



7BR Detailed introduction



Tungsten Carbide

□ Difficult-to-milling material

Especially suitable for processing high temperature alloy, titanium alloy and other difficult milling materials.



Slot milling

□ High performance coating

The special coating is widely used in dry and wet machining of different materials. It can bear more milling force and milling heat, greatly improve the machining performance and make the tool life longer and better.



Bottom flute milling



Earthquake resistance



Cutting fluid

□ Special Geometry

Special flute edge treatment and protection of rounded corners, special design of back edge makes milling force stronger, more stable, vibration lower and surface quality higher, enhance core diameter design, optimize groove shape, enhance tool rigidity, reduce swing, reduce friction and processing heat, greatly improves the surface quality. To use cycloid processing making higher efficiency

□ Strength

Improve metal removal rate, improve processing efficiency, less vibration and reduce monitoring costs, very good processing stability, nice tools rigidity and higher wear resistance. Can effectively reduce processing costs, inhibit and reduce burr generation, improve Surface finish, extend tool life.

High-temperature alloy material processing

Kovar alloy(GB4J29, ASTM F15, JIS EMAS-1001)

Incone aloy(GH4169, INCONEL718, NICR19FE19NB5)

Titanium alloy material processing

According to the metal structure, it is divided into α phase, β phase and $\alpha + \beta$ phase. In China, TA, TB, TC are the brands of hardness: Standard Specification for commercial pure titanium

Hardness: (110-250 HB) titanium alloy (300 -- 450 HB)



8GAP Detailed introduction

□ Stainless steel, Titanium alloy mills

MG

Tungsten Carbide

Especially suitable for stainless steel, titanium alloy and other special materials of high efficiency processing

□ Field of application

Aerospace, medical equipment, auto parts, etc.



Side milling



Earthquake Resistance

□ Special Geometry

Strong and rigid geometric special groove-shape edge band design enables higher dimensional accuracy and surface quality of the material to be machined; more smooth cutting of unequal chip removal groove design, plus special carbide bar, so that the workpiece to be processed to ensure good surface precision quality, but also greatly enhance the life of the tool, reduce tool costs.

□ Strength

Improve side finish, side vertical precision, improve processing efficiency, reduce tool cost

High surface

Stainless steel material processing

Precipitation hardening stainless steel, Austenitic stainless steel, stainless steel, Martensitic stainless steel

Titanium alloy material processing

According to the metal structure, it can be divided into α phase, β phase and $\alpha + \beta$ phase, In China, can be named TA, TB, TC

Hardness:

Commercial pure titanium (110-250HB)
titanium alloy (300-450HB)





8BR Detailed introduction



Tungsten Carbide

□ Stainless steel, titanium alloy

Especially suitable for processing stainless steel, titanium alloy and other difficult cutting materials



Slot milling

□ High performance coating

Wear-resistant and heat-resistant coating ensures a stable cutting process even at high temperatures



Bottom flute milling

□ For soft stainless steel

The design of large Helix Angle and rake angle can control the influence of cutting heat on the cutting tool and improve the machining efficiency



Earthquake Resistance



Cutting fluid

□ Special geometric design

The best cutting core and chip-holding groove design, with high rigidity and sharpness, to achieve the parts of high-volume and efficient processing

Stainless steel material processing

Precipitation hardening stainless steel, Austenitic stainless steel, stainless steel, Martensitic stainless steel

Titanium alloy material processing

According to the metal structure, it can be divided into α phase, β phase and $\alpha + \beta$ phase, In China, can be named TA, TB, TC

Hardness:

Commercial pure titanium (110-250HB)
titanium alloy (300-450HB)





6SP Detailed introduction



Tungsten Carbide

□ Precision tool

Ultra-fine grained cemented carbide bars with wear resistance and high toughness



Slot milling

□ Field of application

Mould making, mechanical fogging parts, bearing high hard steel



Bottom flute milling

□ Unequal groove depth design

Unequal groove depth design, large chip groove at the front end, large core diameter at the back end, deep processing and cavity milling are particularly advantageous, for high efficiency and high stability of processing options



Earthquake Resistance



Cutting fluid

□ Strength

Excellent wear resistance and toughness of ultra-fine grain cemented carbide bars, rigidity, can carry out precision tooling, tool milling efficiency

