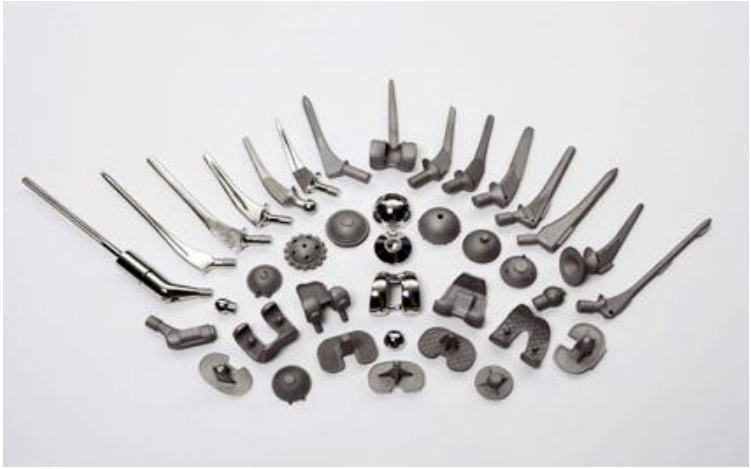
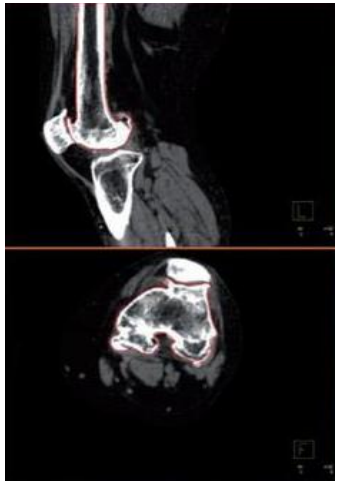
Product application in medical industry

Healthcare industry: Solutions

Modern medical technology makes the life expectancy of human beings to improve. At the same time, in order to prevent the decline of the quality of life, medical equipment is required to adopt efficient production technology.

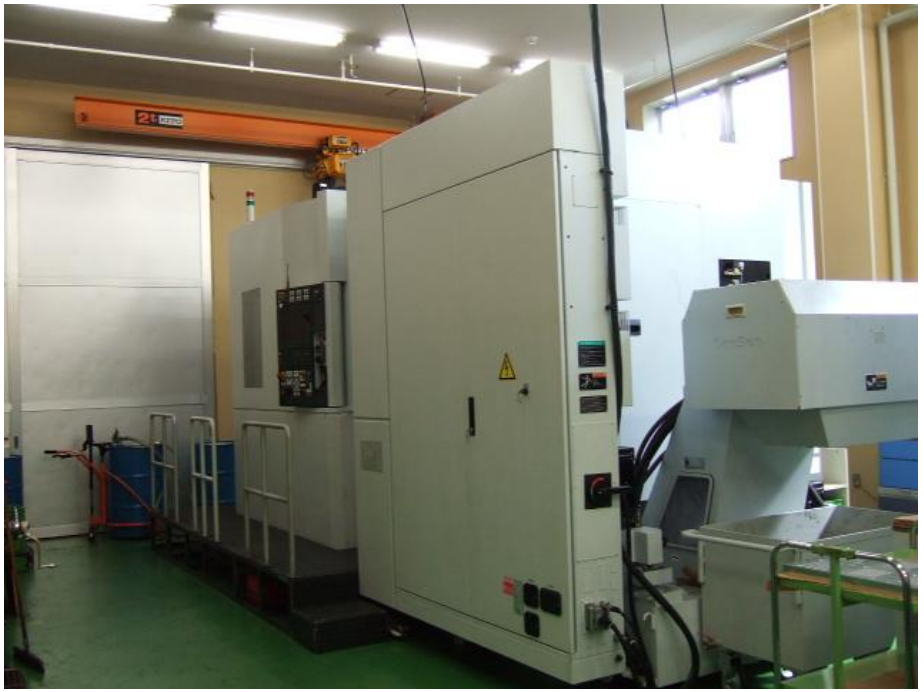




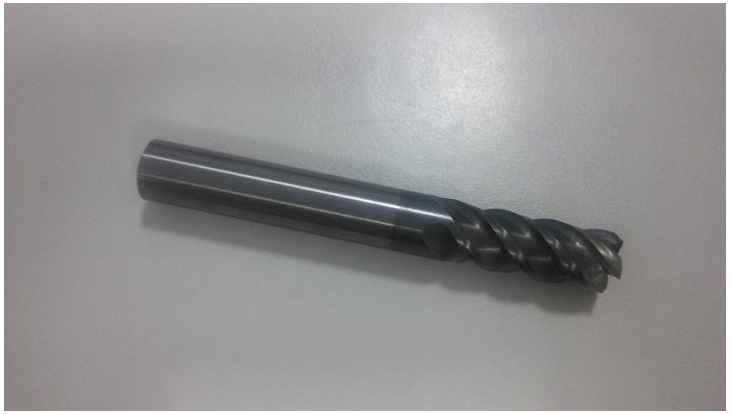
With the combination of medical equipment and machining precision continuously, existing technology can be computed tomography (CT) data directly into CNC processing procedures, make the medical equipment production efficiency has been greatly improved.
In the process, high quality and high efficiency cutting tool is also indispensable.

