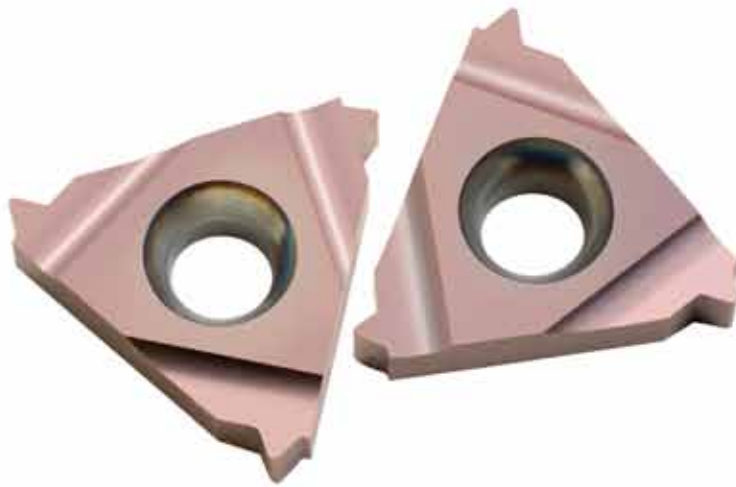




New

HBA grade



Takes on the toughest materials

针对最艰难的被加工材料



Carmex introduces HBA, a new extra-fine sub-micron grade with high toughness for optimized performance.

Carmex推出BHA，一个新的特微细颗粒级高坚韧优化性能的刀片
Threading of fully hardened and tough materials is increasing due to requirements from manufacturers to avoid thread distortions and reduce the delivery time. Thread turning inserts for machining materials harder than 40 HRc require an optimized combination of carbide substrate, coating type and edge conditions.

To meet this market need, Carmex is introducing HBA, a new extra-fine sub-micron grade with high toughness, for optimized performance on:
为了满足市场需求，Carmex推出HBA，
一个特微细颗粒、高韧性、性能优化的刀片

- **Hardened Steels and Cast Iron up to 62 HRc.**
用于硬钢和铸硬钢到HRC62
- **Titanium Alloys and Super Alloys (Hastelloy, Inconel and Nickel base alloys).**
钛合金、超合金（海斯特、因科镍和镍基合金）

- Advantages:**
- **High wear and heat resistance** 高耐磨和高耐热
 - **Excellent edge stability** 杰出的切削刃稳定性
 - **Unique coating structure** 独特的涂层结构



因为淬硬钢和坚韧材料的螺纹的加工需求，以避免螺纹扭曲变形和减少加工时间，增加优化组合涂层的硬质合金基体的螺纹车刀片用于HRC40硬材料加工。

Test Report 试验报告

Application 应用程序

External right hand thread: M32x1.5 右手外螺纹: M32*5
Thread length: 65 mm 螺纹长度: 65mm

Work piece material 工件材料

Hardened steel D2: 53-56 HRc 淬硬钢: HRC53-56

Tool description 刀具数据

Thread turning insert 16 ER 1.5 ISO HBA 螺纹车刀片: 16ER 1.5 ISO HBA
Toolholder: SER 2020 K16 螺纹车刀杆: SER 2020 K16

Cutting conditions 切削条件

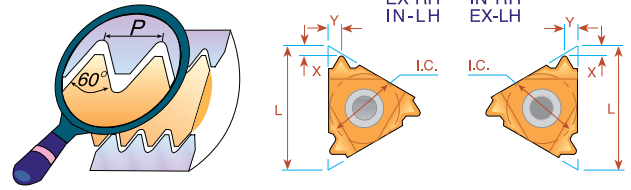
Cutting speed: 45 m/min 切削速度: 45m/min
Number of passes: 28 走刀次数: 28
Coolant: yes 冷却: 有

