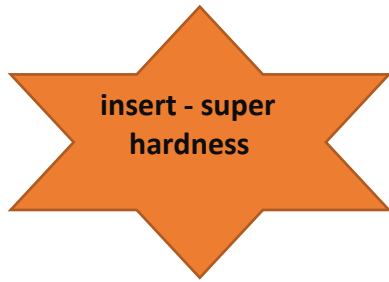
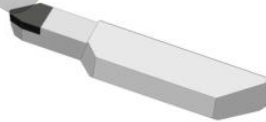
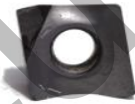
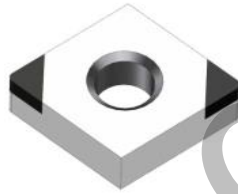
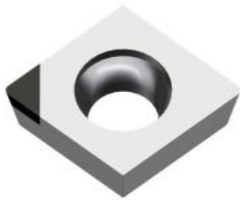


Main products introduction

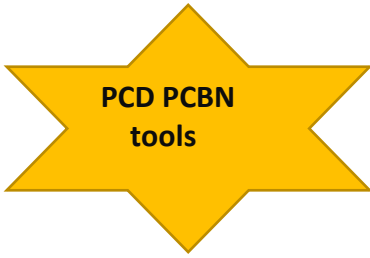


PCD insert
PCBN standard inset
special insert

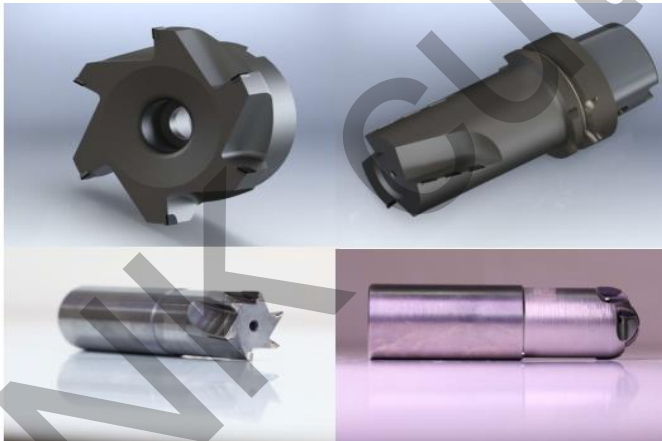


RNK

Cutting tools



PCD mills, reamers, forming tools



RNK Cutting Tools

Applied industry

GEAR

Gear shaft machining

Workpiece material: 20CrMnTi HRC 58-62

Application: lathe tooth surface and cleaning root



parameter	competitor	Ours
insert specification	DNGA150408	DNGA150408T01035D
line speed Vc (m/min)	140	130
feed fz (mm/r)	0.14	0.15
cutting depth Ap (mm)	0.15	0.15
machining workpiece Qty	150	175
single flute life comaparison	100%	116%

GEAR

Crown gear machining

Workpiece material: 20CrMnTi HRC 58-62

Application: lathe end face

Processing definition: Heavy discontinuous processing



other brand	competitor	Ours
insert specification	DNGA120408	DNGA120408T01035D
line speed Vc (m/min)	110	110
feed fz (mm/r)	0.1	0.13 (optimize the beat for 40 seconds)
cutting depth Ap (mm)	0.15	0.2
machining workpiece Qty	80	120
single flute life comaparison	100%	150%

GEAR

Planetary gear machining

Workpiece material: 20CrMnTi HRC 58-62

Application: lathe ball surface

Processing definition: continuous processing



other brand	competiter	Ours
insert specification	CNGA120408	CNGA120408T01020D
line speed Vc (m/min)	100-200 (constant speed)	100-200 (constant speed)
feed fz (mm/r)	0.11	0.11
cutting depth Ap (mm)	0.3-0.6	0.3-0.6
machining workpiece Qty	40-50	150-200
single flute life comaparison	100%	400%

GEAR

Planetary gear machining

Workpiece material: 20CrMnTi HRC 58-62

Application: lathe ball surface

Processing definition: middle level discontinuous processing



other brand	competiter	Ours
insert specification	CNGA120408	CNGA120408T01020D
line speed Vc (m/min)	100-200 (constant speed)	100-200 (constant speed)
feed fz (mm/r)	0.11	0.11
cutting depth Ap (mm)	0.3-0.6	0.3-0.6
machining workpiece Qty	60	205
single flute life comaparison	100%	341%