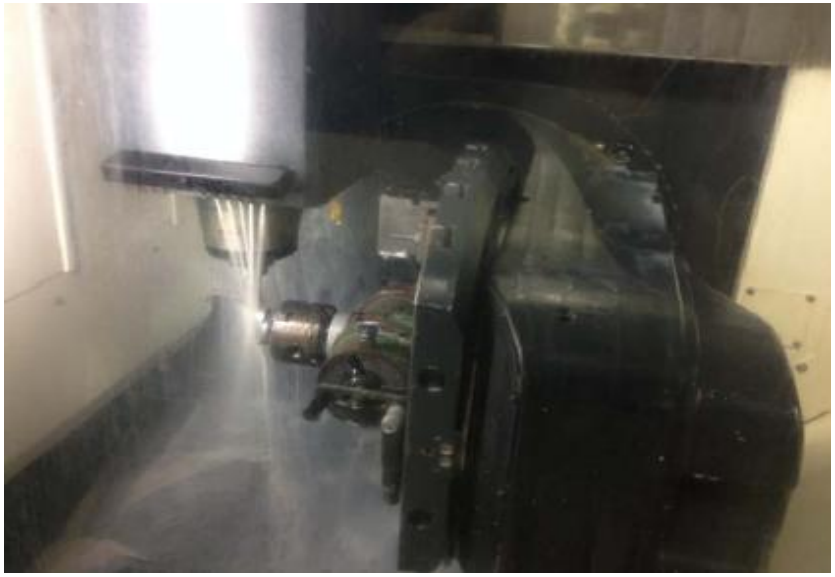
Medical industry: knee joint of artificial bone

Customer: a manufacturer of artificial bone
Workpiece Name: knee joint femoral head
Workpiece material: NP steel (co Cr alloy)
Workpiece hardness: HRC45
Processing equipment: MORI SEIKI Mori Seiki NAD5000
Five axis vertical machining center

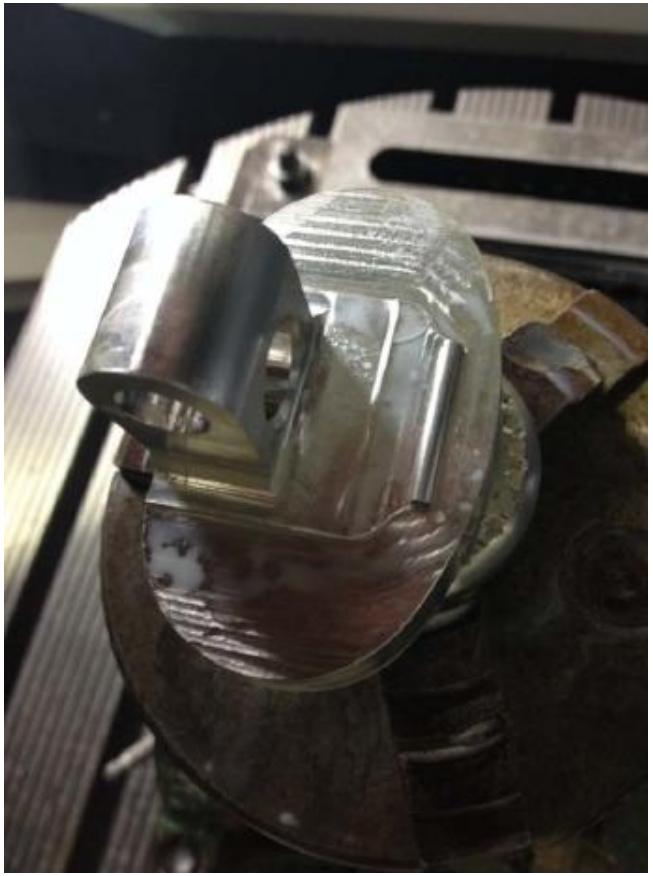


Tool: KMD1200R100S12
Diameter: 12mm
Blade number: 4
The arc: R1
Processing method: surface profile machining
Cutting parameter:
Vc=, 67.8m/min S=1800r/min
Fz=0.14mm/z, F=1000mm/min
Ap=0.2mm, Ae=10mm
Processing life: 6 (9h)





After processing 6 work pieces (9h):
Workpiece surface roughness: Ra3.2
Chip, chip breaking
Tool surface coating off, knife body integrity no collapse



Rival tools: a well-known Japanese brand cutter

Diameter: 12mm

Blade number: 4

The arc: R1

Processing method: surface profile machining

Cutting parameter:

Vc=, 67.8m/min S=1800r/min

Fz=0.14mm/z, F=1000mm/min

Ap=0.2mm, Ae=10mm

Processing life: 4 (6h)

Overall life expectancy increased by 50% compared to competitors

The End

Thank You Very Much