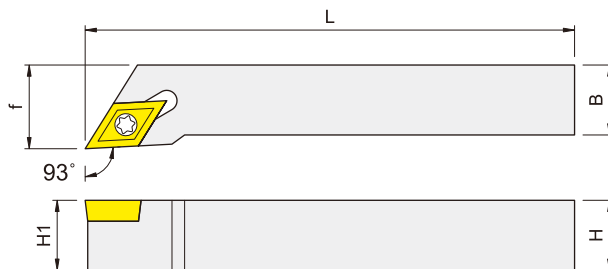
SCNC



Item Code	Dimensions, mm					Insert	Clamp	Wrench
	H	B	L	L1	f			
ISCNCN-1616K-06	16	16	125	16	8	CC..0602..	MS2506A	TF9
ISCNCN-1212K-09	12	12	125	12	6	CC..09T3..	MS4011A	TF15
ISCNCN-1616K-09	16	16	125	16	8			
ISCNCN-2020K-09	20	20	125	20	10			
ISCNCN-2525M-09	25	25	150	25	12.5			
ISCNCN-2020K-12	20	20	125	20	10	CC..1204..	MS5011A	TF20
ISCNCN-2525M-12	25	25	150	25	12.5			



SDJC

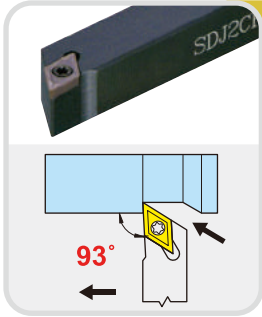


Right-hand shown

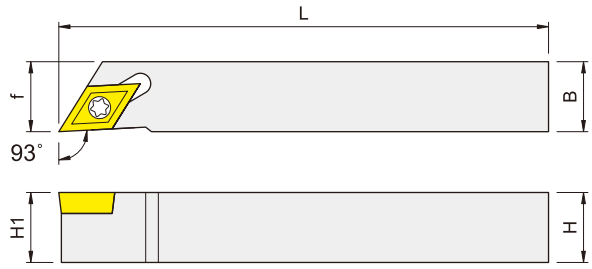
Item Code	Dimensions, mm					Insert	Clamp	Wrench
	H	B	L	L1	f			
ISDJCR/L-1010H-07	10	10	100	10	12	DC..0702..	MS2506A	TF9
ISDJCR/L-1212H-07	12	12	100	12	16			
ISDJCR/L-1212K-07	12	12	125	12	16			
ISDJCR/L-1616K-07	16	16	125	16	20			
ISDJCR/L-2020K-07	20	20	125	20	25	DC..11T3..	MS4009A	TF15
ISDJCR/L-1212H-11	12	12	100	12	16			
ISDJCR/L-1212K-11	12	12	125	12	16			
ISDJCR/L-1616K-11	16	16	125	16	20			
ISDJCR/L-2020K-11	20	20	125	20	25			
ISDJCR/L-2525M-11	25	25	150	25	32			

External Turning Tools

外徑車刀桿

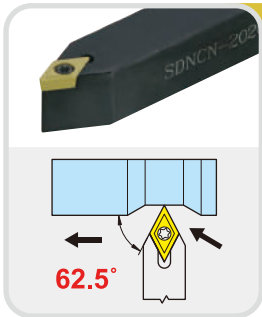


SDJ2C

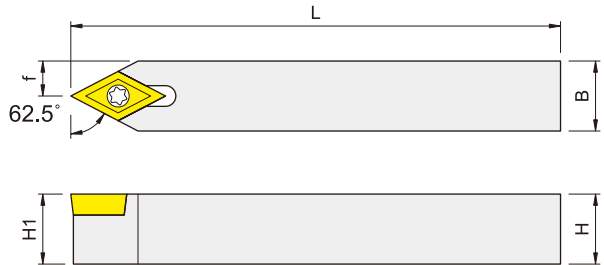


Right-hand shown

Item Code	Dimensions, mm					Insert	Clamp 	Wrench
	H	B	L	L1	f			
ISDJ2CR/L-1010H-07	10	10	100	10	10	DC..0702..	MS2506A	TF9
ISDJ2CR/L-1212H-07	12	12	100	12	12			
ISDJ2CR/L-1212K-07	12	12	125	12	12			
ISDJ2CR/L-1616K-07	16	16	125	16	16			
ISDJ2CR/L-2020K-07	20	20	125	20	20			
ISDJ2CR/L-2525M-07	25	25	150	25	25			
ISDJ2CR-1010H-11	10	10	100	10	10	DC..11T3..	MS4009A	TF15
ISDJ2CR-1010K-11	10	10	125	10	10			
ISDJ2CR/L-1212H-11	12	12	100	12	12			
ISDJ2CR/L-1616K-11	16	16	125	16	16			
ISDJ2CR/L-2020K-11	20	20	125	20	20			
ISDJ2CR/L-2525M-11	25	25	150	25	25			
ISDJ2CR/L-3232P-11	32	32	170	32	32			