ENGINE

Machining of cylinder holes

Workpiece material: born cast iron 58-62 degree

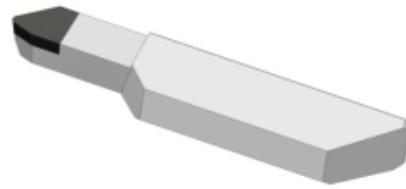
Application: boring

Processing definition: continuous processing



other brand	competiter	Ours
insert specification	SPGN090312	SPGN090312
line speed Vc (m/min)	780	780
feed fz (mm/r)	0.25	0.25
cutting depth Ap (mm)	1	1
machining workpiece Qty	100	170
single flute life comaparison	100%	170%

ENGINE



Valve seat of cylinder head

Workpiece material: powder metallurgy

Application: the sealing surface of Car's valve

Processing definition: continuous processing



other brand	competiter	Ours
insert specification	085B359	085B359
line speed Vc (m/min)	103	103
feed fz (mm/r)	0.07	0.07
cutting depth Ap (mm)	0.1-0.2	0.1-0.2
machining workpiece Qty	200	240
single flute life comaparison	100%	120%

Non - Standard Solution

cylinder cover

roughing machining of
tube valve base hole

Compared with traditional machining tools

traditional tools

use solid carbide drill
and plane milling cutter

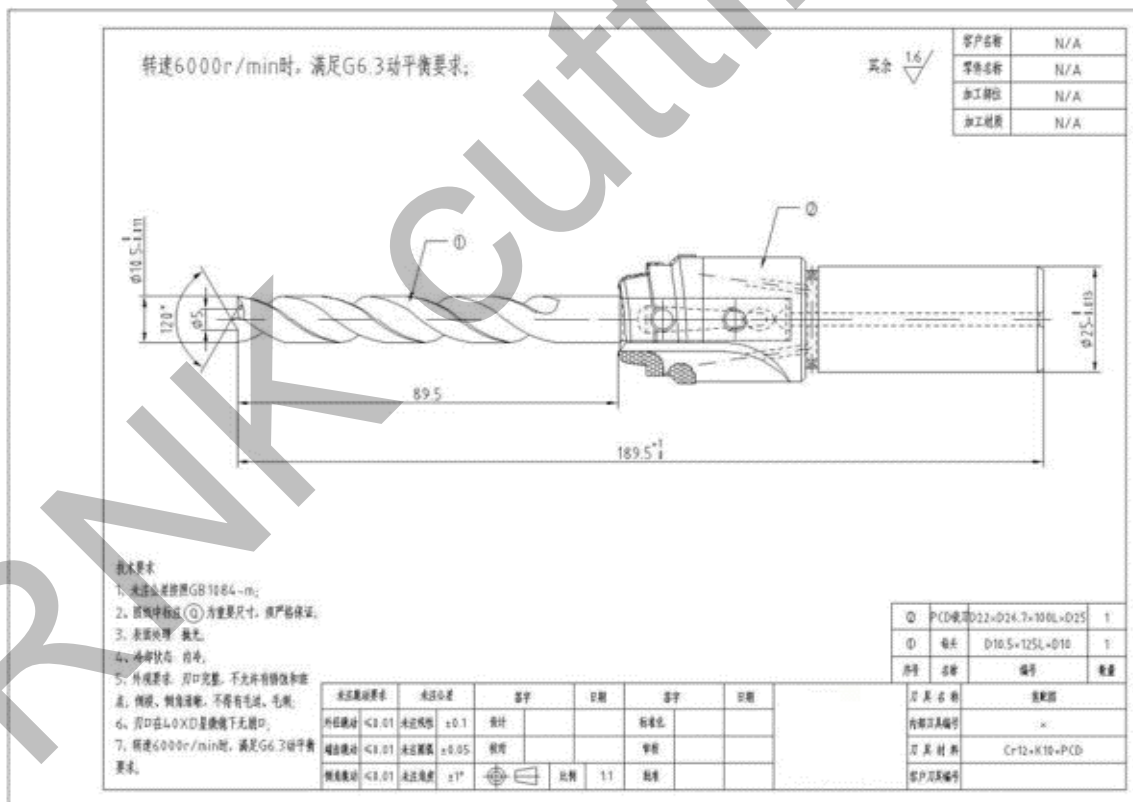
heat expansion connection
processing method

Our tools

2 types of tools are merged
reduce the use of one handle
reduce the time for changing the handle

parameter:

