

# Boiler Tube Weld Overlay

## CladFuse™ Spiral 360°

### Comprehensive services

Sulzer is a specialized service company offering automated weld overlay processes as effective solutions against corrosion and erosion within the Energy Industry.

With global capabilities, our innovative technology provides protection to industrial industries in a wide range of challenging environments, such as Oil & Gas, Petrochemical and Refining, Waste to Energy, Biomass along with Pulp and Paper.

We have been providing our clients with a high quality service protecting their essential assets by using the latest bespoke technology and ensuring high quality, lasting protection.



Picture 1: Boiler Tube Overlay Machines

### Protection against Corrosion & Erosion

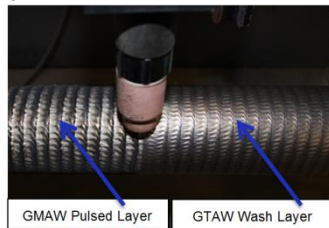
One of the major challenges facing operators and owners of Industrial Power Plants (including WTE and Biomass) is ensuring the long term performance and reliability of critical components such as Super-heaters and Economizers.

High maintenance costs can be reduced and longer outages minimized by protecting components using weld overlay.

Our **CladFuse™ Spiral 360°** weld overlay system is a proven and effective solution protecting against base material thinning caused by erosion and corrosion.



Picture 2: Tube Quality  
Commercially viable solution



Picture 3: Weld Process

Individual boiler tube, screen tubes and headers can all be protected against corrosion and erosion using our **CladFuse™ Spiral 360°** system, ensuring that high quality and effective protection is achieved.

Plants using our weld overlay solution can benefit from:

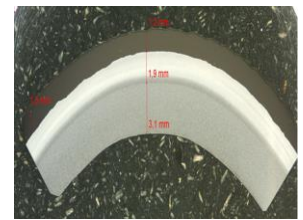
- Reduced maintenance costs
- Replaces the requirement for tube shields
- Longer periods between outages
- Reduced fabrication & inspection costs
- Extended asset lifespan

### CladFuse™ Spiral 360°

- GMAW pulsed & GTAW process.
- Controllable and minimal dilution rates.
- Accurate control of parameters to achieve high quality claddings
- Optimized material thickness application



Picture 4: 180° Bend Test



Picture 5: Macro Test

### Qualifications

We hold a comprehensive range of welding certifications, including ASME, National Board, and European, permitting us to provide a complete range of welding services covering your needs.



ISO 9001 certification assures our customers of a quality service.

ISO 3834-2 certification assures our customers of a quality service.

Following AD 2000-Merkblatt HP0 standard and guideline assures our customers of a quality service.

## Sulzer's comprehensive weld overlay offerings

Sulzer is offering a wide range of automated weld overlay services for both customer sites and in our fabrication facilities including:

- Nozzle ID welding
- Tower and vessel overlay
- Coker drum overlay
- Boiler waterwall membrane panels
- Boiler tube overlay
- Pipe and fittings
- CRA pipeline ID overlay welding

### Typical applications:

- Towers and vessels
- Reactors
- Separators
- Coker drums
- Heat exchangers
- Digesters
- Coal-fired boilers
- Waste to Energy boilers
- Biomass boilers
- Furnaces
- Storage tanks
- And more

## Global capability

Sulzer has a global network that is well placed, equipped and experienced to service our customers in any needs and requirements

Our facilities are located around the world with service facilities in:

- USA
- Canada
- Mexico
- Brazil
- UK
- Germany
- Saudi Arabia
- India
- Thailand
- Singapore
- China
- Australia

Each service facility has the capabilities to meet the demand of the local market, supported by the skills and expertise of the complete service organization including Sulzer's vast network of engineers and technical experts.

Mobilizing from our facilities we have the ability and proven track record to execute projects at any location around the world.

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