

工艺求精 · 品质求精 · 质量稳定 · 信誉可靠

Process refinement · Quality Refinement · Quality stability · Reliable reputation

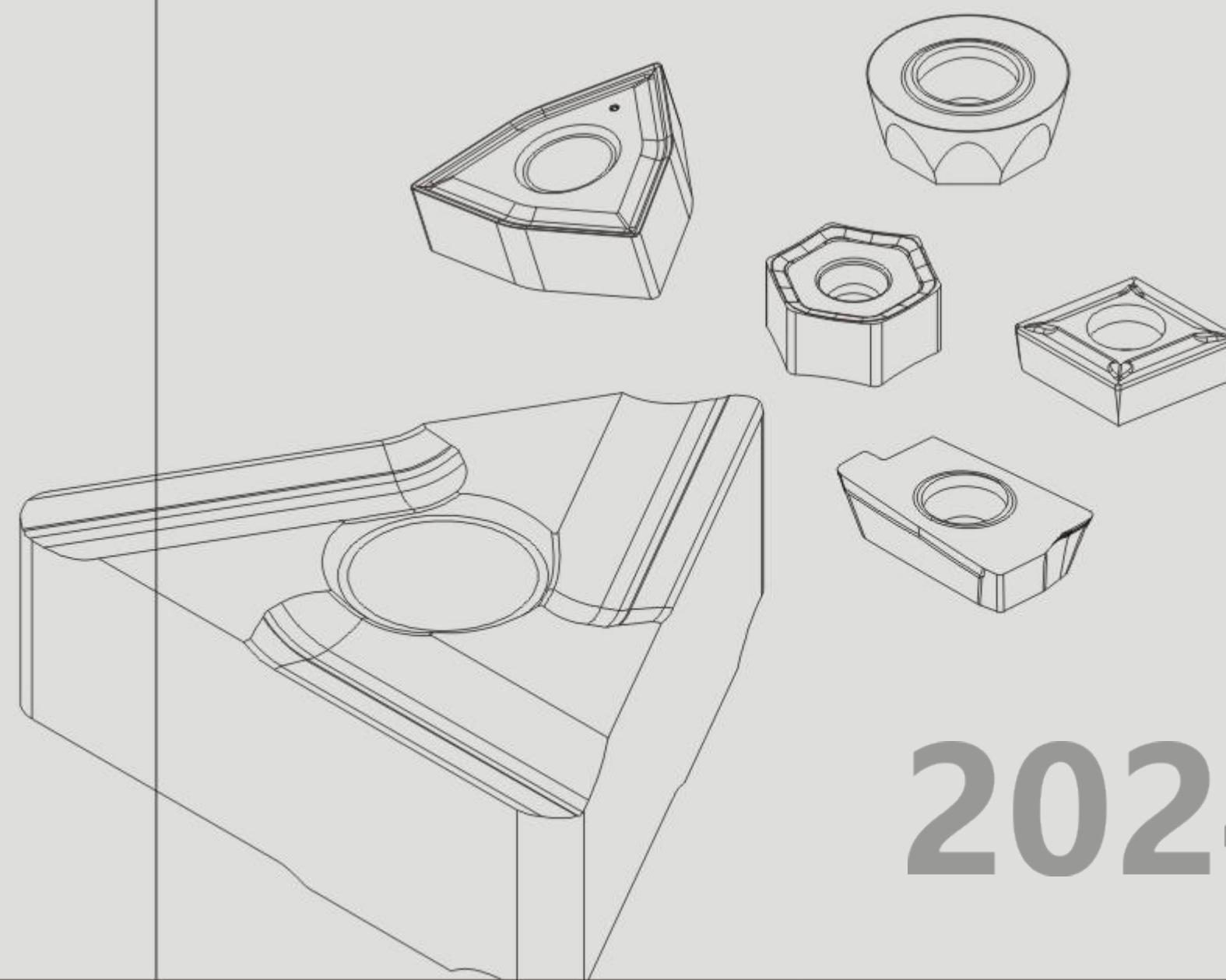


领昕LINGXIN NEW MATERIALS

硬质合金切削工具 CEMENTED CARBIDE CUTTING TOOLS

湖南领昕新材料有限公司

HUNAN LINGXIN NEW MATERIALS CO., LTD.



领昕LINGXIN NEW MATERIALS



No.755 Xian yue Huan Rd, Tian Yuan Zone,
ZhuZhou City , HuNan province,China



www.lxkatcut.com



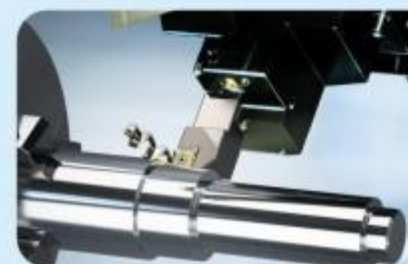
info@lxkatcut.com

2024



CONTENTS 目录

涂层说明 Coating specification	01
牌号介绍 Brand introduction	02-03
铣削牌号一览表 List of milling grades	04
铣削刀片产品预览 Milling blade product preview	05-06
ISO铣削刀片型号表示规则 ISO rules for the specification of milling blade types	07-08
铣削刀片 Milling blade	09-32
加工案例 Processing case	33-34
车削加工技术资料 Turning processing technical data	35-40
车削牌号一览表 List of turning plates	41
车削刀片产品预览 Turning blade product preview	42-44
ISO车削刀片型号表示规则 ISO turning blade type representation rules	45-46
车削刀片 Turning blade	47-94
牌号对照表 Brand comparison table	95-102
硬度对照表 Hardness comparison table	103
材料横向对比表 Material horizontal comparison table	104-109



COMPANY PROFILE

公司简介

工艺求精 · 品质求精 · 质量第一 · 信誉第一
Process refinement · Quality refinement · Quality first · Reputation first

Hunan Lingxin New Materials Co., Ltd. is a professional supplier of carbide cutting tools . committed to providing cemented carbide CNC inserts with Cost-Effective advantages.

The company is located in Zhuzhou, the hometown of cemented carbide in China. Relying on the local perfect industrial chain and technical advantages, it adopts advanced equipment and high-quality raw materials comparable to domestic well-known brands to ensure the durability and consistency of CNC tools.

The company's main products include turning inserts, milling inserts, thread inserts, cermet inserts and aluminum inserts. Especially in the field of stainless steel and titanium alloy cutting, it has been widely praised by customers for its excellent performance.

We support OEM and provide non-standard customization services according to customer requirements to meet the needs of various machining. Products are exported to Southeast Asia and some European countries, and are widely used in machinery manufacturing, mold processing, automobile manufacturing and other industries.

We always adhere to the business philosophy of "Quality first, Service-oriented", and look forward to working with global partners to achieve win-win results!



CORPORATE STRATEGY

公司战略

质量 方针

QUALITY POLICY

工艺求精，品质求精，质量第一，信誉第一。
Customer first, sustainable management. Continue to serve customers, society, and us. Employees innovate value and achieve long-term growth.

企业 愿景

CORPORATE VISION

让每个客户都能体验到最可靠的、一站式
全球刀粒技术和服务赋能模具智造。
Let every customer can experience the most reliable, one-stop Global blade technology and services enable intelligent mold manufacturing.

经营 宗旨

BUSINESS PURPOSE

诚实经营，道德经商，缔造经典，追求完美。
Honest management, ethical business, create classics, the pursuit of perfection.



涂层说明 Coating description

牌号 Grade	CVD涂层 CVD Coating	膜厚 Film thickness	特点 Peculiarity
XH6213	黄色 Yellow	13-15um	厚TiN、AL2Q3等增加耐磨损性，抗氧化功能，加工HRC30钢件性价比高。 It is a universal grade for steel processing because of the excellent combination of the capillary matrix with thick Al ₂ O ₃ coatings with good oral safety. It is suitable for semi-finishing and finishing of HRC30 steel.
XH6211	黑色 Black	15-18um	厚Ti(CN)、AL2O3等涂层增加耐热性、耐磨性和抗氧化性，难加工环境HRC40钢件和球墨铸铁。 Thick Ti(CN), AL2O3 and other coatings to increase heat resistance, wear resistance and oxidation resistance, difficult machining environment HRC40 steel parts and ductile cast iron.
XH6210	双色 Double Coating	14-16um	周边黄色，上下面黑色的特色涂层。具有不错的抗磨损性的复合化学涂层。 Featured coating with yellow colour around the perimeter and black colour underneath the top and bottom of the inserts. Composite chemical coating with good anti-wear properties.
XH6223	黄色 Yellow	13-15um	高钴基体，不错的刃口强度，出色的硬性，良好的寿命。 High cobalt matrix, nice edge strength, excellent hardness, good life.
XH6260	双色 Double Coating	14-16um	厚TiN+MT TiCN+AL2O3+TiN，高估基体，广泛应用于各类钢件。 Thick TiN+MT TiCN+AL2O3+TiN, highly evaluated substrate, widely used for all kinds of steel parts.
XH7313	黄色 Yellow	13-15um	粗加工高性能材质，HRC30以下钢件。 Roughing high-performance suitable for HRC 30 steel.
XH9110	双色 Double Coating	15-18um	主打孔黄，推荐精加工生铁、灰铁。 Main feature is the yellow hole. It is suitable for finishing cast iron and grey cast iron.
XH9211	黑色 Black	15-18um	TiCN+AL2O3厚涂层，半精加工和半粗加工生铁。 TiCN+AL2O3 thick coating, semi-finished and semi-rough cast iron.
XH9311	黑色 Black	15-18um	纯粗加工灰铁，车铣均可。 Roughing for grey cast iron, it is suitable for both turning and milling machining.
XH8510	双色 Double Coating	14-16um	TiN+MT TiCN+AL2O3主推涂层，大切深粗加工钢件等。 TiN+MT TiCN+AL2O3 popular Coating, Rough machining of steel parts with large depth of cut, etc.

牌号 Grade	PVD涂层 PVD Coating	膜厚 Film thickness	特点 Peculiarity
XH7241	黑色 Black	3-5um	高质量表面，通用涂层材质。 PVD coating High-quality surfaces, universal grade for all kinds of materials.
XH7242	古铜色 Bronze	2.5-3um	ALTiSiXN物理涂层，推荐加工304、201和316不锈钢。 ALTiSiXN PVD coating, recommended for machining 304, 201 and 316 stainless steels.
XH7221	黑色 Black	3-5um	超细颗粒基材和纳米涂层结合，在调质料上广泛应用。 Combination of ultrafine particle substrates and nano-coatings for a wide range of applications in texturising materials.
XH7222	古铜色 Bronze	3-5um	超细颗粒基材和含Si涂层，精加工HRC45以下钢件、不锈钢。 Ultra-fine grain substrates and Si coating for finishing steel parts up to HRC45, and stainless steel.
XH7232	古铜色 Bronze	3-5um	专用铣削材质，HRC60左右材料。 Specialised for milling machining, especially for material around HRC60.
XH7111	黑色 Black	3-5um	超硬基体，车削铣削通用淬火材料。 Superhard substrates, general-purpose hardened materials for turning and milling.
XH8113	黄色 Yellow	3-5um	专配金属陶瓷涂层，主打精加工钢件和不锈钢。 Specialised for cermet inserts coating for finishing steel and stainless steel.
XH8213	黄色 Yellow	3-5um	TiN，单精铣钢件。 TiN coating for finishing milling steel parts.

牌号介绍 Brand introduction

牌号 Grade	ISO	涂层 Coating	硬度不低于 HRC Hardness is not less than HRC	应用范围及领域 Application scope and field
XH711	P10 M10 K10，S		60	超细颗粒的基体结合PVD涂层，适于高强度、不锈钢、高锰钢以及高温合金、硅钢片和各种喷涂材料的切削加工，也适于高硬度铸铁和玻璃等工件材料的精加工。 Ultra-fine grain matrix combined with PVD coating, suitable for cutting and machining of high strength steel, stainless steel, high manganese steel, high temperature alloys, silicon steel sheet and various sprayed materials, also suitable for finishing high hardness cast iron and glass.
XH7111		黑色 Black		
XH9110	K10	孔黄黑色 Pore yellow black	30	该合金适合加工冷硬合金铸铁与耐热合金，可获得良好的效果。 Suitable for machining hard alloy cast iron and heat resistant alloys. Good results can be obtained.
XH731	P30-P40 M30-M40	黄色 Yellow	20	适用于冲击性较大工况、要求大切深高进给的大型钢和不锈钢部件的粗加工领域。 Suitable for rough machining of large steel and stainless steel parts in impact conditions and requiring large depth of cut and high feed.
XH7313	P30-P40 M30-M40	黄色 Yellow	20	
XH6213	P20	黄色 Yellow	40	刃口安全性良好的任性基体与MT-TiCN、厚Al ₂ O ₃ 、TiN涂层最佳组合，是钢材加工的通用牌号。适应于钢、铸铁和不锈钢的半精加工、精加工等。 It is a universal grade for steel processing because of the excellent combination of the capillary matrix with MT-TiCN, thick Al ₂ O ₃ and TiN coatings with good oral safety. It is suitable for semi-finishing and finishing of steel, cast iron and stainless steel, etc.
XH6211	P20 K10	黑色 Black		
XH6210	P20	双色 Double Coating		
XH6223	P10	黄色 Yellow	40	适合加工调制钢，半精加工和粗加工。马氏体不锈钢 Suitable for machining modulated steels, semi-finishing and rough machining. Martensitic stainless steels
XH6260	P10	双色 Double Coating	40	适合半精加工钢材。 Suitable for semi-finishing steel.
XH811	P10 M10-M20		30	细颗粒具有较高的耐磨性和热稳定性，良好的抗粘着磨损。韧性较好，可以在较高速下精加工和半精加工普通钢、合金钢、不锈钢、高强度钢、轴承钢等。 The fine grain has high wear resistance and thermal stability, good anti-adhesive wear. Good toughness, can finish and semi-finish common steel, alloy steel, stainless steel, high strength steel, bearing steel, etc. at higher speed.
XH8213	P10 M10-M20	黄色 Yellow	30	
XH821	P10-P20		25	细颗粒基体具有较高的韧性和耐磨性、抗冲击性、抗热裂纹。适用于连续切削各类铸钢、合金钢、不锈钢、高强度钢。 The fine-grained matrix has high toughness and wear resistance, impact resistance, and thermal crack resistance, and is suitable for continuous cutting of various types of cast steel, alloy steel, stainless steel, and high-strength steel.
XH8213		黄色 Yellow	25	
XH7211	P20-P30 M20-M30 K20-K30	黑灰色 Black Grey	30	通用性很强的细颗粒基体，广泛适用于P、M、k、S类材料的半粗半精车削或铣削。 Very versatile fine grain substrate, widely used for semi-rough and semi-finish turning or milling of P, M, k, S type materials.
XH7241	P10-P30 K20	黑灰色 Black Grey		
XH7242	M10-M30	古铜色 Bronze		
XH7221	P10 M10	黑灰色 Black Grey	40	适合精加工不锈钢、高温合金、钛合金等。 Suitable for finishing stainless steel, high temperature alloys, titanium alloys, etc.

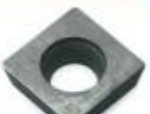
牌号介绍 Brand introduction

牌号 Grade	ISO	涂层 Coating	硬度不低于 HRC Hardness is not less than HRC	应用范围及领域 Application scope and field
XH7222	P10 M10	古铜色 Bronze	45	适合加工调制钢件和不锈钢。 Suitable for processing modulated steel parts and stainless steel.
XH7232	P10	古铜色 Bronze	60	适合加工淬火件和高硬性材料。 Suitable for machining hardened parts and high hardness materials.
XH8311	P25-30	黑色 Black	30	用于钢、铸钢的重型铣削，有较高的抗热裂性和优良的韧性。 It is used for heavy milling of steel and cast steel, with high resistance to heat and excellent toughness.
XH921	K20-K30	黑色 Black	10	适于铸铁、有色金属及其合金与非金属材料的半精加工、半粗加工。 精车小断面，粗车螺纹、旋风车丝和连续断面的半精铣与精铣，以及扩孔等。 Suitable for semi-finish machining of cast iron, non-ferrous metals and their alloys Semi-rough machining, semi-rough machining. Rotary turning of threads and semi-finish and finish milling of continuous sections, as well as hole reaming, etc.
XH9211	K20-K30	黑色 Black	10	
XH931	K30	黑色 Black	10	适于铸铁、有色金属及其合金与非金属材料不平整表面和间断切削时的粗车、粗刨、粗铣，一般孔和深孔的钻孔、扩孔。 Suitable for cast iron, non-ferrous metals uneven surface and intermittent cutting rough turning, rough planing, rough milling, general hole and deep hole drilling, reaming.
XH9311	K30	黑色 Black	10	
XH6313	P30 M30	黄色 Yellow 黑色 Black	30	高强度与抗塑性变形基体与MT-TiCN、厚Al ₂ O ₃ 、TiN涂层的结合； 具有好的韧性及抗塑性变形。适用于钢材和不锈钢的粗加工。 High strength and antiplastic deformation combination of matrix and MT-TiCN, thick Al ₂ O ₃ , TiN coating, good toughness and antiplastic deformation. Suitable for rough machining of steel and stainless steel.
XH651	P30-40 M30-M40	双色 Double Coating	20	粗颗粒基体具有良好的抗冲击性，而比P30更具耐磨性，适用于钢和不锈钢的粗加工。 Coarse-grained matrix with good impact resistance and more wear resistance than P30, suitable for rough machining of steel and stainless steel.
XH8510	P30-40 M30-M40	双色 Double Coating	20	
XH701	P10-P30 M10-M30 K10-K30		50	通用牌号。 适于耐热钢、高锰钢、不锈钢等难加工钢材及普通钢和铸铁加工。 Universal grade. Suitable for heat-resistant steel, high manganese steel, stainless steel and other difficult-to-process steels, as well as ordinary steel and cast iron processing
XH915	N		20	适用于非金属合金的精加工。 Suitable for the finishing of non-ferrous metal.
XH8214	P10-P20		20	适于在碳素钢与合金钢不平整表面和连续面切削时的粗车，间断切削时的半精车，连续断面的粗铣等 Suitable for rough turning uneven surface and continuous surface of carbon steel and alloy steel. Semi-finishing turning when intermittent cutting, rough milling of continuous satin surface, etc.
XH851	P30		20	适于加工碳素钢与合金钢(包括钢锻件、衡压件及铸件的表面)不平整面与间断切削时的粗车粗刨、半精刨、及钻孔。 Suitable for processing uneven surface of carbon steel and alloy steel (including the surface of steel forgings, pressed parts and castings) and rough turning and rough planing, semi-finishing planing, and drilling when intermittent cutting.
XH725	P20-P30		50	适于碳素钢、铸钢、高锰钢、高强度钢及合金钢的粗车。 Suitable for rough turning of carbon steel, cast steel, high manganese steel, high strength steel and alloy steel.

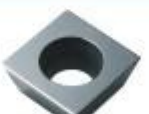
铣削牌号一览表 List of milling grades

工作材料 Material	ISO 使用 代号 ISO code	涂层硬质合金 Coated carbide		金属陶瓷 Cermet	硬质合金 Cemented carbide
		CVD	PVD		
P 钢 Steel	10		XH7212、XH7212 XH7221、XH7222	XH811	XH711 XH821
	20		XH7211、XH7212、XH7221、XH7222 XH7221、XH7222	XH821	XH725 XH701 XH851
	30	XH7313	XH8311		
	40				XH711 XH701
M 不锈钢 Stainless steel	10		XH7211 XH7221、XH7222		
	20				
	30	XH7311			
	40				
K 铸铁 Cast iron	10		XH7211		XH711 XH701 XH911
	20				XH921 XH921
	30				
N 有色金属 Non-ferrous metal	10		XH9111		XH915 XH921
	20				
S 钛合金 高温合金 Titanium alloy Superalloy	钛合金 高温合金		XH7111 XH9111		XH911
H 高硬度材料 High hardness material	淬火件		XH7232		XH711 XH725

铣削刀片产品预览 Milling blade product preview

APKT-MM 010	APKT-XM 010	APMT-DM 010	APKT-PM 011	APKT-R 011	APMT-M2 011
					
APMT-H2 011	APMT-DP 012	APMT-DL 012	RCET 012	RDMW 012	RDMW-MOT 013
					
ROKW-MO 013	ROKT-DR 013	RPMW-MO 014	RPMT-JS 014	RPMT-DL 014	HNMX 015
					
LNMU 015	MPHT-DM 015	OFHW 015	OFKR-DM 016	ONHU 016	ONHU-PM 016
					
ONMU-NL 016	SDMT 017	SEEN 017	SEKA 017	SEKN 017	SEKR 018
					
SNMX-AFN 018	SNMX-MM 018	SNMT-AFN 018	SEKW-AFN 019	SPKN 019	SPKW 020
					
SPKN-ED 020	SPKN-XE 020	TPUN 021	TPKN 021	TPKN-PDR 021	TPKR 022
					
TPKR-PDSR 022	WNMU-GM 022	GLOL 023	LNE 023	SNC 024	LSE 024
					

铣削刀片产品预览 Milling blade product preview

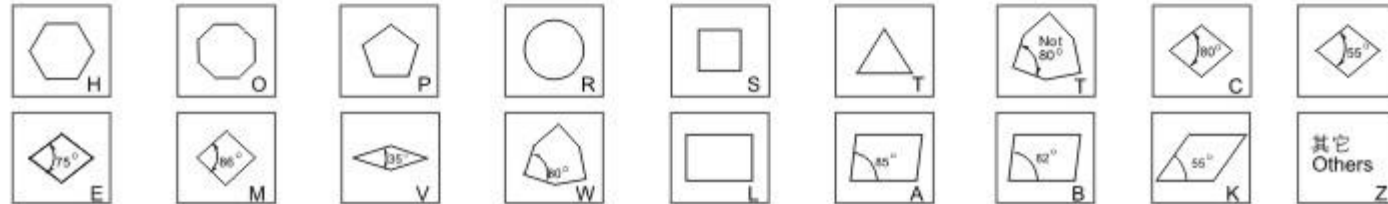
SPE 024	SPMG-DG 025	WCMX 025	WCMT-X 026	CPMT 026	GPS 026
					
LOGT 027	TOGT 027	TOGT 027	SDMW 028	SDMW-边R 028	SDMW-角R 028
					
SNMG-R 029	SNMG-LF 029	SNMG-KH 029	SPEB 029	SPMW 030	SPKW 030
					
TPMT 030	AXHN 031	LNKT 031	SHYW 031	XCHT 031	R420.37 032
					
R420.37 032	SPUB 032				
					

ISO铣削刀片型号表示规则 ISO rules for the specification of milling blade types

范例 Example

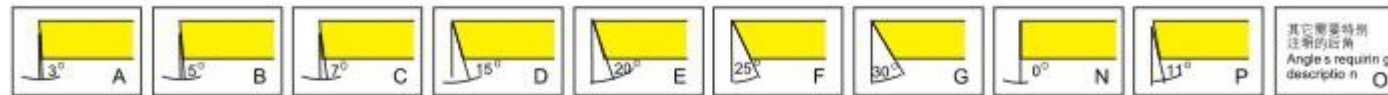


刀片形状 Insert shape



d. 内切圆直径 d. Theoretical diameter of inscribed circle
s. 刀片厚度 s. Insert thickness
M. 见图示 M. See Fig.

主切削刃后角 Major cutting edge clearance angle



公差 Tolerances, mm inch

级别符号 Level symbol	公差 Tolerances in mm m	公差 Tolerances in mm s	公差 Tolerances in mm d	公差 · 英寸 Tolerances in inches m	公差 · 英寸 Tolerances in inches s	公差 · 英寸 Tolerances in inches d
A	±0.005	±0.025	±0.025	±0.0002	±0.001	±0.0010
F	±0.005	±0.025	±0.013	±0.0002	±0.001	±0.0005
C	±0.013	±0.025	±0.025	±0.0005	±0.001	±0.0010
H	±0.013	±0.025	±0.013	±0.0005	±0.001	±0.0005
E	±0.025	±0.025	±0.025	±0.0010	±0.001	±0.0010
G	±0.025	±0.013	±0.025	±0.0010	±0.005	±0.0010
J	±0.025	±0.025	±0.05 ±0.13	±0.0002	±0.001	±0.002 ±0.005
K	±0.013	±0.025	±0.05 ±0.13	±0.0005	±0.001	±0.002 ±0.005
L	±0.025	±0.025	±0.05 ±0.13	±0.0010	±0.001	±0.002 ±0.005
M	±0.08 ±0.18	±0.013	±0.05 ±0.13	±0.003 ±0.007	±0.005	±0.002 ±0.005
N	±0.08 ±0.18	±0.025	±0.05 ±0.13	±0.003 ±0.007	±0.001	±0.002 ±0.005
U	±0.13 ±0.38	±0.013	±0.08 ±0.25	±0.005 ±0.015	±0.005	±0.003 ±0.010

关于H,O,P,S,T,C,E,M,W,R,V,D型刀片，取决于刀片尺寸，参考如下。
Varies depending on the insert size for insert shapes H,O,P,S,T,C,E,M,W,R,V and D see table below

刀片形状 H,O,P,S,T,C,E,M,W,R
Insert shape H,O,P,S,T,C,E,M,W,R

ISO铣削刀片型号表示规则 ISO rules for the specification of milling blade types

内切圆直径 d Inscribed circle diameter		公差m Tolerances for m				公差d Tolerances for d			
		级别M Class M	级别U Class U	级别M Class M	级别U Class U	级别M Class M	级别U Class U	级别M Class M	级别U Class U
(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in
6.35	0.250	±0.08	±0.003	±0.13	±0.005	±0.005	±0.002	±0.08	±0.003
9.525	0.375	±0.08	±0.003	±0.13	±0.005	±0.005	±0.002	±0.08	±0.003
12.7	0.500	±0.13	±0.005	±0.20	±0.008	±0.008	±0.003	±0.13	±0.005
15.875	0.625	±0.15	±0.006	±0.27	±0.011	±0.010	±0.004	±0.18	±0.007
19.05	0.750	±0.15	±0.006	±0.27	±0.011	±0.010	±0.004	±0.18	±0.007
25.4	1.000	±0.18	±0.007	±0.38	±0.015	±0.013	±0.005	±0.25	±0.010

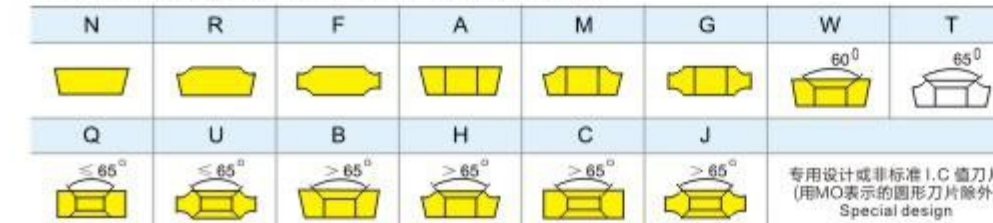
刀片形状D Insert shape D

内切圆直径 d Inscribed circle diameter		公差m Tolerances for m		公差m Tolerances for m	
(mm)	in	(mm)	in	(mm)	in
6.35	0.250	±0.11	±0.004	±0.005	±0.002
9.525	0.375	±0.11	±0.004	±0.005	±0.002
12.70	0.500	±0.15	±0.006	±0.003	±0.003
15.875	0.625	±0.18	±0.007	±0.004	±0.004
19.05	0.750	±0.18	±0.007	±0.004	±0.004

刀片形状V Insert shape V

内切圆直径 d Inscribed circle diameter		公差m Tolerances for m		公差m Tolerances for m	
(mm)	in	(mm)	in	(mm)	in
6.35	0.250	±0.15	±0.006	±0.005	±0.005
9.525	0.375	±0.15	±0.006	±0.005	±0.005
12.70	0.500	±0.20	±0.008	±0.008	±0.008
15.875	0.625	±0.27	±0.011	±0.011	±0.010
19.05	0.750	±0.27	±0.011	±0.011	±0.010

断屑槽及夹固形式 Chip breaker and/or fixing type



厚度 Insert thickness, s mm

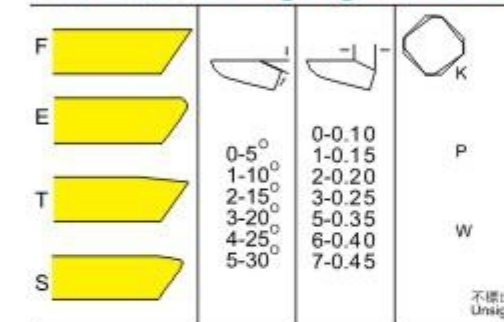
mm	00s=0.79	T0s=0.99	01s=1.59	T1s=1.98
02s=2.38	04s=4.76	06s=6.35	T9s=9.72	
T2s=2.58	T4s=4.96	T6s=6.75	11s=11.11	
03s=3.18	05s=5.56	07s=7.94	12s=12.70	
T3s=3.97	T5s=5.95	09s=9.52		