VC: 150-300
fz: 0.1-0.15



Non - Standard Solution

cylinder cover

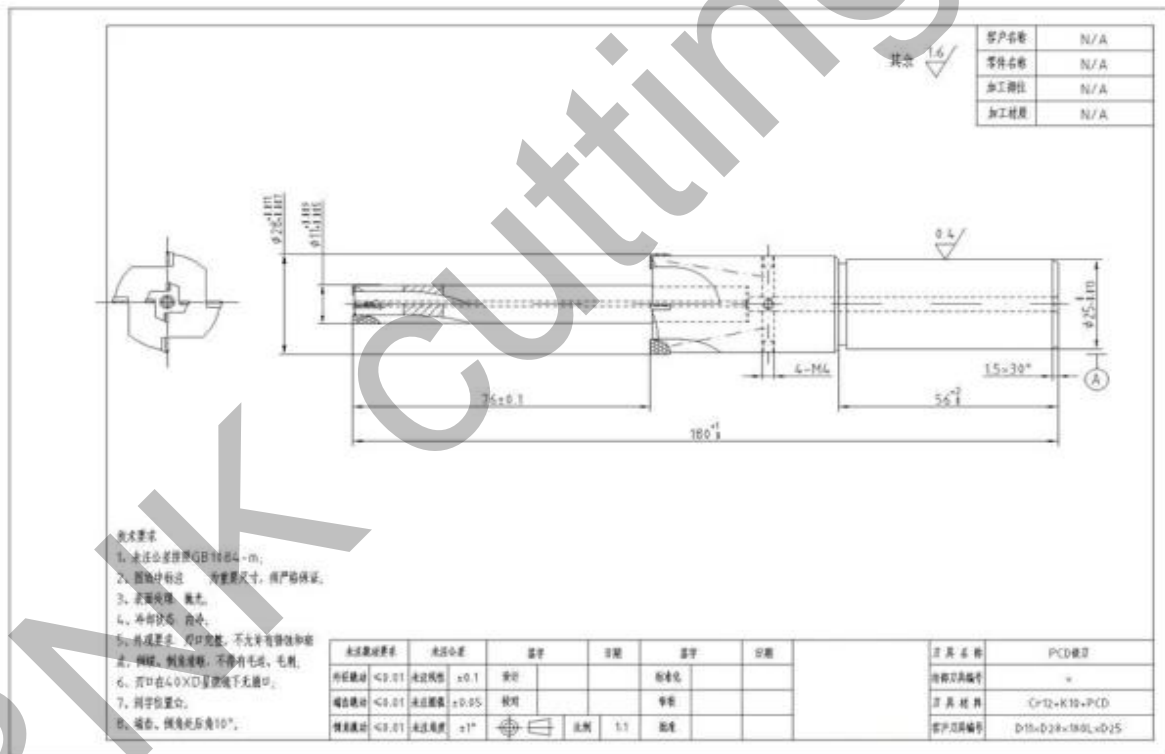
finishing machining of
tube valve base hole

D11 reamer and D28 reamer
Heat expansion connection

parameter:

VC: 150-300

fz: 0.07-0.15



Non - Standard Solution

cylinder cover

recoil drill-reamer for

Compared with traditional machining tools

traditional tools

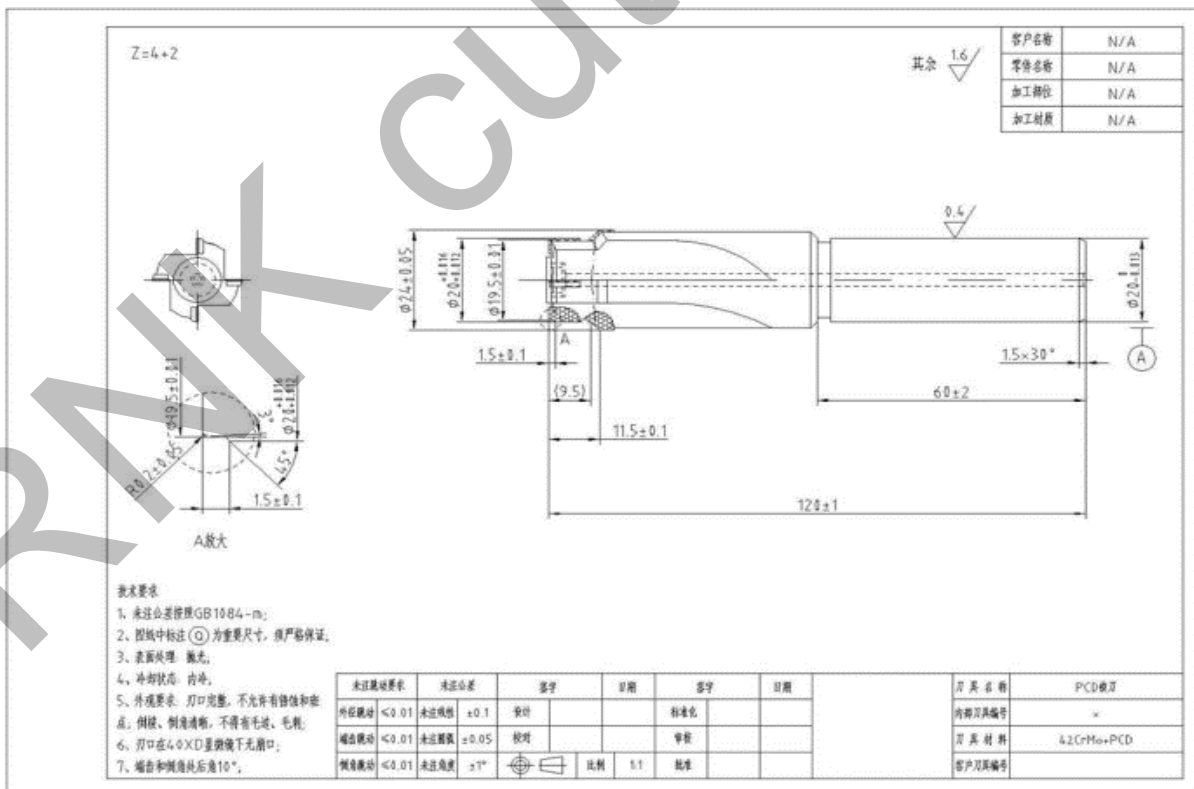
reamer chip is easy to fall inside the cylinder cover, it is difficult to clean it, which is easy to cause the hidden danger of safety.



