

# Laser Surface Engineering LSE

## At a Glance

Sulzer Innotec

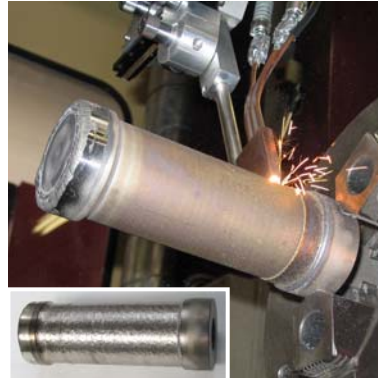
Since 1988 Sulzer Innotec operates laser facilities for the development of laser applications in the field of material treatment. Today, LSE offers a wide range of laser welding services for customers in several different business areas ranging from medical technology, through mold production, to gas turbine components. Beside the conventional laser welding (joining without filler material), the main focus of activities is in the field of build-up welding technologies for the repair business.

### Laser Metal Forming LMF



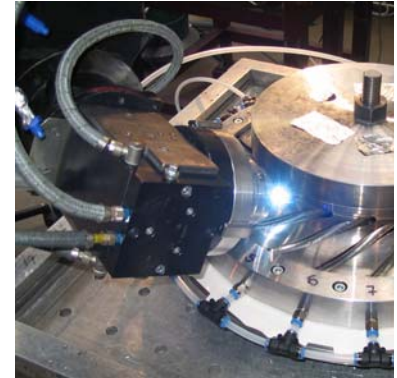
Gas Turbine Components

### Laser Cladding LC

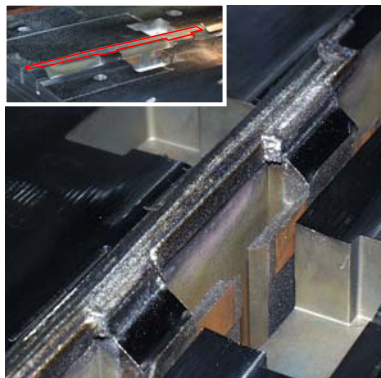


Stellite™ Hardfacing

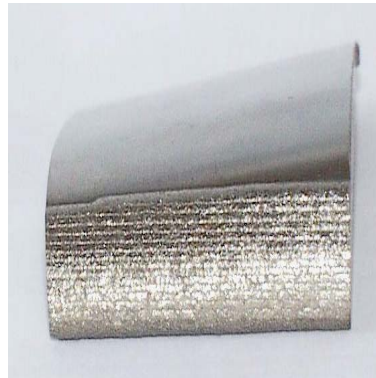
### Keyhole Welding



5-Axis Keyhole Welding



Mold Tools

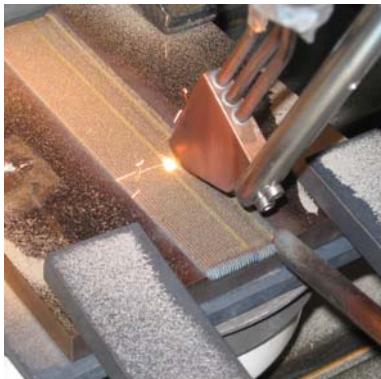


Steam Turbine Blade Leading Edge



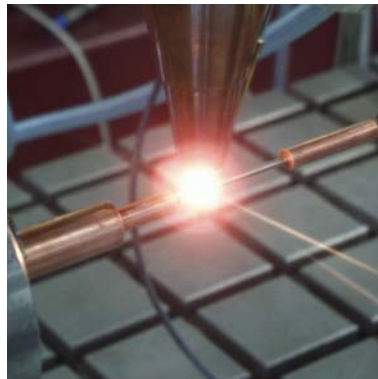
Large Sheet Metal Structures

### Process Development



Laser Metal Forming Trials

### Research



Welding of a Tensile Test Specimen

### Contour Recognition



Tactile Sensor in Operation