修光刃 Wiper land

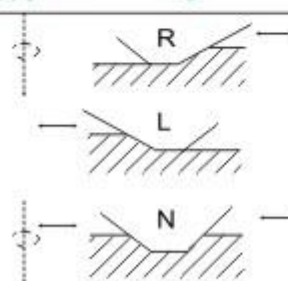


小平面 Parallel land

切削刃倒棱 Cutting edge condition



进给方向 Feeding direction



切削刃长度 (mm) Cutting edge length (mm)

ic mm	ic inch	C	D	R	S	T	V	W	K
3.97	5/32"					06			
5.0				05					
5.56	7/32"					09			
6.0				06					
6.35	1/4"	06	07			11	11		
8.0				08					
9.525	3/8"	09	11	09	09	16	16	06	16*
10.0				10					
12.0				12					
12.7	1/2"	12	15	12	12	22	22	08	
15.875	5/8"	16		15	15	27			
16.0				16					
19.05	3/4"	19	19	19	19	33			
20.0				20					
25.0	1"	25	25	25					
25.4				25	25				
31.75				31					
32				32					

-DM 槽型代码

铣削刀片

Milling Insert



ISO 面铣刀片 ISO Face Milling Inserts



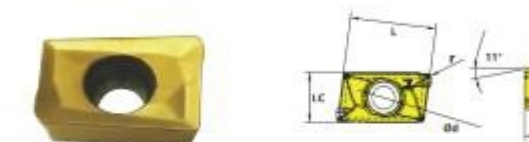
• APKT

型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide					金陶 cermet	
	L	W	S	Ød	r	XH7211	XH7212	XH7111	XH725	XH731	XH8135	XH8136
APKT 1604PDER-MM	17.2	9.525	5.2	4.4	0.8	●	●	●				



• APKT

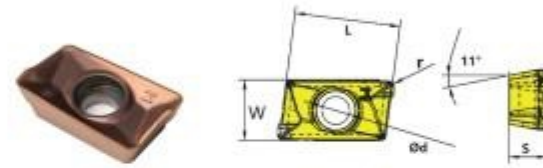
型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide						
	L	W	S	Ød	r	XH7211	XH7213					
APKT 1135PDER-XM	10.9	6.26	3.5	2.8	0.8	●						



• APMT

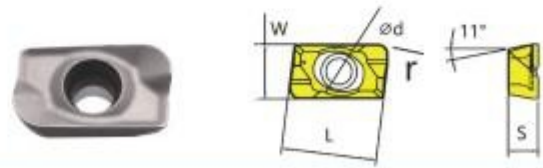
型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide						
	L	W	S	Ød	r	XH7211	XH7212	XH7213				
APMT 100308PDER-DM	10.4	5.9	3.5	2.8	0.8	●		●				

模具铣刀片 Mould Milling Inserts



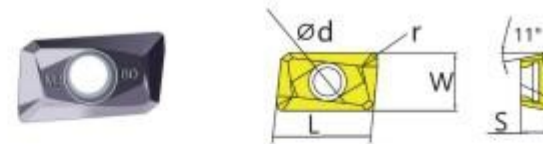
• APKT

型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide						
		L	W	S	Ød	r	XH7241	XH7242	XH7243				
APKT	160408-PM	16.52	9.5	5.76	4.4	0.8	●	●	●				



• APKT

型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide						
		L	W	S	Ød	r	XH721	XH711					
APKT	160416R	16.44	9.44	5.26	4.5	1.6	●	●					
	160432R	16.44	9.44	5.26	4.5	3.2	●	●					



• APMT

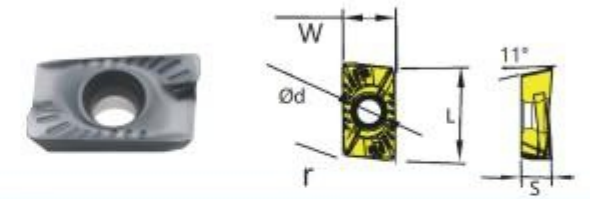
型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide						
		L	W	S	Ød	r	XH7241	XH7242	XH7245	XH721	XH7222		
APMT	1135PDER-M2	11	6.35	3.5	2.8	0.8	●	●	●	●	●		
	1604PDER-M2	16.5	9.525	4.76	4.4	0.8	●	●	●	●	●		



• APMT

型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide						
		L	W	S	Ød	r	XH7241	XH7242	XH7245	XH721	XH7222	XH7111	
APMT	1135PDER-H2	11	6.35	3.5	8.8	0.8	●	●	●	●	●		
	1604PDER-H2	16.5	9.525	4.76	4.4	0.8	●	●	●	●	●		
	1135PDER-H4	10.85	6.2	3.5	2.78	1.6						●	
	1604PDER-H4	16.25	9.28	4.76	4.5	1.6						●	

模具铣刀片 Mould Milling Inserts



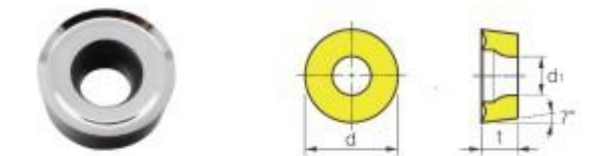
• APMT

型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide						
		L	W	S	Ød	r	XH7211	XH7213					
APMT	1135PDER-DP5420	10.9	6.22	3.48	2.8	0.8		●					
	1604PDER-DP5420	16.46	9.3	5.26	4.4	0.8	●	●					



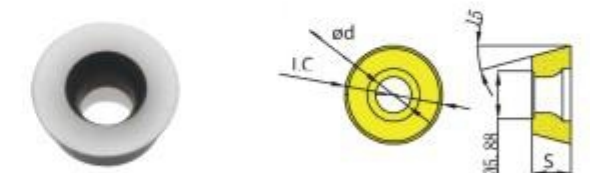
• APMT

型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide						
		L	W	S	Ød	r	XH7211	XH7222					
APMT	1135PDER-DL	11.28	6.22	3.6	2.8	0.8	●	●					
	1604PDER-DL	17.37	9.32	5.33	4.5	0.8	●	●					



• RCET

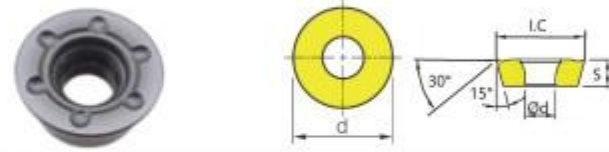
型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide						
		ØI.C	S	Ød	XH911	XH721	XH711				
RCET	1606MO	16.3	6.5	5.4	●	●					
	1906MO	19.05	6.35	7.9	●		●				



• RDMW

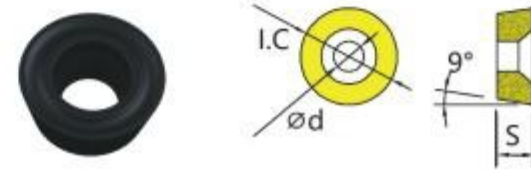
型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide						
		ØI.C	S	Ød	XH7221	XH7222					
RDMW	1204MO	12	4.7	4.8	●	●					

模具铣刀片 Mould Milling Inserts



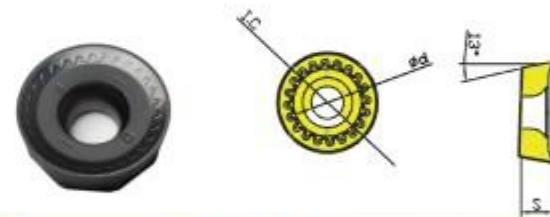
• RDMW

型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide						
		ØI.C	S	Ød	XH7241	XH7242	XH7245	XH7221	XH7222		
RDMW	1204MOT	12	4.7	4.8	●	●	●				
	1605MO	16	5.56	5.5	●			●	●		



• ROKW

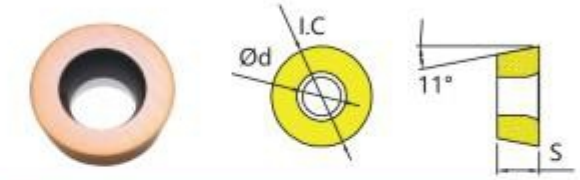
型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide						
		ØI.C	S	Ød	XH7211	XH911					
ROKW	13T4MO	13.18	4.92	4.2							



• ROKT

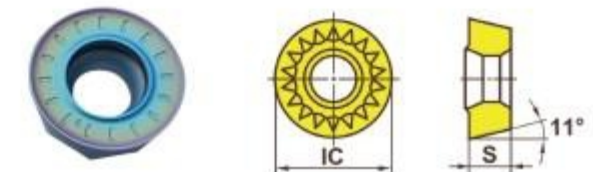
型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide						
		ØI.C	S	Ød	XH7312	XH6211					
ROKT	1606MO-DR	16	6.35	5.56	●						
	2006MO-DR	20.4	6.35	6.55	●	●					

模具铣刀片 Mould Milling Inserts



• RPMW

型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide						
		ØI.C	S	Ød	XH7221	XH7222	XH7241	XH7242	XH7245		
RPMW	1003MO	10	3.18	4.4			●	●	●		
	1204MO	12	4.76	4.4	●	●					



• RPMT

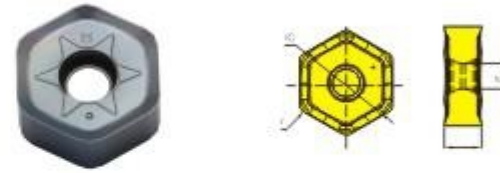
型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide							
		ØI.C	S	Ød	XH7241	XH7242	XH7245	XH7221	XH7222	XH731	XH721	XH911
RPMT	08T2MOE-JS	8	2.9	3.2				●	●			
	10T3MOE-JS	10	4	4.4	●	●	●	●	●			
	1204MOE-JS	12	4.76	4	●	●	●	●	●			
	1606MOE-JS	16	6.46	5.35								



• RPMT

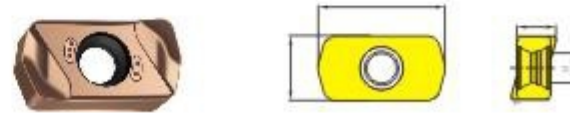
型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide						
		ØI.C	S	Ød	XH7221	XH7222					
RPMT	1204MO-DL	12	4.76	4.4	●	●					

ISO 面铣刀片 ISO Face Milling Inserts



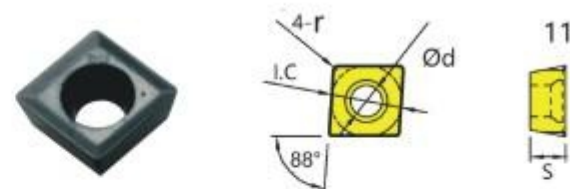
• HNMX

型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide					
	L	I.C	S	Ød	r	XH7241	XH7242	Xh7221	XH7222		
HNMX 90608	9	16	6.35	5	0.5	●		●			



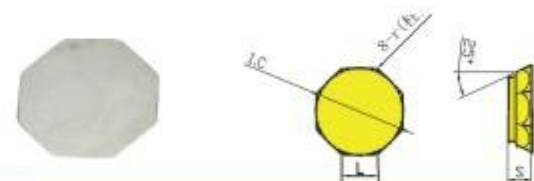
• LNMU

型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide				金陶 cermet	
	L	W	S	Ød	r	XH7241	XH7242	Xh7221	XH7222		
LNMU 0303ZER	11.96	6	3.7	2.8	1.2	●		●			



• MPHT

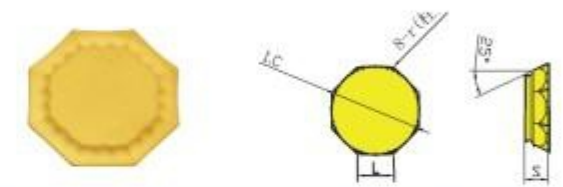
型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide					
	L	ØI.C	S	Ød	r	XH7213	XH7211	XH915			
MPHT 060304-DM	6.35	6.35	3.18	2.8	0.4	●	●	●			
080305-DM	8.3	8.3	3.18	3.4	0.5	●	●				



• OFHW

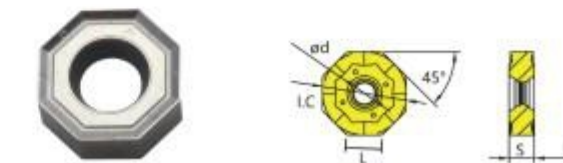
型号 Insert shape	基本尺寸 Dimensions				硬质合金 Cemented carbide						
	L	ØI.C	S	r	XH721	XH711					
OFHW 0704	7.45	18	4.87	0.4	●						

ISO 面铣刀片 ISO Face Milling Inserts



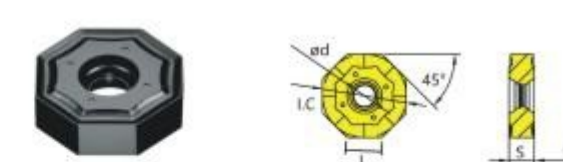
• OFKR

型号 Insert shape	基本尺寸 Dimensions				硬质合金 Cemented carbide						
	L	ØI.C	S	r	XH6313	XH8513					
OFKR 0704-DM	7.45	17.94	4.94	0.8	●						



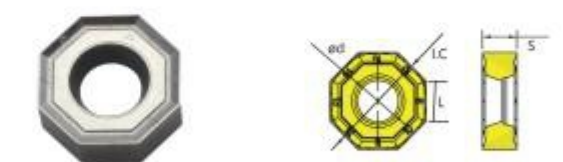
• ONHU

型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide					
	L	ØI.C	S	Ød	r	XH711	XH721				
ONHU 0505	5.69	12.85	5.54	5.6	0.8	●	●				



• ONHU

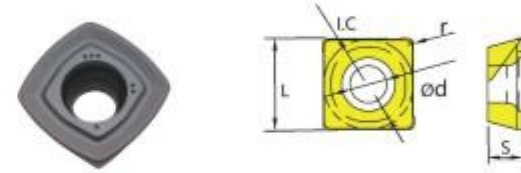
型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide					
	L	ØI.C	S	Ød	r	XH911	XH721				
ONHU 08T508-PM	8.3	29.2	6	5.3	0.83	●	●				



• ONMU

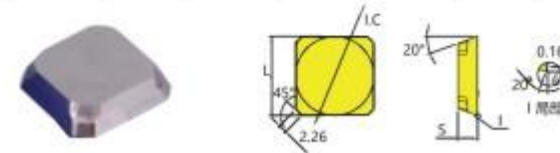
型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide					
	L	ØI.C	S	Ød	r	XH711	XH721	XH731			
ONMU 0705NPN-NL	7	17.65	6.3	7.45	0.8	●					

ISO 面铣刀片 ISO Face Milling Inserts



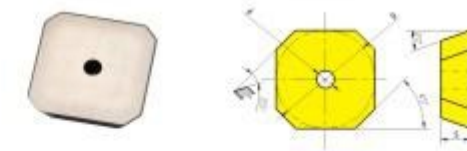
• SDMT

型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide							
		L	ØI.C	S	Ød	r	XH7241	XH7221						
SDMT	120512	12.7	12.7	5.6	4.5	1.2	●							
	150512	15.875	15.875	5.6	4.6	1.2	●							



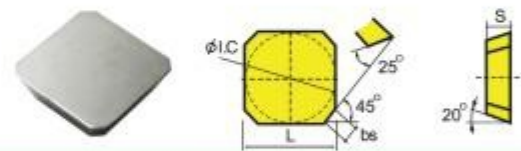
• SEEN

型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide							
		L	ØI.C	S	XH611	XH811						
SEEN	1203AFTN	12.7	12.7	3.18	●	●						



• SEKA

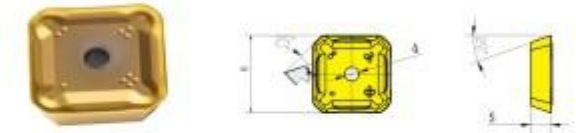
型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide							
		L	ØI.C	S	Ød	XH611	XH811						
SEKA	1203AFTN	12.7	12.7	3.18	2		●						



• SEKN

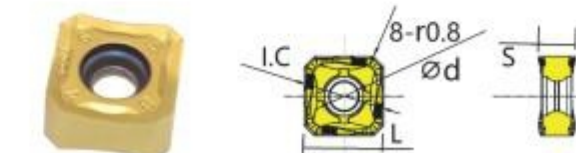
型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide									
		L	ØI.C	S	XH611	XH811	XH911	XH921	XH931	XH821	XH851	XH738	XH621	XH725
SEKN	1203AFN	12.7	12.7	3.18			●	●		●	●	●	●	●
	1203AFTN	12.7	12.7	3.18	●	●								
	1504AFN	15.875	15.875	4.76			●	●	●	●				●
	1504AFTN	15.875	15.875	4.76	●	●								

ISO 面铣刀片 ISO Face Milling Inserts



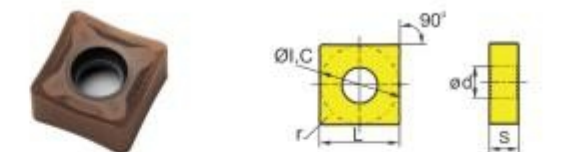
• SEKR

型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide								
		L	ØI.C	S	Ød	XH611	XH811	XH911	XH921	XH931	XH821	XH851	XH738	XH621
SEKR	1203AFTN	12.7	12.7	3.18	2.3			●	●					



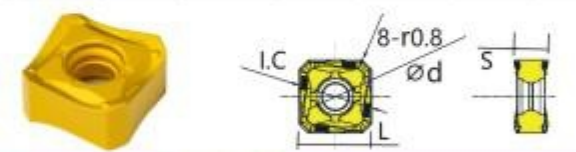
• SNMX

型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide							
		L	ØI.C	S	Ødr	XH7211	XH9112	XH9312					
SNMX	1206AFN-MM	12.7	12.7	6.27	4.55		●	●					



• SNMX

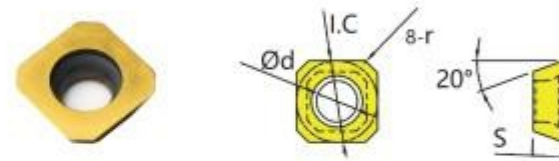
型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide						
		L	ØI.C	S	Ød	r	XH7211	XH9112	XH9312				
SNMX	120612-MM	12.7	12.7	6.27	5.16	1.2		●	●				



• SNMT

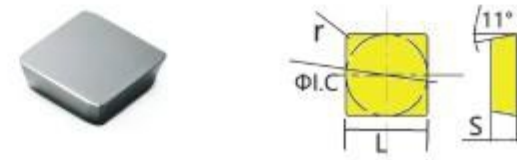
型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide							
		L	ØI.C	S	Ødr	XH7211							
SNMT	1305AFN	13	13	5.54	6.3	●							

ISO 面铣刀片 ISO Face Milling Inserts



• SEKW

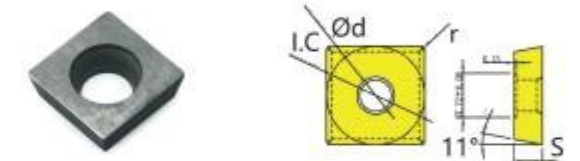
型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide					
		L	ØI.C	S	Ød	r	XH7211	XH711	XH911			
SEKW	1204AFN	12.7	12.7	4.76	5.6	0.8	●					



• SPKN

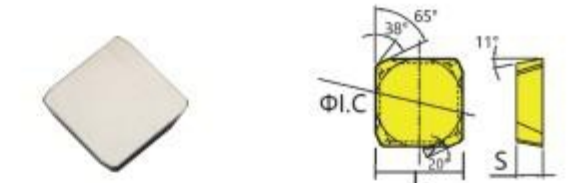
型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide					金陶 Cermet
		L	ØI.C	S	r	XH821	XH851	XH911	XH721	XH725	XH811
SPKN	120308	12.7	12.7	3.18	0.8	●	●	●	●		●
	120312	12.7	12.7	3.18	1.2	●	●	●	●		●
	120400	12.7	12.7	4.76		●	●	●			
	120402	12.7	12.7	4.76	0.2			●		●	●
	120404	12.7	12.7	4.76	0.4			●		●	●
	120408	12.7	12.7	4.76	0.8	●	●			●	●
	120412	12.7	12.7	4.76	1.2	●	●			●	●
	150408	15.875	15.875	4.76	0.8	●	●	●	●	●	●
	150412	15.875	15.875	4.76	1.2	●	●	●	●	●	●

ISO 面铣刀片 ISO Face Milling Inserts



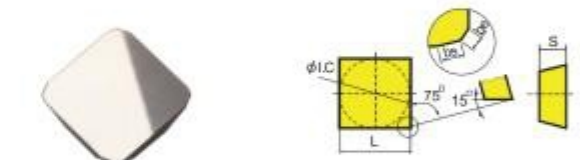
• SPCW

型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide					
		L	ØI.C	S	Ød	r	XH831	XH851				
SPCW	120408	12.7	12.7	4.76	5.6	0.8	●	●				
	150408	15.875	15.875	4.76	5.6	0.8	●	●				
SPKW	100308	10	10	3.18		0.8	●	●				
	120308	12.7	12.7	3.18	5.6	0.8	●	●				
	120408	12.7	12.7	4.76	5.6	0.8	●	●				
	150408	15.875	15.875	4.76		0.8	●	●				
	190605	19.05	19.05	6.35	6.7	0.5						



• SPKN

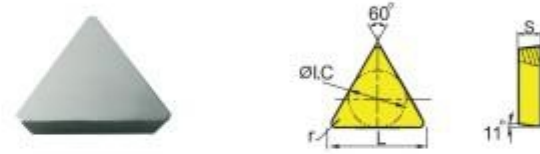
型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide						金陶 Cermet
		L	ØI.C	S	XH821	XH851	XH911	XH921	XH721	XH725	XH811
SPKN	1203ED (T) R	12.7	12.7	3.18	●	●	●	●		●	●
	1204ED (T) R	12.7	12.7	4.76	●	●	●	●			●
	1504ED (T) R	15.875	15.875	4.76	●	●	●	●	●	●	●



• SPKN

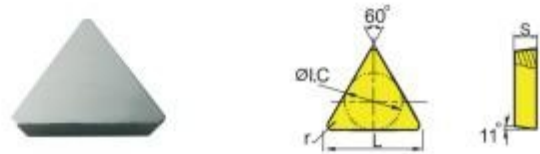
型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide						金陶 Cermet
		L	ØI.C	S	XH821	XH851	XH911	XH921	XH721	XH725	XH811
SPKN	1203XE (T) R	12.7	12.7	3.18	●	●	●	●		●	●
	1204XE (T) R	12.7	12.7	4.76	●	●	●	●			●
	1504XE (T) R	15.875	15.875	4.76	●	●	●	●		●	●

ISO 面铣刀片 ISO Face Milling Inserts



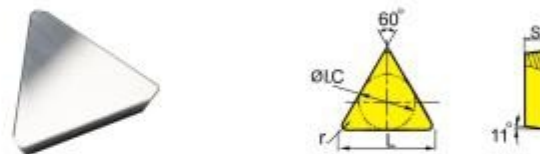
• TPUN

型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide						金陶 Cermet
		INCH	L	ØI.C	S	r	XH821	XH851	XH911	XH921	XH738	XH725	XH811
TPUN	160308	332	16.5	9.525	3.18	0.8	●					●	●
	220408	432	22	12.7	4.76	0.8	●		●		●	●	
	220412	433	21	12.7	4.76	1.2			●		●	●	



• TPKN

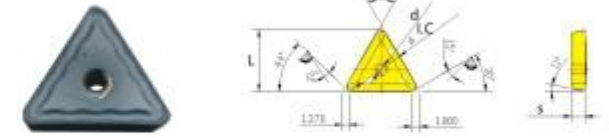
型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide							金陶 Cermet
		INCH	L	ØI.C	S	r	XH821	XH851	XH911	XH921	XH738	XH725	XH711	XH811
TPKN	160308	332	16.5	9.525	3.18	0.8	●	●					●	
	220408	432	22	12.7	4.76	0.8	●	●	●	●	●	●	●	●
	220412	433	21	12.7	4.76	1.2	●	●	●	●	●	●	●	●



• TPKN

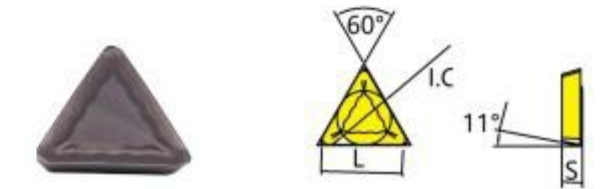
型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide							金陶 Cermet
		L	ØI.C	S	XH821	XH851	XH911	XH921	XH738	XH725	XH711	XH811
TPKN	1603PD(T)R	16.5	9.525	3.18	●	●		●	●	●	●	●
	2204PD(T)R	22	12.7	4.76	●	●		●	●	●	●	●

ISO 面铣刀片 ISO Face Milling Inserts



• TPKR

型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide					
		L	ØI.C	S	XH711	XH721				
TPKR	1603PDSR	16.5	9.525	3.25	●	●				



• TPKR

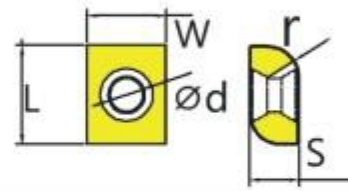
型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide					
		L	ØI.C	S	XH711	XH721	XH731			
TPKR	2204PDSR	22	12.7	4.76	●	●				



• WNMU

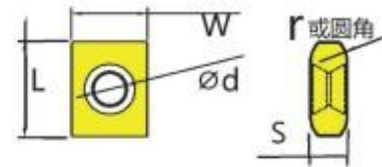
型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide					
		INCH	L	ØI.C	S	r	XH7241	XH7242	XH7221	XH7221		
WNMU	080608EN-GM	8.87	14.2	6.63	6.2	0.8	●	●		●		

重切削刀片 Heavy Milling Inserts



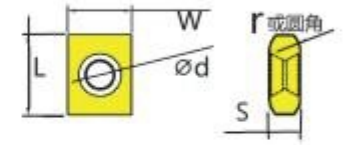
· GLOL

形状 Shape	型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide				
		L	W	S	Ød	R或倒角 R or chamfer	XH8611				
	GLOL20021R5	15.875	12.7	7.94	5.4	2-R5.0 2-0.2x45°	●				
	GLOL20022R5	15.875	12.7	6.35	5.4	4-R5.0	●				
	GLOL20023R04	12.7	12.7	6.35	5.4	4-R0.4					



· LNE

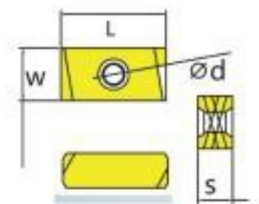
形状 Shape	型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide				
		L	W	S	Ød	R或倒角 R or chamfer	XH8611				
	LNE424-4R1.0	15.875	12.7	7.94	5.5	4-R1.0	●				
	LNE424-2R3.5	15.875	12.7	7.94	5.5	2-R3.5 2-0.4x45°	●				
	LNE434-405	19.05	14.288	6.35	5.5	4-0.5	●				



重切削刀片 Heavy Milling Inserts

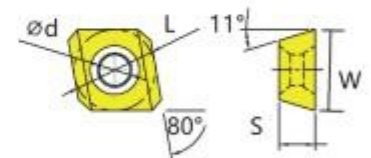
· SNC

形状 Shape	型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide				
		L	W	S	Ød	R或倒角 R or chamfer	XH8611				
	SNC55-405	15.875	15.875	7.94	5.5	4-0.5x45°	●				
	SNC55-2R2	15.875	15.875	7.94	5.5	2-R2.0 2-0.5x45°	●				
	SNC55-2R5	15.875	15.875	7.94	5.5	2-R5.0 2-0.5x45°	●				
	SNC22-4R2	15.875	15.875	7.94	5.5	4-R2.0	●				



· LSE

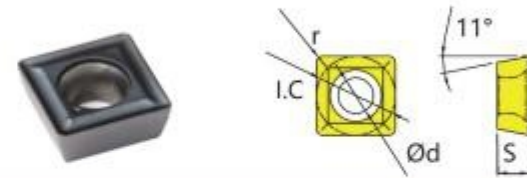
形状 Shape	型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide				
		L	W	S	Ød	R或倒角 R or chamfer	XH8611				
	LSE446R01	28.575	14.288	6.202	5.5		●				



· SPE

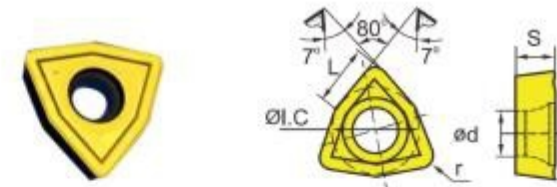
形状 Shape	型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide				
		L	W	S	Ød	R或倒角 R or chamfer	XH8611				
	SPE55R02	14.268	14.288	6.35	5.4		●				