our tools

The reamer chip off from the backside, and the space for avoidance of water pipe hole need space is

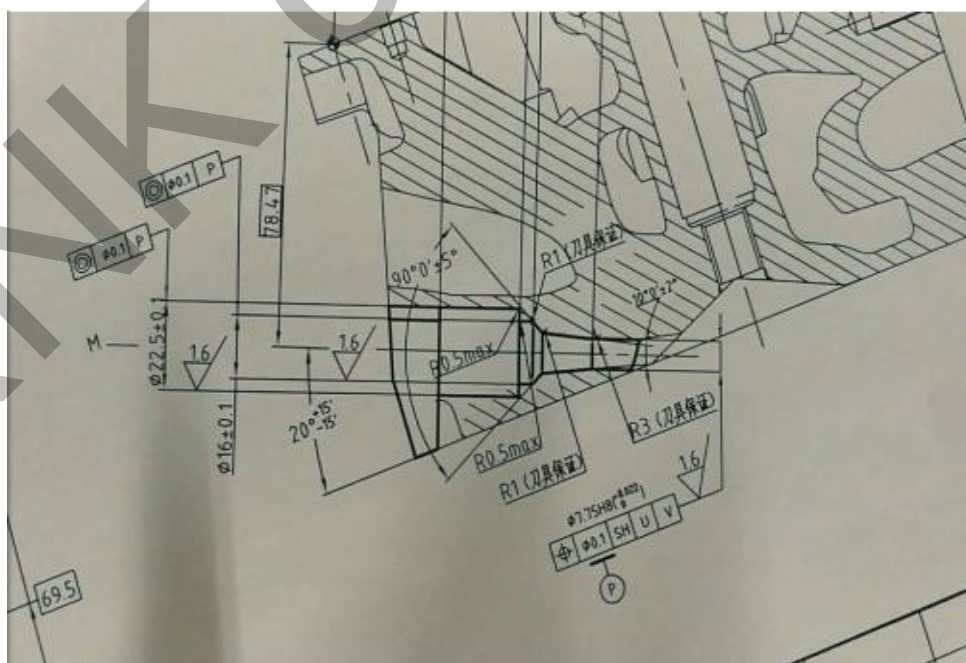
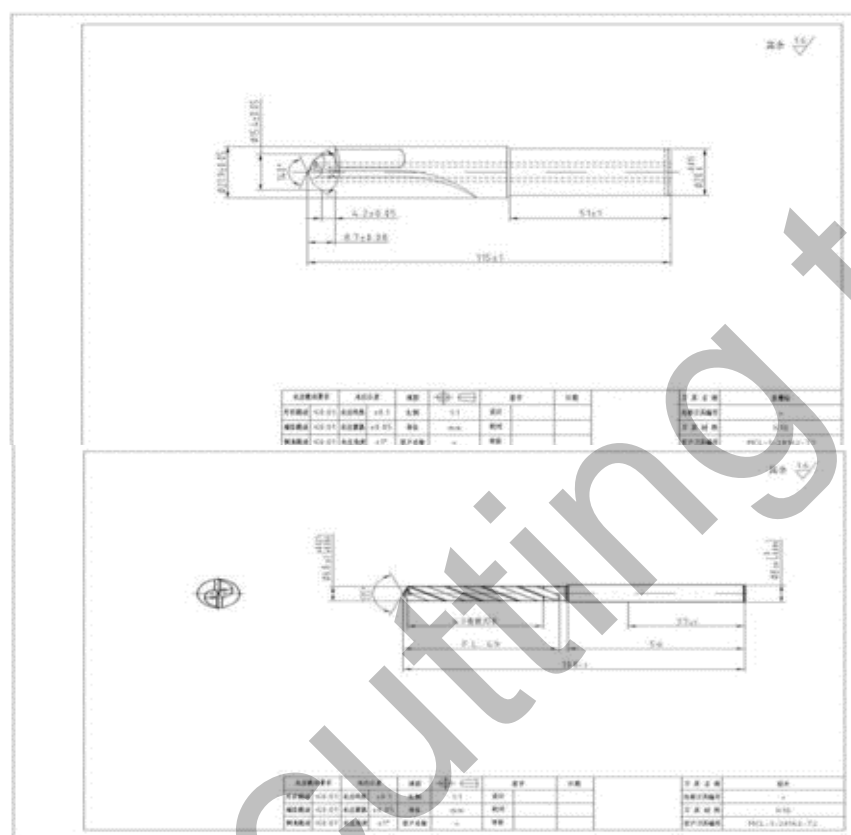
The head of a cutter has space for the cutting fluid, Strike a water out hole in the opposite direction, lead the reamer chip out for backward



