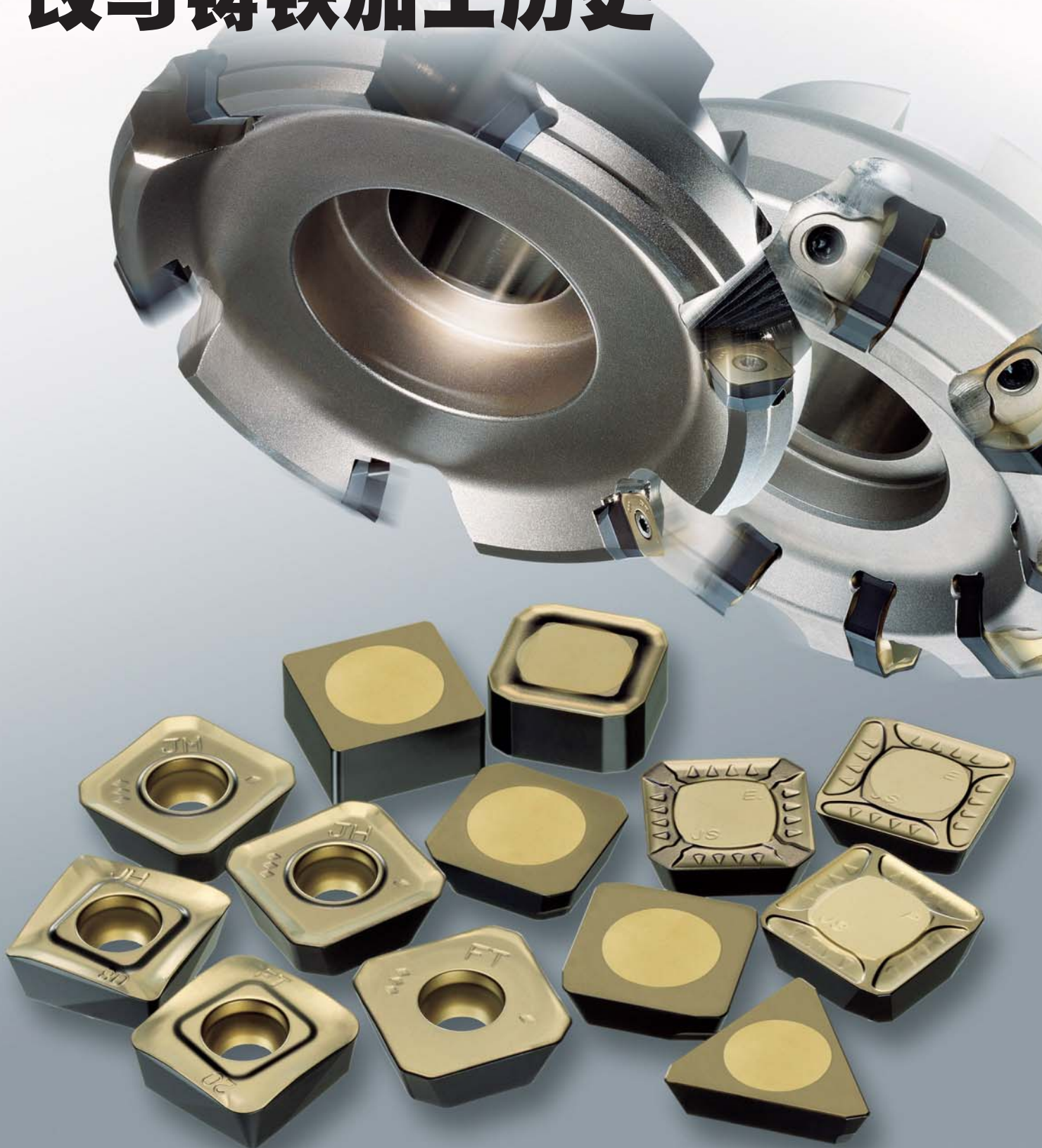


铸铁铣削加工用CVD涂层材料

超级涂层硬质合金 **MC5020**

黑色超平滑涂层 改写铸铁加工历史

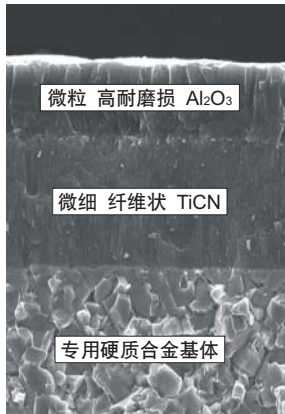


铸铁铣削加工用CVD涂层材料

超级涂层硬质合金 **MC5020**

特点

- 可抑制铸铁加工时容易发生的热龟裂与崩刃现象，加之优异的耐磨损性，可实现长时间的稳定加工。



MC5020
涂层组织结构

耐磨损性提高

具有微粒高耐磨损Al₂O₃与微细纤维状TiCN层，在广泛的铸铁铣削加工领域发挥优异的耐磨损性。

耐破损性提高

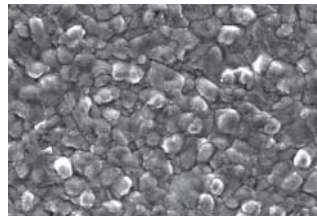
采用韧性及耐热龟裂性优异的专用硬质合金基体材料，可抑制刀尖的突发性破损。

抑制异常损伤

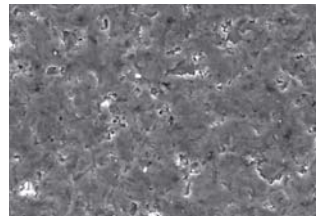
表面极其平滑的黑色超平滑涂层，可抑制粘结崩刃等异常损伤。

平滑程度卓越的黑色超平滑涂层

涂层表面比较



以往的涂层



黑色超平滑涂层

适用范围

MC5020为铸铁铣削加工的第一推荐材料。兼备高耐磨损性与超群的耐破损性，可对应广泛加工领域。



推荐切削条件

工件材料	抗拉强度	切削速度 (m/min)	每刃进给量 (mm/tooth)
K 灰铸铁	250—350MPa	200 (100—250)	0.2 (0.1—0.3)
	≤450MPa	200 (100—250)	0.2 (0.1—0.3)
球墨铸铁	500—800MPa	110 (80—150)	0.2 (0.1—0.3)

