

Application of OSK tool SM Series in IT industry



Customer: an international famous factory

Parts: a brand mobile phone motherboard
Material Science : SUS304

Processing equipment : FANUC



Judgment standard:

With a knife in the blank surface and the lateral surface of, 10 high-speed feed processing surface layer, side + rough refinement, under the same conditions, the comparison of tool price workpiece surface roughness degree requirements Ra1.6-3.2, hope processing 80PCS workpiece tool life approximately 10 hours

Tool: SM4BD0600R050S06
Tool edge diameter: 6.0mm
Tool R angle: 0.5mm
Cutter blade number: 4

Plane processing parameters:
S8000 r/min
F4000 mm/min
Ap:0.15-0.2mm
Ae:4.0 mm

Side processing parameters:
S8000 r/min
F4000 mm/min
Ap: 8.0mm
Ae:0.3-0.1mm

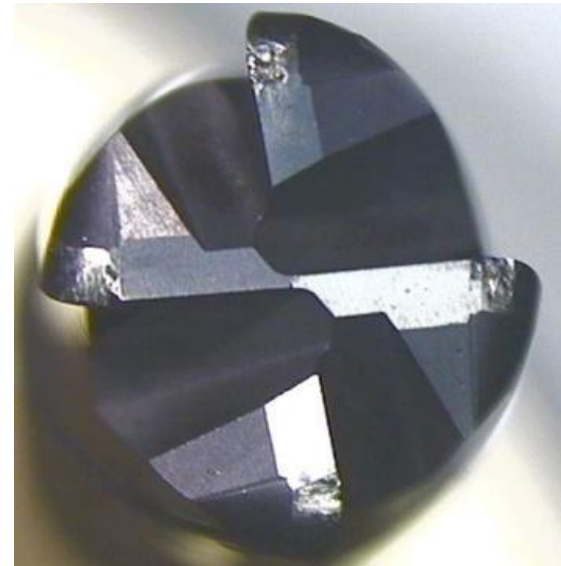


Processing result:

After processing 80PCS, the tool has no obvious wear and tear.

Ra1.6, can continue processing

After processing 200PCS, the tool R corner and the bottom edge of the obvious wear, Ra>3.2, but the side edge intact, stop processing.



After machining 200PCS
Tool bottom edge wear

Sum up:

OSK this tool to process the workpiece in large quantities in the use of the average life expectancy in the 200PCS, far greater than can be required 80PCS
The average life expectancy of a Taiwan brand tool is 80PCS

The average life of a Japanese brand tool in 180PCS

OSK this tool features share:

The special stainless steel imported tungsten steel bar
Special coating for stainless steel
Cutting tool design: the design of non equal division and R angle



The End

Thank You Very Much