Non - Standard Solution

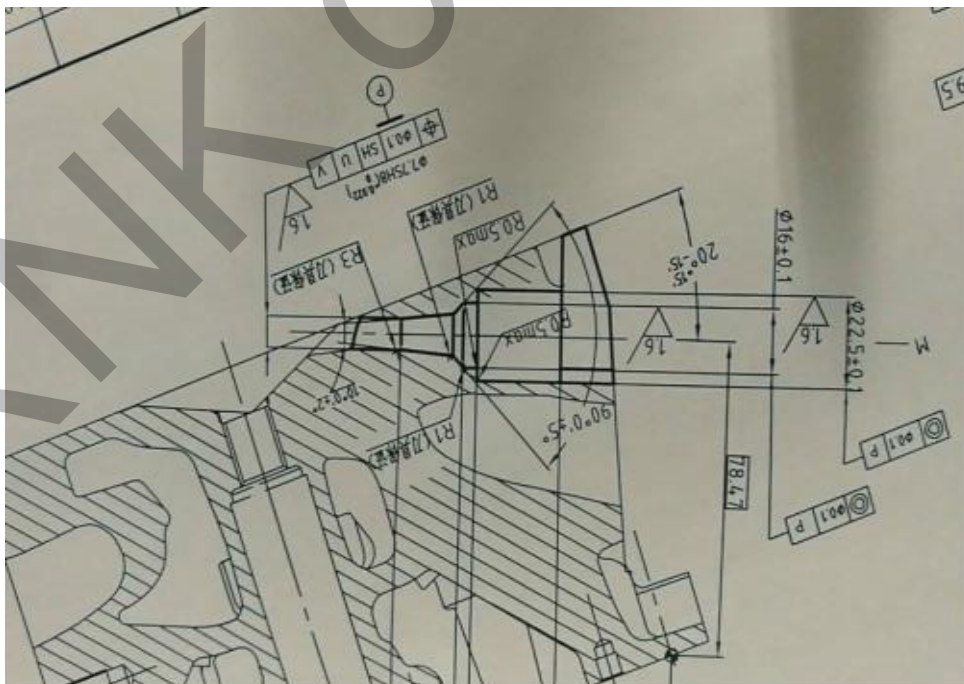
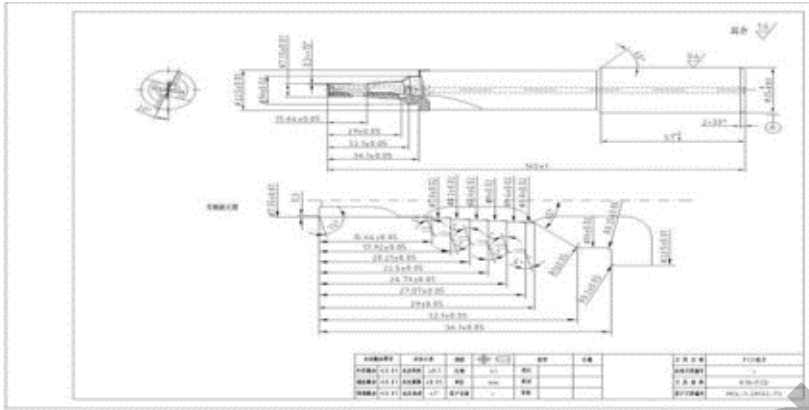
cylinder cover