钻削刀片 Drilling Inserts



• SPMG

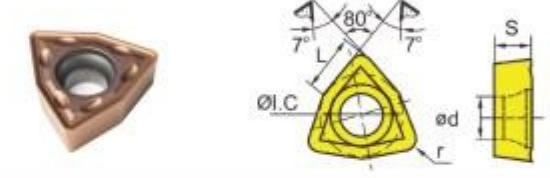
型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide							
		L	ØI.C	S	Ød	r	XH6241	XH6211	XH6212					
SPMG	050204-DG	5	5	2.38	2.28	0.4	●	●	●					
	060204-DG	6	6	2.38	2.6	0.4	●	●	●					
	07T308-DG	7.94	7.94	3.97	2.9	0.8	●	●	●					
	09T308-53	9.525	9.525	3.97	5.16	0.8	●	●	●					
	090408-DG	9.525	9.525	4.76	5.16	0.8	●	●	●					
	110408-DG	11.5	11.5	4.76	4.4	0.8	●	●	●					
	140512-DG	14.3	14.3	5.4	5.8	1.2	●	●	●					



• WCMX

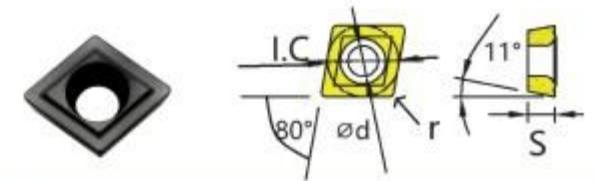
型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide							
		L	ØI.C	S	Ød	r	XH6241	XH6211	XH6212					
WCMX	020104	2.7	3.97	1.65	2.38	0.4	●	●	●					
	030208-53	3.8	5.56	2.38	2.8	0.8	●	●	●					
	040208-53	4.3	6.35	2.38	3.1	0.8	●	●	●					
	050308-53	5.4	7.938	3.18	3.2	0.8	●	●	●					
	06T308-53	6.5	9.525	3.97	3.7	0.8	●	●	●					
	080412-53	8.7	12.7	4.76	4.3	1.2	●	●	●					

钻削刀片 Drilling Inserts



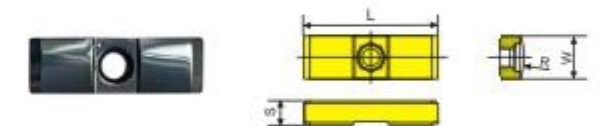
• WCMT

型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide							
		L	ØI.C	S	Ød	r	XH6241	XH6211	XH6212					
WCMT	030208-X	3.8	5.56	2.38	2.8	0.8	●	●	●					
	040208-X	4.3	6.35	2.38	3	0.8	●	●	●					
	050308-X	5.4	7.94	3.18	3.4	0.8	●	●	●					
	06T308-X	6.5	9.525	3.97	3.8	0.8	●	●	●					
	080408-XS	8.7	12.7	4.76	4.4	0.8	●	●	●					
	080412-X	8.7	12.7	4.76	4.4	1.2	●	●	●					



• CPMT

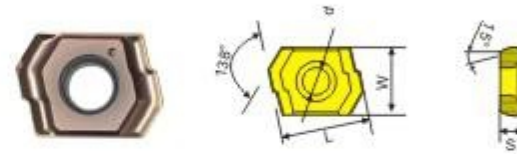
型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide								
		ØI.C	S	Ød	r	XH7211								
CPMT	080204	7.94	2.38	3.5	3.5	●								
	090308	9.525	3.18	4.5	4.5									
	120408	12.7	4.76	5.4	5.4	●								



• GPS

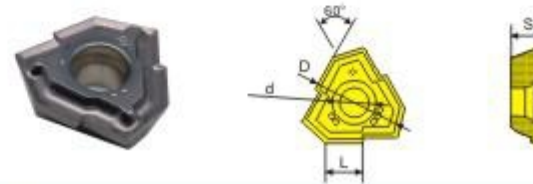
型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide							
		L	W	S	Ød	r	XH7231							
GPS	04-R5.5	16	4	2	2.38	5.5	●							
	05-R6.0	18	5	2.5	2.8	6	●							
	05-R7.5	18	5	2.5	2.8	7.5	●							
	06-R8.5	20	6	3	2.8	8.5	●							
	06-R10	20	6	3	2.8	10	●							
	07-R12	20	7	3.5	3.45	12	●							
	08-R15.5	25	8	4.5	3.6	15.5	●							

钻削刀片 Drilling Inserts



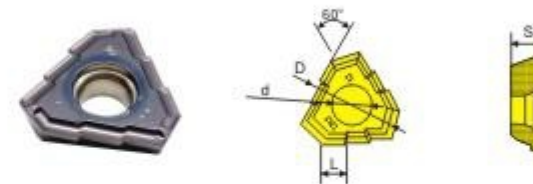
• LOGT

型号 Insert shape	基本尺寸 Dimensions				硬质合金 Cemented carbide							
	L	W	S	Ød	XH7231	XH7232						
LOGT	60204	9.24	7.1	2	2.8	●	●					



• TOGT

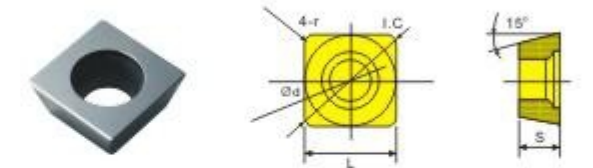
型号 Insert shape	基本尺寸 Dimensions				硬质合金 Cemented carbide							
	D	d	S	L	XH7231							
TOGT	70304	7.75	3	2.32	2.75	●						
	80305	8.64	3	2.87	2.8	●						



• TOGT

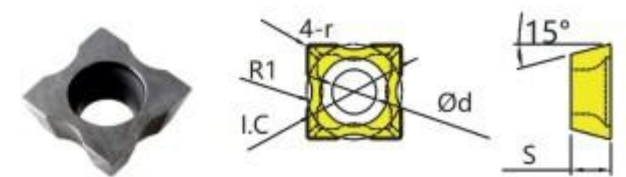
型号 Insert shape	基本尺寸 Dimensions				硬质合金 Cemented carbide							
	D	d	S	L	XH7231							
TOGT	090305	9.25	3	3.08	2.18	●						
	100305	10.1	3.5	3.38	2.7	●						
	110405	11.27	4	3.86	2.84	●						
	120405	12.5	4.5	4.34	3.38	●						
	130408	13.95	5.5	4.76	3.73	●						

倒角机刀片 Chamfering Machine Inserts



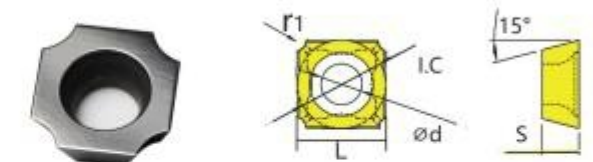
• SDMW

型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide							
	L	ØI.C	S	Ød	r	XH631	XH851	XH6313	XH811	XH8113			
SDMW	09T304	9.525	9.525	3.97	4.4	0.4	●	●	●	●	●		



• SDMW

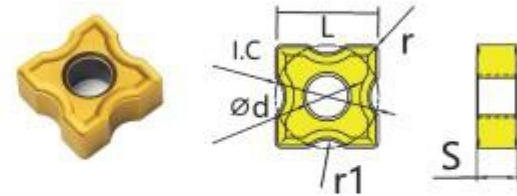
型号 Insert shape	基本尺寸 Dimensions						硬质合金 Cemented carbide					
	L	ØI.C	S	Ød	r	r1	XH631	XH851	XH6313	XH811	XH8113	
SDMW	09T304-R1	9.525	9.525	3.97	4.4	0.4	1.0	●	●	●	●	
	09T304-R1.5	9.525	9.525	3.97	4.4	0.4	1.5	●	●	●	●	
	09T304-R2	9.525	9.525	3.97	4.4	0.4	2.0	●	●	●	●	
	09T304-R2.5	9.525	9.525	3.97	4.4	0.4	2.5	●	●	●	●	
	09T304-R3	9.525	9.525	3.97	4.4	0.4	3.0	●	●	●	●	



• SDMW

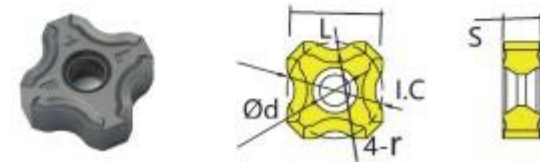
型号 Insert shape	基本尺寸 Dimensions					硬质合金 Cemented carbide							
	L	ØI.C	S	Ød	r1	XH631	XH851	XH6313	XH811	XH8113			
SDMW	09T3-R2	9.525	9.525	3.97	4.4	2.0	●	●	●	●			
	09T3-R3	9.525	9.525	3.97	4.4	3.0	●	●	●	●			
	09T3-R4	9.525	9.525	3.97	4.4	4.0	●	●	●	●			
	09T3-R5	9.525	9.525	3.97	4.4	5.0	●	●	●	●			

倒角机刀片 Chamfering Machine Inserts



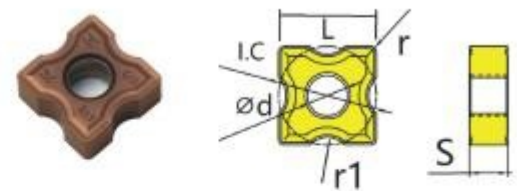
• SNMG

型号 Insert shape		基本尺寸 Dimensions						硬质合金 Cemented carbide					
		L	ØI.C	S	Ød	r	r1	XH731	XH7312				
SNMG	12T408-R5	12.7	12.7	5.2	5.1	0.8	5.0	●	●				
	12T408-X	12.7	12.7	5.2	5.1	0.8	3.0	●	●				



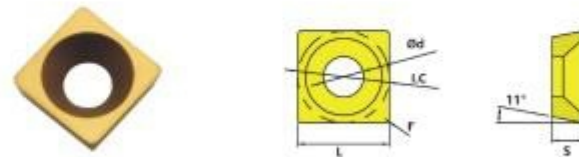
• SNMG

型号 Insert shape		基本尺寸 Dimensions						硬质合金 Cemented carbide					
		L	ØI.C	S	Ød	r		XH731	XH7312				
SNMG	12T408-LF	12.7	12.7	4.85	4.1	3.0		●	●				



• SNMG

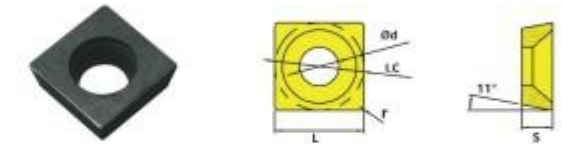
型号 Insert shape		基本尺寸 Dimensions						硬质合金 Cemented carbide					
		L	ØI.C	S	Ød	r	r1	XH731	XH7312				
SNMG	12T408-KH	12.7	12.7	4.9	5.16	0.8	3.0	●	●				



• SPEB

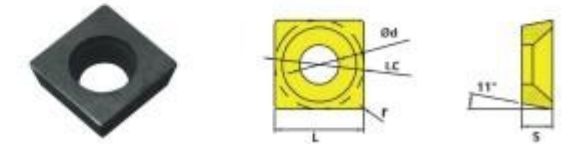
型号 Insert shape		基本尺寸 Dimensions						硬质合金 Cemented carbide					
		L	ØI.C	S	Ød	r		XH621	XH6213	XH631			
SPEB	322	9.525	9.525	3.18	4.2	0.4		●	●				

倒角机刀片 Chamfering Machine Inserts



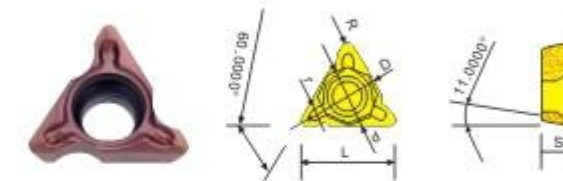
• SPMW

型号 Insert shape		基本尺寸 Dimensions						硬质合金 Cemented carbide					
		L	ØI.C	S	Ød	r		XH621	XH6213	XH631			
SPMW	090304	9.525	9.525	3.18	4.54	0.4		●	●				



• SPCW • SPKW

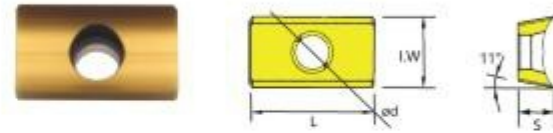
型号 Insert shape		基本尺寸 Dimensions						硬质合金 Cemented carbide					
		L	ØI.C	S	Ød	r		XH821	XH831	XH731	XH911		
SPCW	120408	12.7	12.7	4.76	5.6	0.8		●	●	●			
	150408	15.875	15.875	4.76	5.6	0.8		●	●				
SPKW	120308	12.7	12.7	3.18	5.6	0.8							
	120408	12.7	12.7	4.76	5.6	0.8		●		●			
	150408	15.875	15.875	4.76	5.6	0.8		●	●				
	190605	19.05	19.05	6.35	6.7	0.5							



• TPMT

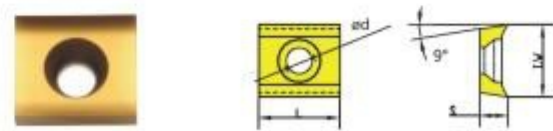
型号 Insert shape		基本尺寸 Dimensions						硬质合金 Cemented carbide					
		L	ØI.C	S	Ød	r	r1	XH6231	XH623				
TPMT	80204	7.6	4.75	2.38	2.5	0.4		●	●				
	080204-R1.5	7.6	4.75	2.38	2.5	0.4	1.5	●	●				

管用刀片 Tube Scraving Inserts



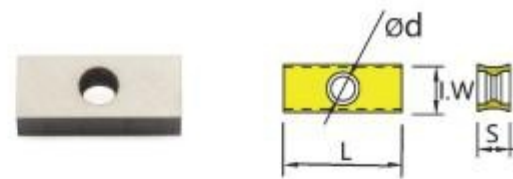
• AXHN

型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide							
		L	W	S	Ød	XH7313							
AXHN	1604-X	16.5	9.5	4.76	4.5	●							



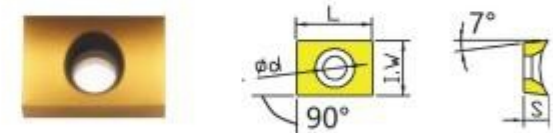
• LNKT

型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide							
		L	W	S	Ød	XH8113							
LNKT	100803-X	10	7.79	3.5	3.2	●							



• SHYW

型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide							
		L	W	S	Ød	XH7313	XH721						
SHYW	128805	12.95	8.82	5.8	4.2	●							
	200805	20.2	8.4	5.8	4.3	●							
	218506	21	9.5	6	4.1	●							



• XCHT

型号 Insert shape		基本尺寸 Dimensions				金陶 Cermet							
		L	W	S	Ød	XH8113							
XCHT	110302	11	7.6	3.5	3.4	●							

管用刀片 Tube Scraving Inserts



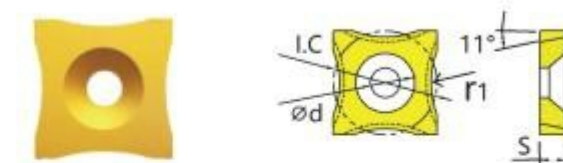
• R420.37

型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide							
		L	W	S	Ød	XH6213	XH6211	XH6313	XH6311	XH7213	XH7211		
R420.37	11T3	17	12	4.76	4.3	●		●					
	06T3	12	8	3.97	3.81	●		●					



• R420.37

型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide							
		L	W	S	Ød	XH6213	XH6211	XH6313	XH6311	XH7213	XH7211		
R420.37	06T3	10	7.5	2.85	3.15	●		●					



• SPUB

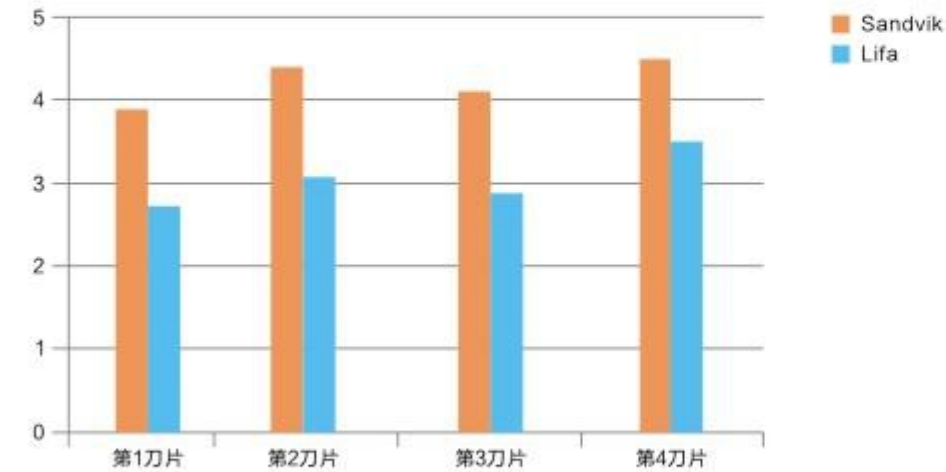
型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide							
		I.C	S	Ød	r1	XH7383	XH6223						
SPUB	63B	19.05	4.76	5.08	12.06	●							
	63C	19.05	4.76	5.08	14.98	●							
	63D	19.05	4.76	5.08	19.93	●							
	63E	19.05	4.76	5.08	25.01	●							
	63F	19.05	4.76	5.08	29.97	●							
	63G	19.05	4.76	5.08	40	●							
	63H	19.05	4.76	5.08	50.03	●							
	63J	19.05	4.76	5.08	62.73	●							
	63L	19.05	4.76	5.08	88.13	●							
	63M	19.05	4.76	5.08	100.83	●							

CT3000 加工案例 CT3000 Processing case

刀具品牌	立法	特固克
刀具型号	CNMG120404-FG XH7135	CNMG120404-FG CT3000
切削工	断续切削	断续切削
切削液	湿式切削	湿式切削
加工类型	粗加工	粗加工
背利刀亮	1.3~2.3mm	1.3~2.3mm
转速	1500~1500r/min	1500~1500r/min
每转进给量	0.15~0.15mm/rev	0.15~0.15mm/rev
切削速度	127~149m/min	127~149m/min
表里质量	表面优	表面优
断屑效果	短切屑	短切屑
加工效率	0.13min/pce	0.13min/pce
刃口寿命	700pcs	800pcs
失效形式	微崩	后刀面磨损
性能评价	性能良	性能优



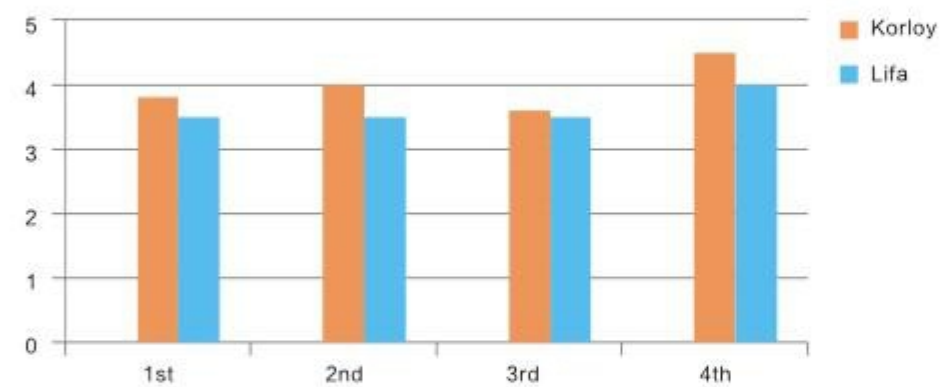
HGC4215加工案例 HGC4215 processing case



1个刀尖加工工件190根

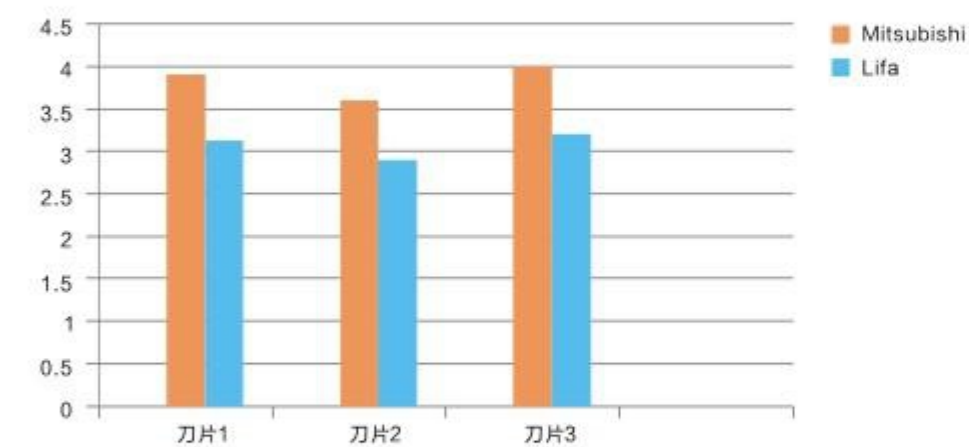
- 工件直径: 102~135M
- YBC252 CNMG120408-PM
- Vc: 400~1800m/min
- Fn: 0.2mm/rev
- Ap: 0.2mm

铝H01加工案例 Aluminum H01 processing case



- TCGT110208-AK H01
- Vc: 320~800m/min
- Fn: 0.08~0.25mm/rev
- Ap: 1.8mm

VP16TF加工案例 VP16TF Processing case



- VP15TF APMT1135
- 半精加工插角
- 刀具直径 $\phi 17$
- Fn: 600~3500mm/r
- Ap: 0.3mm

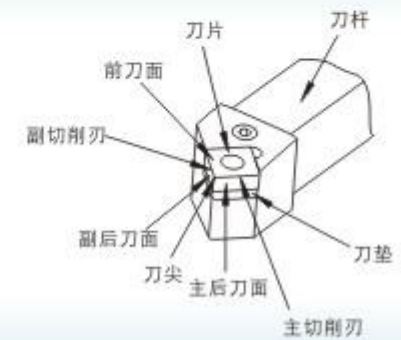
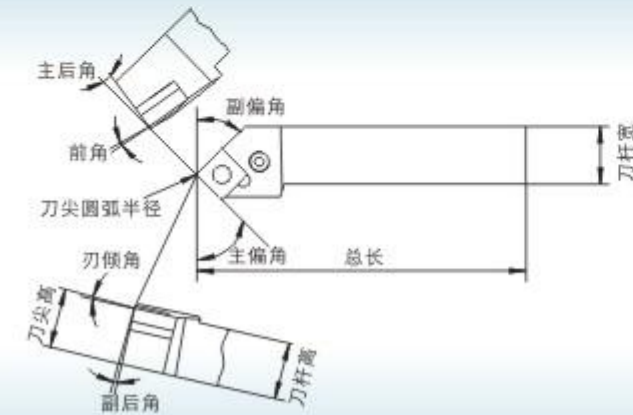
车削刀片 Turning Insert

车削加工技术资料 Turning processing technical data

车削刀具各部分作用

The role of each part of the turning tool

1 车刀各部分的名称



2 前角的影响

前角增大使切削刃锋利，切屑流出阻力小，摩擦力小，切削变形小，因此切削力和切削功率小，切削温度低，刀具磨损小，加工表面质量高。但过大前角使刀具的刚性和强度降低，热量不易传散，刀具磨损和破损严重，刀具寿命低。在确定刀具前角时，应根据加工条件考虑选择。

选值	具体情况
小前角	- 加工脆性材料和硬材料时 - 粗加工和断续切削时
大前角	- 加工塑性材料和软材料时 - 精加工时

3 后角的影响

后角在加工中的主要作用是减小刀具后刀面与加工表面的摩擦。当前角固定时，后角的增大能增大刀刃的锋利程度，切削力减小，摩擦减小，故加工表面质量高；但是过大的后角使切削刃强度降低，散热条件差，磨损量大，因为刀具寿命降低。

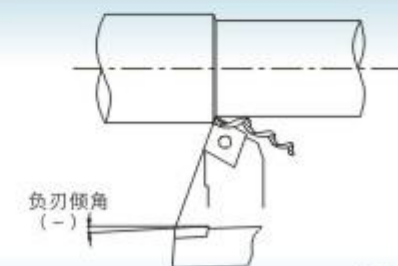
后角选择原则是：在摩擦不严重的情况下，选择较小的后角。

选值	具体情况
小后角	- 粗加工时为提高刀尖强度 - 加工脆性材料和硬材料时
大后角	- 精加工时为了减小摩擦 - 加工易产生硬化层的材料时

4 刃倾角的作用

刃倾角的正负决定了切屑的排出方向，还影响刀尖强度和抗冲击性能。

◆ 如图(1)所示，当刃倾角为负时，即刀尖相对于车刀的底平面处于最低点，切屑流向工件已加工表面。



图(1)

车削加工技术资料 Turning processing technical data

◆如图(2)所示,当刃倾角为正时,即刀尖相对于车刀的底平面处于最高点,切屑流向工件未加工表面。

◆刃倾角的变化还能影响刀尖的强度和抗冲击性能。当刃倾角取负值时,刀尖在切削刃的最低点,切削刃切入工件时,切入点在切削刃或前刀面,保护刀尖免受冲击,增强刀尖强度。一般大前角刀具通常选用负的刃倾角。既可增强刀尖强度,又可避免刀尖切入时产生的冲击。



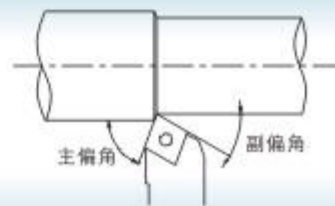
图(2)

5 主偏角的影响

减小主偏角可以使刀具强度提高,散热条件好,加工表面粗糙度小。这是因为主偏角小时,切削宽度长,故单位切削刃长度上受力小。同时主偏角减小能提高刀具的寿命。

通常,在车细长轴和阶梯轴时,选90°主偏角;在车外圆、端面和倒角时,选45°主偏角。

增大主偏角,径向分力减小,切削平稳,切削厚度增大,断屑性能好。



选值	具体情况
小主偏角	● 高强度、高硬度和表面有硬化层的材料
大主偏角	● 机床刚性不足时

6 副偏角的影响

副偏角是影响表面粗糙度的主要角度,它的大小也影响刀具强度。过小的副偏角,会增加副后面与已加工表面间摩擦,引起振动。

副偏角的选择原则是,在粗加工或者不影响摩擦和产生振动的条件下,应选取较小的副偏角;在精加工时可选择较大的副偏角。

7 刀尖圆弧半径

刀尖圆弧半径对刀尖强度及加工表面粗糙度影响很大。

刀尖圆弧半径大,切削刃强度增大,刀具前、后刀面磨损可以在某种程度上减小。但刀尖圆弧半径过大时,径向切削力增加,易产生振动,影响加工精度和工件表面粗糙度。

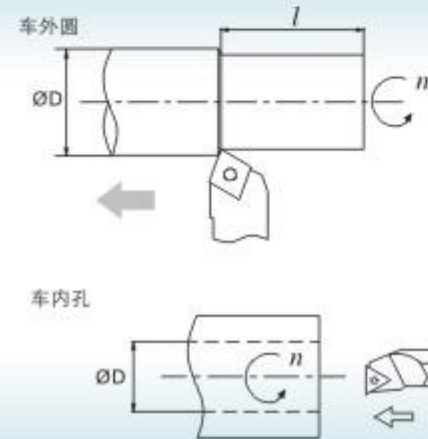
选值	具体情况
小的刀尖圆弧半径	● 小切深的精加工 ● 加工细长轴类零件 ● 机床刚性不足时
大的刀尖圆弧半径	● 粗加工时 ● 加工硬材料、断续切削时 ● 机床刚性好时

车削加工技术资料 Turning processing technical data

车削加工参数计算方法

Calculation method of turning processing parameters

1 切削速度的计算



$$V_c = \frac{\pi \times D \times n}{1000} \quad (m/min)$$

式中: V_c : 切削速度(m/min)

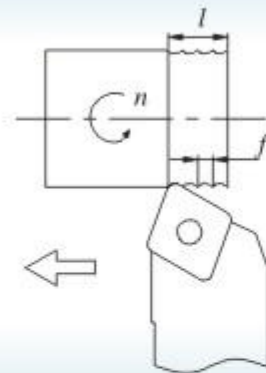
n : 主轴转速(rev/min)

D : 工件直径(mm)

