

Drilling of Turbine Blades

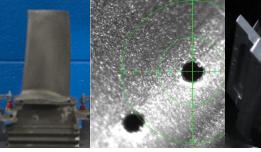
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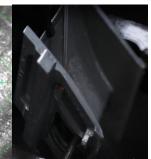


A complete range of services for turbine engine components

Our client offers manufacturing solutions for airfoil and LMJ used for: hot section turbine components.

- Drilling of turbine blades
- Other high precision machining tasks





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Cooling hole drilling in coated superalloy

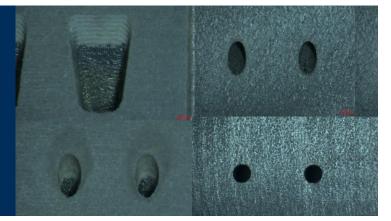
The challenge was to avoid any chipping or micro cracking of the coating with little recast layer.

Main processing criteria:

- No micro cracks
- No chipping
- Small recast layer
- No burrs
- Perfect verticality
- Narrow tolerances
- Low roughness

Machining technologies able to reach these criteria:

- EDM
- Laser MicroJet (LMJ) water jet guided laser



No HAZ, production-proven, better ROI

LMJ advantages versus EDM:

- Capable to drill through non-conductive materials such as the thermal barrier coating
- High flexibility (shaped holes)
- Easy to program shapes
- High stability

Installed machine type:

- 2 x LMJiP
- 200 W green laser