solution of nozzle oil hole



Non - Standard Solution

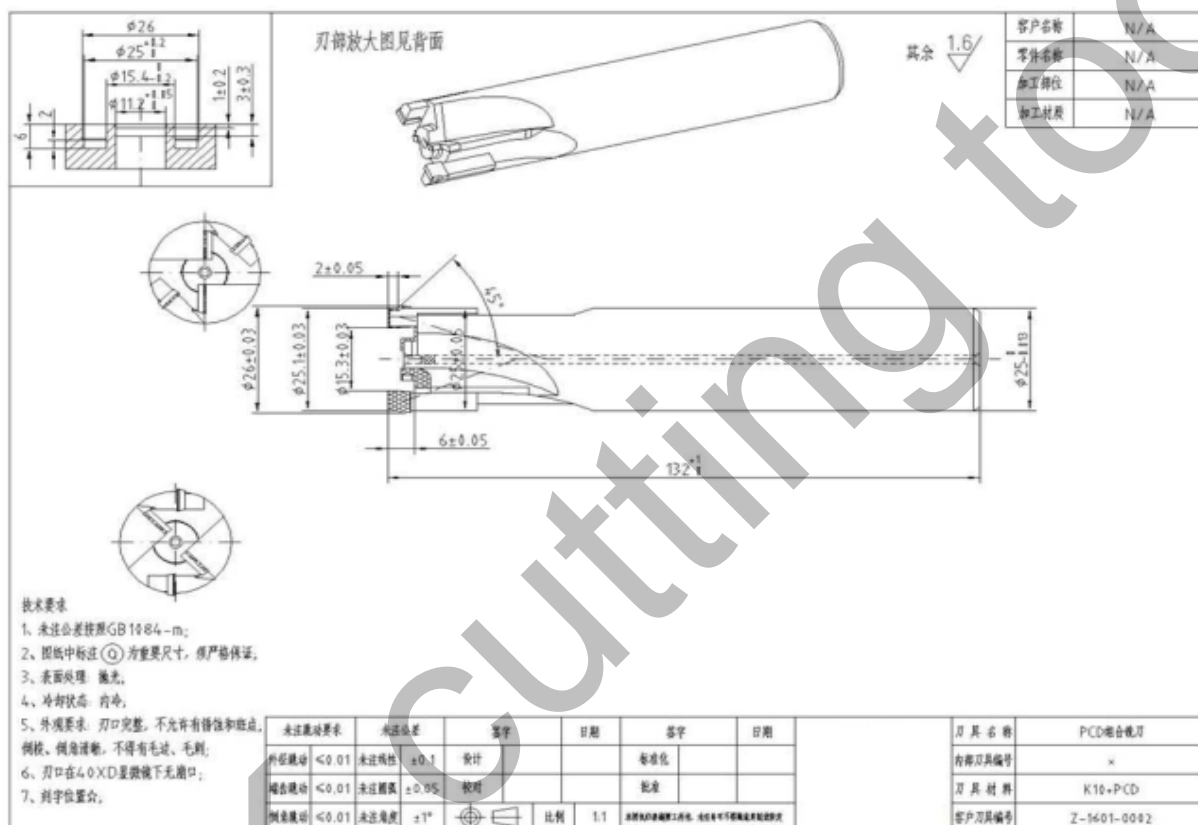
cylinder cover



Non - Standard Solution

cylinder cover

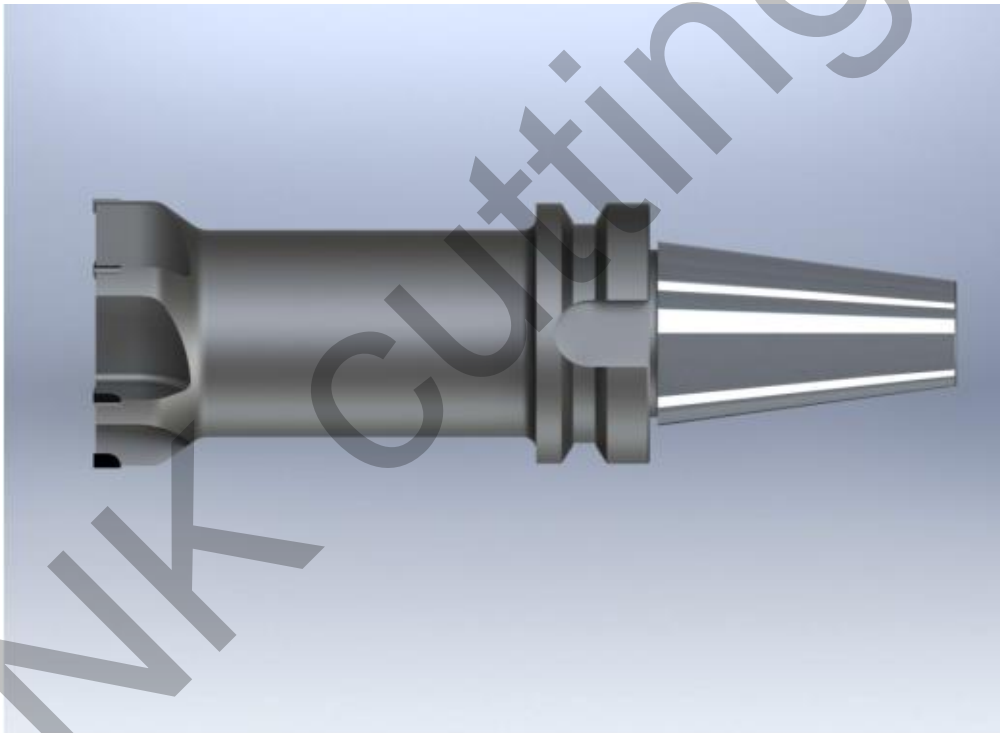
reamer and plane milling cutter compound into one cutter.