例如: 主轴转速为280rev/min, 切削直径为150mm的工件, 其切削速度为:

$$V_c = \frac{\pi \times D \times n}{1000} \quad (m/min) = 132(m/min)$$

2 进给量的计算



$$f = \frac{l}{n} \quad (mm/rev)$$

式中: f : 每转进给量(mm/rev)

l : 每分钟切削长度(mm/min)

n : 主轴转速(rev/min)

例如: 主轴转速为500rev/min, 每分钟切削长度为100mm/min, 其每转进给量为:

$$f = \frac{l}{n} = \frac{100}{500} = 0.2(mm/rev)$$



车削加工技术资料 Turning processing technical data

3 外圆、内孔切削时间的计算

$$T = \frac{l}{f \times n} \quad (\text{min})$$

式中: T: 切削时间(min)

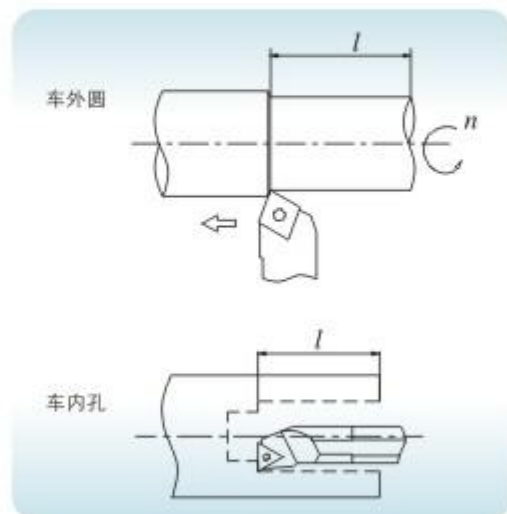
l: 被切削部分长度(mm)

f: 进给量(mm/rev)

n: 主轴转速(rev/min)

例如: 求主轴转速为250rev/min, 进给量为0.2mm/rev, 切削长度为150mm的工件所用时间。

$$T = \frac{l}{f \times n} = \frac{150}{0.2 \times 250} = 3(\text{min})$$



4 端面切削时间的计算 (恒线速)

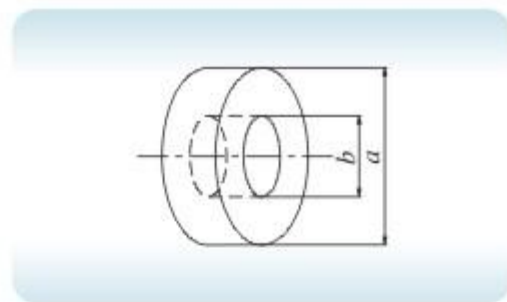
$$T = \frac{\pi \times (a^2 - b^2)}{4000 \times V_c \times f} \quad (\text{min})$$

式中: T: 切削时间(min)

V_c: 切削速度(m/min)

f: 进给量(mm/rev)

当所切削的端面无内孔时, b=0, 公式亦适用。



5 已加工表面粗糙度的理论值计算

$$R = \frac{f^2}{8r_c} \times 1000 \quad (\mu\text{m})$$

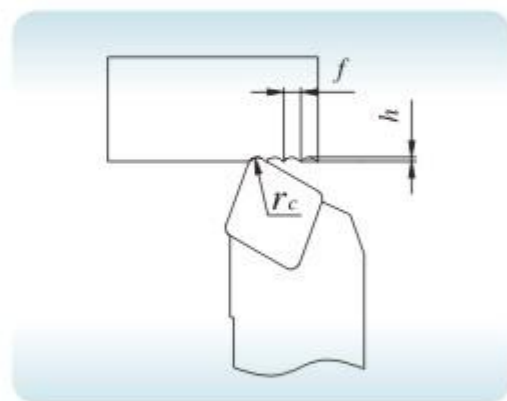
式中: R: 已加工表面粗糙度理论值(μm)

f: 进给量(mm/rev)

r_c: 刀尖圆弧半径(mm)

例如: 进给量为0.2mm/rev, 刀尖圆弧半径为0.4mm时, 其已加工表面粗糙度理论值为:

$$R = \frac{f^2}{8r_c} \times 1000 = \frac{0.2^2}{8 \times 0.4} \times 1000 = 12.5(\mu\text{m})$$



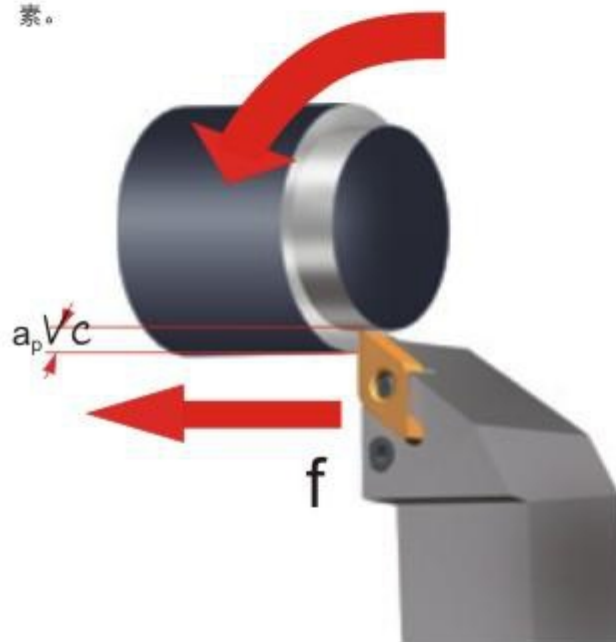
车削加工技术资料 Turning processing technical data

车削三要素对加工的影响

The influence of three elements of turning on processing

三要素的影响

在切削加工中, 通常都希望获得短的加工时间, 长的刀具寿命和高的加工精度。因此, 必须充分考虑工件材料的材质、硬度、形状状况及机床的性能, 选择合适的刀具并使用高效率的切削条件, 即我们所说的三要素。



切削速度 (V_c)

工件在车床上旋转, 将其每分钟的转数定义为主轴转速 (n)。由于工件旋转, 在其直径的切削点处产生切削速度, 称为线速度, 单位米/分钟。通常用线速度来考虑切削速度对加工的影响。

切削速度的影响

切削速度对刀具寿命有非常大的影响。提高切削速度时, 切削温度就上升, 而使刀具寿命大大缩短。加工不同种类、硬度的工件, 切削速度会有相应的变化。通过大量的切削实验得出:

(1) 在通常情况下, 切削速度提高20%, 刀具耐用

度降低1/2; 切削速度提高50%, 刀具耐用度将降至原来的1/5。

(2) 低速 (20-40m/min) 切削易产生振动, 使刀具寿命缩短。

进给量 (f)

进给量是指工件每旋转一周, 刀具的移动量, 单位为毫米/转。

进给量的影响

进给量是决定被加工表面质量的关键因素, 同时也影响加工时切屑形成的范围和切屑的厚度。

在对刀具寿命影响方面, 进给量过小, 后刀面磨损大, 刀具寿命大幅降低; 进给量过大, 切削温度升高, 后刀面磨损也增大, 但较之切削速度对刀具寿命的影响要小。

切削深度 (a_p)

切削深度指未加工表面与已加工表面之间的差值, 单位毫米。它是工件未加工直径与已加工直径差值的一半。

切削深度的影响

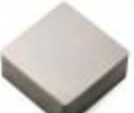
切削深度应根据工件的加工余量、形状、机床功率、刚性及刀具的刚性来确定。

切削深度变化对刀具寿命影响不大。切削深度过小时, 会造成刮擦, 只切削工件表面的硬化层, 缩短刀具寿命。当工件表面具有硬化的氧化层时, 应在机床功率允许范围内选择尽可能大的切削深度, 以避免刀尖只切削工件的表面硬化层, 造成刀尖的异常磨损甚至破损。

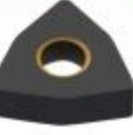
车削牌号一览表 List of turning plates

工作材料 Material	ISO 使用 代号 ISO code	涂层硬质合金 Coated carbide		金属陶瓷 Cermet	涂层 金属陶瓷 Coating Cermet	硬质合金 Cemented carbide
		CVD	PVD			
P 钢 Steel	10	XH6223 XH6260	XH6223 XH6311	XH811	XH813	
	20	XH6211, XH6210 XH6213	XH6313, XH6311			XH851
	30	XH6272, XH6271, XH6270 XH6313, XH6311				
	40					
M 不锈钢 Stainless steel	10	XH6211 XH6212	XH7111 XH6221 XH6222		XH8113	
	20		XH6511			
	30					
K 铸铁 Cast iron	10	XH6211 XH6110				
	20					
	30					
	40					
N 有色金属 Non-ferrous metal	01		XH915			
	10					
	20		XH9211			
	30					
	40					
S 钛合金 高温合金 Titanium alloy Superalloy	钛合金 高温合金		XH6221			
H 高硬度材料 High hardness material	淬火钢		XH7111			

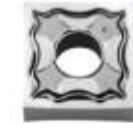
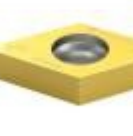
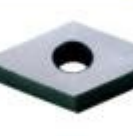
车削刀片产品预览 Turning blade product preview

CCMT 047	CNMG-MS 047	CNMG-BA 047	CNMG-BM 048	CNMG-MA 048	CNMG-MSA 048
					
SNMG-MS 049	SNMG-MA 049	SNMG-MSA 049	TCMT 050	TNMG-HA 050	TNMG-BM 050
					
TNMG-MS 050	TNMG-MA 051	TNMG-MSA 051	VNMG-MS 051	VNMG-MA 052	VNMG-MSA 052
					
WNMG-MS 052	WNMG-MSA 053	WNMG-MA 053	DCMT 053	DCMT-MV 054	CCMT-HM 054
					
CCMT-HF 054	CNMA 055	CNMG 055	CNMG-CQ 055	CNMG-MPB 056	CNMG-MR 056
					
CNMG-PM 056	CNMG-DR 057	CNMG-TM 057	DCMT-HF 057	DCMT-HM 058	DNMG-DM 058
					
DNMG-PM 058	SCET 059	SCMT-TC 059	SCMT-HF 059	SCMT-HM 059	SNUN 060
					
SNMA 060	SNMG 060	SNMG-PM 061	SNMG-R 061	SNMG-L 061	SNMG-TM 062
					

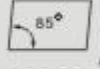
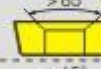
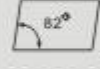
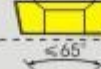
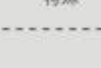
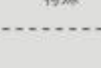
车削刀片产品预览 Turning blade product preview

SNMM 062	SPEB 062	SPMW 063	TCMT 063	TNMA 063	TNMG 064
					
TNMG-CQ 064	TNMG-DM 064	TNMG-PM 065	TNMG-GH 065	TNMG-R 065	TNMG-L 066
					
TNMG-TM 066	TNMX 066	TNMX-X 067	TNMX-3 067	TNMX-R 067	VBMW 067
					
VCMT 068	VCMT-MD 068	VNMG-XH 068	VNMG-DM 068	VNMG-PM 069	WNMA 069
					
WNMG 069	WNMG-EM 070	WNMG-OPM1 070	WNMG-PM 070	WNMG-R 071	WNMG-L 071
					
WNMG-TM 071	175.32-301940 071	CCMT 073	CCMT-FGF 073	CCMT-HQF 073	CCMT-MTF 074
					
CNMG-FGF 074	CNMG-MTF 074	DCMT-FGF 075	DCMT-MTF 075	DNMG-MTF 075	DNMG-VFF 076
					
SCMT-MTF 076	SNMG-MTF 076	TCMT-MT1 077	TCMT-MT2 077	TNMG-CQ 077	TNMG-FSF 077
					

车削刀片产品预览 Turning blade product preview

TNMG-VFF 078	TNMG-FGF 078	TNMG-MTF 078	TNMG-2G 079	TNMG-F 079	TPGH-R 080
					
TPGH-L 080	VNMG 080	VNMG-FGF 081	VNMG-MT 081	WNMG-FGF 081	WNMG-HQF 081
					
WNMG-MSF 082	WNMG4-MT 082	WNMG-MTF 082	WNMG-L 083	WNMG-TSF 083	APKT-MA 085
					
APGT-G2 085	CCGT-LH 085	CNMG-HA 086	DCGT-LH 086	DNMG-LH 086	RCGT-LH 087
					
RCGT-FX 087	SCGT-LH 087	SEET-LH 088	SNMG-VH 088	TCGT-LH 088	TNMG-HA 089
					
VBGT-LH 089	VCMT-LH 089	WCGX-LH 090	WNMG-HA 090	GIPA6.0-3.0 090	GIPATZ 091
					
GIPA8.0-4.0 091	CCGW 092	DCGW 092	DNMA 092	SCMW 093	SNR 093
					
SNRA 093	TNR 094	TNRA 094	VCGW 094	WNGA 094	
					

ISO车削刀片型号表示规则 Iso turning insert model type rule

刀片形状 / 代号 SHAPE/COPE			公制 MATRIC SYSTEM					
代号	有无孔	有无断屑槽	刀片剖面	代号	有无孔	有无断屑槽	刀片剖面	
 A	有	无		 N	无	无		
 B	有	单面		 R	无	单面		
 C	有	无		 F	无	双面		
 D	有	无		 A	有	无		
 E	有	双面		 M	有	单面		
 K	有	无		 G	有	双面		
 L	有	无		 X	---	---		特殊
 O	有	无						
 P	有	无						
 S	有	无						
 T	有	无						
 V	有	无						
 W	有	无						
 Z	有	无						

T N M G

主切削刃后角				公差									
代号	后角	代号	后角	代号	刀尖高度m公差(mm)	内接圆ØI.C公差(mm)	厚度S公差(mm)	(参考) M级精度详细情况 (按形状、大小分)					
A	3°	B	5°	A	±0.005	±0.025	±0.025	● 刀尖高度公差 (mm)					
C	7°	D	15°	F	±0.005	±0.013	±0.025	内接圆	正三角形	正方形	80°菱形	55°菱形	35°菱形
E	20°	F	25°	C	±0.013	±0.025	±0.025	6.35	±0.08	±0.08	±0.08	±0.11	±0.16
G	30°	N	0°	H	±0.013	±0.013	±0.025	9.525	±0.08	±0.08	±0.08	±0.11	±0.16
P	11°	O	其他的后角	E	±0.025	±0.025	±0.025	12.7	±0.13	±0.13	±0.13	±0.15	---
				G	±0.025	±0.025	±0.13	15.875	±0.15	±0.15	±0.15	±0.18	---
				J	±0.005	±0.05±0.13	±0.025	19.05	±0.15	±0.15	±0.15	±0.18	---
				K	±0.013	±0.05±0.13	±0.025	25.4	±0.18	---	---	---	---
				L	±0.025	±0.05±0.13	±0.025	● 内接圆ØI.C公差 (mm)					
				M	±0.08±0.18	±0.05±0.13	±0.13	内接圆	正三角形	正方形	80°菱形	55°菱形	35°菱形
				N	±0.08±0.18	±0.05±0.13	±0.025	6.35	±0.05	±0.05	±0.05	±0.05	±0.05
				U	±0.13±0.38	±0.08±0.25	±0.13	9.525	±0.05	±0.05	±0.05	±0.05	±0.05
								12.7	±0.08	±0.08	±0.08	±0.08	±0.08
								15.875	±0.10	±0.10	±0.10	±0.10	±0.10
								19.05	±0.10	±0.10	±0.10	±0.10	±0.10
								25.4	±0.13	---	---	---	±0.13

ISO车削刀片型号表示规则 Iso turning insert model type rule

内切圆直径 (mm)	刀片形状								刀片厚度(mm)
	C	D	R	S	T	V	W	K	
3.97					06				00
5.0			05						T0
5.56					09				01
6.0			06						T1
6.35	06	07			11	11			02
8.0			08						T2
9.525	09	11	09	09	16	16	06	16	03
10.0			10						T3
12.0			12						04
12.7	12	15	12	12	22	22	08		T4
15.875	16	15	15	15	27				05
16.0		19	16						T5
19.05	19		19	19	33				06
20.0			20						T6
25.0	25	25	25						07
25.4			25	25					T7
31.75			31						08
32			32						T8

22 04 08 - DM (ISO)
4 3 2 (inch)

内切圆	
代号	内切圆直径(mm)
2	6.35
3	9.525
4	12.7
5	15.875
6	19.05
8	25.4

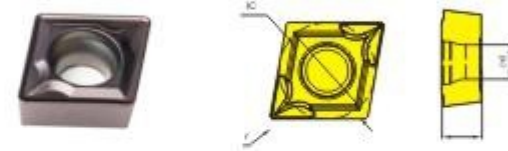
厚度	
代号	厚度(mm)
2	3.18
3	4.76
4	6.35
5	7.94
6	9.52

刀尖圆弧半径	
代号	刀尖圆弧半径(mm)
0	0.2
1	0.4
2	0.8
3	1.2
4	1.6
5	2.0
6	2.4

刀尖圆弧代号	
代号	刀尖圆弧半径(mm)
00	无圆角
02	0.2
04	0.4
08	0.8
12	1.2
16	1.6
20	2.0
24	2.4
32	3.2
X	其他

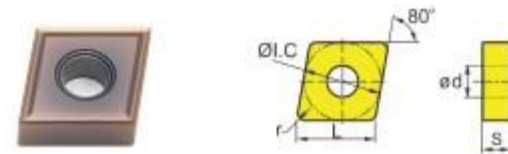
断屑槽型代号		
DF	DM	DR
		
HF	HM	HR
		
EF	EM	ER
		
NF	NM	SF
		
PM	HR	WGF
		

ISO标准车削 ISO standard turning



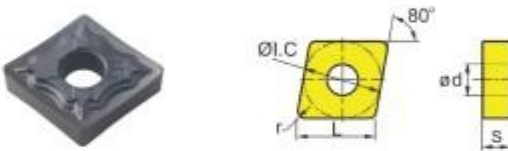
• CCMT

型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide									
	ISO	ØI.C	t	Ød	r	XH7242										
CCMT	060202	6.35	3.97	2.8	0.2	●										
	060204	6.35	3.97	2.8	0.4	●										
	060208	6.35	3.97	2.8	0.8	●										
	09T304	9.525	3.97	4.4	0.4	●										
	09T308	9.525	3.97	4.4	0.8	●										
	120404	12.70	4.76	5.5	0.4	●										
	120408	12.70	4.76	5.5	0.8	●										



• CNMG

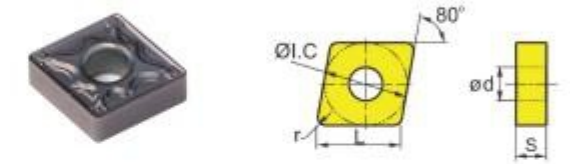
型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222					
CNMG	120404-MS	431-MS	12.9	12.7	4.76	5.16	0.8			●	●	●					
	120408-MS	432-MS	12.9	12.7	4.76	5.16	1.2			●	●	●					



• CNMG

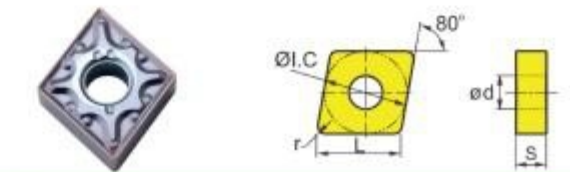
型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222					
CNMG	120408-BA	432-BA	12.9	12.7	4.76	5.16	0.8	●	●								

ISO标准车削 ISO standard turning



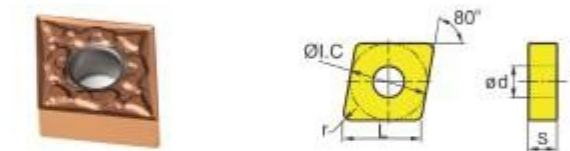
• CNMG

型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222				
CNMG	120408-BM	432-BM	12.9	12.7	4.76	5.16	0.8	●	●							



• CNMG

型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222					
CNMG	120404-MA	431-MA	12.9	12.7	4.76	5.16	0.8			●	●	●					
	120408-MA	432-MA	12.9	12.7	4.76	5.16	1.2			●	●	●					



• CNMG

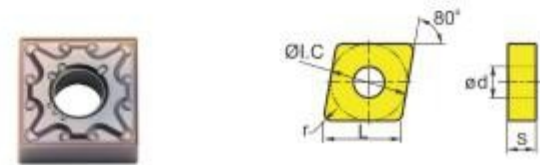
型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222					
CNMG	120408-MSA	432-MSA	12.9	12.7	4.76	5.16	0.8			●							
	120412-MSA	433-MSA	12.9	12.7	4.76	5.16	1.2			●							

ISO标准车削 ISO standard turning



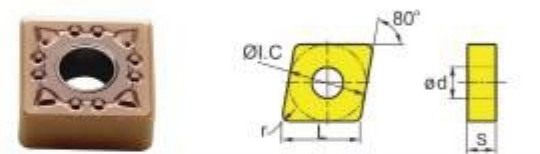
• SNMG

型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222							
SNMG	120408-MS	432-MS	12.7	12.7	4.76	5.16	0.4			●	●	●							
	120412-MS	433-MS	12.7	12.7	4.76	5.16	0.8			●	●	●							



• SNMG

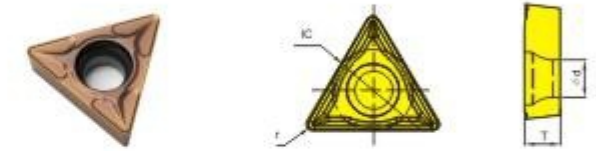
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222							
SNMG	120404-MA	431-MA	12.7	12.7	4.76	5.16	0.4			●	●	●							
	120408-MA	432-MA	12.7	12.7	4.76	5.16	0.8			●	●	●							
	120412-MA	433-MA	12.7	12.7	4.76	5.16	1.2			●	●	●							



• SNMG

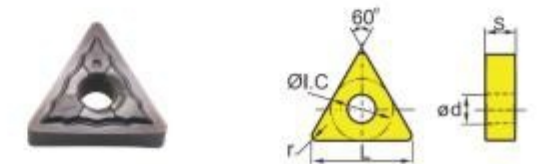
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222							
SNMG	120408-MSA	432-MSA	12.7	12.7	4.76	5.16	0.8			●									
	120412-MSA	433-MSA	12.7	12.7	4.76	5.16	1.2			●									

ISO标准车削 ISO standard turning



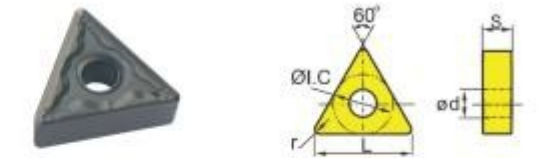
• TCMT

型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide										
	ISO	ØI.C	t	Ød	r	XH7242											
TCMT	110204	6.35	2.38	2.8	0.4	●											
	110208	6.35	2.38	2.8	0.8	●											
	16T304	9.525	3.97	4.4	0.4	●											
	16T308	9.525	3.97	4.4	0.8	●											



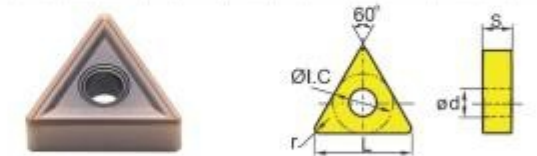
• TNMG

型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222							
TNMG	160404-HA	331-HA	16.5	9.525	4.76	3.81	0.8			●	●	●							
	160408-HA	332-HA	16.5	9.525	4.76	3.81	0.8			●	●	●							



• TNMG

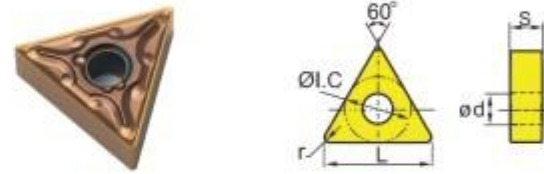
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222							
TNMG	160408-BM	332-BM	16.5	9.525	4.76	3.81	0.8	●	●										



• TNMG

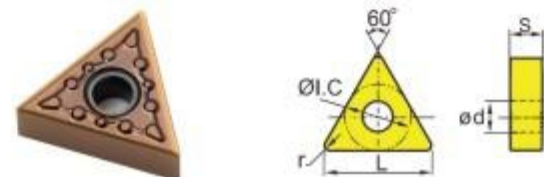
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222							X915
TNMG	160404-MS	331-MS	16.5	9.525	4.76	3.81	0.4			●	●	●							
	160408-MS	332-MS	16.5	9.525	4.76	3.81	0.8			●	●	●							

ISO标准车削 ISO standard turning



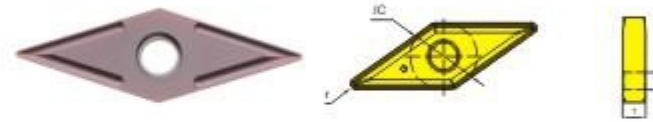
• TNMG

型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222							X915
TNMG	160404-MA	331-MA	16.5	9.525	4.76	3.81	0.4			●	●	●							
	160408-MA	332-MA	16.5	9.525	4.76	3.81	0.8			●	●	●							



• TNMG

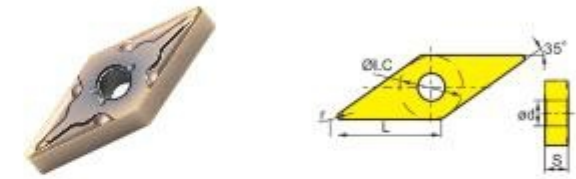
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222							X915
TNMG	160404-MSA	331-MSA	16.5	9.525	4.76	3.81	0.4			●									
	160408-MSA	332-MSA	16.5	9.525	4.76	3.81	0.8			●									
	160412-MSA	333-MSA	16.5	9.525	4.76	3.81	1.2			●									



• VNMG

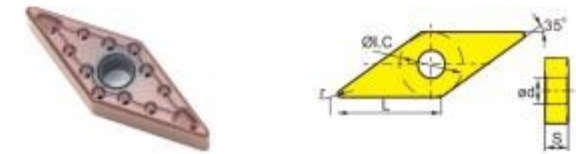
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222							
VNMG	160408-MS	432-MS	16.6	9.525	4.76	3.81	0.4	●	●										

ISO标准车削 ISO standard turning



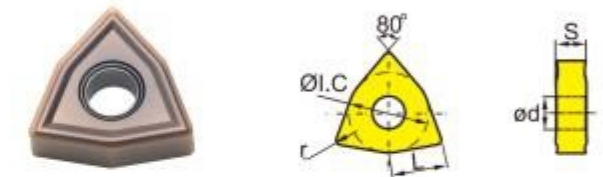
• VNMG

型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222							
VNMG	160404-MA	431-MA	16.6	9.525	4.76	3.81	0.4			●	●	●							
	160408-MA	432-MA	16.6	9.525	4.76	3.81	0.8			●	●	●							



• VNMG

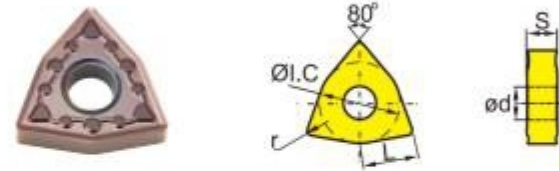
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222							
VNMG	160408-MSA	432-MSA	16.6	9.525	4.76	3.81	0.4			●									



• WNMG

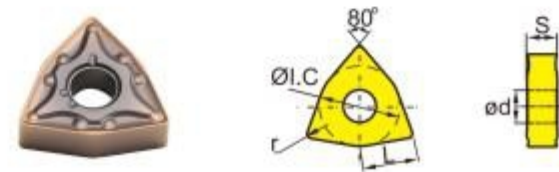
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222							
WNMG	080404-MS	331-MS	8.7	12.7	4.76	4.76	4.76			●	●	●							
	080408-MS	432-MS	8.7	12.7	4.76	4.76	4.76			●	●	●							

ISO标准车削 ISO standard turning



• WNMG

型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222						
WNMG	080404-MSA	331-MSA	8.7	12.7	4.76	5.16	0.4			●								
	080408-MSA	432-MSA	8.7	12.7	4.76	5.16	0.8			●								
	080412-MSA	433-MSA	8.7	12.7	4.76	5.16	1.2			●								



• WNMG

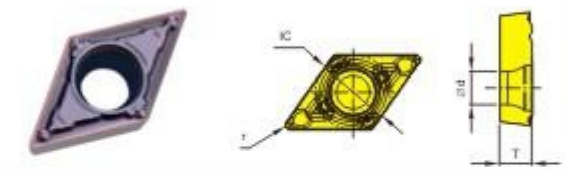
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7211	XH7212	XH7242	XH7221	XH7222						
WNMG	080404-MA	331-MA	8.7	12.7	4.76	5.16	0.4			●	●	●						
	080408-MA	432-MA	8.7	12.7	4.76	5.16	0.8			●	●	●						



