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

Additive Manufacturing Processes

Ref: AL.6-2

According to one study, 3D printing is expected to represent a market of over 6 billion euros each year. To better understand the expectations placed in this technology, this training course presents the various additive manufacturing processes for metallic materials, available now or in the future, setting out their limits and potential.

Practical information

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

ORGANISATION
IREPA LASER - Strasbourg / Illkirch

DURATION
2 days (14 hours)
Starts at 9 am

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

- Prepare an investment or carry out technology watch on the topic.
- Understand the concept of additive manufacturing for metallic materials.
- Know the potential and constraints of each process.
- Know the specific features of manufacturing parts with metallic structures.
- Understand the various digital processing methods used.

Target audience

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

Programme

Over the 2 days

The additive manufacturing market
- Technical and economic challenges
- Applications
- Trends

Additive manufacturing processes
- Basic principles of the main processes
  - Selective Laser Melting
  - Electron Beam Melting
  - Selective Laser Sintering
  - Direct additive laser construction CLAD®
  - Wire deposition
  - Other processes
- Performance and limits
- Characteristics of the parts produced
- Demonstrations
- Lessons learned

Digital processing
- Design
- The principles involved
- File format
- Error handling
- Building parts

Choice of materials
- Powder metallurgy
- Metallurgical analysis of parts

Standardisation
- The challenges
- The outlook