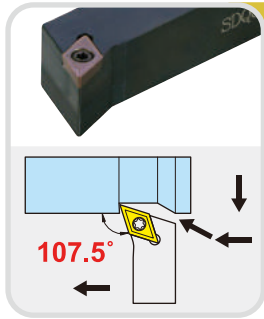
SDNC



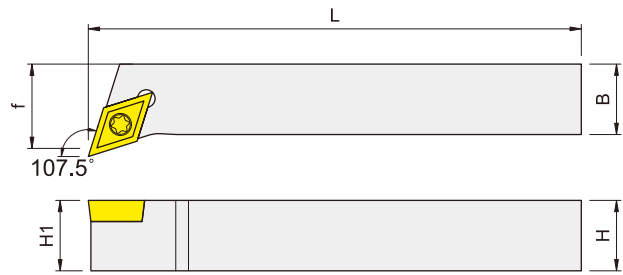
Item Code	Dimensions, mm					Insert	Clamp 	Wrench
	H	B	L	L1	f			
ISDNCN-1010H-07	10	10	100	10	5	DC..0702..	MS2506A	TF9
ISDNCN-1212H-07	12	12	100	12	6			
ISDNCN-1616K-07	16	16	125	16	8			
ISDNCN-1212H-11	12	12	100	12	6	DC..11T3..	MS4009A	TF15
ISDNCN-1212K-11	12	12	125	12	6			
ISDNCN-1616K-11	16	16	125	16	8			
ISDNCN-2020K-11	20	20	125	20	10			
ISDNCN-2525M-11	25	25	150	25	12.5			

External Turning Tools

外徑車刀桿

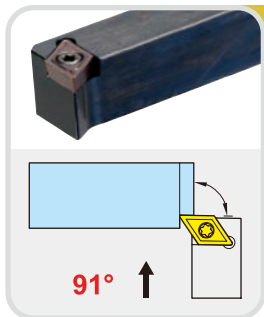


SDQC

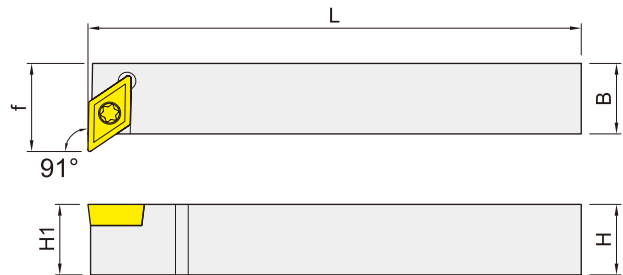


Right-hand shown

Item Code	Dimensions, mm					Insert	Clamp 	Wrench
	H	B	L	L1	f			
ISDQCR/L-1212H-11	12	12	100	12	16	DC..11T3..	MS4009A	TF15
ISDQCR/L-1616K-11	16	16	125	16	20			
ISDQCR/L-2020K-11	20	20	125	20	25			
ISDQCR/L-2525M-11	25	25	150	25	32			



SDFC

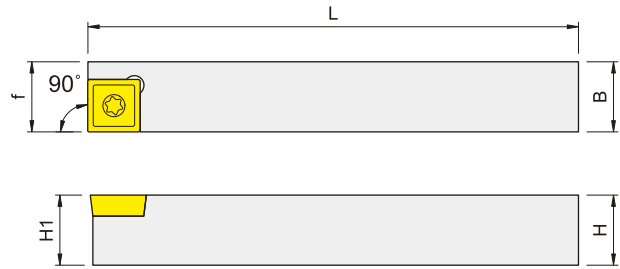
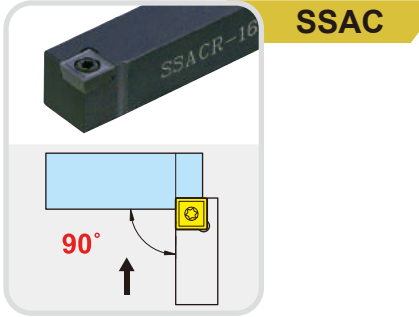


Right-hand shown

Item Code	Dimensions, mm					Insert	Clamp 	Wrench
	H	B	L	L1	f			
ISDFCR/L-1212K-07	12	12	125	12	16	DC..0702..	MS2506A	TF9
ISDFCR/L-1212K-11	12	12	125	12	19	DC..11T3..	MS4009A	TF15
ISDFCR/L-1616K-11	16	16	125	16	20			

