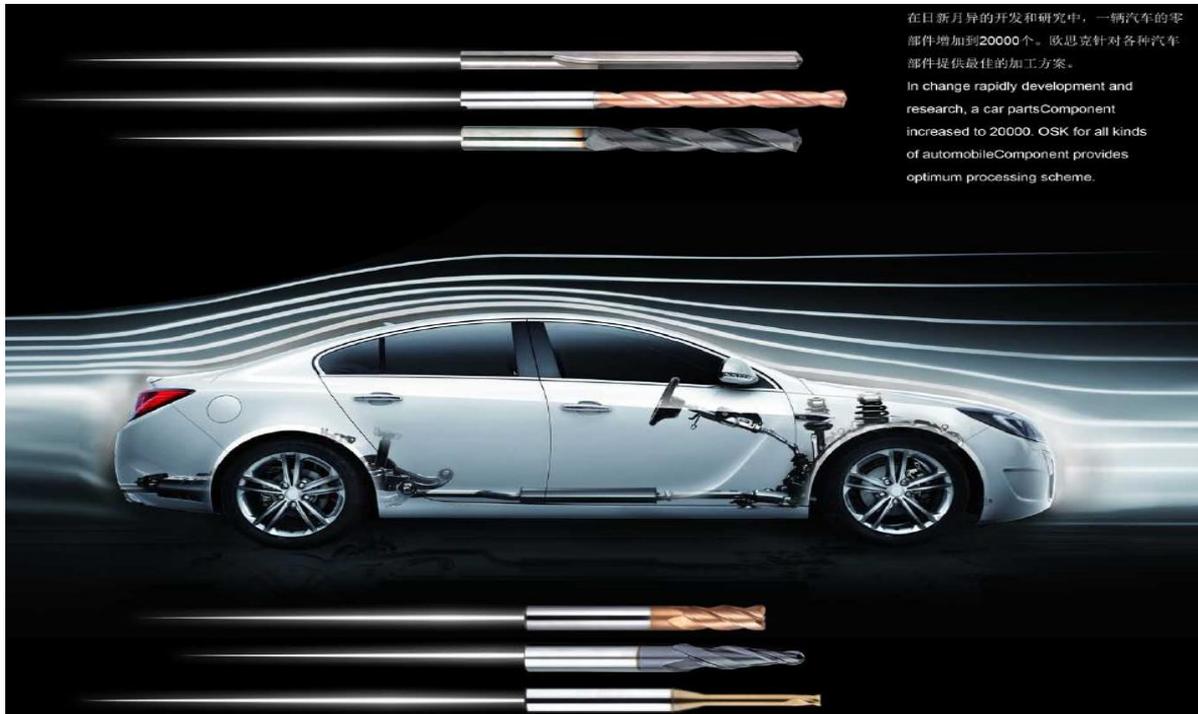
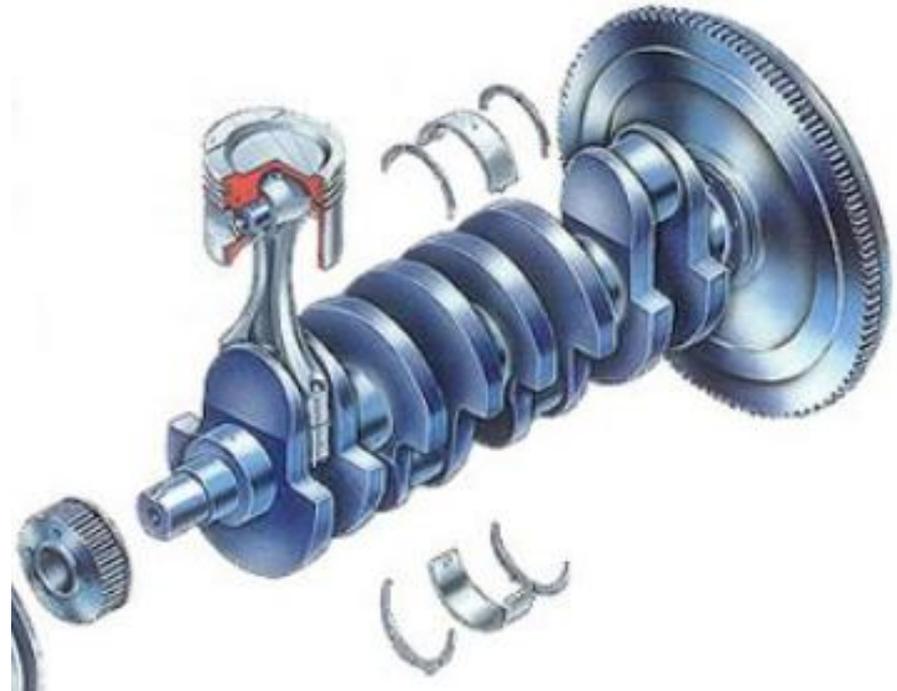