Results 结果

Number of threads per corner: 36 每个角加工件数: 36

Partial Profile 60°

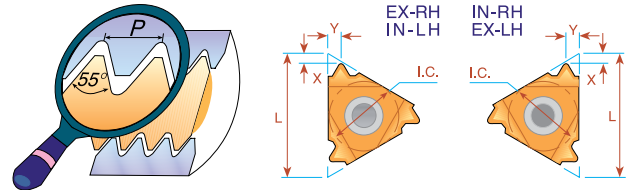
范围牙60°



L	I.C. in	Pitch Range		EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y
		mm	TPI				
16	3/8	0.5-1.5	48-16	16 ER A60	16 IR A60	0.8	0.9
		1.75-3.0	14-8	16 ER G60	16 IR G60	1.2	1.7
		0.5-3.0	48-8	16 ER AG60	16 IR AG60		

Partial Profile 55°

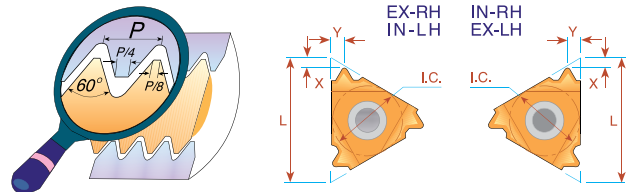
范围牙55°



L	I.C. in	Pitch Range		EXTERNAL Ordering Code Right Hand	INTERNAL Ordering Code Right Hand	X	Y
		mm	TPI				
16	3/8	0.5-1.5	48-16	16 ER A55	16 IR A55	0.8	0.9
		1.75-3.0	14-8	16 ER G55	16 IR G55	1.2	1.7
		0.5-3.0	48-8	16 ER AG55	16 IR AG55		

ISO - metric

ISO 公制

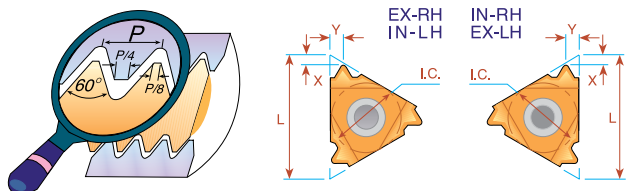


Pitch mm	L	I.C. in	EXTERNAL Ordering Code Right Hand	X	Y	INTERNAL Ordering Code Right Hand	X	Y
1.0	16	3/8	16 ER 1.0 ISO	0.7	0.7	16 IR 1.0 ISO	0.6	0.7
1.25			16 ER 1.25 ISO	0.8	0.9	16 IR 1.25 ISO	0.8	0.9
1.5			16 ER 1.5 ISO	0.8	1.0	16 IR 1.5 ISO	0.8	1.0
1.75			16 ER 1.75 ISO	0.9	1.2	16 IR 1.75 ISO	0.9	1.2
2.0			16 ER 2.0 ISO	1.0	1.3	16 IR 2.0 ISO	1.0	1.3
3.0			16 ER 3.0 ISO	1.2	1.6	16 IR 3.0 ISO	1.1	1.5

UN - Unified

UNC, UNF, UNEF, UNS

UN60°/UNC, UNF, UNEF, UNS



Pitch TPI	L	I.C. in	EXTERNAL Ordering Code Right Hand	X	Y	INTERNAL Ordering Code Right Hand	X	Y
28	16	3/8	16 ER 28 UN	0.6	0.7	16 IR 28 UN	0.6	0.7
24			16 ER 24 UN	0.7	0.8	16 IR 24 UN	0.7	0.8
20			16 ER 20 UN	0.8	0.9	16 IR 20 UN	0.8	0.9
18			16 ER 18 UN	0.8	1.0	16 IR 18 UN	0.8	1.0
16			16 ER 16 UN	0.9	1.1	16 IR 16 UN	0.9	1.1
14			16 ER 14 UN	1.0	1.2	16 IR 14 UN	0.9	1.2
12			16 ER 12 UN	1.1	1.4	16 IR 12 UN	1.1	1.4



Carmex
Precision Tools Ltd.
x-treme thread cutting™