切削性能

耐磨损性

MC5020加工球墨铸铁时
也可发挥超群耐磨损性！

<切削条件>
工件材料: FCD700
切削速度: 250m/min
每刃进给量: 0.3mm/tooth
切削深度: 1.5mm
干式切削



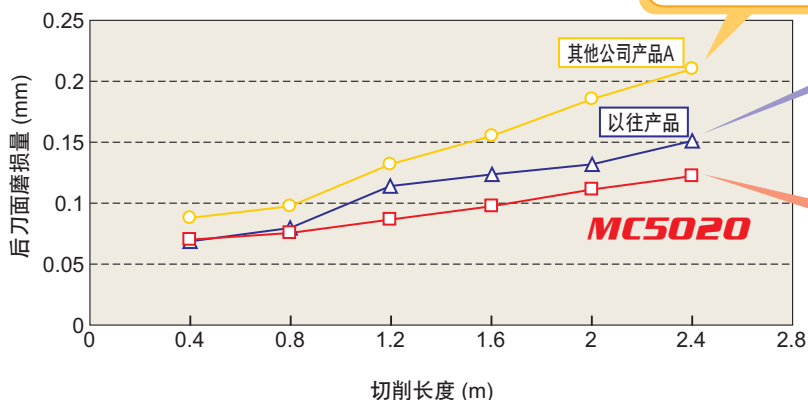
其他公司产品A



以往产品



MC5020



耐破损性、耐崩刃性

MC5020的耐破损性、耐崩刃性优异，实现切削刃的高可信度！

<切削条件>
工件材料: FC300(带槽)
切削速度每: 500m/min
刃进给量: 0.3mm/tooth
切削深度: 0.5mm
干式切削



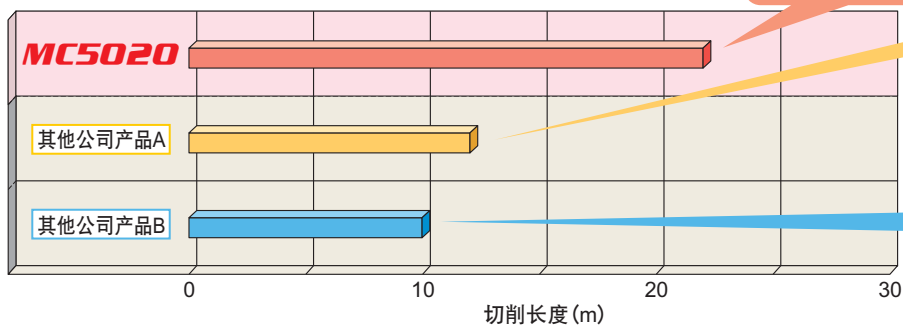
MC5020



其他公司产品A




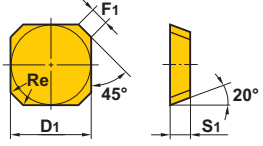

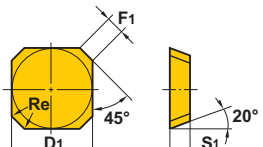

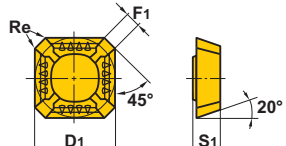

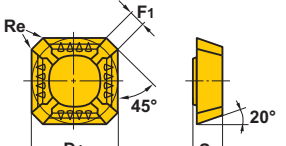

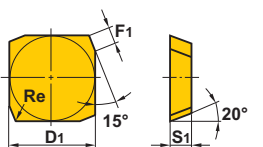

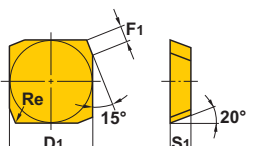

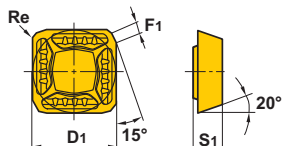
其他公司产品B


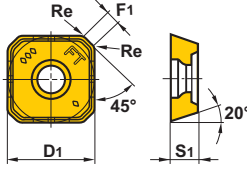

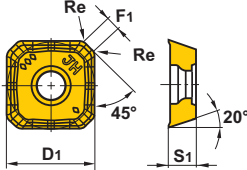

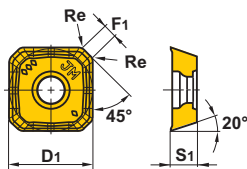

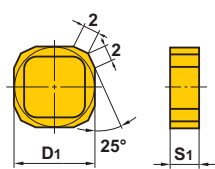

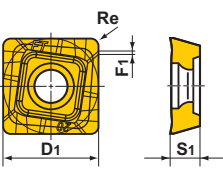

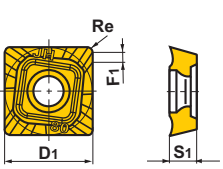

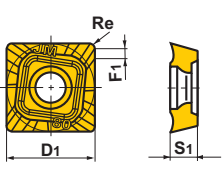


超级涂层硬质合金 **MC5020**

可转位刀片

刃口修磨 E:倒圆 S:复合型刃口修磨 T:倒棱