• DCMT

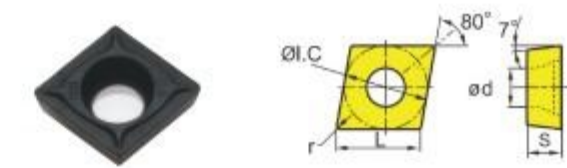
型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide										
	ISO		ØI.C	t	Ød	r		XH7242										
DCMT	11T304		9.525	3.97	4.4	0.4		●										
	11T308		9.525	3.97	4.4	0.8		●										

ISO标准车削 ISO standard turning



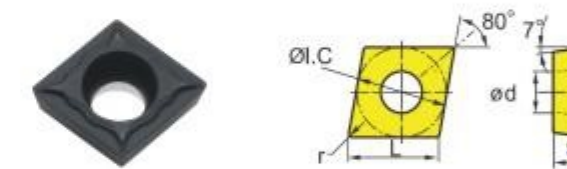
• DCMT

型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide										
	ISO		ØI.C	t	Ød	r		XH7242										
DCMT	070202-MV		6.35	2.38	2.8	0.2		●										
	070204-MV		6.35	2.38	2.8	0.4		●										
	070208-MV		6.35	2.38	2.8	0.8		●										
	11T304-MV		9.525	3.97	4.4	0.4		●										
	11T308-MV		9.525	3.97	4.4	0.8		●										



• CCMT

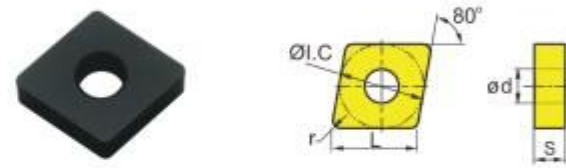
型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide															
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH6223	XH6220	XH6260	XH6273	XH6271	XH6270	XH9110	XH9111	XH9210	XH9311			
CCMT	060204-HM	2*1.5)1-HM	6.4	6.35	2.38	2.8	0.4	●	●	●													
	060208-HM	2(1.5)2-HM	6.4	6.35	2.38	2.8	0.8	●	●	●													
	09T304-HM	3(2.5)1-HM	9.7	9.525	3.97	4.4	0.4	●	●	●													



• CCMT

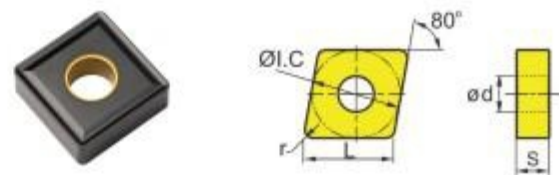
型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide												
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH6313	XH6312	XH6310							
CCMT	120404-HF	3(2.5)1-HF	9.7	9.525	3.97	4.4	0.4	●	●	●	●	●	●							

ISO标准车削 ISO standard turning



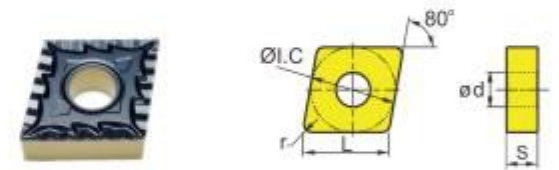
• CNMA

型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH9111	XH9110	XH9211	XH9210	XH9311	XH9310					
CNMA	120404	431	12.9	12.7	4.76	5.16	0.4	●	●	●	●							
	120408	432	12.9	12.7	4.76	5.16	0.8	●	●									
	120412	433	12.9	12.7	4.76	5.16	1.2			●	●	●	●					
	120416	434	12.9	12.7	4.76	5.16	1.6			●	●	●	●					



• CNMG

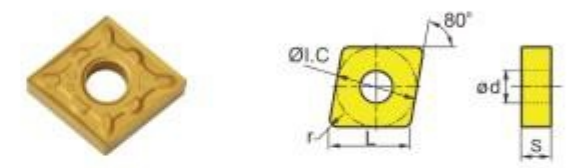
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH9110	XH9111	XH731	XH6313	XH6311	XH6310		
CNMG	120404	431	12.9	12.7	4.76	5.16	0.4	●	●	●								
	120408	432	12.9	12.7	4.76	5.16	0.8	●	●	●	●	●	●					
	120412	433	12.9	12.7	4.76	5.16	1.2	●	●	●	●	●		●	●	●		
	190608	642	19.3	19.05	6.35	7.94	0.8											



• CNMG

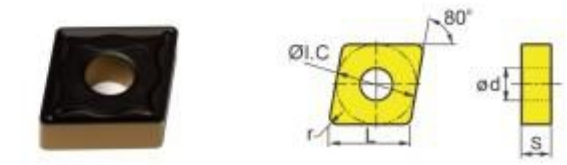
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH9110	XH9111	XH731	XH6313	XH6311	XH6310		
CNMG	120408-CQ	432-CQ	12.9	12.7	4.76	5.16	0.8	●	●	●								
	120412-CQ	433-CQ	12.9	12.7	4.76	5.16	1.2	●	●	●								

ISO标准车削 ISO standard turning



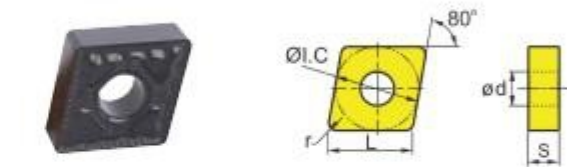
• CNMG

型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH9110	XH9111	XH731	XH6313	XH6311	XH6310		
CNMG	120408-MPB	432-MPB	12.9	12.7	4.76	5.16	0.8	●	●	●				●	●	●		



• CNMG

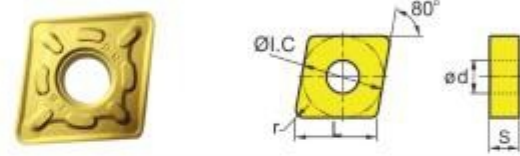
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH7313	XH7311	XH7310								
CNMG	160616-MR	544-MR	16	15.875	6.35	6.35	1.6	●	●	●								



• CNMG

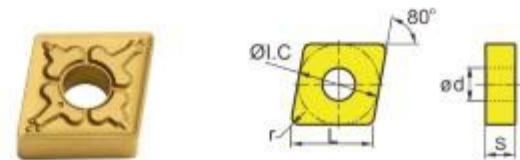
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH9110	XH9111	XH731	XH7313	XH7311	XH7310	XH6313	XH6311
CNMG	120404-PM	431-PM	12.9	12.7	4.76	5.16	0.4	●	●	●	●	●						
	120408-PM	432-PM	12.9	12.7	4.76	5.16	0.8	●	●	●	●	●	●	●	●			
	120412-PM	433-PM	12.9	12.7	4.76	5.16	1.2				●	●				●	●	●
	190608-PM	642-PM	19.3	19.05	6.35	6.35	0.8							●	●	●		
	190612-PM	643-PM	19.3	19.05	6.35	6.35	1.2	●	●	●				●	●	●	●	●

ISO标准车削 ISO standard turning



• CNMG

型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide											
	ISO	INCH	L	ØI.C	S	Ød	r		XH6213	XH6211	XH6210	XH6313	XH6311	XH6310	XH7313	XH7311	XH7310			
CNMG	190616-DR	643-DR	19.3	19.05	6.35	7.94	1.6		●	●	●	●	●	●	●	●	●			



• CNMG

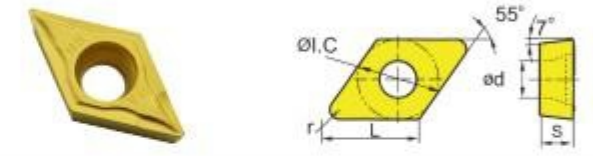
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide											
	ISO	INCH	L	ØI.C	S	Ød	r		XH6213	XH6211	XH6210	XH6223	XH6220							
CNMG	120404-TM	431-TM	12.9	12.7	4.76	5.16	0.4		●	●	●	●	●							
	120408-TM	432-TM	12.9	12.7	4.76	5.5	0.8		●	●	●	●	●							



• DCMT

型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide											
	ISO	INCH	L	ØI.C	S	Ød	r		XH6213	XH6211	XH6210	XH6313	XH6311	XH6310						
DCMT	070202-HF	2(1.5)0	7.8	6.35	2.38	2.8	0.2		●	●	●	●	●	●						

ISO标准车削 ISO standard turning



• DCMT

型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide											
	ISO	INCH	L	ØI.C	S	Ød	r		XH6213	XH6211	XH6210	XH7313	XH7311	XH7310	XH7238	XH9110	XH9111			
DCMT	070204-HM	2(1.5)1-HM	7.8	6.35	2.38	2.8	0.4		●	●	●									
	11T304-HM	3(2.5)1-HM	11.6	9.525	3.97	4.4	0.4		●	●	●	●	●	●						
	11T308-HM	3(2.5)2-HM	11.6	9.525	3.97	4.4	0.8		●	●	●	●	●	●	●	●	●			



• DNMG

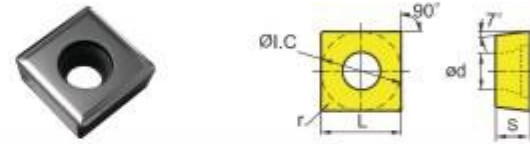
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide											
	ISO	INCH	L	ØI.C	S	Ød	r		XH6213	XH6211	XH6210	XH6313	XH6310	XH7313	XH7311	XH7310	XH9110	XH9111	XH9310	XH9310
DNMG	150404-DM	431-DM	15.5	12.7	4.76	5.16	0.4		●	●	●									
	150408-DM	432-DM	15.5	12.7	4.76	5.16	0.8		●	●	●	●	●	●						
	150604-DM	441-DM	15.5	12.7	6.35	5.16	0.4		●	●	●									
	150608-DM	442-DM	15.5	12.7	6.35	5.16	0.8		●	●	●	●	●	●	●	●	●	●	●	●



• DNMG

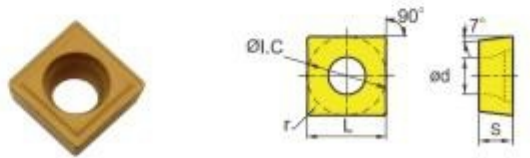
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide											
	ISO	INCH	L	ØI.C	S	Ød	r		XH6313	XH6311	XH6310	XH6313	XH6311	XH6310	XH7313	XH7311	XH7310			
DNMG	150404-PM	431-PM	15.5	12.7	4.76	5.16	0.4		●	●	●									
	150604-PM	441-PM	15.5	12.7	6.35	5.16	0.4		●	●	●	●	●	●	●	●	●			
	150608-PM	442-PM	15.5	12.7	6.35	5.16	0.8								●	●	●			

ISO标准车削 ISO standard turning



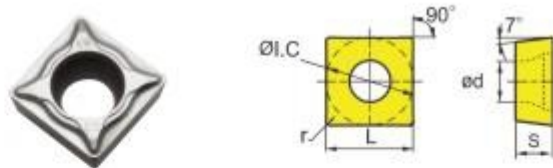
• SCET

	型号 Insert shape	基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	L	ØI.C	S	Ød	r	XH911										
SCET	150510	15.875	15.875	5.7	5.56	1.2	●										



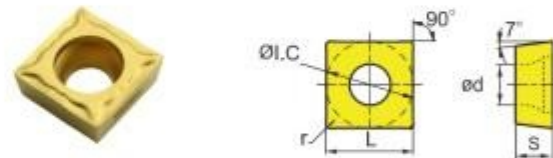
• SCMT

	型号 Insert shape	基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH621	XH6213	XH6211	XH6210						
SCMT	09T304-TC	3(2.5)1-TC	9.525	9.525	3.97	4.4	0.4	●	●	●	●						



• SCMT

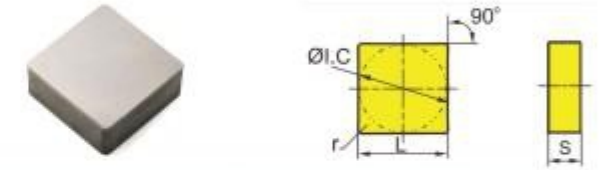
	型号 Insert shape	基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6313	XH6311	XH6310							
SCMT	09T308-HF	3(2.5)2-HF	9.525	9.525	3.97	4.4	0.8	●	●	●							



• SCMT

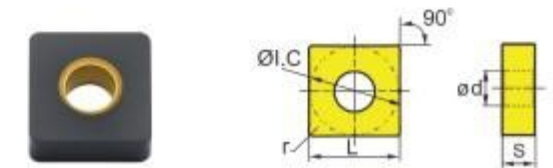
	型号 Insert shape	基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH6313	XH6311	XH6310	XH9110	XH9111		
SCMT	09T308-HM	3(2.5)2-HM	9.525	9.525	3.97	4.4	0.8	●	●	●	●	●	●	●	●		

ISO标准车削 ISO standard turning



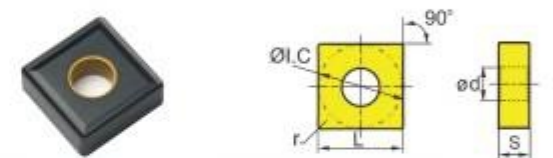
• SNUN

	型号 Insert shape	基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	r	XH9111	XH9211	XH9311								
SNUN	120412	433	12.7	12.7	4.76	1.2	●	●	●								
	190408	632	19.05	19.05	4.76	0.8	●	●	●								



• SNMA

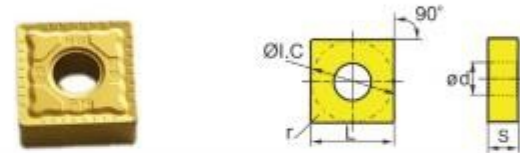
	型号 Insert shape	基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6313	XH6311	XH6310	XH9110	XH9111	XH9211	XH9210			
SNMA	120412	433	12.7	12.7	4.76	5.16	1.2				●	●	●	●			
	160512	543	16	15.875	6.35	6.35	1.2				●	●	●	●			
	190616	644	19.05	19.05	6.35	7.94	1.6	●	●	●			●	●			



• SNMG

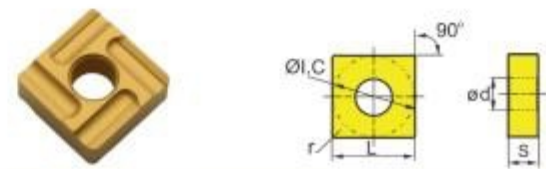
	型号 Insert shape	基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210							
SNMG	120408	432	12.7	12.7	4.76	5.16	0.8	●	●	●							

ISO标准车削 ISO standard turning



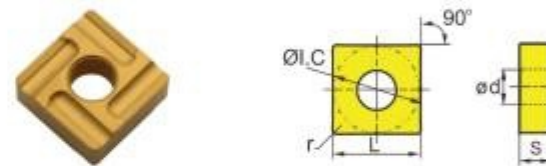
• SNMG

型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH6313	XH6311	XH6310						
SNMG	120404-PM	431-PM	12.7	12.7	4.76	5.16	0.4	●	●	●									
	120408-PM	432-PM	12.7	12.7	4.76	5.16	0.8	●	●	●									
	190612-PM	643-PM	19.05	19.05	6.35	7.94	1.2	●	●	●	●	●	●						



• SNMG

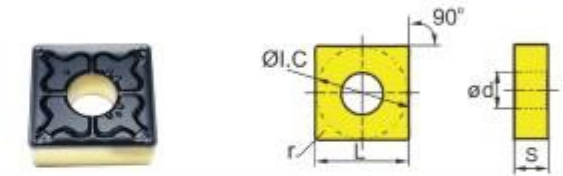
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210									
SNMG	120408R-S	432R-S	12.7	12.7	4.76	5.16	0.8	●	●	●									



• SNMG

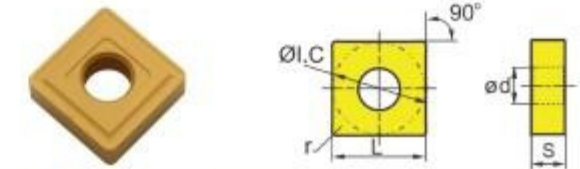
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210									
SNMG	120408L-S	432L-S	12.7	12.7	4.76	5.16	0.8	●	●	●									

ISO标准车削 ISO standard turning



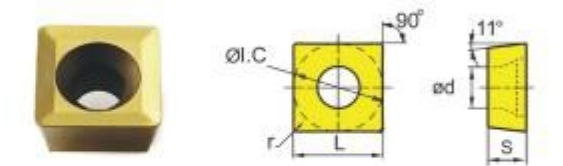
• SNMG

型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH6313	XH6311	XH6310						
SNMG	120408-TM	432-TM	12.7	12.7	4.76	5.16	0.8	●	●	●	●	●	●						



• SNMM

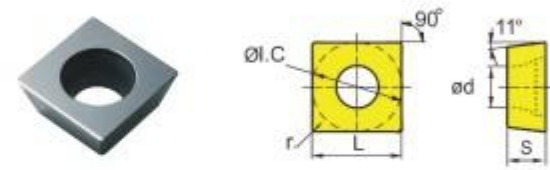
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH6313	XH6311	XH6310						
SNMM	150612	543	15.875	15.875	6.35	6.35	1.2	●	●	●	●	●	●						



• SPEB

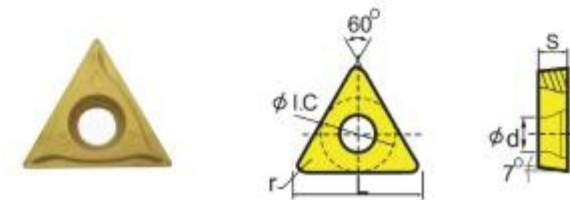
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH6313	XH6311	XH6310						
SPEB	090408P	332P	9.5	9.5	4.76	3.85	0.8	●	●	●	●	●	●						

ISO标准车削 ISO standard turning



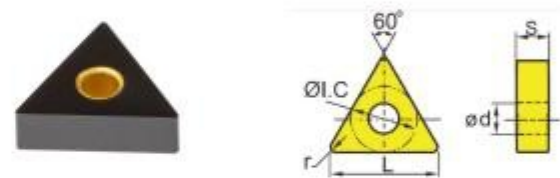
• SPMW

型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r		XH6313	XH6311	XH631	XH9111	XH9110	XH911	XH831	XH721		
SPMW	090304	321	9.525	9.525	3.18	4.4	0.4		●	●	●	●	●	●	●	●		



• TCMT

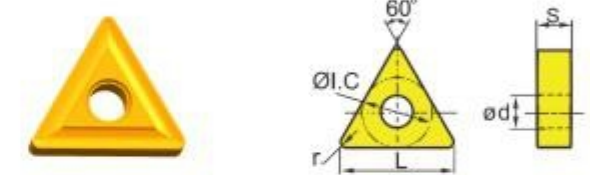
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r		XH6213	XH6211	XH6213	XH6313	XH6311	XH6310				
TCMT	16T304-MP	3(2.5)1-MP	16.5	9.53	3.97	4.4	0.4		●	●	●	●	●	●				
	16T308-HM	3(2.5)2-HM	16.5	9.53	3.97	4.4	0.8		●	●	●							



• TNMA

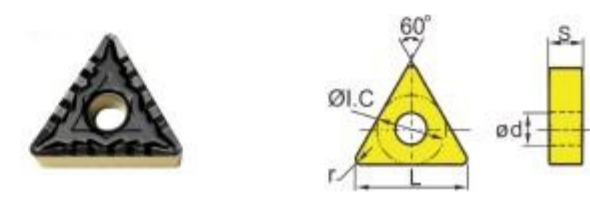
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide						金陶 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r		XH9110	XH9111	XH6210	XH9210	XH711	XH941	XH611	XH811		
TNMA	160404	331	16.5	9.525	4.76	3.81	0.4		●	●								
	160408	332	16.5	9.525	4.76	3.81	0.8		●	●	●	●						
	160412	333	16.5	9.525	4.76	3.81	1.2		●	●								
	220408	432	22	12.7	4.76	5.16	0.8				●	●	●		●	●		
	27.48		27.48	15.86	8	6.5	0							●				

ISO标准车削 ISO standard turning



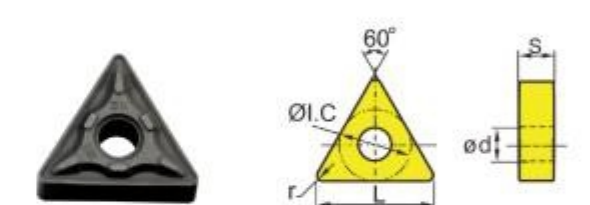
• TNMG

型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r		XH9110	XH9111	XH6313	XH6311	XH6310					
TNMG	160408	332	16.5	9.525	4.76	3.81	0.8		●	●								
	160412	333	16.5	9.525	4.76	3.81	1.2		●	●								
	270616	544	27.5	15.875	6.35	6.35	1.6				●	●	●					



• TNMG

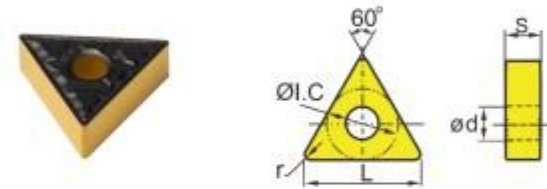
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r		XH6213	XH6211	XH6210	XH6313	XH6311	XH6310	XH7313	XH7311	XH7310	
TNMG	160408-CQ	332-CQ	16.5	9.525	4.76	3.81	0.8		●	●	●				●	●	●	
	160412-CQ	333-CQ	16.5	9.525	4.76	3.81	1.2		●	●	●	●	●	●	●	●	●	



• TNMG

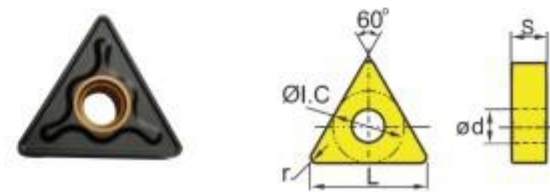
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r		XH6213	XH6211	XH6210	XH6313	XH6311	XH6310	XH9111	XH7313	XH7311	XH7310
TNMG	160408-DM	332-DM	16.5	9.525	4.76	3.81	0.8		●	●	●	●	●	●	●	●	●	●
	220408-DM	432-DM	22	12.7	4.76	5.16	0.8		●	●	●							

ISO标准车削 ISO standard turning



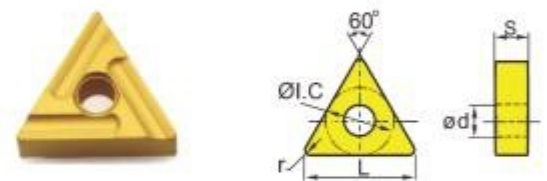
• TNMG

型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH9110	XH9111	XH9310	XH9311	XH7313	XH7311	XH7310		
TNMG	160404-PM	331-PM	16.5	9.525	4.76	3.81	0.4	●	●	●	●	●			●	●	●		
	160408-PM	332-PM	16.5	9.525	4.76	3.81	0.8	●	●	●	●	●	●	●	●	●	●		



• TNMG

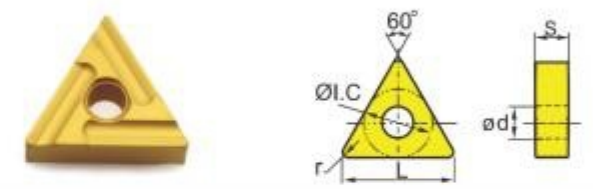
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6210	XH9110										
TNMG	160408-GH	332-GH	16.5	9.525	4.76	3.81	0.8	●	●										
	160412-GH	333-GH	16.5	9.525	4.76	3.81	1.2	●	●										



• TNMG

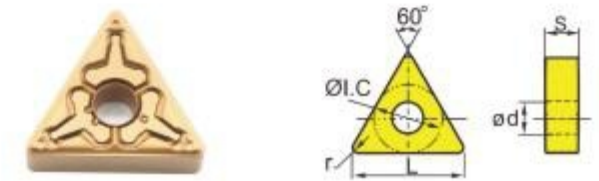
型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH9110	XH9111							
TNMG	160404R-S	331R-S	16.5	9.525	4.76	3.81	0.4	●	●	●	●	●							
	160408R-S	332R-S	16.5	9.525	4.76	3.81	0.8	●	●	●	●	●							

ISO标准车削 ISO standard turning



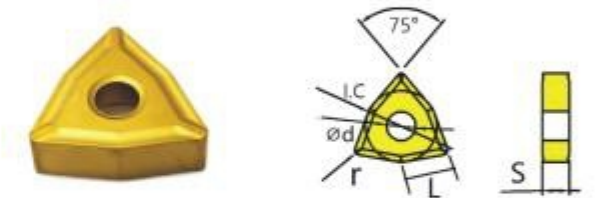
• TNMG

型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH9110	XH9111							X915
TNMG	160404L-S	331-TM	16.5	9.525	4.76	3.81	0.4	●	●	●	●	●							
	160408L-S	332-TM	16.5	9.525	4.76	3.81	0.8	●	●	●	●	●							



• TNMG

型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH9110	XH9111							
TNMG	160404-TM	331-TM	16.5	9.525	4.76	3.81	0.4				●	●							
	160408-TM	332-TM	16.5	9.525	4.76	3.81	0.8	●	●	●	●	●							



• TNMX

型号 Insert shape			基本尺寸 Dimensions							硬质合金 Cemented carbide									
	ISO		L	ØI.C	S	Ød	r	XH6313	XH6311										
TNMX	1509-2		15.9	22.225	9.595	7.94	1.6	●											

[illegible]

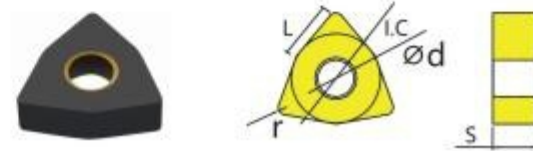
型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide																
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH6313	XH6311	XH6310	XH7313	XH7311	XH7310	XH9110	XH9111						
VNMG	160408-DM	332-DM	16.6	9.525	4.76	3.81	0.8	●	●	●	●	●	●	●	●	●	●							

ISO标准车削 ISO standard turning



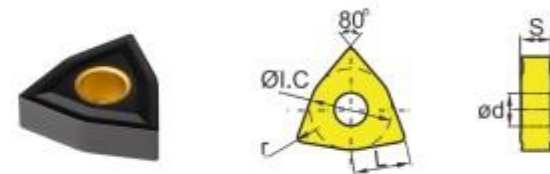
• VNMG

型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide														
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH6313	XH6311	XH6310	XH7313	XH7311	XH7310	XH9110	XH9111				
VNMG	160408-PM	332-PM	16.6	9.525	4.76	3.81	0.8	●	●	●	●	●	●	●	●	●	●	●				



• WNMA

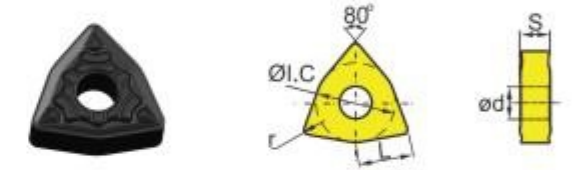
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide											
	ISO	INCH	L	ØI.C	S	Ød	r		XH9110	XH9111										
WNMA	60408	332	6.4	9.525	4.76	3.81	0.8		●	●										
	80404	431	8.7	9.525	4.76	5.16	0.4		●	●										
	080408	432	8.7	12.7	4.76	5.16	0.8		●	●										
	080412	433	8.7	12.7	4.76	5.16	1.2		●	●										



• WNMG

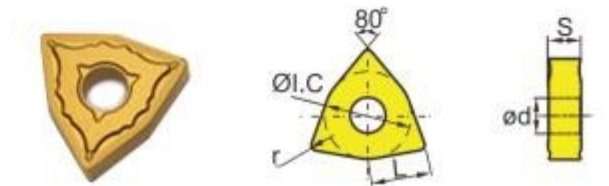
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide													
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH9110	XH9111										
WNMG	080404	431	8.7	12.7	4.76	5.16	0.4	●	●	●	●	●										
	080408-TC	432-TC	8.7	12.7	4.76	5.16	0.8	●	●	●	●	●										
	80412	433	8.7	12.7	4.76	5.16	1.2					●										

ISO标准车削 ISO standard turning



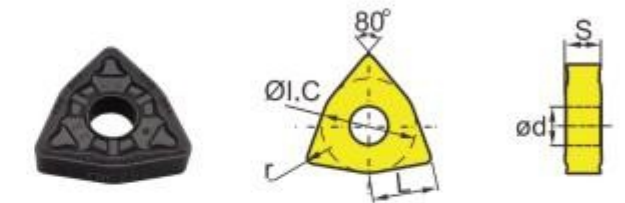
• WNMG

型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide											
	ISO	INCH	L	ØI.C	S	Ød	r		XH7310	XH7311	XH7313									
WNMG	080412-EM	433-EM	8.7	12.7	4.76	5.16	1.2		●											



