

Corrosion Protection for Boilers

Automated Weld Overlay in Workshop

Maximizing operational availability and performance

Improving boiler performance and yearly availability is an ongoing challenge for boiler operations and maintenance teams. Sulzer's Weld Overlay solutions are designed to enhance the operational reliability of our client's assets, improving operating performance, by increasing availability and in turn strengthening revenue streams.

At our cladding facilities we provide Weld Overlay services to our global client base, protecting boilers and components from corrosion and erosion by applying our Weld Overlay solutions.

With continued focus on Safety, Quality and ever demanding schedules, our highly skilled teams have executed numerous projects for Waste to Energy and Biomass plants, reducing maintenance costs and effective boiler protection.

Solution

Thinning of the original base material due to corrosion and/or erosion can cause a reduction in the operational performance of the boiler, resulting in long term production not being commercially viable and increase the risk of unplanned failures.

Sulzer's Weld Overlay solutions for membrane wall at our cladding facilities provide commercially viable, effective protection for membrane walls, minimizing the long term risk.



Picture 1: Pulse GMAW membrane wall welding towers.

CladFuse™ GMAW-P Weld Overlay towers

The CladFuse membrane wall Weld Overlay process uses Pulsed MIG welding technology. Advantages are:

- Advanced automated welding equipment
- Controllable and minimal dilution rates
- Accurate control of parameters
- Optimized material thickness application
- High deposition rates
- 1 and 2 layers processes

CMT Weld Overlay

As part of our membrane wall weld overlay services we also offer a CMT welding process. Advantages are:

- Short Arc MIG/MAG process
- Cooler welding temperatures
- Lower welding current in the weld pool
- Lower dilution rates



Picture 2: CMT Welding Heads

Our overlay processes provide:

- Commercially viable solutions
- Long term solutions to corrosion/erosion
- Prevention of costly and unplanned shutdowns



Picture 3: Cladded Panels

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.



Legal Notice: The information contained in this publication is believed to be accurate and reliable, but is not to be construed as implying any warranty or guarantee of performance. Sulzer waives any liability and indemnity for effects resulting from its application.

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 membrane wall panels
- Boiler tube overlay
- Pipes 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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