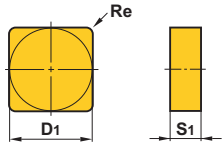

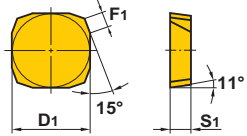

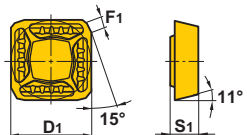

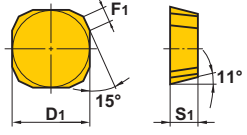

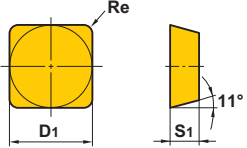

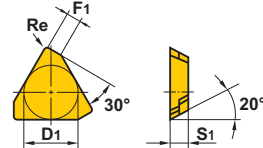

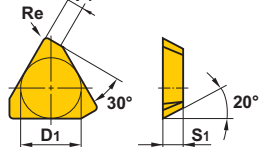
对应铣刀 刀片外形	型号	精度	刃口修磨	库存	尺寸(mm)				形状
					D1	S1	F1	Re	
	SEEN1203AFSN1	E	S	●	12.7	3.18	1.4	1.0	
	SEEN1504AFSN1	E	S	●	15.875	4.76	1.4	1.0	
	SEER1203AFEN-JS	E	E	●	12.7	3.18	1.4	1.0	
	SEER1504AFEN-JS	E	E	●	15.875	4.76	1.4	1.0	
	SEEN1203EFRS1	E	S	●	12.7	3.18	1.4	1.0	
	SEEN1504EFRS1	E	S	●	15.875	4.76	1.4	1.0	
	SEER1203EFER-JS	E	E	●	12.7	3.18	1.4	1.0	

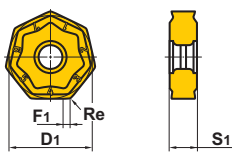
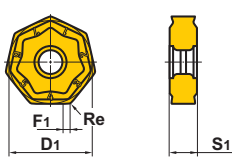
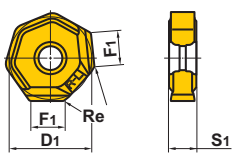
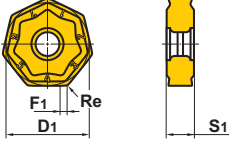

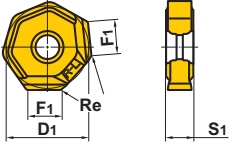
对应铣刀 刀片外形	型号	精度	刃口 修磨	库存	尺寸(mm)				形状
					D1	S1	F1	Re	
ASX445 	SEMT13T3AGSN-FT	M	S	●	13.4	3.97	1.9	1.5	
ASX445 	SEMT13T3AGSN-JH	M	S	●	13.4	3.97	1.9	1.5	