• WNMG

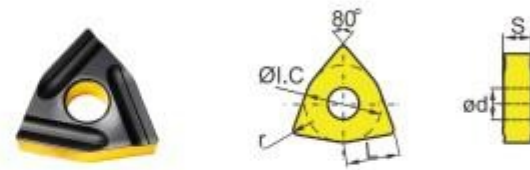
型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide											
	ISO	INCH	L	ØI.C	S	Ød	r		XH6213	XH6211	XH6210									
WNMG	080408-OPM1	432-OPM	8.7	12.7	4.76	5.16	0.8		●	●	●									



• WNMG

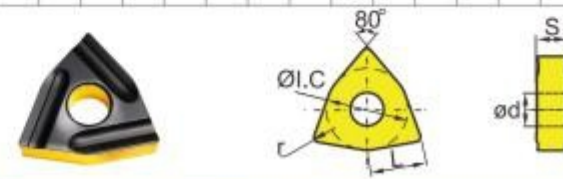
型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide													
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH6313	XH6311	XH6310	XH9110	XH9111	XH7136	X715	X735	X738	X725	X915
WNMG	060408-PM	332-PM	6.4	9.525	4.76	3.81	0.8	●	●	●	●	●	●	●	●						
	080404-PM	431-PM	8.7	12.7	4.76	5.16	0.4	●	●	●											
	080408-PM	432-PM	8.7	12.7	4.76	5.16	0.8	●	●	●											
	080412-PM	433-PM	8.7	12.7	4.76	5.16	1.2	●	●	●											

ISO标准车削 ISO standard turning



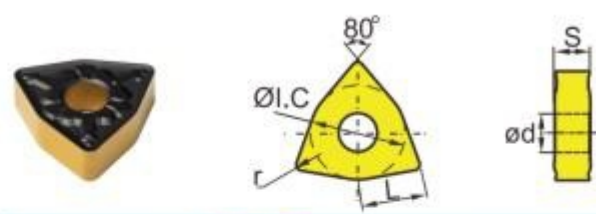
• WNMG

型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210								
WNMG	080404R-S	431R-S	8.7	12.7	4.76	5.16	0.4	●	●									
	080408R-S	432R-S	8.7	12.7	4.76	5.16	0.8	●	●									



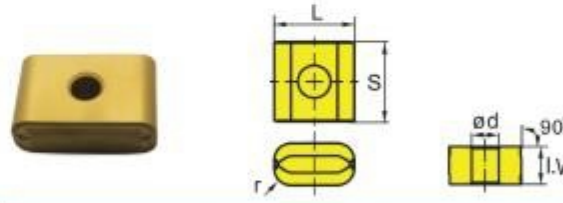
• WNMG

型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210								
WNMG	080404L-S	431L-S	8.7	12.7	4.76	5.16	0.4	●	●									
	080408L-S	432L-S	8.7	12.7	4.76	5.16	0.8	●	●									



• WNMG

型号 Insert shape			基本尺寸 Dimensions						硬质合金 Cemented carbide									
	ISO	INCH	L	ØI.C	S	Ød	r	XH6213	XH6211	XH6210	XH6220							
WNMG	080404-TM	431-TM	8.7	12.7	4.76	5.16	0.4				●							
	080408-TM	432-TM	8.7	12.7	4.76	5.16	0.8	●	●	●	●							



• 175.32-301940

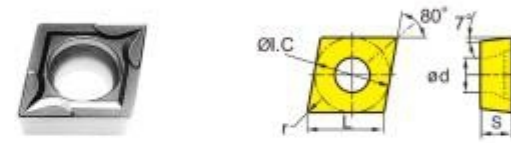
型号 Insert shape		基本尺寸 Dimensions					硬质合金 Cemented carbide											
		L	W	S	Ød	r	XH6313	XH6311	XH6310									
	175.32-301940	30	10	19.05	6.35	4	●											

金属陶瓷刀片
Cermet Inserts

工艺求精 · 品质求精 · 质量第一 · 信誉第一

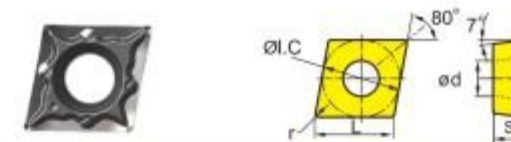
Process refinement · Quality Refinement · Quality first · Reputation first

金属陶瓷刀片 Cermet Inserts



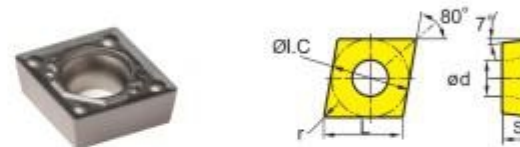
• CCMT

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
CCMT	060204	2(1.5)1	6.2	6.35	2.38	2.8	0.4	●	●	●	●
	09T304	3(2.5)1	9.4	9.525	3.97	4.4	0.4	●	●	●	●



• CCMT

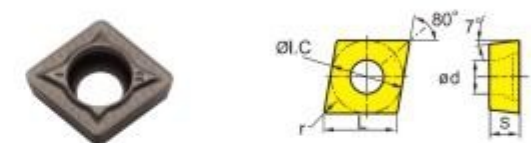
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
CCMT	060204-FGF	2(1.5)1-FGF	6.2	6.35	2.38	2.8	0.4	●	●	●	●
	09T304-FGF	3(2.5)1-FGF	9.4	9.525	3.97	4.4	0.4	●	●	●	●
	09T308-FGF	3(2.5)2-FGF	8.8	9.525	3.97	4.4	0.8	●	●	●	●
	120404-FGF	431-FGF	12.4	12.7	4.76	5.16	0.4	●	●	●	●



• CCMT

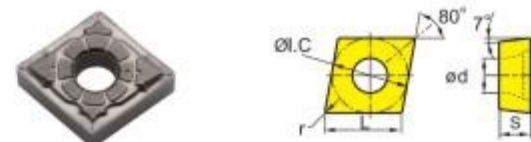
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
CCMT	09T304-HQF	3(2.5)1-HQF	9.4	9.525	3.97	4.4	0.4	●	●	●	●

金属陶瓷刀片 Cermet Inserts



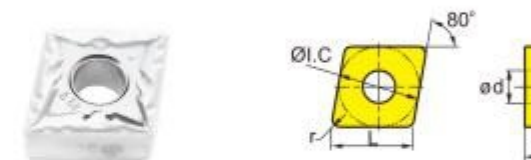
• CCMT

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
CCMT	060204-MTF	2(1.5)1-MTF	6	6.35	2.38	2.8	0.4	●	●	●	●
	060208-MTF	2(1.5)2-MTF	5.6	6.35	2.38	2.8	0.8	●	●	●	●
	09T304-MTF	3(2.5)1-MTF	9.4	9.525	3.97	4.4	0.4	●	●	●	●
	09T308-MTF	3(2.5)2-MTF	8.8	9.525	3.97	4.4	0.8	●	●	●	●



• CNMG

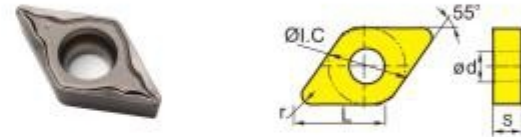
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
CNMG	120404-FGF	431-FGF	12.4	12.7	4.76	5.16	0.4	●	●	●	●
	120408-FGF	432-FGF	12	12.7	4.76	5.16	0.8	●	●	●	●



• CNMG

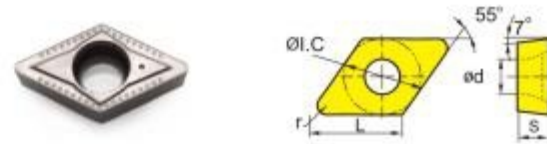
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
CNMG	120404-MTF	431-MTF	12.4	12.7	4.76	5.2	0.4	●	●	●	●
	120408-MTF	432-MTF	12	12.7	4.76	5.2	0.8	●	●	●	●

金属陶瓷刀片 Cermet Inserts



• DCMT

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
DCMT	070204-FGF	2(1.5)1-FGF	7.3	6.35	2.38	2.8	0.4	●	●	●	●
	11T304-FGF	3(2.5)-FGF	11.2	9.525	3.97	4.4	0.4	●	●	●	●
	11T308-FGF	3(2.5)2-FGF	10.8	9.525	3.97	4.4	0.8	●	●	●	●



• DCMT

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
DCMT	11T304-MTF	3(2.5)1-MTF	11.2	9.525	3.97	4.4	0.4	●	●	●	●
	11T308-MTF	3(2.5)2-MTF	10.8	9.525	3.97	4.4	0.8	●	●	●	●



• DNMG

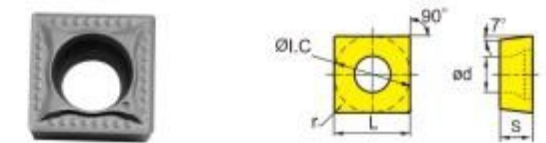
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
DNMG	150404-MTF	431-MTF	15.1	12.7	4.76	5.16	0.4	●	●	●	●

金属陶瓷刀片 Cermet Inserts



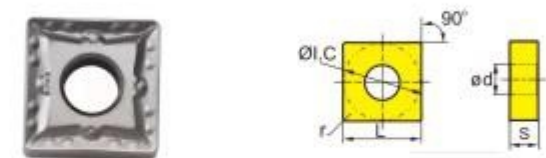
• DNMG

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
DNMG	150404R-VFF	431R-VFF	15.1	12.7	4.76	5.16	0.4	●	●	●	●



• SCMT

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
SCMT	09T304-MTF	3(2.5)1-MTF	9.525	9.525	3.97	4.4	0.4	●	●	●	●



• SNMG

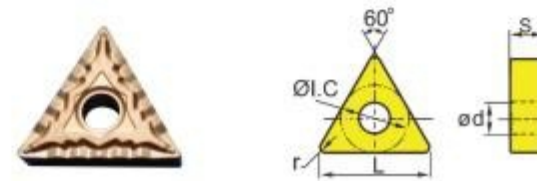
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
SNMG	120408-MTF	432-MTF	12.7	12.7	4.76	5.16	0.8	●	●	●	●

金属陶瓷刀片 Cermet Inserts

· TCMT



型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
TCMT	090204-MT1	1.8(1.5)1-MT1	8.6	5.56	2.38	2.5	0.4	●	●	●	●
	110204-MT1	2(1.5)1-MT1	10	6.35	2.38	2.8	0.4	●	●	●	●
	16T304-MT2	3(2.5)1-MT2	15.5	9.525	3.97	4.4	0.4	●	●	●	●
	16T308-MT2	3(2.5)2-MT2	14.5	9.525	3.97	4.4	0.8	●	●	●	●



· TNMG

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
TNMG	160404-CQ	331-CQ	15.5	9.525	4.76	3.81	0.4	●	●		
	160408-CQ	332-CQ	15.5	9.525	4.76	3.81	0.8	●	●		

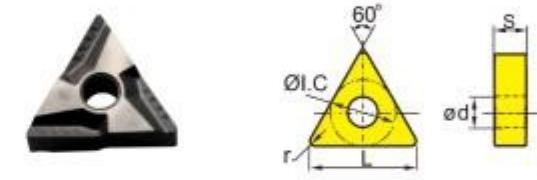


· TNMG

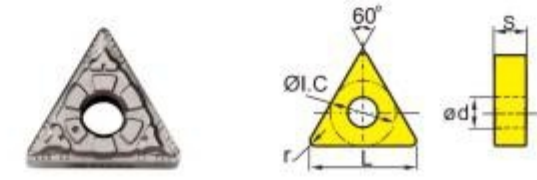
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
TNMG	160404R-FSF	431R-FSF	15.5	9.525	4.76	3.81	0.4	●	●	●	●
	160404L-FSF	431L-FSF	15.5	9.525	4.76	3.81	0.4	●	●	●	●
	160408R-FSF	432R-FSF	14.5	9.525	4.76	3.81	0.8	●	●	●	●
	160408L-FSF	432L-FSF	14.5	9.525	4.76	3.81	0.8	●	●	●	●

金属陶瓷刀片 Cermet Inserts

· TNMG



型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
TNMG	160404R-VFF	431R-VFF	15.5	9.525	4.76	3.81	0.4	●	●	●	●
	160404L-VFF	431L-VFF	15.5	9.525	4.76	3.81	0.4	●	●	●	●
	160408R-VFF	432R-VFF	14.5	9.525	4.76	3.81	0.8	●	●	●	●
	160408L-VFF	432L-VFF	14.5	9.525	4.76	3.81	0.8	●	●	●	●



· TNMG

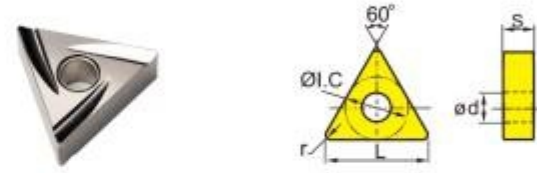
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
TNMG	160404-FGF	431-FGF	15.5	9.525	4.76	3.81	0.4	●	●	●	●
	160408-FGF	432-FGF	14.5	9.525	4.76	3.81	0.8	●	●	●	●



· TNMG

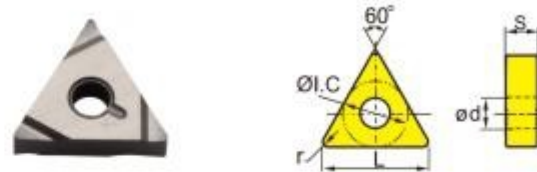
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
TNMG	160404-MTF	431-MTF	15.5	9.525	4.76	3.81	0.4	●	●	●	●
	160408-MTF	432-MTF	14.5	9.525	4.76	3.81	0.8	●	●	●	●

金属陶瓷刀片 Cermet Inserts



• TNGG

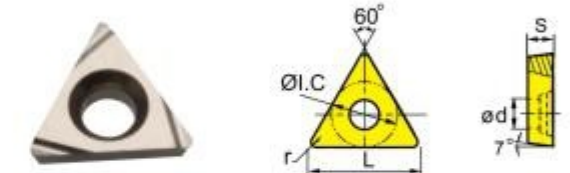
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
TNGG	160402R-2G	430R-2G	16.5	9.525	4.76	3.8	0.2	●	●	●	●
	160402L-2G	43/L-2G	16.5	9.525	4.76	3.8	0.2	●	●	●	●
	160404R-2G	431R-2G	14.5	9.525	4.76	3.8	0.4	●	●	●	●
	160404L-2G	431L-2G	14.5	9.525	4.76	3.8	0.4	●	●	●	●
	160408R-2G	432R-2G	13.5	9.525	4.76	3.8	0.8	●	●	●	●
	160408L-2G	432L-2G	13.5	9.525	4.76	3.8	0.8	●	●	●	●



• TNGG

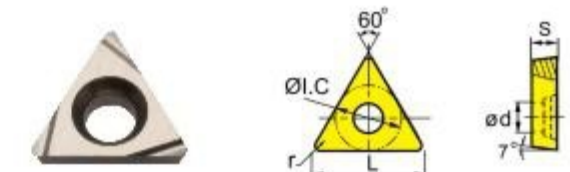
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
TNGG	160402R-F	430R-F	16.5	9.525	4.76	3.8	0.2	●	●	●	●
	160402L-F	430L-F	16.5	9.525	4.76	3.8	0.2	●	●	●	●
	160404R-F	431L-F	13.5	9.525	4.76	3.8	0.4	●	●	●	●
	160404L-F	431L-F	15.5	9.525	4.76	3.8	0.4	●	●	●	●
	160408R-F	432L-F	14.5	9.525	4.76	3.8	0.8	●	●	●	●
	160408L-F	432L-F	14.5	9.525	4.76	3.8	0.8	●	●	●	●

金属陶瓷刀片 Cermet Inserts



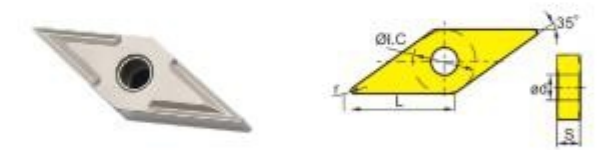
• TPGH

型号 Insert shape		基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
TPGH	080202R	8.2	4.76	2.38	2.44	0.2	●	●	●	●
	080204R	8.2	4.76	2.38	2.44	0.4	●	●	●	●
	090202R	9.6		2.38	2.8	0.2	●	●	●	●
	090204R	9.6	5.56	2.38	2.8	0.4	●	●	●	●
	110302R	11	6.35	3.18	3.18	0.2	●	●	●	●
	110304R	11	6.35	3.18	3.18	0.4	●	●	●	●



• TPGH

型号 Insert shape		基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
TPGH	080202L	8.2	4.76	2.38	2.44	0.2	●	●	●	●
	080204L	8.2	4.76	2.38	2.44	0.4	●	●	●	●
	090202L	9.6	5.56	2.38	2.8	0.2	●	●	●	●
	090204L	9.6	5.56	2.38	2.8	0.4	●	●	●	●
	110302L	11	6.35	3.18	3.18	0.2	●	●	●	●
	110304L	11	6.35	3.18	3.18	0.4	●	●	●	●
	110304R/L	11	6.35	3.18	3.18	0.4	●	●	●	●



• VNMG

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
VNMG	160404	431	15.6	9.53	4.76	3.81	0.4	●	●	●	●

金属陶瓷刀片 Cermet Inserts



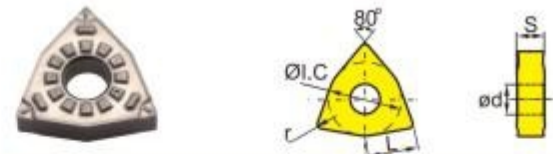
• VNMG

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
VNMG	160404-FGF	431-FGF	15.6	9.525	4.76	3.81	0.4	●	●	●	●



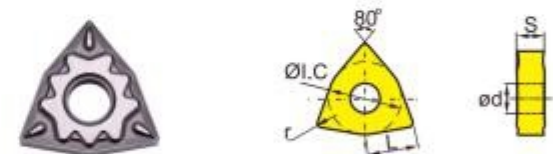
• VNMG

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
VNMG	160404-MTF	431-MTF	15.6	9.525	4.76	3.81	0.4	●	●	●	●
	160408-MTF	432-MTF	14	9.525	4.76	3.81	0.8	●	●	●	●



• WNMG

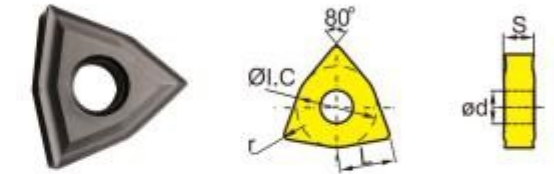
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
WNMG	080404-FGF	431-FGF	8.4	12.7	4.76	5.2	0.4	●	●	●	●
	080408-FGF	432-FGF	8.3	12.7	4.76	5.2	0.8	●	●	●	●



• WNMG

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
WNMG	080404-HQF	431-HQF	8.4	12.7	4.76	5.2	0.4	●	●	●	●
	080408-HQF	432-HQF	8.3	12.7	4.76	5.2	0.8	●	●	●	●

金属陶瓷刀片 Cermet Inserts



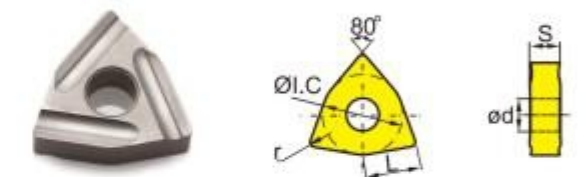
• WNMG

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
WNMG	080404-MSF	431-MSF	8.4	12.7	4.76	5.2	0.4	●	●	●	●
	080408-MSF	432-MSF	8.4	12.7	4.76	5.2	0.8	●	●	●	●



• WNMG

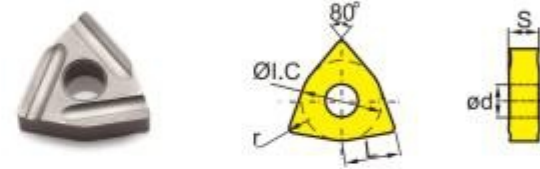
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
WNMG	080404-MT1	431-MT1	8.4	12.7	4.76	5.16	0.4	●	●	●	●
	080408-MT2	432-MT2	8.4	12.7	4.76	5.16	0.8	●	●	●	●



• WNMG

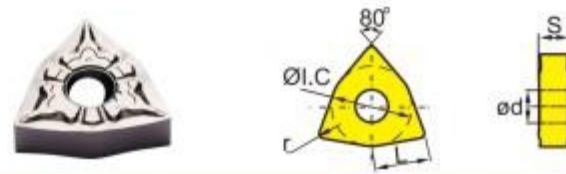
型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
WNMG	080404R-SF	431R-SF	8.4	12.7	4.76	5.16	0.4	●	●	●	●
	080408R-SF	432R-SF	8.4	12.7	4.76	5.16	0.8	●	●	●	●

金属陶瓷刀片 Cermet Inserts



• WNMG

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
WNMG	080404L-SF	431L-SF	8.3	12.7	4.76	5.16	0.4	●	●	●	●
	080408L-SF	432L-SF	8.3	12.7	4.76	5.16	0.8	●	●	●	●



• WNMG

型号 Insert shape			基本尺寸 Dimensions					金属陶瓷 Cermet			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH6113	XH811	XH8113
WNMG	080404-TSF	431-TSF	8.4	12.7	4.76	5.16	0.4	●	●	●	●

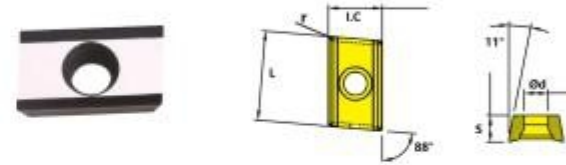
铝合金车削刀片 Aluminum alloy turning Inserts



工艺求精 · 品质求精 · 质量第一 · 信誉第一

Process refinement · Quality Refinement · Quality first · Reputation first

铝合金车削刀片 Aluminum Inserts



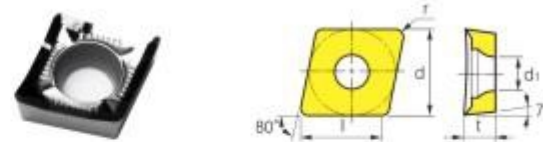
• APKT

型号 Insert shape		基本尺寸 Dimensions						硬质合金 Cemented carbide			
	ISO	L	ØI.C	S	Ød	r		XH91B	XH915		
APKT	1604PDFA-MA	16.27	9.525	4.76	4.4	0.2		●	●		



• APGT

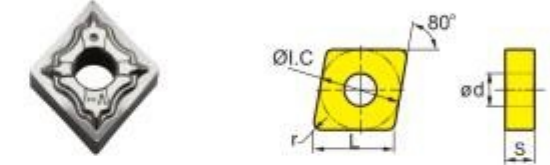
型号 Insert shape		基本尺寸 Dimensions						硬质合金 Cemented carbide			
	ISO	L	ØI.C	S	Ød	r		XH725	XH915		
APGT	1604-G2	14.72	9.26	4.9	4.4	0.8			●		
	1135PDER-G2	9.71	6.18	3.5	2.8	0.5			●		



• CCGT

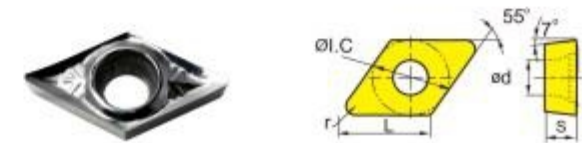
型号 Insert shape		基本尺寸 Dimensions						硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	Ød	r	XH725	XH915		
CCGT	060202-LH	2(1.5)0-LH	6.2	6.35	2.38	2.8	0.2		●		
	060204-LH	2(1.5)1-LH	6	6.35	2.38	2.8	0.4		●		
	060208-LH	2(1.5)2-LH	5.6	6.35	2.38	2.8	0.8		●		
	09T302-LH	3(2.5)0-LH	9.4	9.525	3.97	4.4	0.2		●		
	09T304-LH	3(2.5)1-LH	9.2	9.525	3.97	4.4	0.4		●		
	09T308-LH	3(2.5)2-LH	8.8	9.525	3.97	4.4	0.8		●		
	120402-LH	430-LH	12.6	12.7	4.76	5.5	0.2		●		
	120404-LH	431-LH	12.4	12.7	4.76	5.5	0.4		●		
	120408-LH	432-LH	12	12.7	4.76	5.5	0.8		●		

铝合金车削刀片 Aluminum Inserts



• CNMG

型号 Insert shape		基本尺寸 Dimensions						硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	Ød	r	XH725	XH915		
CNMG	120402-HA	430-HA	12.6	12.7	4.76	5.16	0.2				
	120404-HA	431-HA	12.4	12.7	4.76	5.16	0.4				
	120408-HA	432-HA	12	12.7	4.76	5.16	0.8				



• DCGT

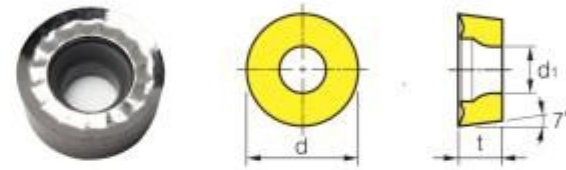
型号 Insert shape		基本尺寸 Dimensions						硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	Ød	r	XH725	XH915		
DCGT	070202-LH	2(1.5)0-LH	7.5	6.35	2.38	2.8	0.2		●		
	070204-LH	2(1.5)1-LH	7.3	6.35	2.38	2.8	0.4		●		
	11T302-LH	3(2.5)0-LH	11.4	9.525	3.97	4.4	0.2		●		
	11T304-LH	3(2.5)1-LH	11.2	9.525	3.97	4.4	0.4		●		
	11T308-LH	3(2.5)1-LH	10.8	9.525	3.97	4.4	0.8		●		



• DNMG

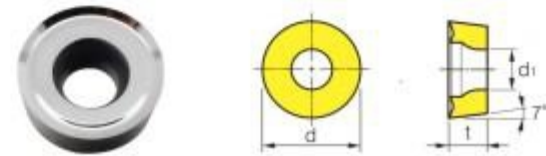
型号 Insert shape		基本尺寸 Dimensions						硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	Ød	r	XH725	XH915		
DNMG	150404-LH	431-LH	15.1	12.7	4.76	5.16	0.4		●		

铝合金车削刀片 Aluminum Inserts

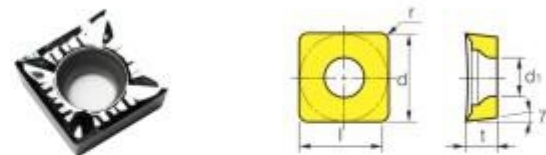


• RCGT

型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide									
	ISO	ØI.C	S	Ød	XH91B	XH915								
RCGT	0803MO-FX	8	3.18	3.35		●								
	1003MO-LH	10	3.18	4		●								
	10T3MO-LH	10	3.97	4.4	●									
	1204-LH	12	4.76	4.4		●								



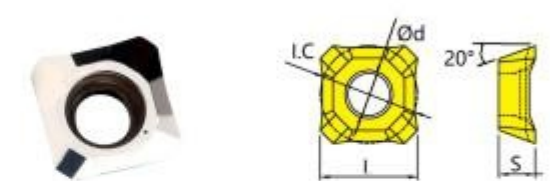
型号 Insert shape		基本尺寸 Dimensions			硬质合金 Cemented carbide									
	ISO	ØI.C	S	Ød	XH91B	XH915								
RCGT	1204MO-12	12	4.76	4.4		●								
	1204-FX	12	4.76	4.4		●								



• SCGT

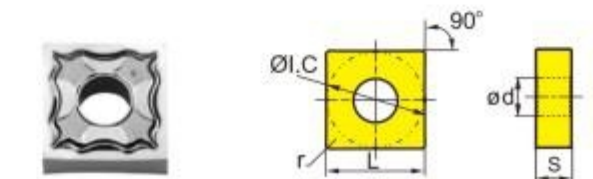
型号 Insert shape		基本尺寸 Dimensions							硬质合金 Cemented carbide					
	ISO	INCH	L	ØI.C	S	Ød	r		XH725	XH915				
SCGT	09T304-LH	3(2.5)1-LH	9.1	9.525	3.97	4.4	0.4			●				
	09T308-LH	3(2.5)2-LH	8.7	9.525	3.97	4.4	0.8			●				
	120404-LH	431-LH	12.3	12.7	4.76	5.5	0.4			●				
	120408-LH	432-LH	11.9	12.7	4.76	5.5	0.8			●				

铝合金车削刀片 Aluminum Inserts



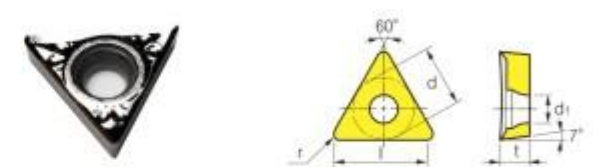
• SEET

型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide								
	ISO	L	ØI.C	S	Ød	XH725	XH915							
SEET	1204AFN-LH	9.37	12.7	4.76	5.5		●							