Suitable for processing materials

~ 60° fired material, Pre-fired material

Plastic mould : S136, 2083, 2738, Heated NAK80

Cold treatment mould :GS2379, SKD11, DC53, DC11,

Heated treatment mould :DH2F, GS2343, 2347, 2539

Cast iron steel :GS2344, DAC, DAC55, SKD61





UGP Detailed description



Tungsten carbide

□ Economical tools

High surface quality precision machining, cutting process faster, longer tool life

□ Field of application

Mould Manufacturing, parts processing, mechanical processing, die casting manufacturing

□ Suitable cutting

In general, the processing of untreated die steel to pre-hardened steel, quenched and tempered steel, ordinary steel and other ~ 48 ° steel, processing stainless steel also has excellent performance, but also can process titanium alloy, copper and aluminum and other metal materials

□ Strength

Coating hardness and high heat resistance, in cutting soft materials, can better play the processing performance

Suitable for processing materials

~ 48 ° plain steel, prehardened carbon steel: Q 235. 45 # , 65MN, ZG200-400 Die Steel: P20,136, CR14MO4V, 20CR stainless steel, titanium alloy, copper-aluminum and other metal materials



Slot milling



Bottom flute milling



3PCP Detailed introduction



Tungsten Steel



□ Machining for mass products

Copper, aluminum, magnesium and other non-metallic materials, suitable for products parts processing, die-casting manufacturing, wheel manufacturing

□ Excellent workability

The copper-aluminum special coating with excellent lubricity and heat resistance can prolong the tool life without affecting the precision and Burr of the workpiece



Slot milling

□ Suitable cutting

6 series, 7 series aluminum alloy, ADC12 die-casting aluminum alloy, copper electrode



Bottom flute milling

□ Strength

Tool coating has good self-lubricating effect, low friction coefficient at high temperature, strong anti-adhesion, non-stick tool wear resistance, good side finish

Suitable for processing materials

Non-ferrous metal: 6061,6063,7050,7075

DIE CAST ALUMINUM: Adc12, Al S112, Al S112, A360

copper, brass, magnesium alloy, zinc alloy



2LB Detailed introduction

Suitable for processing materials
Graphite, CFK/GFK, ceramics, high silicon aluminum, zirconium, chromium cobalt alloy CRCOPPCB, plastic



Tungsten Steel

□ Diamond coated milling cutter

Suitable for processing CFK/GFK, graphene, high silicon aluminum, ceramics and other special materials

□ Special high performance coating

Using diamond coating with hardness up to HV10000, with super wear resistance;

□ Raw material & tools geometric design

The high reliability and wear resistance of CFK/GFK/C/SI special materials are ensured by using high toughness and high strength Matrix and extremely sharp geometric design

□ Strength

High Quality, high performance, high reliability, high wear resistance, can reduce the cost and increase production capacity



Slot milling



Bottom flute milling

8BP Detailed description

8BP4

Four-flute anti-vibration flat cutter (hard-to-cut material)
material: ultra-fine grain cemented carbide, especially suitable for high-performance milling
Fu coating: outstanding wear resistance and high temperature oxidation (1,100 °C), the utility model can effectively prolong the tool life and enhance the production efficiency. On the other hand, the friction coefficient of the coating is low, which is helpful to smooth and efficient shoulder row

□ 40°/42° unequal helix angle

The utility model can prevent resonance phenomenon, reduce the vibration of the cutting tool, greatly improve the surface smoothness of the workpiece, prolong the service life of the cutting tool, and reduce the wear and damage of the machine tool spindle. More significant in improving the efficiency of processing: greatly improve the metal cutting and the same cutting parameters can increase the axial and radial cutting depth

□ Front angle

Eliminate old problems in machining difficult-to-mill materials: Work Hardening, using a large rake angle, can reduce the high heat generated during cutting

□ Neck type

Reduce stem diameter interference, increase the effective processing length to avoid the loss of processing rigidity by changing to lengthening type

Best for customers:

Under the condition of increasing the metal removal rate, the workpiece Surface finish and the tool life are increased simultaneously

□ End Tooth

After enhancement, therefore can use in the difficult processing situation, like the KOPO milling, the spiral interpolation milling and the cavity milling and so on needs the axial feed situation

□ Tip of tool

45° angle of protection

□ Flute

After grinding, it is optimized by micro-geometry processing, aiming at machining hard-to-mill material