Introduction of product application in automotive industry



Automotive Industry: Connecting rod



The R / round nose cutter Endmill

Application

Machine type:ALFING

Tool type:D20-R1.2

Workpiece mat:C70

Workpiece hardness:HB240-280

Hole type:through

Hole deep:1mm

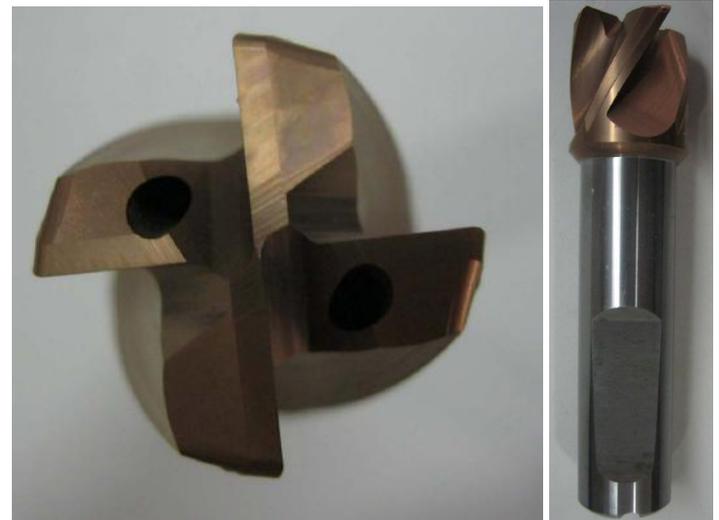
Cchuck:BT40- Side fixing chuck

Coolant type:Emulsion

Spindle speed:1000 r/min

Frate:200mm/min

Tool life:2000 pcs



Tip R, hole cutter

Application

Machine type:ALFING

Tool type:D7.38R1

Workpiece mat:C70

Workpiece hardness:HB240-280

Hole type:through

Hole deep:10mm

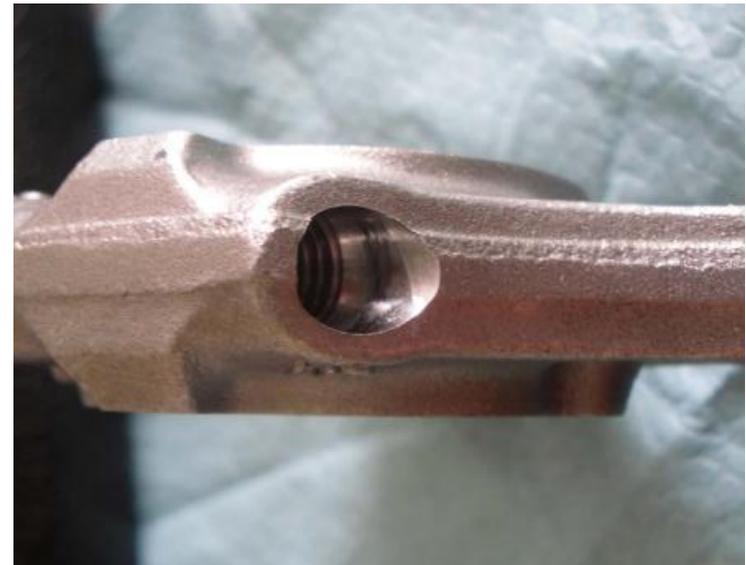
Chuck:BT40-ER32

Coolant type:Emulsion