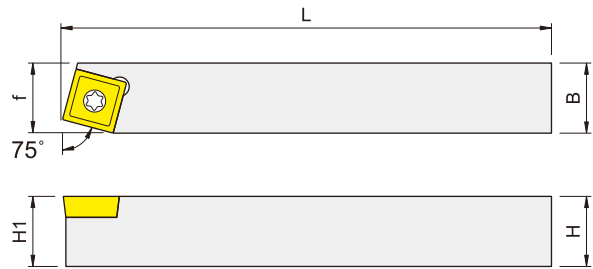
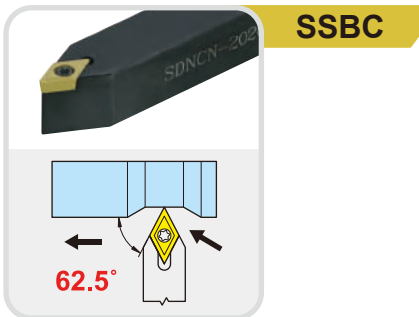
External Turning Tools

外徑車刀桿



Right-hand shown

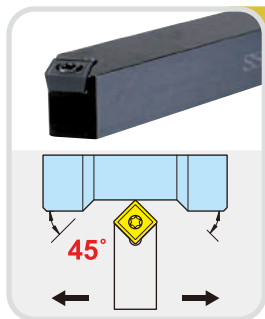
Item Code	Dimensions, mm					Insert	Clamp 	Wrench
	H	B	L	L1	f			
ISSACR/L-3.4H-09	9.5	12.7	100	9.5	12.7	SC..09T3..	MS4009A	TF15
ISSACR/L-4.4H-09	12.7	12.7	100	12.7	12.7		MS4011A	TF15
ISSACR-1212H-09	12	12	100	12	12			
ISSACR/L-1616K-09	16	16	125	16	16			



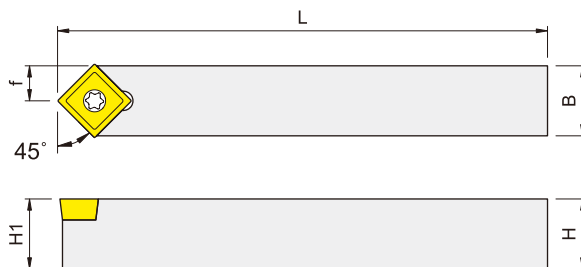
Right-hand shown

Item Code	Dimensions, mm					Insert	Clamp 	Wrench
	H	B	L	L1	f			
ISSBCR/L-3.4H-09	9.5	12.7	100	9.5	12.7	SC..09T3..	MS4009A	TF15
ISSBCR/L-4.4H-09	12.7	12.7	100	12.7	12.7		MS4011A	TF15
ISSBCR/L-1212H-09	12	12	100	12	12			

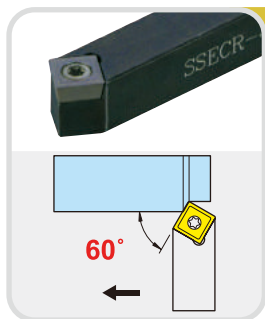
Turning Inserts & Tools



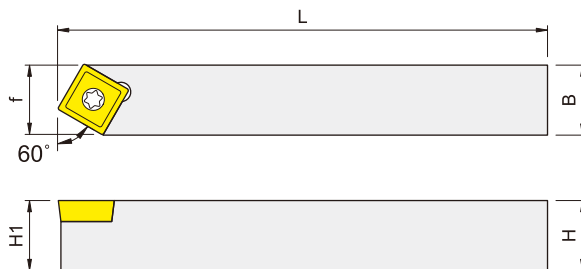
SSDC



Item Code	Dimensions, mm					Insert	Clamp	Wrench
	H	B	L	L1	f			
ISSDCN-3.4H-09	9.5	12.7	100	9.5	6.35	SC..09T3..	MS4009A	TF15
ISSDCN-4.4H-09	12.7	12.7	100	12.7	6.35	SC..09T3..	MS4011A	TF15
ISSDCN-1212H-09	12	12	100	12	6			
ISSDCN-1616K-09	16	16	125	16	8			
ISSDCN-2020K-09	20	20	125	20	10			
ISSDCN-2525M-09	25	25	150	25	12.5			

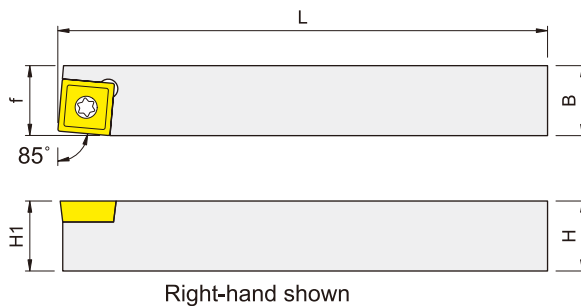
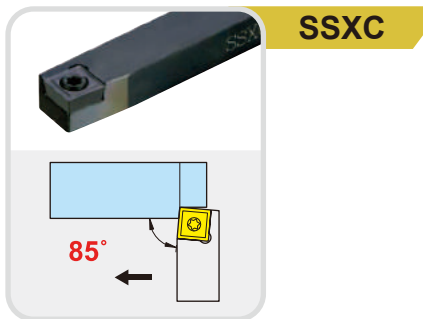