Suitable for processing materials

Mainly for stainless steel, titanium alloy and heat-resistant alloy and other difficult cutting materials

Milling mode

Suitable for full slot milling, rough milling, semi-fine rough milling, fine milling, multi-purpose, reduce tool types in the axial feeding situation can use the following feed: Slope Milling, spiral interpolation milling, more flexibility



8BP Detailed introduction

Carbide end mill with Unequal Helix Angle

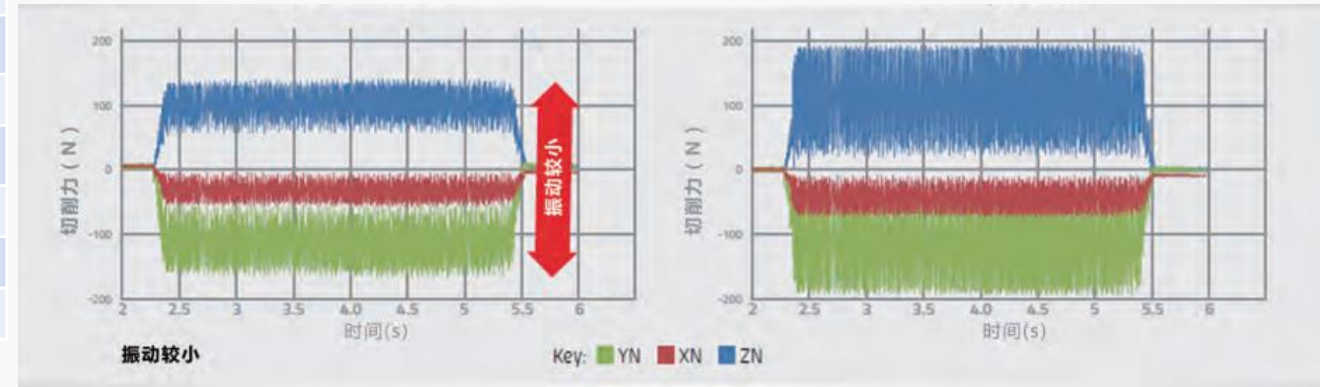
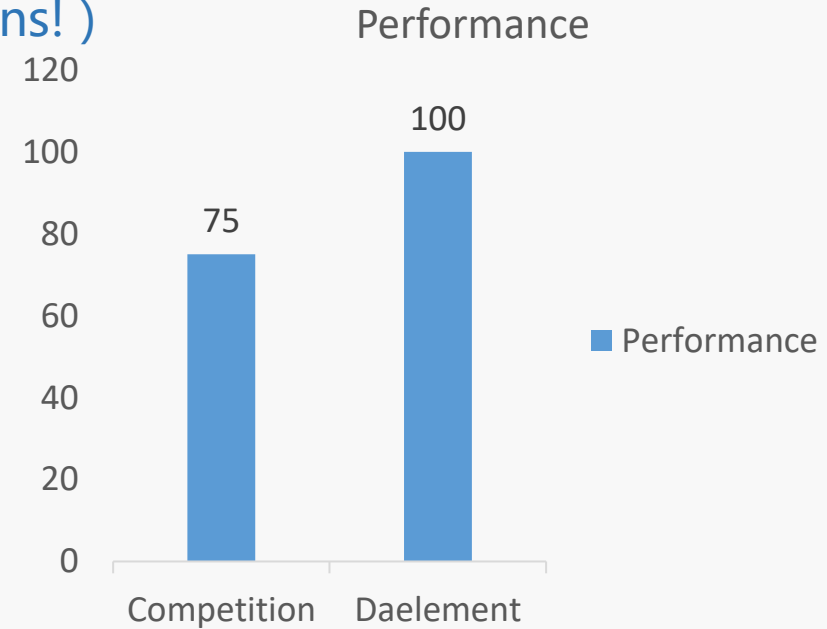
(Each diameter has a number of available angular radius dimensions!)



This high-performance end mill is designed with variable helical geometry to effectively suppress chatter and features built-in corner protection as a standard to allow cycloidal machining and high-performance universal milling applications. This cutter is ideal if the machining conditions require spiral/bevel and side milling with only 1 cutter. The end of the milling cutter is provided with a special interpolating cutting edge to enlarge the chip-removing space and no drilling is needed for milling and boring.