ASX445 	SEMT13T3AGSN-JM	M	S	●	13.4	3.97	1.9	1.5	
BN425 	SNMF43B2G	M	E	●	12.7	4.8	—	—	
ASX400 	SOMT12T320PEER-FT	M	E	●	12.7	3.97	0.5	2.0	
ASX400 	SOMT12T308PEER-JH	M	E	●	12.7	3.97	1.4	0.8	
ASX400 	SOMT12T308PEER-JM	M	E	●	12.7	3.97	1.4	0.8	

超级涂层硬质合金 **MC5020**

可转位刀片

刃口修磨 E:倒圆 S:复合型刃口修磨 T:倒棱

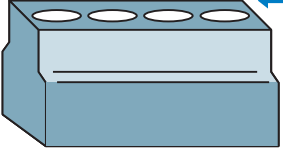
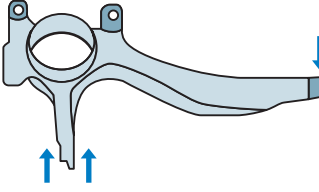
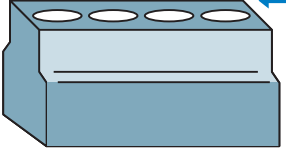
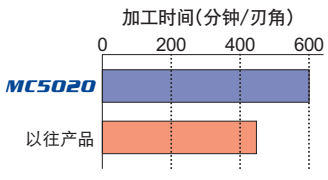
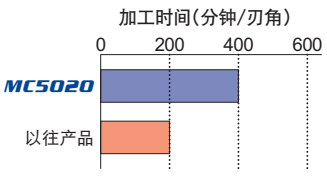
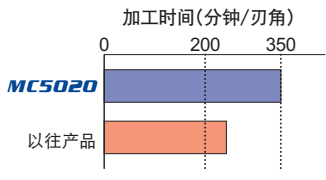
对应铣刀 刀片外形	型号	精度	刃口修磨	库存	尺寸(mm)				形状
					D1	S1	F1	Re	
	SNMN120408	M	E	●	12.7	4.78	—	0.8	
	120412	M	E	●	12.7	4.78	—	1.2	
	SPEN1203EEER1	E	E	●	12.7	3.175	1.4	—	 <p>本图所示为右手刀(R)。</p>
	1203EEEL1	E	E	●	12.7	3.175	1.4	—	
	SPNN1203EEER1	N	E	●	12.7	3.175	1.4	—	
	SPER1203EEER-JS	E	E	●	12.7	3.175	1.4	—	
余偏角15° 	SPKN1203EDR	K	T	●	12.7	3.18	1.4	—	
	SPMN120408	M	E	●	12.7	4.76	—	0.8	
	120412	M	E	●	12.7	4.76	—	1.2	
	TEEN1603PESR1	E	S	●	9.525	3.175	1.4	0.4	
	TEEN2204PESR1	E	S	●	12.7	4.76	1.4	1.0	