SSEC

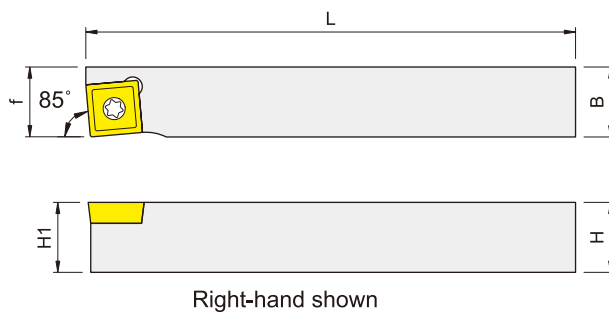
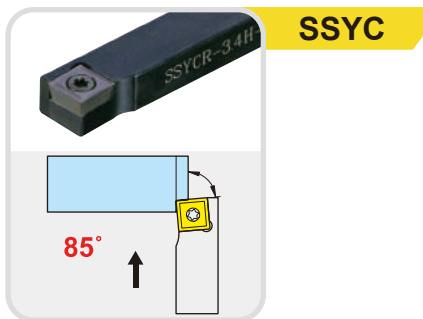




Right-hand shown

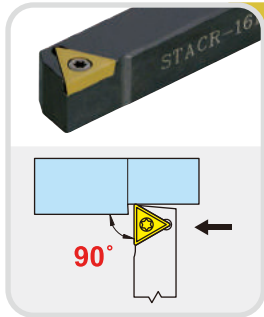
Item Code	Dimensions, mm					Insert	Clamp	Wrench
	H	B	L	L1	f			
ISSECR/L-3.4H-09	9.5	12.7	100	9.5	12.7	SC..09T3..	MS4009A	TF15
ISSECR/L-4.4H-09	12.7	12.7	100	12.7	12.7	SC..09T3..	MS4011A	TF15
ISSECR/L-1212H-09	12	12	100	12	12			



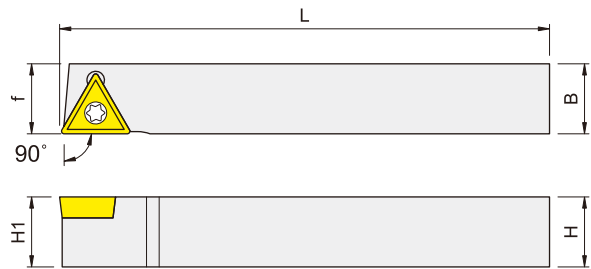
Item Code	Dimensions, mm					Insert	Clamp 	Wrench 
	H	B	L	L1	f			
ISSXCR-3.4H-09	9.5	12.7	100	9.5	12.7	SC..09T3..	MS4009A	TF15



Item Code	Dimensions, mm					Insert	Clamp 	Wrench 
	H	B	L	L1	f			
ISSYCR/L-3.4H-09	9.5	12.7	100	9.5	12.7	SC..09T3..	MS4009A	TF15

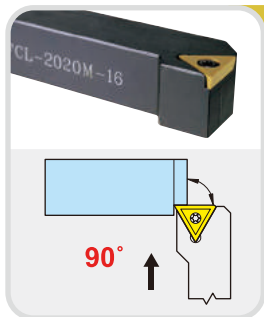


STAC

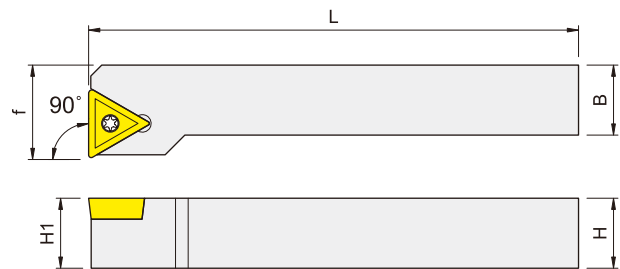


Right-hand shown

Item Code	Dimensions, mm					Insert	Clamp 	Wrench
	H	B	L	L1	f			
ISTACR-1010H-11	10	10	100	10	10	TC..1102..	MS2506A	TF9
ISTACR-1212H-11	12	12	100	12	12			
ISTACR-1616K-11	16	16	125	16	16			
ISTACR-3.4H-11	9.5	12.7	100	9.5	12.7			
ISTACR-4.4H-11	12.7	12.7	100	12.7	12.7			
ISTACR-1616K-16	16	16	125	16	16	TC..16T3..	MS4011A	TF15