• SNMG

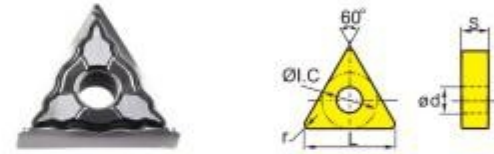
型号 Insert shape		基本尺寸 Dimensions							金属陶瓷 Cermet					
	ISO	INCH	L	ØI.C	S	Ød	r		XH725	XH915				
SNMG	120404-VH	431-VH	12.3	12.7	4.76	5.16	0.4			●				



• TCGT

型号 Insert shape		基本尺寸 Dimensions							硬质合金 Cemented carbide					
	ISO	INCH	L	ØI.C	S	Ød	r		XH725	XH915				
TCGT	090204-LH	1.8(1.5)1-LH	8.6	5.56	2.38	2.5	0.4			●				
	090208-LH	1.8(1.5)1-LH	8.1	5.56	2.38	2.5	0.8			●				
	110202-LH	2(1.5)0-LH	10.5	6.35	2.38	2.8	0.2			●				
	110204-LH	2(1.5)1-LH	10	6.35	2.38	2.8	0.4			●				
	110208-LH	3(2.5)0-LH	9	6.35	2.38	2.8	0.2			●				
	16T302-LH	3(2.5)1-LH	16	9.525	3.97	4.4	0.4			●				
	16T304-LH	3(2.5)1-LH	15.5	9.525	3.97	4.4	0.4			●				
	16T308-LH	3(2.5)2-LH	14.5	9.525	3.97	4.4	0.8			●				

铝合金车削刀片 Aluminum Inserts



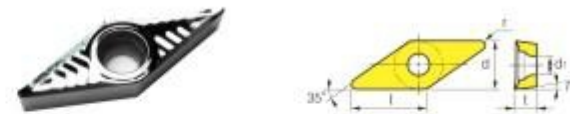
• TNMG

型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide			
	ISO	INCH	L	Ø1.C	S	Ød	r	XH725	XH915		
TNMG	160404-HA	431-HA	15.5	9.525	4.76	3.81	0.4		●		
	160408-HA	432-HA	14.5	9.525	4.76	3.81	0.8		●		



• VBGT

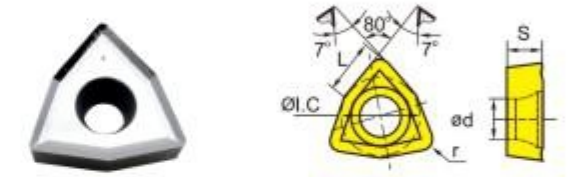
型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide			
	ISO	INCH	L	Ø1.C	S	Ød	r	XH725	XH915		
VBGT	160404-LH	321-LH	16.6	9.525	4.76	4.4	4.4	●			



• VCGT

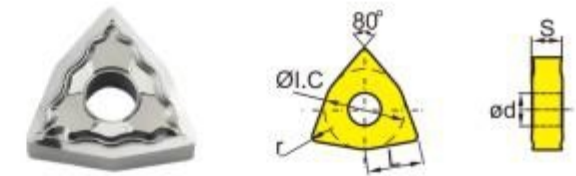
型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide			
	ISO	INCH	L	Ø1.C	S	Ød	r	X725	X915		
VCGT	110302-LH	2(1.5)0-LH	10.5	6.35	3.18	2.8	0.2		●		
	110304-LH	2(1.5)1-LH	10	6.35	3.18	2.8	0.4		●		
	160402-LH	330-LH	16.1	9.525	4.76	4.4	0.2		●		
	60404-LH	331-LH	15.6	9.525	4.76	4.4	0.4		●		
	160408-LH	332-LH	14	9.525	4.76	4.4	0.8		●		
	160412-LH	333-LH	13.6	9.525	4.76	4.4	1.2		●		
	220525-LH		15.6	12.7	5.56	5.6	2.5		●		
	220530-LH		14.3	12.7	5.56	5.6	3.0		●		

铝合金车削刀片 Aluminum Inserts



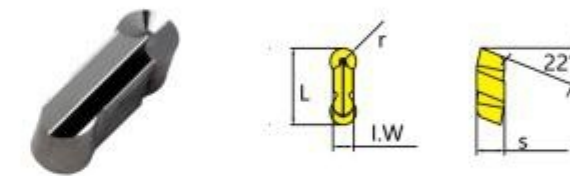
• WCGX

型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide			
	ISO		L	Ø1.C	S	Ød	r	XH725	XH915		
WCGX	020102-LH		2.5	3.91	3.91	2.25	0.2		●		
	030208-LH		3.47	5.55	5.55	2.65	0.8		●		
	040208-LH		4.2	6.35	6.35	2.85	0.8		●		
	050308-LH		5.3	7.94	7.94	3.4	0.8		●		
	06T308-LH		6.1	9.525	9.525	4	0.8		●		
	080408-LH		8.3	12.7	12.7	4.4	0.8		●		



• WNMG

型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide			
	ISO	INCH	L	Ø1.C	S	Ød	r	XH725	XH915		
WNMG	080404-HA	431-HA	8.4	12.7	4.76	5.16	0.4	●			
	080408-HA	432-HA	8.3	12.7	4.76	5.16	0.8				



• GIPA

型号 Insert shape			基本尺寸 Dimensions				硬质合金 Cemented carbide				
	ISO		L	Ø1.C	S	r	XH725	XH915			
GIPA	6.0-3.0		18.06	4.8	6.5	3.0		●			

铝合金车削刀片 Aluminum Inserts



• GIPA

型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide					
	ISO	L	ØI.C	S	r	XH725	XH915				
GIPA	TZ-35Y-1.2KF-P	30	6.1	8.1	1.2		●				



• GIPA

型号 Insert shape		基本尺寸 Dimensions				硬质合金 Cemented carbide					
	ISO	L	ØI.C	S	r	XH725	XH915				
GIPA	8.0-4.0	30	5.6	8.2	4.0		●				

基体车削刀片 Matrix Turning Inserts



• CCGW

型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	Ød	r	XH7228	XH7326		
CCGW	60202	2(1.5)0	6.2	6.35	2.38	2.8	0.2				
	09T302	3(2.5)0	9.4	9.525	3.97	4.4	0.2				
	09T304	3(2.5)1	9.2	9.525	3.97	4.4	0.4				
	120404	431	12.4	12.7	4.76	5.5	0.4				



• DCGW

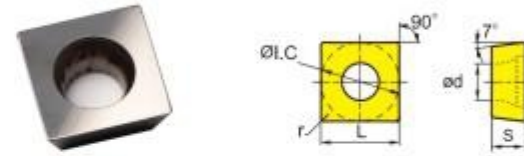
型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	Ød	r	XH611	XH921	XH931	
DCGW	11T302	3(2.5)0	11.4	9.525	3.97	4.4	0.2	●	●	●	
	11T304	3(2.5)1	11.2	9.525	3.97	4.4	0.4	●	●	●	



• DNMA

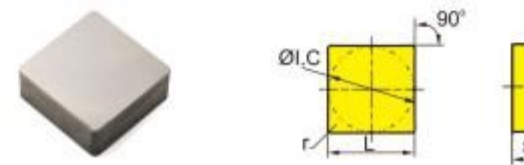
型号 Insert shape			基本尺寸 Dimensions					硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	Ød	r	XH7228	XH7228		
DNMA	150602	440	15.5	12.7	6.35	5.16	0.2	●	●		

基体车削刀片 Matrix Turning Inserts



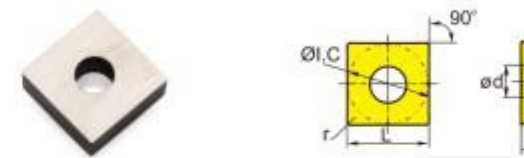
• SCMW

型号 Insert shape			基本尺寸 Dimensions				硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	Ød	r	XH7228	XH7326	
SCMW	09T302	3(2.5)0	9.525	9.525	3.97	4.4	0.2	●	●	



• SNR

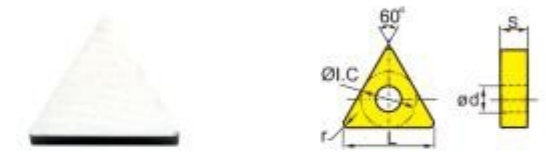
型号 Insert shape			基本尺寸 Dimensions				硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	r	XH7228	XH7326		
SNR	120402	430	12.7	12.7	4.76	0.2	●	●		
	150402	530	15.875	15.875	4.76	0.2				



• SNRA • SNGA

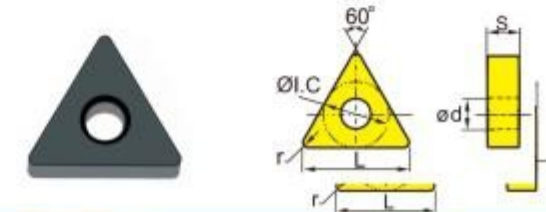
型号 Insert shape			基本尺寸 Dimensions				硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	Ød	r	XH7228	XH7326	
SNRA	120402	430	12.7	12.7	4.76	5.16	0.2	●	●	
SNGA	150612	543	15.875	15.875	6.35	6.35	1.2	●	●	
	250716	854	23.4	23.4	7.94	9	1.6	●	●	

基体车削刀片 Matrix Turning Inserts



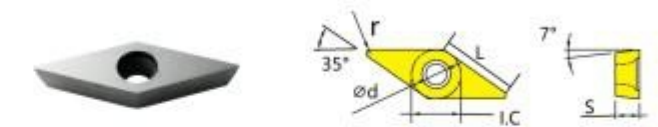
• TNR

型号 Insert shape			基本尺寸 Dimensions				硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	r	XH7228	XH7326		
TNR	220402	430	12.7	12.7	4.76	0.2	●	●		
	270402	530	28.5	16.3	4.76	0.2	●	●		
	330402	630	33.8	19.05	4.76	0.2	●	●		



• TNRA

型号 Insert shape			基本尺寸 Dimensions				硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	Ød	r	XH7228	XH7326	
TNRA	220402	430	22	12.7	4.76	5.16	0.2	●	●	
	220404	430	22	12.7	4.76	5.16	0.4	●	●	



• VCGW

型号 Insert shape			基本尺寸 Dimensions				硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	Ød	r	XH7228	XH7326	
VCGW	110302	220	16.1	9.525	4.76	4.4	0.2	●	●	
	160404	331	15.6	9.525	4.76	4.4	0.4	●	●	



• WNGA

型号 Insert shape			基本尺寸 Dimensions				硬质合金 Cemented carbide			
	ISO	INCH	L	ØI.C	S	Ød	r	XH7228	XH7326	
WNGA	080404	431	8.7	12.7	4.76	5.16	0.4	●	●	

CVD涂层材料 CVD Ccoating

类别 Category	试用分类代号 Trial classification code		LIFA 立发	ZCC- CT 赫捷	SANDVIK 山特维克	KORLOY 英泊伊	TaeguTec 特固德	WALTER 瓦尔特	MITSUBISHI 三菱	SUMITOMO 住友	TUNGALOY 泰珂路	KYOCERA 京瓷	DIJET 捷杰	HITACHI 日立	KENNAMETAL 肯纳	SECO 山高	ISCAR 伊斯卡
	分类 Sort	代号 Designation															
车削 Turning	P	P01	XH6223 XH6260	GC4005 GC4205				WAP01	UE6005	AC700G AC810P	T9005	CA5505	JC110V	HC5000 HC8010	KCP05 KC9105	TP1000 TK1000	IC425
		P10	XH6211 XH6223 XH6260	GC4205 GC4215	NC3010 NC3015		TT1300	WAP10	UE6005 UE6010 UE6020 UE6020 UC6010	AC700G AC820P AC2000 AC810P	T9005 T9015	CA5505 CA5515	JC110V JC215V	HG8010 GM8015 GM10	KGP10 KC9110 TN7005 TN7010	TP1000 TK1000 TP2000 TK2000 IC8150	IC9150 IC9015 IC9050 IC8150
		P20	XH6213 XH6210	GC4015 GC4251 GC4025 GC4215 LC25	NC320		TT1500	WAP20	UC6010 UE6110 UE6020 UE6010	AC2000 AC3000 AC830P	T9015 T9025	CA5515 CA5525 CA5025 CR9025	JC110V JC215V	HG8025 GM8020	KCP25 KC9125 KC9225 TN7015	TP2000 TK2000 TP200 IC8350	IC9250 IC9025 IC9054 IC8350
		P30	XH6313 XH6311 XH8510	GC4225 GC4235 GC4025 GC4035 GC2135	NC330		TT3500 TT5100	WAP30	UE6035 UE6400 US735	AC830P AC630M AC3000	T9025 T9035	CA5525 CA5535 CR9025	JC215V JC325V	GM25	KCP30 KC9140 KC8050 TN7025	TP3000 TP300 TP400 IC656	IC8350 IC9350 IC656
	M	P40	XH6313 XH8510	GC4235 GC4035 GC235			TT450		UE6035 UE6400 US735	AC630M	T9035	CA5535	JC325V JC450V	GM8035 GX30	KC9240 KC9040 KC9245 TPC35	TP3000 TP400 TP40	IC9350 IC635 IC9350
		M10		GC2015				WAM10	US7020	AC610M		CA6515 CA6015	JC110V	GM10	KCM15 TN7010	TP200	IC9250
		M20		GC2025	NC9020		TT2500	WAM20	US7020	AC610M AC630M	T6020 T9025	CA6525 CA6015	JC110V JC215V	GM8020	KC9225 TN7015	TP200	IC9250 IC9025 IC9054
		M30	XH6311 XH5210	GC2135 GC235	NC330		TT3500	WAM30	US735	AC630M	T6030		JC215V JC325V	HG8025 GM25	KCM25 KC8050 TN8050	TP300 TP400 TP40	IC9350 IC9025
	K	M40	XH8510	GC2025			TT5100		US735	AC630M			JC325V JC450V	GX30	KCM35 KC9240 KC9245 TPC35	TP400 TP40	IC656 IC635 IC9350
		K01		GC3205 GC3210					UC5105 UC5015	AX300G AC410K	T5010	CA4010 CA4505	JC105V	GM3005	KCK05	TK1000	IC9150
		K10	XH9110	GC3205 GC3210 GC3215	NC305K		TT1300	WAK10	UC5115 UE6010	AC410K AC700G AC420K	T5010	CA4515 CA4010 CA4115	JC110V	HG8010 GM8015	KCK15 KC9315 KC9240 KC9110	TN5015 TK1000 TK2000	IC9150 IC9015 IC4010 IC418 IC428
		K20	XH9211	GC3215	NC315K		TT1500	WAK20	UE5115	AC700G AC820P	T5020	CA4120	JC110V JC215V	HG8025 GM8020	KC920 KC9320	TN5020 TK2000 TP200	IC9015
		K30	XH9311													TN5020 TK2000 TP200	

CVD涂层材料 CVD Ccoating

类别 Category	试用分类代号 Trial classification code		LIFA 立发	ZCC- CT 赫捷	SANDVIK 山特维克	KORLOY 英泊伊	TaeguTec 特固德	WALTER 瓦尔特	MITSUBISHI 三菱	SUMITOMO 住友	TUNGALOY 泰珂路	KYOCERA 京瓷	DIJET 捷杰	HITACHI 日立	KENNAMETAL 肯纳	SECO 山高	ISCAR 伊斯卡
	分类 Sort	代号 Designation															
铣削 Milling	P	P01															
		P10								ACP100			JC730U		TN2510 TN25M		IC9080 IC4100
		P20		YBC201 YBM251	GC4020 GC4220			WAP25	PH7020 F7030	ACP100			JC730U		TN7525	T200M T250M	IC520M
		P30	XH7311 XH8511	YBM351	GC4020 GC4220	NCM335	TT7300	WAP35	F7030	AC230	T3030				KC930M TN7535	T250M T350M	IC4050
	M	P40	XH7311 XH8511	YBC302	GC4240 GC4040					AC230				GF30 GX2030 GX30	KC930M TN7535	T350M	
		M01															
		M10													TN25M		
		M20		YBM351 YBM253					F7030				JC730U		TN7525	T350M T58M	
	K	M30	XH7311 XH8511	YBC302	GC2040	NCM335		WTP35	F7030		T3030				KC930M TN7535	T250M T260M	IC520M
		M40	XH7311 XH8511	YBD152	GF30 GX30												IC4050
		K01											JC600				IC9080
		K10	XH9111	YBD152		NCM310		WAK15	F5010	ACK200 AC211	T1015		JC600			TN5505 TN5515	IC4100
	K	K20	XH9211	YBD252 K20D K20W	GC3220 GC3020 K20D K20W	NCM320		WAK25	F5020	ACK200	T1015		JC610		KC915M TN5520	T150M DT7150	C520M DT7150
		K30	XH9311	YBD252	GC3040								JC610		KC930M KC935M	T200M	IC4050

PVD物理涂层 PVD Physical Coating

类别 Category	试用分类代号 Trial classification code		LIFA 立法	ZCC-CT 株建	SANDVIK 山特维克	KORLOY 克洛伊	TaeguTec 特固德	WALTER 瓦尔特	MITSUBISHI 三菱	SUMITOMO 住友	TUNGALOY 泰珂路	KYOCERA 京瓷	DIJET 捷杰	HITACHI 日立	KENNAMETAL 肯纳	SECO 山高	ISCAR 伊斯卡
	分类 Sort	代号 Designation															
车削 Turning	P	P01	XH6222									PR915 PR1005	JC5003				
		P10	XH6221 XH7111	YBG102	GC1525 GC1025				VP10MF		AH710	PR915 PR930 PR1025 RR1115	JC5003	KC5010 KC5510 KU10T	CP200 TS2000	IC250 IC507 IC570	
		P20		YBG202	GC1525 GC1020 GC1025 GC1125	PC230			VP15TF VP20MF		AH710 AH330	PR630 PR915 PR930 PR660 PR1025 RR1225	JC5015	KC5025 KU25T	CP250	IC908 IC928 IC1008 IC1028 IC3028	
		P30	XH8513	YBG202	GC1025 GC1125				VP15TF VP20MF		GH330 GH730 AH120 AH330 AH740	PR630 PR660	JC5015	KC7015 KC7020 KC7235	CP500	IC928 IC1008 IC1028 IC3028	
	P40	XH8513		GC1020 GC2145	PC240				VP15TF VP20MF		AH120	PR660		KC7040	CP500	IC928 IC1008 IC3028	
	M01											PR915 PR1025					
	M10	XH6221 XH7111	YBG202 YBG205	GC1005 GC1025 GC1125				VP10MF	AC510N			PR915 PR930 PR1125 PR1225	JC 5003	KC5010 KC5510	CP200 TS2000	IC330 IC354 IC507 IC907 IC3028	
	M20	XH7211 XH6242 XH6212	YBG202 YBG205	GC1020 C125 GC4125	PC9030			VP15TF VP20MF	AC520U	GH330 GH730	PR630 PR915 PR930	JC 5015	KC5025 KC730 KC5525	CP2000 CP500 TS2500	IC228 IC250 IC354 IC3028		
	M30	XH6242		GC1020 GC2035	PC9030			VP15TF VP20MF	AC6040M AC520U AC530U	AH120	PR630 PR660	JC 5015	KC5025 KC5525	CP500	IC908 IC928 IC1008 IC1028		
	M40	XH8511		GC2035 GC2145					AC530U		PR660					IC228 IC328	
	K01									EH10Z	AH110		JC 5003				
	K10	XH9111 XH7111				PC205K				EH10Z	GH110 AH110		JC 5003 JC 5015	KC5010 KC5510	CP200 TS2000	IC350	
	K20	XH9211			GC1020	PC215K			VP15RT VP15TF VP20RT	EH20Z AH120			JC 5015	KC7015 KC7020	CP200 CP250	IC928 IC1008 IC908 ICRR	
	K30	XH9311			GC4125	PC215K			VP15TF	EH20Z AH120					KC7225	CP500	IC925 IC1008 IC908 IC22

PVD物理涂层 PVD Physical Coating

类别 Category	试用分类代号 Trial classification code		LIFA 立法	ZCC-CT 株建	SANDVIK 山特维克	KORLOY 克洛伊	TaeguTec 特固德	WALTER 瓦尔特	MITSUBISHI 三菱	SUMITOMO 住友	TUNGALOY 泰珂路	KYOCERA 京瓷	DIJET 捷杰	HITACHI 日立	KENNAMETAL 肯纳	SECO 山高	ISCAR 伊斯卡
	分类 Sort	代号 Designation															
铣削 Milling	P	P01	XH7111							ACP10			JC5003	PT08M PC A08M PC S08M TB6005J X1005			
		P10	XH7111	YBG252	GC1010 GC1025			WXH15 WXM15		ACZ310 ACP100 ACP200		PR730 PR830 PR1025 PR1225	JC5003 JC5030 JC5040	CY9020 PCA12M TB6005 JX1020 PC20M	KC715M		IC250 IC903 IC950
		P20	XH8214	YBG205 YBG320 YBG252	GC1025 GC1015 GC2030	PC230			VP15TF	ACZ310 ACZ350 ACP200		PR630 PR730 PR830 PR660 PR1025 PR1225	JC5015 JC5030 JC5040	TB6020 CY1550 JX1015	KC522M KC525M	F25M MP3000	IC950 IC900 IC908 IC910
		P30	XH8313 XH8311	YBG302 GC1010 GC1030 GC2030		PC3530 PC130		WXH35	VP15TF VP30RT	ACZ300 ACZ350 ACZ200	GH330 AH330 AH120 AH740	PR630 PR660 PR730 PR830 PR1230	JC5015 JC5040	TB6045 CY250 CY25 HC844 JH1045 PTH30E	KC725M	F25M F30M MP3000	IC900 IC928 IC300 IC328 IC1008
	M	P40	XH8513 XH8311	YBG302	GC1030		TT8020 TT8030	WXP45	VP30RT	ACZ350 ACP300	AH120	PR660 PR1230	JC5040	PTH30E TB6060 PTH40H	KC735M	F40M T60M	IC900 IC928 IC300 IC328
		M01												PCS08M			
		M10	XH7111	YBG252	GC1025 GC1030			WXM15		ACP200		PR630 PR730 PR830	JC5003 JC5020	SY9020 JX1020	KC715M		IC903
		M20	XH6212 XH6221 XH6211	YBG205 YBG320 YBG252	GC1025 GC2030 GC1040	TB6000 CY250 JC1015	TT8020 TT9030	WXH15 WXM15	VP15TF VP20RT	ACZ310 EH20Z ACP300	GH330	PR630 PR730 PR830 PR660	JC5015 JC5030 JC5040	TB6020 CY150 JC1015	KC730 KC522M KC525M	F25M MP3000	IC900 IC903 IC908 IC928
	K	M30	XH6212	YBG302	GC1040 GC2030	PC9530	TT8030	WXH35	VP15TF VP20RT VP30RT	ACZ330 EH20Z ACZ350	AH120	PR630 PR660 PR730 PR830 PR1225	JC5015 JC5030 JC5040	TB6045 CY250 HC844	KC725M KC735M	F30M F40M	IC928 IC328 IC1008
		M40		YBG302					VP30RT	ACZ350 ACP300	AH140	PR660	JC5015	TB6060 PTH40H JX1060			IC928 IC328
		K01									AH110	PR510 PR905	JC5003	PTH08M PCA08M PCS08M			
		K10	XH7111 XH9111	YBG102 YBG252	GC1010	PC205K		WXH15 WXM15		ACZ310 ACK200	AH120 GH110	PR510 PR905	JC5003	CY9020 TB6005 CY100H	KC510M		IC900 IC910
	K	K20	XH6211	YBG202	GC101 GC1020	PC215K	TT6030		VP15TF VP20RT	ACZ310 ACK200	AH120	PR510 PR905	JC5015	TB6020 CY150 PTH13S	KC520M KC525M	MK2000	IC910 IC950
		K30	XH9311		GC1020				CP15TF VP20RT	ACZ330 ACK300			JC5015	TB6045 PTH40H	KC725M KC735M		IC908 IC950 IC928

金属陶瓷 Cermet

类别 Category	试用分类代号 Trial classification code		LIFA 立法	ZCC- CT 株建	SANDVIK 山特维克	KORLOY 克洛伊	TaeguTec 特固德	WALTER 瓦尔特	MITSUBISHI 三菱	SUMITOMO 住友	TUNGALOY 东谷路	KYOCERA 京瓷	DIJET 捷杰	HITACHI 日立	KENNAMETAL 肯纳	SECO 山高	ISCAR 伊斯卡
	分类 Sort	代号 Designation															
车削 Turning	P	P01				CC105 CN100			AP25N	T110A T2000Z	NS520 GT520	AT520 GT720	LN10 CX50				IC20N IC520N
		P10	XH811	YNG151 YNG151C	CT5015 GC1525	CC15 CN200 CT10	PV3010		AP25N NX2525	T1200A T2000Z	NS520 AT530 GT730 GT720	TN60 TN6020 PV60 PV7020	CX50 CX75	CZ25	KT125 KT315	CM CMP	IC20N IC520N IC530N
		P20	XH811		GC1525		CT3000		AP25N UP35N NX2525 NX3035	T1200A T2000Z T3000Z	NS530 GT530 GT730 NS730	TN10 TN6020 PV60 PV7020	CX75	CH550	KT5020 KT325 KT1120		IC20N IC75T IC30N IC520N IC530N
		P30							VP45N	T3000Z	NS530 NS730						IC75T IC30N
	M	M10	XH8113	YNG151 YNG151C	GC1525		PC3010		NX2525 AP25N	T110A T2000Z	NS520 AT530 GT520 GT520	TN60 TN6020 PV60 PV7020	LN10 CX50		KT125	CM CMP	
		M20	XH8113				CT3000		NX2525 AP25N NX3035	T1200A T2000Z	NS530 GT730 NS730	TN90 TN6020 PV60 PV7020	CX50 CX75	CH550			
		M30								T3000Z							
	K	K01				CC105 CN100			AP25 NX2525	T110A T2000Z	NS520 AT520 GT520 GT720	TN30 PV30	LN10				
		K10		YNG151 YNG151C	CT5015	CC115	CT3000		AP25N NX2525	T1200A T2000Z	NS50 GT530 GT730 NS730	TN60 TN6020 PV60 PV7020	LN10		KT325 KT125		
		K20							AP25 NX2525	T3000Z			CX75				

金属陶瓷 Cermet

类别 Category	试用分类代号 Trial classification code		LIFA 立法	ZCC- CT 株建	SANDVIK 山特维克	KORLOY 克洛伊	TaeguTec 特固德	WALTER 瓦尔特	MITSUBISHI 三菱	SUMITOMO 住友	TUNGALOY 东谷路	KYOCERA 京瓷	DIJET 捷杰	HITACHI 日立	KENNAMETAL 肯纳	SECO 山高	ISCAR 伊斯卡
	分类 Sort	代号 Designation															
铣削 Milling	P	P10	XH821	YNG151 YNG151C		CN100	CT3000		NX2525			TN60	CX75			C15M	IC30N
		P20	XH821		CT30	CN20	CT520		NX2525		NS530	TN100M	CX75 CX90	CH550 CH7030 MZ1000 MZ2000	KT530M HT7 MZ2000	C15M	IC30N
		P30				CN30			NX4545	T250A	NS530 NS540 NS740		CX90 CX99	MZ3000 CH7035			IC30N
	M	M10	XH8213	YNG151 YNG151C			CT3000		CT3000			TN60					IC30N
		M20	XH8213		CT530		CT520		NX2525		NS530	TN100M	CX75	CH550 CH7030 MZ1000 MZ2000	KT530M HT7 KT605M	C15M	IC30N
		M30							NX4545	T250A	NS540 NS740		CX90 CX99	MZ3000 CH7035			
	K	K10		YNG151 YNG151C			CT520		NX2525		NS530	TN60					
		K20							NX2525				CX75		KT530M HT7		