Non - Standard Solution

cylinder block

face endmill plate,
chuck for cylinder block



Non - Standard Solution

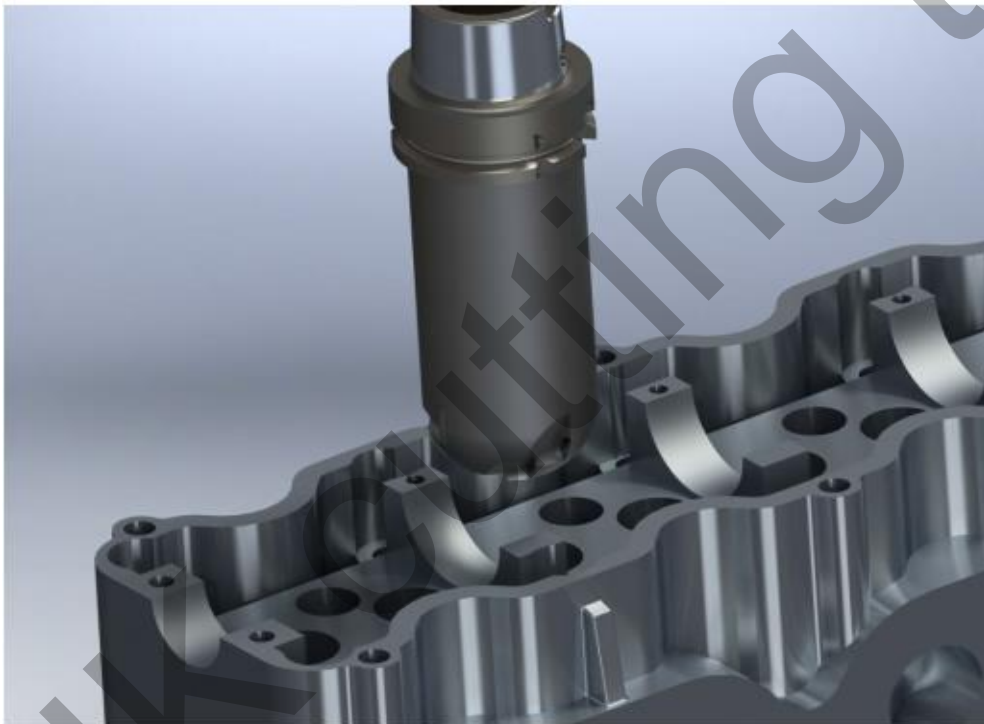
cylinder block

roughing for hole in

The structure of brazed PCD with the handle

Line speed reach 1500 mm/min

The using life is 2 times higher than that of the solid carbide tool at least

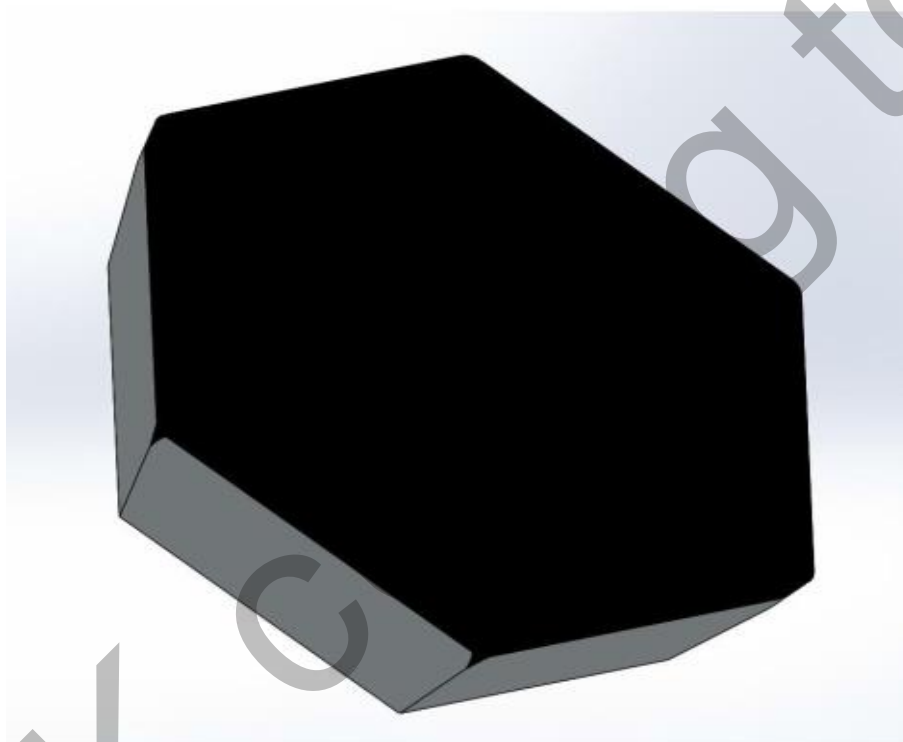


Non - Standard Solution

cylinder block

cylinder hole machining -
boring insert

Full face CBN design to avoid the break off problem of brazed