STFC

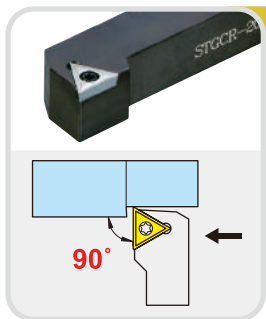


Right-hand shown

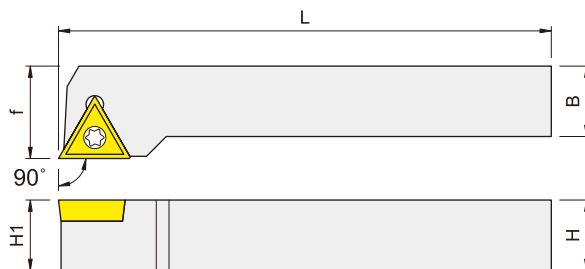
Item Code	Dimensions, mm					Insert	Clamp 	Wrench
	H	B	L	L1	f			
ISTFCR/L-2020K-16	20	20	125	20	25	TC..16T3..	MS4011A	TF15
ISTFCR/L-2525M-16	25	25	150	25	32			

External Turning Tools

外徑車刀桿

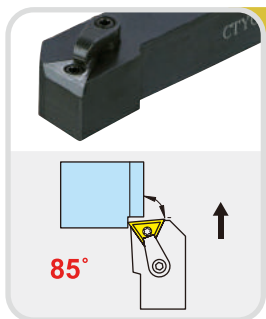


STGC

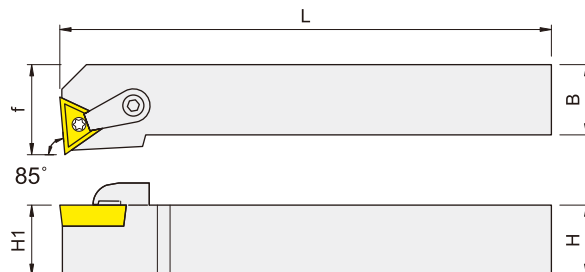


Right-hand shown

Item Code	Dimensions, mm					Insert	Clamp 	Wrench
	H	B	L	L1	f			
ISTGCR-1212H-16	12	12	100	12	16	TC..16T3..	MS4011A	TF15
ISTGCR-1616K-16	16	16	125	16	20			
ISTGCR-2020K-16	20	20	125	20	25			
ISTGCR-2525M-16	20	25	150	25	32			

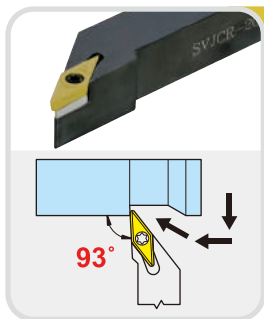


CTYC

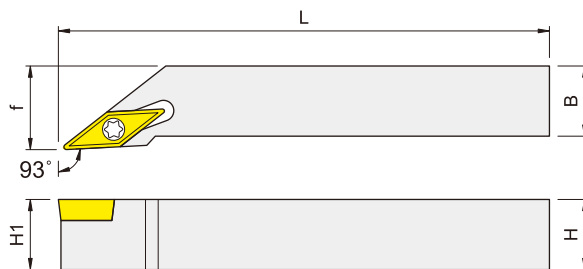


Right-hand shown

Item Code	Dimensions, mm					Insert	Screw 	Wrench 	Screw 	Clamp 	Wrench
	H	B	L	L1	f						
ICTYCR/L-2020K-16	20	20	125	20	25	TC..16T3..	MS4011A	TF15	MS625	MC620	PL30

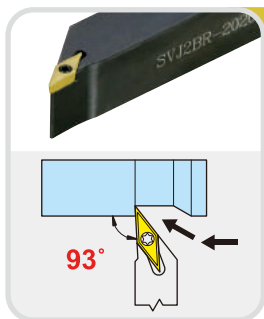


SVJB

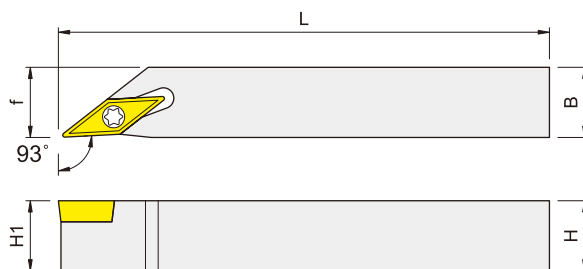


Right-hand shown

Item Code	Dimensions, mm					Insert	Shim	Screw	Wrench	Screw	Wrench
	H	B	L	L1	f						
ISVJBR/L-1616K-16	16	16	125	16	20	VB..1604..	VSS322	MDS5035	PL35	MS3512B	TF15
ISVJBR/L-2020K-16	20	20	125	20	25						
ISVJBR/L-2525M-16	25	25	150	25	32						
ISVJCR/L-1010H-11	10	10	100	10	12	VC..1103..	--	--	--	MS2506A	TF9
ISVJCR/L-1212K-11	12	12	125	12	16						
ISVJCR/L-1616K-11	16	16	125	16	20						
ISVJCR/L-2020K-11	20	20	125	20	25						
ISVJCR/L-2525M-11	25	25	150	25	32						



