

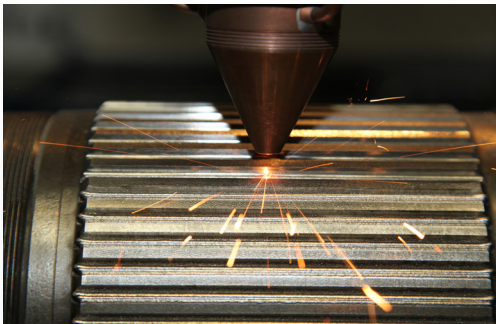


# AMERICAN CLADDING TECHNOLOGIES

[americancladding.com](http://americancladding.com)

ENVISION • ENDEAVOR • EXCEL

## LASER METAL DEPOSITION (LMD)



High Value Component Repair



Wind Turbine Components

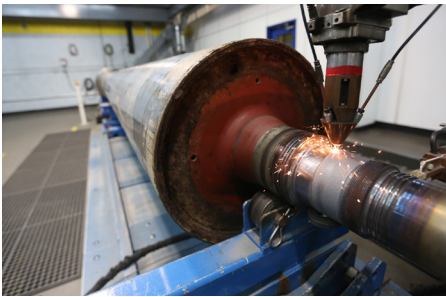
**LMD**, also known as **LASER CLADDING**, uses metal alloy powders to enhance the surfaces of metal components. These enhancements are usually focused on extending your component life by minimizing erosion/corrosion of the base material. Recent advances in **LMD** include complex structure building and component repairs.

Advantages of **LMD** over more traditional additive processes include:

- Metallurgical bond
- Superior metallurgy
- Very dense coating
- Very low dilution
- Less part distortion
- Highly repeatable
- Virtually unlimited material selection
- Virtually unlimited build heights

# WHAT MAKES US DIFFERENT

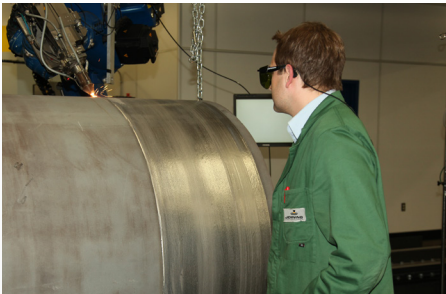
**LMD** is not a niche offering for us.... it's what we do. Constantly striving to stay at the forefront of this fast growing technology has resulted in a full staff dedicated to the science of **LMD**. This expertise ranges from metallurgical sample evaluations to custom **LMD** equipment designs. Helping you through feasibility, qualification, serial production and up to onsite vertical integration is our daily routine. With annual powder deposition amounts now exceeding 32 tons, we've learned how to help you stay successful. We currently offer 24 hours/day **LMD** work cells whose part capacity ranges from ounces to multiple tons that are over 40 feet in length.



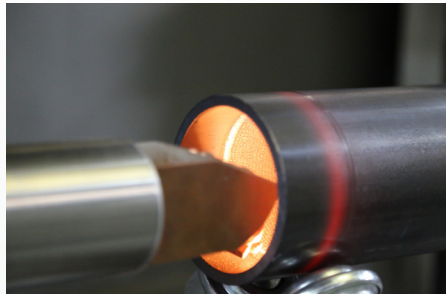
Roll Repairs



Valve Coatings (67-70 Rc)



Chemical Processing Industry



ID Cladding

## INDUSTRIES SERVED

- Power Generation
- Industrial Gas Turbine
- Chemical Processing
- Aerospace
- Transportation
- Oil – Gas Exploration
- Dept. of Defense
- Mining

## APPLICATIONS

- Hardfacing overlays
- Corrosion resistant overlays
- Original material restoration
- Boss / profile buildups
- R&D / feasibility studies
- Systems build & training

## PARTIAL LIST OF ADDITIVE ALLOYS

- **Low Alloy Steel:** 4130 | 4140 | 4340 | H-13
- **Stainless:** 304 | 309 | 316 | 347 | 410 | 420 | 15-5PH | 17-4PH
- **Cobalt Alloys:** Stellite 6 | 21 | 31 | 75
- **Ni Alloys:** Inconel 622 | 625 | 718 | Waspaloy | Hastelloy X
- **Aluminum:** 4047
- Aluminum Bronze
- **Titanium:** Ti-6Al4V
- **Others:** Tungsten carbides | various proprietary alloys

## ACCREDITATIONS

- ISO 9001
- AS9100
- ASME boiler & pressure vessel certifications S,R,U



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