Test Data:

Materials:	AISI 304 , 1.4301 , AS 3047
Series:	8BP4
Clamping tool:	Spring Holder (BIG)
Dimensions:	middle 16/L42*92/16
CuttingspeedVC(m/min):	161
Rotational speed(RPM)/Minutes:	3200
Feed rate(mm 1 min):	870
Feed ratef(mm/Troughs):	0.068
ae (mm):	0.24
ap(mm) /Depth:	18



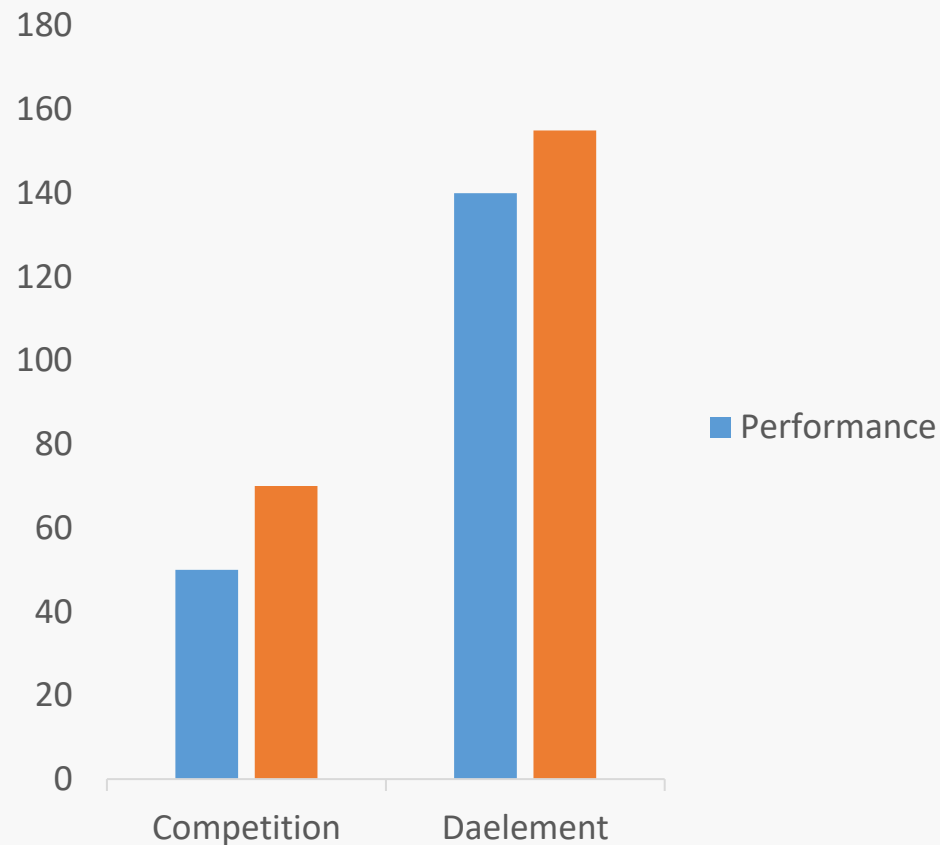
7BRC Detailed introduction

Round nose end mill with Unequal Helix Angle



测试数据:

Materials:	TiVI6V4
Series:	7BRC5
Clamping tool:	Spring holder (BIG)
Dimensions:	16/L44R4.0*92/16
CuttingspeedVC(m/min):	80
Rotational speed(RPM)/Minutes:	1600
Feed rate(mm 1 min) :	586
Feed ratef(mm/Troughs):	0.092
ae (mm):	4
ap(mm) /Depth:	30





Drills details



MG

5D



Titanium Alloy

Nickel Alloy

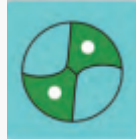
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Stainless steel



MG

3D



Copper

CAST IRON

<hrc 55

Copper, aluminum, magnesium

Nickel

-for Steel Parts, up to 1400N/mm2-micro geometry design and surface micro treatment, with good chip control-aluminum chromium nitride coating, to maximize tool life
-for stainless steel and heat-resistant alloys and other difficult-cutting materials
-optimized geometry design, to ensure no work hardening and maximum productivity
-special HELICA coating, excellent high temperature oxidation and red hardness