SVJ2B

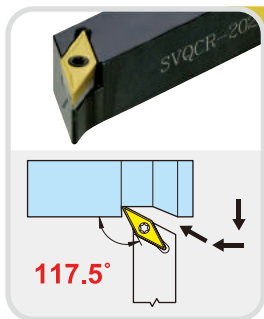


Right-hand shown

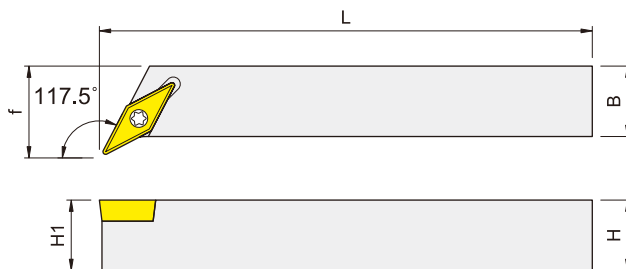
Item Code	Dimensions, mm					Insert	Screw	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f						
ISVJ2CR/L-1010H-11	10	10	100	10	10	VC..1103..	--	--	--	MS2506A	TF9
ISVJ2CR/L-1212H-11	12	12	100	12	12						
ISVJ2CR/L-1616K-11	16	16	125	16	16						
ISVJ2CR/L-2020K-11	20	20	125	20	20						

External Turning Tools

外徑車刀桿

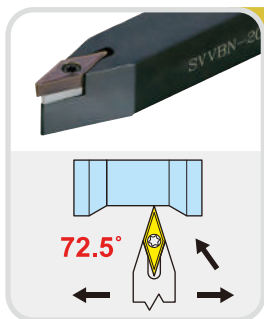


SVQB

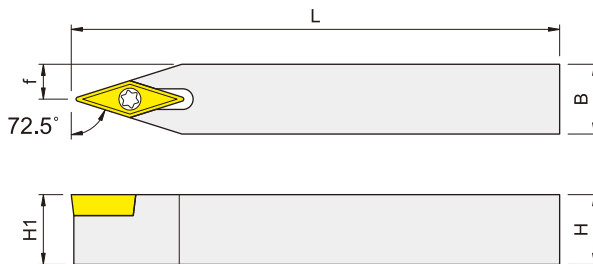


Right-hand shown

Item Code	Dimensions, mm					Insert	Shim	Screw	Wrench	Screw	Wrench
	H	B	L	L1	f						
ISVQBR/L-2020K-16	20	20	125	20	25	VB..1604..	VSS322	MDS5035	PL35	MS3512B	TF15
ISVQBR/L-2525M-16	25	25	150	25	32						
ISVQCR/L-1212H-11	12	12	100	12	16	VC..1103..	--	--	--	MS2506A	TF9
ISVQCR/L-1616K-11	16	16	125	16	20						
ISVQCR/L-2020K-11	20	20	125	20	25						



SVVB



Item Code	Dimensions, mm					Insert	Screw	Wrench	Screw	Clamp	Wrench
	H	B	L	L1	f						
ISVVBN-1616K-16	16	16	125	16	8	VB..1604..	VSS322	MDS5035	PL35	MS3512B	TF15
ISVVBN-2020K-16	20	20	125	20	10						
ISVVBN-2525M-16	25	25	150	25	12.5						
ISVVBN-1010H-11	10	10	100	10	5	VC..1103..	--	--	--	MS2506A	TF9
ISVVCN-1212K-11	12	12	125	12	6						
ISVVCN-1616K-11	16	16	125	16	8						
ISVVCN-2020K-11	20	20	125	20	10						
ISVVCN-2525M-11	25	25	150	25	12.5						

