



CHALLENGE

ISO 13485: Safety and quality are NON-NEGOTIABLE in the medical devices industry.

Quality of finish of metal implants "bone, screw and dental" is paramount.

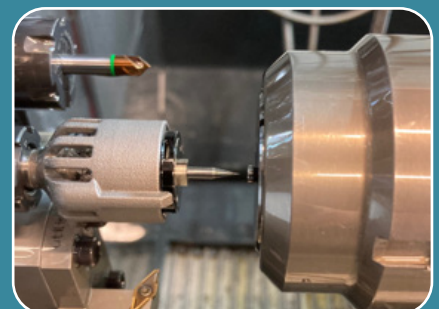
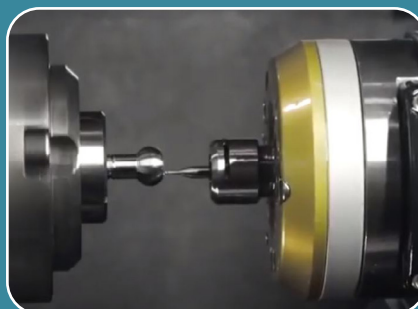
Medical parts demand very high surface finishes & precision milling which require high speed machining at very low run out - 3 microns at length of 3D, on the tool tip.

JET SPINDLES



SOLUTION

Jet Spindle speeder use the machines high pressure coolant (+15BAR) as a free source of energy to provide 25,000 – 55,000 RPMs with only 3 microns of runout.





ADVANTAGES	MECHANICAL	ELECTRICAL	COMPETITOR	COLIBRI TECH
INSTALLATION	Plug n Play	Air & electricity cables + dry air filter	Plug n Play	Plug n Play
SINGLE SETUP	Yes	Issues with cables	Complex tool replacement	Yes
RUNOUT	Medium	Low	High	Low
PRICE	Very expensive + machine spindle wear	Expensive Investment	Most expensive over time	Best Value for Money

BONE SCREW TORX HEAD & SCREW SUPPORT



1. A-Z Torx milling and
2. Bone screw support screw thread milling



Flute, 30° Helix Solid Carbide Endmills



Small Diameter Solid Carbide Threading Endmills

BONE PLATE HOLES & PROFILE FINISH



1. Shoulder and profiling milling and
2. Helical milling of bone plate holes



High productivity solid carbide endmills



4 flute, 30° helix ball nose short solid carbide endmills

DENTAL IMPLANT ABUTMENT SHAPING & THREADING



1. A-Z thread milling and
2. Profile milling of dental abutment



High productivity solid carbide endmills

SOLUTION

- ✓ Go directly from rough to finish (skip Semi Finish step)
- ✓ Faster machining time
- ✓ Better tool wear