对应铣刀 刀片外形	型号	精度	刃口修磨	库存	尺寸(mm)				形状
					D1	S1	F1	Re	
AHX640W (MK断屑槽) 	* NNMU200608ZEN-MK	M	E	●	20	6.55	1.0	0.8	
AHX640W (HK断屑槽) 	* NNMU200608ZEN-HK	M	E	●	20	6.55	1.0	0.8	
AHX640W (修光刃刀片) 	* WNEU2006ZEN7C-WK	E	E	●	20	6.55	7.4	0.8	

*刀片在左手刀与右手刀上均可使用。

超级涂层硬质合金 **MC5020**

使用实例

使用刀片(材料)		SPMN120408(MC5020)	SNMN120412(MC5020)	SPEN1203EEER1(MC5020)
工件材料		铸铁(FCA)  全面粗加工	球墨铸铁(FCD400)  粗加工	灰铸铁(FC250)  粗加工
零部件名称		汽缸	转向节	汽缸
切削条件	切削速度 (m/min)	124	500	300
	每刃进给量 (mm/tooth)	0.05	0.12	0.12
	切削深度 (mm)	3.0	3.5	2-5
切削油剂		湿式切削	干式切削	干式切削
结果		<p>加工时间(分钟/刃角)</p>  <p>MC5020未发生崩刃,与以往产品相比寿命延长。</p>	<p>加工时间(分钟/刃角)</p>  <p>MC5020未发生崩刃,与以往产品相比寿命延长。</p>	<p>加工时间(分钟/刃角)</p>  <p>MC5020的寿命为以往产品的1.4倍。</p>

关于安全

- 请勿用手直接触摸切削刃、切屑。
- 请在推荐条件范围内使用,及早更换刀具。
- 有时会有高温的切屑飞出,伸长的切屑排出。请使用防护罩、防护镜等防护用具。
- 使用非水溶性切削液时,务必采取防火措施。
- 安装刀片或零部件时,请使用附带的扳手稳妥安装。
- 刀具旋转使用时,务必进行试运转,确认有无摇摆、振动、异常声音。

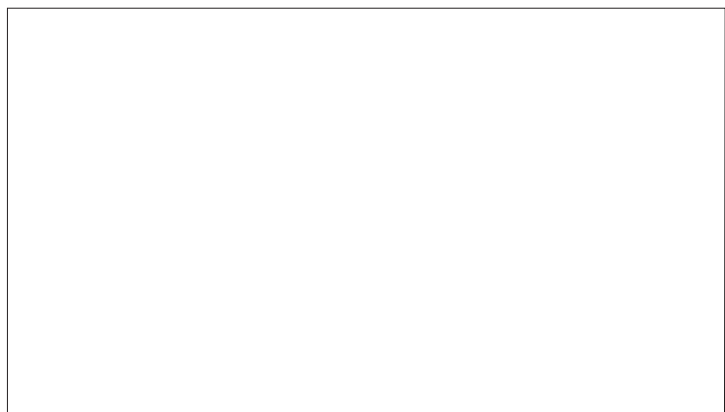
三菱综合材料株式会社
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亚太地区市场销售部:

〒130-0015 日本国东京都墨田区横网1-6-1, KFC大楼8楼

电话: 81-3-5819-8771 传真: 81-3-5819-8774

<http://www.mitsubishicarbide.com>



(规格若有更改,恕不事先通知)

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