

## **SURFACE TECHNOLOGY: LASER METAL DEPOSITION (LMD)**

**CLADDING, HARDENING, JOINING, CONSTRUCTING .. NEW AND REPAIR**

Compared to conventional welding build-up processes such as PTA, laser metal deposition has significantly lower and more localized heat input, low dilution of the substrate material and reduced potential for distortion. Thus, it offers advantages in terms of the materials that can be deposited and the workpiece geometries that can be processed.

Even materials that are difficult to weld, such as high-temperature nickel-based alloys and high-carbon steels, are more easily clad using LMD. In addition, the typically small melt pool formed during LMD process enables processing of very complex geometries within a single setup to deposit protective surfaces, restorative build-ups and the creation of near-net shapes.



### **REPEATABILITY**

Asco operates 4kW IPG Fiber Laser fully integrated into an 9-Axis handling system.

### **DEEP BORE CLADDING**

Internal Head capable of cladding bores down to 65mm ID and 1 metre depth

### **HIGH SPEED ID CLADDING**

Flash Cladding of INFINIBORE® LC-6 down bores to 100mm ID and 1 metre depth. Hard Chrome replacement with overlay as little as 0.1mm

### **TYPICAL MATERIALS APPLIED**

INFINIBORE®

AST® Clad – 625

AST® Clad – 6

AST® Clad – 21

AST® Clad – WC 40

AST® Clad – WC 50

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