Turning Inserts & Tools

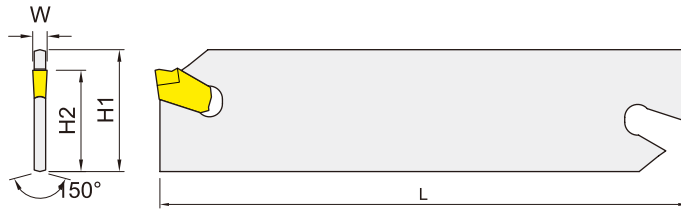


Parting

切 斷



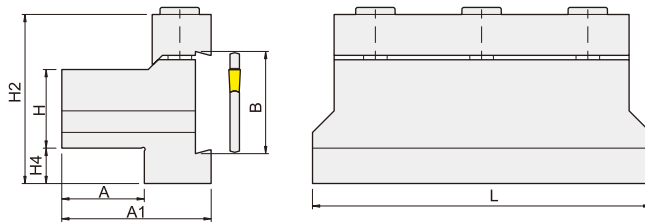
ISGIH



Item Code	Dimensions, mm				Insert	Tool Block	Wrench
	H1	H2	L	W			
ISGIH26-2	26	21.4	110	2.2	TGTN0220	SGTBU...-26	ESG-1
ISGIH32-2	32	25	150	2.2		SGTBU...-32	
ISGIH26-3	26	21.4	110	3.1	TGTN0310	SGTBU...-26	
ISGIH32-3	32	25	150	3.1		SGTBU...-32	



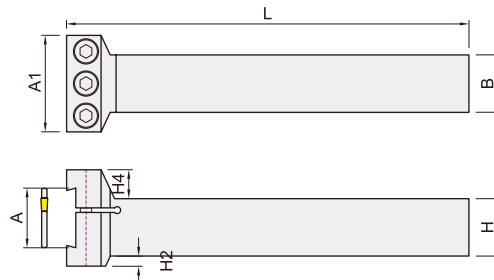
ISGTBU



Item Code	Dimensions, mm								Clamp	Screw	Wrench	BLADE
	H	B	A	A1	L	H2	H4					
ISGTBU20-26	20	26	21	38	86	43	9	BKU-86	HTM630	PL50	ISGIH26-3	
ISGTBU25-26	25	26	23	40	86	43	4					
ISGTBU20-32	20	32	21	40	110	50	13	BKU-100			ISGFH32-3	
ISGTBU25-32	25	32	23	42	110	50	8					



ISGTBV



Item Code	Dimensions, mm								Clamp	Screw	Wrench	BLADE
	H	B	A	A1	L	H2	H4					
ISGTBV25-26	25	25	26	42	125	4.4	12.6	BKU-86	HTM630	PL50	ISGIH26...	

Specification

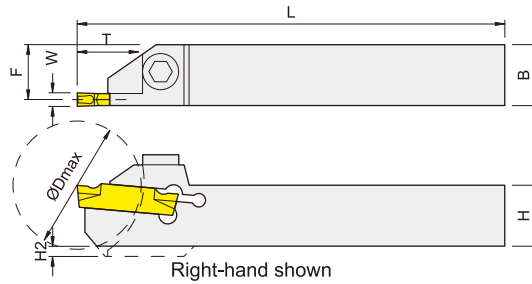
	P	Steel											Cutting Type : General Interrupted
	M	Stainless steel											
	K	Cast iron											
Inserts	Designation	Grade						Dimensions (mm)					Drawing
		CX30NS	CX40NS					w	r				
	TGTN 0220	✓	✓					2.2	0.2				
	TGTN 0310	✓	✓					3.1	0.15				

Recommended Cutting Conditions

Working Material	Vc	fz
Carbon Steel (HB85-225)	90 ~ 250	0.08 (0.06 ~ 0.12)
Stainless 300 Series	55 ~ 110	0.06 (0.06 ~ 0.12)
Cast Iron (HB140-220)	110 ~ 275	0.15 (0.06 ~ 0.12)




