40 years of expertise in laser safety and laser technologies, serving your most critical challenges.

Additive Manufacturing by Powder Deposition – DED

Ref: AL.6-1

The intrinsic qualities of laser beams have enabled the development of numerous manufacturing processes. The DED (Direct Energy Deposition) process offers the possibility of working on large or small parts while ensuring high precision and excellent metallurgical qualities.

Practical information

DATES (INTER-COMPANY / IN-HOUSE)
On request

ORGANISATION
/

DURATION
2 days (14 hours)
Starts at 1.30 pm

PRICES
1870€ excl. VAT

TECHNICAL/TEACHING LEAD:
Franck RIGOLET

DO YOU HAVE A DISABILITY?
Contact our disability officer at referent.handicap@irepa-laser.com

Key information

PREREQUISITES
General knowledge of materials and conventional material treatments

ACCESSIBLE LASER CLASSES
/

CERTIFICATION
Certificate of completion issued.

TECHNICAL/TEACHING LEAD:
Franck RIGOLET

Training objectives

- Get an overview of laser and other prototyping processes.
- Distinguish between the different technological solutions and their applications.
- Know the performance and potential of the DED-CLAD® process.
- Acquire a process optimisation methodology.

Target audience

Design offices, engineers, R&D, schools, researchers.

Programme

Over the 2 days

Innovative prototyping processes
• Selective Laser Melting
• Selective Laser Sintering
• Other processes

Presentation of the DED-CLAD® process
• Principle and technology
• The laser
• Powder feeding
• Performance and limits
• Potential applications
• Basic principles (refresher)
• Laser beam properties
• Industrial applications
• Lasers used

Implementation on a laser machine
• Getting to know the software
• Tests and trials on different materials
• Building parts

Metallurgy
• Powder metallurgy
• Part analysis