Spindle speed:700 r/min

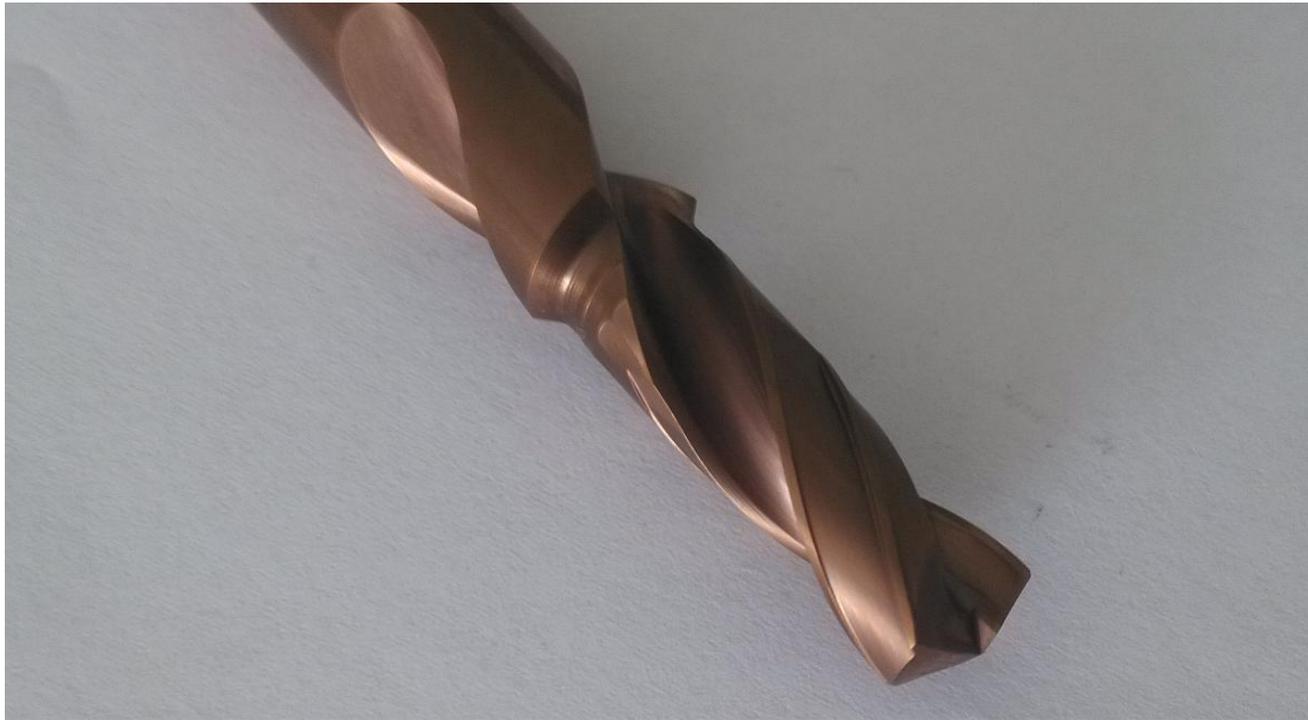
Feed rate:173mm/min

Tool life:1000 pcs



Case

Tool type: D8.2x23.5xD10x90xB10, Step drill reamer



Machine type:LITZ
Tool type:D8.2-10-12
Workpiece mat:40Cr
Workpiece hardness:HRC28-36
Hole type:through
Hole deep:16mm
Chuck:BT40-ER32
Coolant type:Emulsion
Spindle speed:4000 r/min
Feed rate:600mm/min
Tool life:1400 pcs



Unique design: double back edge, double arc type F drill

Advantages:

1、 low cutting load, good processing stability

Machine spindle power 5KW, processing load 12%

2、 good hole wall roughness, comparable to the reamer

Hole number 1-200, hole wall roughness Ra0.4.

