



LMD additive manufacturing equipment

REIS RV60-40 Robot Cell with Trumpf Trudisk 8002 laser

5.3kW laser metal deposition equipment with integrated induction heating system

Features and benefits

- Induction heating-assisted laser metal deposition system enables advanced control of thermal input and cycles
- Capable of depositing more brittle and crack-sensitive materials than usually possible with deposition systems
- Fully enclosed flexible inert environment option for oxidation-sensitive materials such as titanium and titanium aluminide

Some applications

- Large-scale repair and remanufacture
- Hardfacing and corrosion-resistant deposition
- Novel material deposition including oxide dispersion strengthened (ODS) nano-additives
- Repair of superplastic forming (SPF) die plates
- Repair of valve seats
- Repair or remanufacture of gas turbine engine blades and vanes
- Repair of blisks
- Manufacture of gas turbine engine casings

Technical specification

- Trumpf Trudisk 8002 5.3kW disc laser
- TruControl 1000 controller
- Trumpf BEO D70 processing optics with motoric collimation
- Reis RV60-40 robot (2.4m reach, 40kg max payload)
- Reis RDKVv05 two-axis manipulator (500kg max payload)
- Sulzer Metco 10-C powder feeder with dual 1.5kg hopper system
- 16kW dual-coil induction heating system with fully programmable temperature cycle control and pyrometer temperature measurements