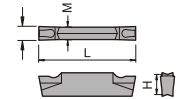
IKGM

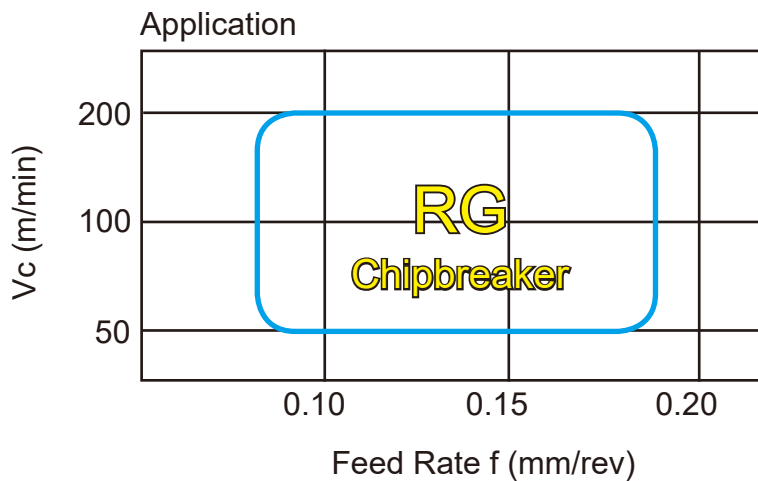


Item Code	Dimensions, mm					Width W(mm)		Insert	Screw	Wrench
	H	B	L	F	T	min	max			
IKGMR/L-1212K-1.5-L10	12	12	125	11.4	10	1.5	2.0	GMM2020...	HTM416	PL30
IKGMR/L-1616K-1.5-L10	16	16	125	15.4					HTM520	PL40
IKGMR/L-2020K-1.5-L10	20	20	125	19.4					HTM525	PL40
IKGMR/L-2525M-1.5-L10	25	25	150	24.4					HTM416	PL30
IKGMR/L-1212K-2T-L10	12	12	125	11.1	10				HTM520	PL40
IKGMR/L-1616K-2T-L10	16	16	125	15.1					HTM525	PL40
IKGMR/L-2020K-2T-L10	20	20	125	19.1					HTM520	PL40
IKGMR/L-2525M-2T-L10	25	25	150	24.1					HTM525	PL40
IKGMR/L-1212K-2T-L13	12	12	125	11.1	13	2.0	3.0		HTM525	PL40
IKGMR/L-1616K-2T-L13	16	16	125	15.1						
IKGMR/L-2020K-2T-L13	20	20	125	19.1						
IKGMR/L-2525K-2T-L13	25	25	150	24.1						
IKGMR/L-1212K-2T-L17	12	12	125	11.1	17					
IKGMR/L-1616K-2T-L17	16	16	125	15.1						
IKGMR/L-2020K-2T-L17	20	20	125	19.1						
IKGMR/L-2525M-2T-L17	25	25	150	24.1						

Parting Inserts & Tools

Specification

	P	Steel	☉	☒										Cutting Type : ☉ General ☒ Interrupted
	M	Stainless steel	☉	☒										
	K	Cast iron	☉	☒										
Inserts	Designation	Grade						Dimensions (mm)				Drawing		
		CX30NS	CX40NS					w	r	h	m			
	GMM 2020-RG	✓	✓					2.2	2.0	4.3	1.5			



Recommended Cutting Conditions

Working Material	V_c	f_z
Carbon Steel (HB85-225)	60 ~ 200	0.08 ~ 0.18
Stainless 300 Series	60 ~ 150	
Cast Iron (HB140-220)	50 ~ 140	

Turning Inserts Grade Comparison Chart

車刀片材質等級比較表

ISO Code	CARBIDEX	Mitsubishi	Sumiotmo	TaugeTec	SECO	
P Steel	P10	UE6110	AC810P	TT8105	TP1500	
	P20	CX2565 CX2565	MC6025 VP15TF VP20RT	AC820P AC520U	TT8115	TP2500 CP250
	P30	CX2565 CX2555	UE6035 VP15TF VP20RT	AC830P AC530U	TT8125 TT5100	TP3500 CP500
	P40	CX3565 CX3555	UE6035 UH6400	AP830P AC530U	TT8135 TT7100	TP3500 CP500
M Stainless Steel	M10	VP10MF MC7015	AC610M		TP1500 TS2000	
	M20	CX3565 CX3555	VP15TF VP20MF US7020 MC7025	AC610M AC520U	TT9215	TM2000 TP2500 TS2500
	M30	CX3565 CX3555	VP15TF MP7035 MC7025 US735	AC6030M AC630M AC530U	TT9225	TM4000 TP3500 CP500
	M40		MP7035 US735	AC6040M AC530U	TT9235 TT8020	TM4000
K Cast Iron	K01	MC5005	AC405K	TT7005		
	K10	CX2565	UC5015	AC415K	TT7015 TT7310	TK1000 TS2000
	K20	CX2565 CX2555	VP15TF UC5115	AC420K		TK2000 CP500
	K30		VP15TF UE6110			

Turning Inserts & Tools

The above table is selected from a publication for reference only, which is not obtained approval from each brand.

Cutting Tools Evaluation Report

切削報告

Company			Department		Name of Contact	
Address			TEL		Date	
Material	Material Name		Remark:			
	Hardness					
	Number/mooth					
Machine	CNC Machine					
	Power					
Tools	Brand					
	Type					
	Grade					
	Tool diameter					
	Tool teeth					
Cutting Conditions	N (rpm)					
	Vc (m/min)					
	fz (mm/rev 、 mm/tooth)					
	F (mm/min)					
	Ad×Rd (mm)					
	Cutting time (mm/pcs)					
	Wet / Dry					
Results	Tool Life Criterion					
	Chips Types					
Appraise	Overall Rating					
	Accept	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

- | | |
|---------------------|--|
| Tool Life Criterion | <ul style="list-style-type: none"> ① Change constant ② Surface roughness ③ Dimensional change ④ Happen burr ⑤ Spindle load ⑥ Situation of tip control ⑦ Tool wear ⑧ Chipping, breaks |
|---------------------|--|

- | | |
|-------------|--|
| Chips Types | <ul style="list-style-type: none"> ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ |
|-------------|--|





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Cutting Technologies

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