Hole number 201-800, hole wall roughness Ra0.8.

Hole number 801-1400, hole wall roughness Ra1.2.

3、 multi knife in one design, high cutting parameters, improve customer processing efficiency

Drill, hinge, chamfer three step one

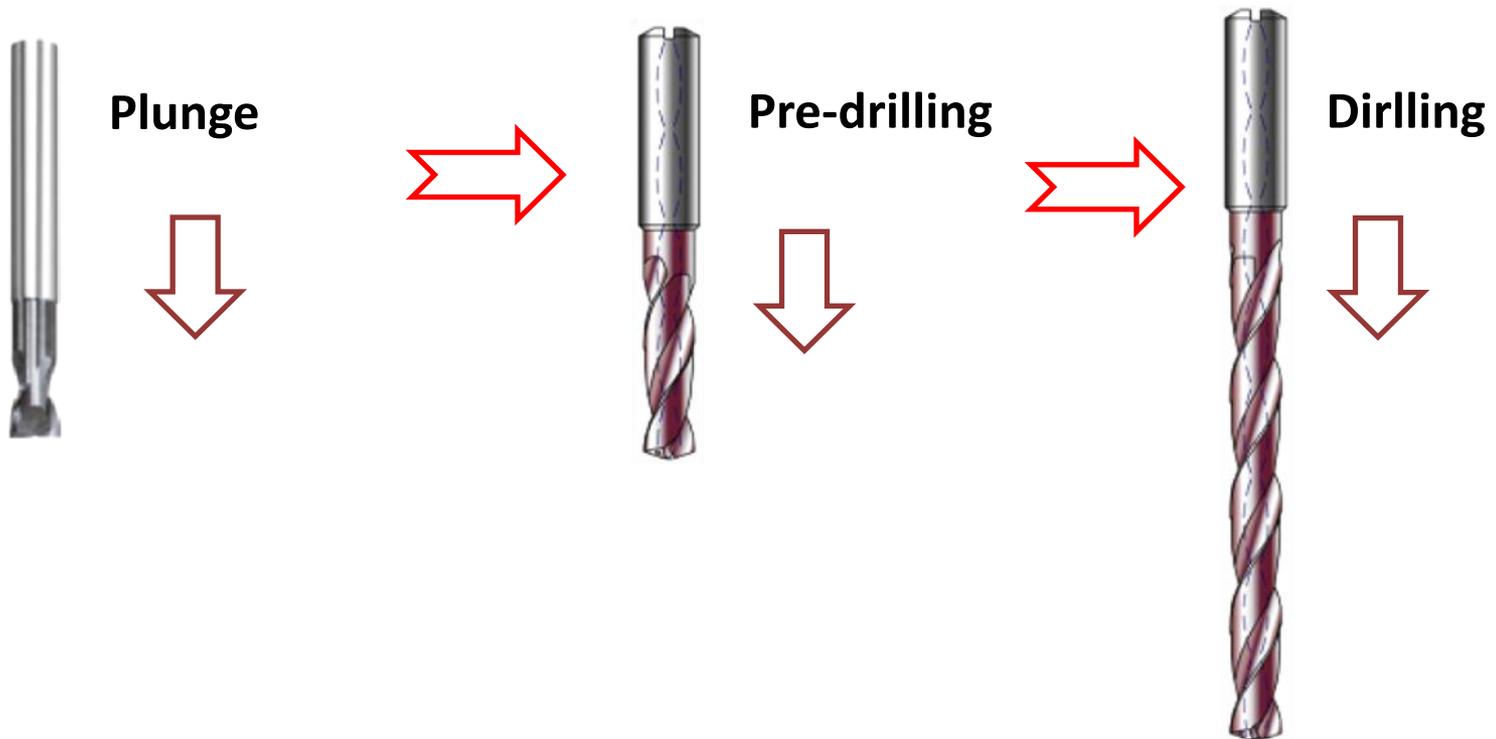
High cutting speed: 110M/min, high into the: 0.15mm/r

Improve the processing efficiency of more than 50%.