CBN head cutter



Non - Standard Solution

oil sump tank

holes for screw on oil

enlarge hole, plane milling cutter, thread machining compound
into one tools

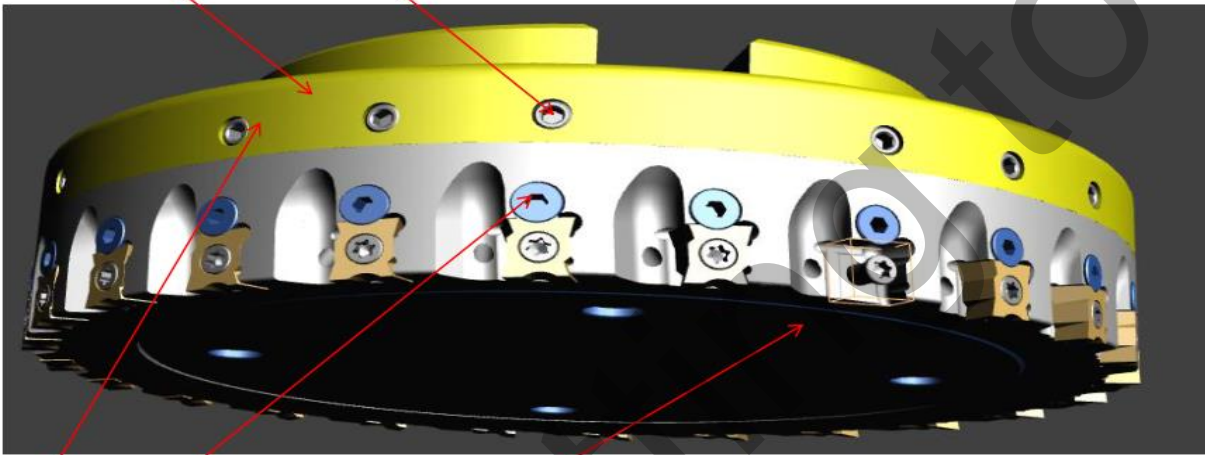


Non - Standard Solution

X - TOOL

Aluminum plate base

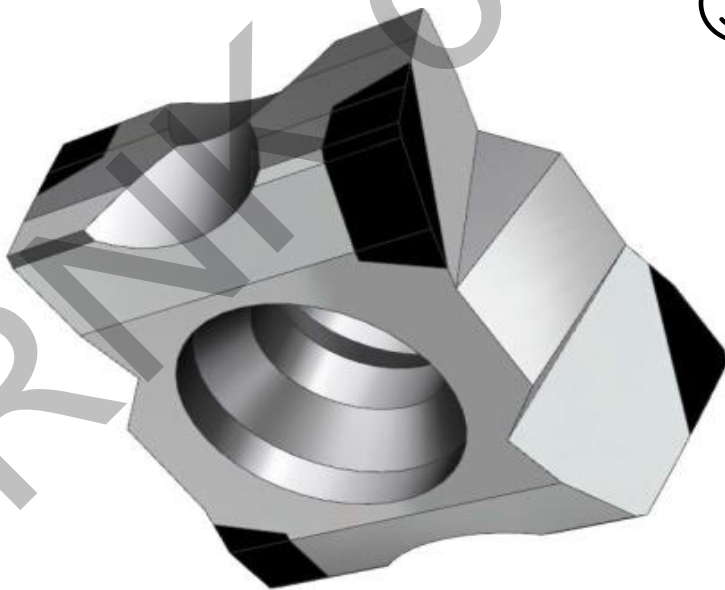
Dynamic balance adjusting screw



steel frame

Height adjusting screw

Coolant spray plate



4 edge design

More economical than single blade

provide different main deflection angle

provide repair service