硬质合金材料 Carbide Cemerred Marerial

类别 Category	试用分类代号 Trial classification code		LIFA 立法	ZCC- CT 株理	SANDVIK 山特维克	KORLOY 克洛伊	TaeguTec 特固德	WALTER 瓦尔特	MITSUBISHI 三菱	SUMITOMO 住友	TUNGALOY 钜路路	KYOCERA 京瓷	DIJET 捷杰	HITACHI 日立	KENNAMETAL 肯纳	SECO 山高	ISCAR 伊斯卡
	分类 Sort	代号 Designation															
车削 Turning	P	P01				ST05											
		P10	XH701	YC10	S1P	ST10	P10			ST10P	TX10S		SRT	WS10	P10		IC70
		P20	XH701		SMA	ST20	P20		UT120T	ST20E	TX25	PW30	SRT DX30	EX35	K125M TTM		IC70 IC50M
		P30	XH7651 XH851		SM30	ST30A	P30		UT120T	A30 A30N	TX30 UX30		SR30 DX35	EX35 EX40	GK K600 TTR		IC54 IC50M
	M	P40	XH851	YC40	S6					ST40E U10E	TX40		SR30 DX35	EX45	G13		IC54
		M10	XH701		H10A	U10	M10			EH510 U10E	TU10		UMN	WA10B	K313	890	
		M20	XH701		H13A	U20	M20		UT120T	EH510 U2	TU20 UX30		DX25 UMS	EX35	K68 KMF K125M TTM	HX 883	IC08
		M30	XH701	YBC351 YBC352	H10F SM30	ST30A			UT120T	A30 A30N	UX30		DX25 UMS	EX45	K600 TTR		IC08 IC28 IC128
	K	M40			S6	U40	M40				TU40		UM40	EX45	G13		
		K01		YD051	H1P	H02			UT105T	H1 H2	TH03 KS05F		KG03	WH05	K605		IC20
		K10	XH701 XH911	YD101	H1P H10 HM	H01	K10		HT110	EH10 EH510	G1F TH10	KW10	KG10 KT9	WH10	K313 K110M THM-U	890	IC20 IC10
		K20	XH701 XH921	YD201	H13A	G10	K20		UT120T	G10E EH20 EH520	G2F KS15F G2 KS20	GW10	CR1 KG20	WH20	K715 KMF K600	890 HX 883	IC20 IC10
	N	K30	XH931	YD201		G3			UT120T	G10E	G3		KG30	THR	THR	883	IC10 IC28
		N01			H10 H13A					H1 H2	KS05F		KG03		K605		
		N10	XH915	YD101		H01	K10	WK10	HT110	EH10 EH510	TH10 H10T		KG10 KT9		K313 K110M THM-U	890 H15	
		N20					K20			G10E EH20 EH520	KS15F		CR1 KG20		K715 KMF K600	HX KX H15 H25	
	S	N30											KG30		G13 THR	H25	
		S10	XH711	YD101	H10 H10A H10F H13A	H01	K10		RT9005 RT9010	EH10 EH510	KS05F TH10		KS05F TH10		K10 K313 THM	890	
		S20							RT9010 TF15	EH20 EH520	KS15F KS20		FZ15 KG20		K715 KMF	890 883 HX H25	
		S30							TF15				KG30		G13 K600 THR		

硬质合金材料 Carbide Cemerred Marerial

类别 Category	试用分类代号 Trial classification code		LIFA 立法	ZCC- CT 株理	SANDVIK 山特维克	KORLOY 克洛伊	TaeguTec 特固德	WALTER 瓦尔特	MITSUBISHI 三菱	SUMITOMO 住友	TUNGALOY 钜路路	KYOCERA 京瓷	DIJET 捷杰	HITACHI 日立	KENNAMETAL 肯纳	SECO 山高	ISCAR 伊斯卡
	分类 Sort	代号 Designation															
铣削 Milling	P	P10	XH701	YC10	S1P								SRT				
		P20	XH701 XH8214			ST20	P10		UT120T	A30N	TX25		SRT DX30	EX35	K125		IC50M IC28
		P30	XH851 XH725			ST30	P20		UT120T	A30N	UX30	PW30	SR30 DX35	EX35 EX40	GX K6		IC50M IC28
		P40	XH851	YC30S		ST40	P30					PW30	SR30	EX45			IC28
	M	M10	XH701	YC10		U10	M10						UMN		K313		
		M20	XH701			U20	M20		UT120T	A30N			DX25 UMS	EX35	K313		
		M30	XH701 XH651	YC30S					UT120T	A30N	UX30		DX25 UMS	EX40 EX45	KFM K60		IC28
		M40				U40	M40				TU40			EX45			IC28
	K	K01		YD051		H01			UT105T	KG03							
		K10	XH701 XH911	YD051	H1P	H05 H10	K10	WK10	UT120T	G10E	TH10	KW10	KG10	WH10	K110M K313		IC20
		K20	XH921	YD201	G10		K10		UT120T	G10E			KT9 CR1 KG20	WH20	KFM	HX	IC20 IC10
		K30	XH931	YD201	G3				UT120T				KG30				IC10 IC28

硬度对照表(黑色金属硬度及强度近似换算值)

Hardness Comparison Table(Approximate Conversion on Hardness &Strength of Ferrous Metals)

硬度 Hardness				抗弯强度 TRS (N/mm²)	硬度 Hardness				抗弯强度 TRS (N/mm²)
洛氏		维氏	布氏		洛氏		维氏	布氏	
HRC	HRA	HV	HB		HRC	HRA	HV	HB	
70.0	86.6	1037	—	—	43.0	72.1	411	401	1360
69.5	86.3	1017	—	—	42.5	71.8	405	396	1340
69.0	86.1	997	—	—	42.0	71.6	399	391	1320
68.5	85.8	978	—	—	41.5	71.3	393	385	1300
68.0	85.5	959	—	—	41.0	71.1	388	380	1280
67.5	85.2	941	—	—	40.5	70.8	382	375	1260
67.0	85.0	923	—	—	40.0	70.5	377	370	1245
66.5	84.7	906	—	—	39.5	70.3	372	365	1225
66.0	84.4	889	—	—	39.0	70.0	367	360	1210
65.5	84.1	872	—	—	38.5	—	362	355	1190
65.0	83.9	856	—	—	38.0	—	357	350	1175
64.5	83.6	840	—	—	37.5	—	352	345	1160
64.0	83.3	825	—	—	37.0	—	347	341	1140
63.5	83.1	810	—	—	36.5	—	342	336	1125
63.0	82.8	795	—	—	36.0	—	338	332	1110
62.5	82.5	780	—	—	35.5	—	333	327	1095
62.0	82.2	766	—	—	35.0	—	329	323	1080
61.5	82.0	752	—	—	34.5	—	324	318	1065
61.0	81.7	739	—	—	34.0	—	320	314	1050
60.5	81.4	726	—	—	33.5	—	316	310	1035
60.0	81.2	713	—	2555	33.0	—	312	306	1020
59.5	80.9	700	—	2500	32.5	—	308	302	1010
59.0	80.6	688	—	2450	32.0	—	304	298	298
58.5	80.3	676	—	2395	31.5	—	300	294	294
58.0	80.1	664	—	2345	31.0	—	296	291	291
57.5	79.8	653	—	2295	30.5	—	292	287	287
57.0	79.5	642	—	2250	30.0	—	289	283	283
56.5	79.3	631	—	2205	29.5	—	285	280	280
56.0	79.0	620	—	2160	29.0	—	281	276	276
55.5	78.7	609	—	2115	28.5	—	278	273	273
55.0	78.5	599	—	2075	28.0	—	274	269	269
54.5	78.2	589	—	2035	27.5	—	271	266	266
54.0	77.9	579	—	1995	27.0	—	268	263	263
53.5	77.7	570	—	1955	26.5	—	264	260	260
53.0	77.4	561	—	1920	26.0	—	261	257	257
52.5	77.1	551	—	1885	25.5	—	258	254	254
52.0	76.9	543	—	1850	25.0	—	255	251	251
51.5	76.9	534	—	1815	24.5	—	252	248	248
51.0	76.3	525	501	780	24.0	—	249	245	820
50.5	76.1	517	494	1750	23.5	—	246	242	810
50.0	75.8	509	488	1720	23.0	—	243	240	800
49.5	75.5	501	481	1690	22.5	—	240	237	790
49.0	75.3	493	474	1660	22.0	—	237	234	785
48.5	75.0	485	468	1630	21.5	—	234	232	775
48.0	74.7	478	461	1605	21.0	—	231	229	765
47.5	74.5	470	455	1575	20.5	—	229	227	760
47.0	74.2	463	449	1550	20.0	—	226	225	750
46.5	73.9	456	442	1525	19.5	—	223	222	745
46.0	73.7	449	436	1500	19.0	—	221	220	735
45.5	73.4	443	430	1475	18.5	—	218	218	730
45.0	73.2	436	424	1450	18.0	—	216	216	725
44.5	72.9	429	418	1430	17.5	—	214	214	715
44.0	72.6	423	413	1405	17.0	—	211	211	710
43.5	72.4	417	407	1385	—	—	—	—	—

注：此表所列各个钢系的换算值，对含碳量由低到高的钢种基本适用。The conversion values for all steels listed in this table are basically applicable to steels with low to high carbon content. 此表所列的抗拉强度值。适用于换算精度要求不高的一般钢种，1N/mm²=1Mpa。The tensile strength values listed in this table are suitable for general steels with low con

材料横向对比表 Transverse Comparison Table Of Materials

ISO	国家和标准										
	中国	美国	德国		英国		瑞典	法国	意大利	西班牙	日本
	GB	AISI/SAE	W.-nr	DIN	BS	EN	SS	AFNOR	UNI	UNE	JIS
P	结构钢										
	15	1015	1.0401	C15	080M15	-	1350	CC12	C15C16	F.111	-
	20	1020	1.0402	C22	050A20	2C	1450	CC20	C20C21	F.112	-
	35	1035	1.0501	C35	060A35	-	1550	CC35	C35	F.113	-
	45	1045	1.0503	C45	080M40	-	1650	CC45	C45	F.114	-
	55	1055	1.0535	C55	070M55	-	1655	-	C55	-	-
	60	1060	1.0601	C60	080A62	43D	-	CC55	C60	-	-
	Y15	1213	1.7015	9SMn28	230M07	-	1912	S250	CF9SMn28	11SMn28	SUM22
	-	12L13	1.0718	9SMnPb28	-	-	1914	S250Pb	CF9MnPb28	11SMnPb28	SUM22L
	-	-	1.0722	10SPb20	-	-	-	10PbF2	CF10Pb20	10SPb20	-
	-	1140	1.0726	35S20	212M36	8M	1957	35MF4	-	F210G	-
	Y13	1215	1.0736	9SMn36	240M07	1B	-	S300	CF9SMn36	12SMn35	-
	-	12L14	1.0737	9SMnPb36	-	-	1926	S300Pb	CF9SMnPb36	12SMnP35	-
	55Si2Mn	9255	1.0904	55Si9	250A53	45	2085	55S7	55Si8	56Si7	-
	-	9262	1.0961	60SiCr7	-	-	-	60SC7	60SiCr8	60SiCr8	-
	15	1015	1.1141	Ck15	080M15	32C	1370	XC12	C16	C15K	S15C
	40Mn	1039	1.1157	40Mn4	150M36	15	-	35M5	-	-	-
	25	1025	1.1158	Ck25	-	-	-	-	-	-	S25C
	35Mn2	1335	1.1167	36Mn5	-	-	2120	40Mn5	-	36Mn5	SMn438(H)
	30Mn	1330	1.1170	28Mn6	150M28	14A	-	20M5	C28Mn	-	SCMn1
	35Mn	1035	1.1183	Cf35	060A35	-	1572	XS38TS	C36	-	S35C
	Ck45	1045	1.1191	45	080M46	-	1672	XC42	C45	C45K	S45C
	55	1055	1.1203	Ck55	070M55	-	-	XC45	C50	C55K	S55C
	50	1050	1.1213	Cf53	060A52	-	1674	XC48TS	C53	-	S50C
	60Mn	1060	1.1221	Ck60	080A62	43D	1678	XC60	C60	-	S58C
	-	1095	1.1274	Ck101	060A96	-	1870	-	-	-	SUP4
	-	-	1.3401	X120Mn12	Z120M12	-	-	X120M12	XG120Mn12	X120Mn12	SCMnH/1
	Gr15;45Gr	52100	1.3505	100Cr6	534A99	31	2258	100C6	100Cr6	F.131	SUJ2
	-	ASTM A204Gr.A	1.5415	15Mo3	1501-240	-	2912	15D3	16Mo3KW	16Mo3	-
	-	4520	1.5426	16Mo5	1503-245-420	-	-	-	16Mo5	16Mo5	-
	-	ASTM A350LF5	1.5622	14Ni6	-	-	-	16N6	14Ni6	15Ni6	-
	-	ASTM A353	1.5662	X8Ni9	1501-509;510	-	-	-	X10Ni9	XBNi09	-

材料横向对比表 Transverse Comparison Table Of Materials

ISO	国家和标准										
	中国	美国	德国		英国		瑞典	法国	意大利	西班牙	日本
	GB	AISI/SAE	W.-nr	DIN	BS	EN	SS	AFNOR	UNI	UNE	JIS
P	结构钢										
	-	2515	1.5680	12Ni19	-	-	-	Z18N5	-	-	-
	-	3135	1.5710	36NiCr6	640A35	111A	-	35NC6	-	-	SNC236
	-	3415	1.5732	14NiCr10	-	-	-	14NC11	16NiCr11	15NiCr11	SNC415(H)
	-	3415 3310	1.5752	14NiCr14	655M13 655A12	36A	-	12NC15	-	-	SNC815(H)
	-	9840	1.6511	36CrNiMo4	816M40	110	-	40NCD3	38CrNiMo4(KB)	35CrNiMo4	-
	-	8620	1.6523	21NiCrMo2	850M20	362	2503	20NCD2	20NiCrMo2	20NiCrMo2	SNCCM220(H)
	-	8740	1.6546	40NiCrMo2	311-Type7	-	-	-	40NiCrMo2(KB)	40NiCrMo2	SNC240
	40CrNiMoA	4340	1.6582	34CrNiMo6	817M40	24	2541	35NCD6	35CrNiMo6(KB)	-	-
	-	-	1.6587	17CrNiMo6	820A16	-	-	18NCD6	-	14CrNiMo13	-
	15Cr	5015	1.7015	15Cr3	523M15	-	-	12C3	-	-	SCr415(H)
	35Cr	5132	1.7033	34Cr4	530A32	18B	-	32C4	34Cr4(KB)	35Cr4	SCr430(H)
	40Cr	5140	1.7035	41Cr4	530M40	18	-	42C4	41Cr4	42Cr4	SCr440(H)
	40Cr	5140	1.7045	42Cr4	-	-	2245	-	-	42Cr4	SCr440
	18CrMn	5115	1.7131	16MnCr15	(527M20)	-	2511	16MC5	16MnCr15	16MnCr15	-
	20CrMn	5155	1.7176	55Cr3	527A60	48	-	55C3	-	-	SUP9(A)
	30CrMn	4130	1.7218	25CrMo4	1717CDS110	-	2225	25CD4	25CrMo4(KB)	55Cr3	SCM420; SCM430
	35CrMo	4137;4135	1.7220	34CrMo4	708A37	19B	2234	35CD4	35CrMo4	34CrMo4	SCM432; SCRRM3
	40CrMoA	4140;4142	1.7223	41CrMo4	708M40	19A	2244	42CD4TS	41CrMo4	41CrMo4	SCM440
	42CrMo 42CrMnMo	4140	1.7225	42CrMo4	708M40	19A	2244	42CD4	42CrMo4	42CrMo4	SCM440(H)
	-	-	1.7262	15CrMo5	-	-	2216	12CD4	-	12CrMo4	SCM415(H)
	-	ASTM A182 F11;F12	1.7335	13CrMo44	1501- 620Gr.27	-	-	15CD3.5; 15CD4.5	14CrMo44	14CrMo45	-
	-	-	1.7361	32CrMo12	722M24	40B	2240	30CD12	32CrMo12	F.124.A	-
	-	ASTM A182 F.22	1.7380	10CrMo910	1501- 622Gr.31;45	-	2218	12CD9;10	12CrMo9,10	TU.H	-
	-	-	1.7715	14MoV63	1503-660-440	-	-	-	-	13MoCrV6	-
	50CrVA	6150	1.8159	50CrV4	735A50	47	2230	50CV4	50CrV4	51CrV4	SUP10
	-	-	1.8509	41CrAlMo7	905M39	41B	2940	40CAD6,12	41CrAlMo7	41CrAlMo7	-
	-	-	1.8523	39CrMoV139	897M39	40C	-	-	36CrMoV12	-	-

材料横向对比表 Transverse Comparison Table Of Materials

ISO	国家和标准										
	中国	美国	德国		英国		瑞典	法国	意大利	西班牙	日本
	GB	AISI/ SAE	W.-nr	DIN	BS	EN	SS	AFNOR	UNI	UNE	JIS
P	工具钢										
	T10	W.110	1.1545	C105W1	-	-	1880	Y ₁ 105	C98KU C100KU	F.515 F.516	-
	T12A	W.112	1.1663	C125W	-	-	-	Y ₂ 120	C120KU	(C120)	SK2
	CrV;9SiCr	L3	1.2067	100Cr6	BL3	-	-	Y100C6	-	100Cr6	-
	Cr12	D3	1.2080	X210Cr12	BD3	-	-	Z200Cr12	X210Cr13KU X250Cr12KU	X210Cr12	SKD1
	4Cr5MoVSi	H13	1.2344	X40CrMoV5 1	BH13	-	2242	Z40CDV5	X35CrMoV05KU X40CrMoV51KU	X40CrMoV5	SKD61
	Cr6WV	A2	1.2363	X100CrMoV5 1	BA2	-	2260	Z100CDV5	X100CrMoV51KU	X100CrMoV5	SKD12
	CrWMo	-	1.2419	105WCr6	-	-	2140	105WC13	10WCr6 107WCr5KU	105WCr5	SKS31 SKS2 SKS3
	Cr12W	-	1.2436	X210CrW12	-	-	2312	-	X215CrW12 1KU	X210CrW12	SKD2
	5CrNiMo	S1	1.2542	45WCrV7	BS1	-	2710	-	45WCrV8KU	45WCrSi8	-
	3Cr2W8V	H21	1.2581	X30WCrV9 3 X30WCrV93KU	BH21	-	-	Z30WCV9	X28W09KU X30WCrV9 3KU	X30WCrV9	SKD5
	Cr12MoV	-	1.2601	X165CrMoV 12	-	-	2310	-	X165CrMoW12KU	X160CrMoV12	SKD11
	5CrNiMo	L6	1.2713	55NiCrMoV6	-	-	-	55NCDV7	-	F.250.S	SKT4
	V	W210	1.2833	100V1	BW2	-	-	Y ₁ 105V	-	-	SKS43
	W6Mo5Cr4V2Co5	-	1.3243	S6-5-2-5	-	-	2723	Z85WDKCV	HS6-5-2-5	HS6-5-2-5	SKH55
	W18Cr4VCo5	T4	1.3255	S18-1-2-5	BT4	-	-	Z80WKCV 10-05-04-01	X78WCo1805KU	HS18-1-1-5	SKH3
	W6Mo5Cr4V2	M2	1.3343	S6-5-2	BM2	-	2722	Z85WDCV 06-05-04-02	X82WMo0605KU	HS6-5-2	SKH9
	-	M7	1.3348	S2-9-2	-	-Z-	2782	Z100WCWV 09-02-04-02	HS2-9-2	HS2-9-2	-
	W18Cr4V	T1	1.3355	S18-0-1	BT1	-	-	Z80WCV 18-04-01	X75W18KU	HS18-0-1	SKH2
	W6Mo5Cr4V3	M3	-	S6-5-3	-	-	-	-	-	-	SKH52
	-	M42	-	-	BM42	-	-	-	-	-	SKH59

材料横向对比表 Transverse Comparison Table Of Materials

ISO	国家和标准					主要用途
	中国	美国	德国	日本	大同（日本）	
	GB	AISI/SAE	DIN	JIS	DAIDO	
P	塑料模具钢					
	-	P20 mod.		-	PX5N	量产用大型镜面模具。汽车尾灯、镜壳前挡板、摄像机、家用电器等
	-	-		-	NAK55	高精度镜面模具。摄像机、音乐、化妆容器、透明罩类、透明胶片等
	-	-		-	NAK80	高镜面高精密模具。摄像机、化妆容器、透明罩类、透明胶片等
	3Cr13	420 mod.		SUS420J2 mo	S-STAR	超镜面耐蚀精密模具。照相机部件、激光唱片、透镜、表壳
	冷作模具钢					
	-	02	-	SKS93	YK30	冲压模、量规、裁纸刀、辅助工具
	9CrWMn	01 mod.	-	SKS3 mod.	GOA	冲裁模、量规、拉模、丝锥、穿孔冲头
	Cr12MoV	D2	X165CrMoV12	SKD11	DC11	冲裁模、冷作成形模、冷拉模、成形轧辊、冲头
	-	D2 mod.	-	SKD11 mod.	DC53	冲裁模、冷作成形模、冷拉模、成形轧辊、冲头
	热作模具钢					
	4Cr5MoSiV1	H13	X40CrMoV51	SKD61	DHA1	铝压铸模、压铸模关连部件、热冲压模、热挤压模、热剪切刀片
	-	-	-	-	DH21	长寿命铝压铸模
	-	-	-	-	DH31-S	大型压铸模
	-	-	-	-	DH2F	压铸模、塑料模

材料横向对比表 Transverse Comparison Table Of Materials

ISO	国家和标准										
	中国	美国	德国		英国		瑞典	法国	意大利	西班牙	日本
	GB	AISI/SAE	W.-nr	DIN	BS	EN	SS	AFNOR	UNI	UNE	JIS
M	不锈钢										
	0Cr13; 1Cr12	403	1.4000	X6Cr13	403S17	-	2301	Z6C13	X6Cr13	F.3110	SUS403
	-	-	1.4001	X7Cr14	-	-	-	-	-	F.8401	-
	1Cr13	410	1.4006	X10Cr13	410S21	56A	2302	Z10C14	X12Cr13	F.3401	SUS410
	1Cr17	430	1.4016	X6Cr17	430S15	60	220	Z8C17	X8Cr17	F.3113	SUS430
	2Cr13	410	1.4021	X20Cr13	S62	56B; 56C	-	Z20C13	X20C13	F.3401	SUS410
	-	-	1.4027	G-X20Cr14	420C29	56B	-	Z20C13M	-	-	SCS2
	4Cr13	-	1.4034	X46Cr13	420S45	56D	2304	Z40CM Z38C13M	X40Cr14	F.3405	SUS420J2
	1Cr17Ni2	431	1.4057	X20CrNi172	431S29	57	2321	Z15CNi6.02	X16CNi16	F.3427	SUS431
	Y1Cr17	430F	1.4104	X12CrMoS17	-	-	2383	Z10CF17	X10CrS17	F.3117	SUS430F
	1Cr17Mo	434	1.4113	X6CrMo171	434S17	-	2325	Z8CD17.01	X8CrMo17	-	SUS434
	-	-	1.4313	X5CrNi134	425C11	-	-	Z4CND13.4M	-	-	SCS5
	-	-	1.4408	G-X6CrNiMo1810	316C16	-	-	-	-	F.8414	SCS14
	4Cr9Si2	HW3	1.4718	X45CrSi93	401S45	52	-	Z45CS9	X45CrSi8	F.322	SUH1
	0Cr13Al	405	1.4724	X10CrAl13	403S17	-	-	Z10C13	X10CrAl12	F.311	SUS405
	Cr17	430	1.4742	X10CrAl18	430S15	60	-	Z10CAS18	X8Cr17	F.3113	SUS430
	8Cr20Si2Ni	HNV6	1.4757	X80CrNiSi20	443S65	59	-	Z80CSN20.02	X80CrSiNi20	F.320V	SUH4
	2Cr25N	446	1.4762	X10CrAl24	-	-	2322	Z10CAS24	X16Cr26	-	SUH446
	奥氏体不锈钢										
	0Cr18Ni9	304	1.4301	X5CrNi1810	304S15	58E	2332	Z6CN18.09	X5CrNi1810	F.3551; F.3541; F.3504	SUS304
	1Cr18Ni9MoZr	303	1.4305	X10CrNiS189	303S21	58M	2346	Z10CNF18.09	X10CrNiS18.09	F.3508	SUS303
	0Cr19Ni10	304L	1.4306	X2CrNi1911	304S12	-	2352	Z2CN18.10	X2CrNi18.11	F.3503	SCS19
	-	-	1.4308	G-X6CrNi189	304C15	-	-	Z6CN18.10M	-	-	SCS13
	Cr17Ni7	301	1.4310	X12CrNi177	-	-	2331	Z12CN17.07	X12CrNi1707	F.3517	SUS301
	-	304LN	1.4311	X2CrNiN1810	304S62	-	2371	Z2CN18.10	-	-	SUS304LN
	0Cr19Ni9	304	1.4350	X5CrNi189	304S31	58E	-	Z6CN18.09	X5CrNi1810	-	SUS304
	0Cr17Ni11Mo2	316	1.4401	X5CrNiMo1712	316S16	Z6CND17.11	2347	1.4401	X5CrNiMo1712	F.3543	SUS316
	00Cr17Ni13Mo2	316LN	1.4429	X2CrNiMoN17133	-	-	2375	Z2CND17.13	-	-	SUS316LN
	0Cr27Ni12Mo3	316L	1.4435	X2CrNiMo18143	316S12	-	2353	Z2CDN17.13	X2CrNiMo1713	-	SCS16,
	00Cr19Ni13Mo3	317L	1.4438	X2CrNiMo17133	317S12	-	2367	Z2CND19.15	X2CrNiMo18.16	-	SUS317L
	-	329L	1.4460	X8CrNiMo275	-	-	2324	-	-	-	SUS329L; SCH11; SCS11
	1Cr18Ni9Ti	321	1.4541	X6CrNiTi1810	2337	321S12	58B	Z6CNT18.10	X6CrNiTi1811	F.3553	SUS321
	1Cr18Ni11Nb	347	1.4550	X6CrNiNb1810	347S17	58F	2338	Z6CNNb18.1	X6CrNiTi1811	F.3552	SUS347
	Cr18Ni12Mo2Ti	316Ti	1.4571	X6CrNiMoTi17122	320S17	58J	2350	Z6NDT17.12	X6CrNiMoTi17	F.3535	-

材料横向对比表 Transverse Comparison Table Of Materials

ISO	国家和标准										
	中国	美国	德国		英国		瑞典	法国	意大利	西班牙	日本
	GB	AISI/ SAE	W.-nr	DIN	BS	EN	SS	AFNOR	UNI	UNE	JIS
M	奥氏体不锈钢										
		-	1.4581	G-X5CrNiMoNb1810	318C7	-	-	Z4CNDNb1812M	XG8CrNiMo18	-	SCS22
	Cr17Ni12Mo3Nb	318	1.4583	X10CrNiMoNb1812	-	-	-	Z6CNDNb1713B	X6CrNiMoTiNb17	-	-
	1Cr23Ni13	309	1.4828	X15CrNiSi2012	309S24	-	-	Z15CNS20.1	-	-	SUH309
	0Cr25Ni20	310S	1.4845	X12CrNi2521	310S24	-	2361	Z12CN2520	X6CrNi2520	F.331	SUH310
	Cr15Ni36W3Ti	330	1.4864	X12NiCrSi3616	-	-	-	Z12CNS35.1	-	-	SUH330
	-	-	1.4865	G-X40NiCrSi3818	330C11	-	-	-	XG50NiCr3919	-	SCH15
	5Cr2Mn9Ni4N	EV8	1.4871	X53CrMnNiN219	349S54: 321S12	- 58B	-	Z52CMN21.0	X53CrMnNiN219	-	SCH35
	1Cr18Ni9Ti	321	1.4878	X12CrNiTi189	321S320	58C	-	Z6CNT18.12	X6CrNiTi1811	F.3523	SU321

ISO	国家和标准								
	中国	美国	德国	英国	瑞典	法国	意大利	西班牙	日本
K	球墨铸铁QT400-18								
		60-40-18	GGG40	400/17	0717-02	FGS370-17	GS370-17	FGE38-17	FCD400
	QT450-10	65-45-12	--	420/12	--	FGS400-12	GS400-12	FGE42-12	FCD450
	QT500-7	70-50-05	GGG5050	0/707	27-02	FGS500-7	GS500-7	FGE50-7	FCD500
	QT600-3	80-60-03	GGG6060	0/707	32-03	FGS600-2	GS600-2	FGE60-2	FCD600
	QT700-2	100-70-03	GGG7070	0/207	37-01	FGS700-2	GS700-2	FGE70-2	FCD700
	QT800-2	120-90-02	GGG8080	0/208	64-03	FGS800-2	GS800-2	FGE80-2	FCD800
	QT900-2	--	--	900/2	--	--	--	--	--
	灰口铸铁								
	--	NO.60	GG40	--	0140	FGL400	--	--	--
	HT350	NO.50	GG35	350	0135	FGL350	G35	FG35	FC350
	HT300	NO.45	GG30	300	0130	FGL300	G30	FG30	FC300
	HT250	NO.35	GG25	250	0125	FGL250	G25	FG25	FC250
	HT200	NO.30	GG20	200	0120	FGL200	G20	FG20	FC200
	HT150	NO.20	GG15	150	0115	FGL150	G15	FG15	FC150
	HT100	--	--	100	0110	--	G10	--	FC100

Notes

This image shows a full page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for handwriting practice or general writing. There are no margins, text, or other markings on the page.