Automotive Industry: Crankshaft



Crankshaft oil hole machining



Countersink cutter

Application

Machine type: Special purpose machine tool

Tool type:D10-R1.2

Workpiece mat:42CrMo

Workpiece hardness:HB240-280

Hole type:

Hole deep:5mm

Chuck:HSK63- Hydraulic chuck

Coolant type: Oil mist

Spindle speed:3500 r/min

Feed rate: 200mm/min

Tool life:1800 pcs



Guide drill bit

Application

Machine type: Special purpose machine tool

Tool type:D9.5

Workpiece mat:42CrMo

Workpiece hardness:HB240-280

Hole type: Blind hole

Hole deep:25mm

Chuck:HSK63- Hydraulic chuck

Coolant type: Oil mist

Spindle speed:3200 r/min

Feed rate:450mm/min

Tool life:1700 pcs



Chamfering drill

Application

Machine type: Special purpose machine tool

Tool type: D10/90°

Workpiece mat: 42CrMo

Workpiece hardness: HB240-280

Hole type: Blind hole

Hole deep: Chamfering

Chuck: HSK63-ER32

Coolant type: Oil mist

Spindle speed: 4000 r/min

Feed rate: 900mm/min

Tool life: 3200 pcs



Step drill

Application

Machine type:

Mori Seiki - Horizontal Machining Center

Tool type:D9/D13

Workpiece mat:42CrMo

Workpiece hardness:HB240-280

Hole type: Blind hole

Hole deep:16mm

Chuck:HSK63

Coolant type: Emulsion liquid

Spindle speed:2800 r/min

Feed rate:750mm/min

Tool life:3000 pcs



Three plane edge milling cutter

Application

Machine typ:

Mori Seiki - Horizontal Machining Center

Tool type:D19 Three face edge

Workpiece mat:42CrMo

Workpiece hardness :HRC28

Hole deep:3.5mm

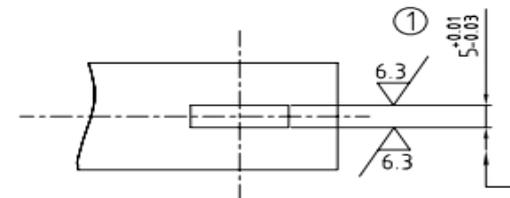
Chuck:HSK63-ER

Coolant type: Emulsion liquid

Spindle speed:250 r/min

Feed rate:75mm/min

Tool life:2500



Automotive Industry: Transmission case



Internal cooling hard alloy straight groove drill

Application

Machine type: MAKINO-Vertical machining center

Tool type: D8.5

Workpiece mat: AL

Workpiece hardness: HB90-115

Hole type: Blind hole(Thread preparation Hole)

Hole deep: 22mm

Chuck: HSK63

Coolant type: Oil mist

Spindle speed: 6500 r/min

Feed rate: 1300mm/min

Tool life: 4700 pcs



Cemented carbide milling cutter

Application

Machine type:MAKINO

Tool type:D12

Workpiece mat:AL

Workpiece hardness:HB90-115

Processing way:

Boring milling

Vertical milling

Side milling

Chuck:HSK63-ER

Coolant type: Oil mist

Spindle speed:5000r/min

Feed rate:1500mm/min

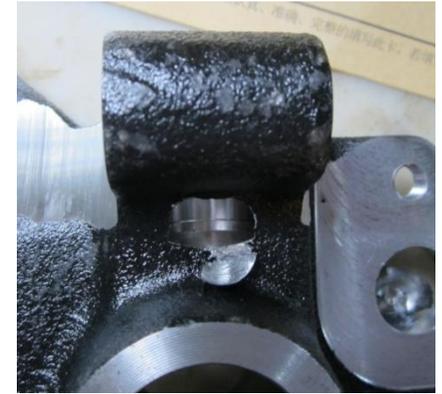
Tool life:1500PCS



Automotive Industry: Steering knuckle



Solid carbide 3 edge drill for discontinuous hole machining



The whole hard alloy composite drill for drilling and chamfering and



Carbide taper reamer



The End

Thank You Very Much