

## INCONEL WELD OVERLAY

## Major Plant Refurbishment

## Waste to Energy Site in the Northeast of England

- TEi were awarded the contract to refurbish the internal piping of 2 incinerator units in Teeside.
- During a 3 week outage period TEi Services replaced 46 superheater elements in each unit.
   The panels were fabricated in TEi's fabrication facility in Wakefield.
- Panels were fabricated from 38mm dia. x
   5.5mm wall 15Mo3 boiler tube. The top and bottom tube in each bank was clad with Inconel 625 in Wakefield before being manipulated.



Wall tubes - 69 in each unit - 60.5mm dia. x 5.5mm wall - 15Mo3 material were fabricated and clad with Inconel 625. The tube was then manipulated into the required configuration.

All site work, stripping out and installing new panels and wall tube was done on double shift working.

The work was completed on time and within budget allowing the plant to be successfully returned to service. All welds were tested to HP steam boiler codes.

These new panels and new wall tubes will extend the life of the incinerator by a factor of 5. Inconel weld overlay has been proven to withstand the erosive atmosphere inside municipal waste incinerators.





TEI provide the design, fabrication and construction expertise to service and maintain the Waste to Energy Industry.

## QUALITY ASSURANCE

TEI Ltd comes from a tradition of companies with more than 150 years service to the energy, process, manufacturing and construction industries.

The company has grown from such famous names in British Engineering as:

- · Senior Thermal Engineering
- · Foster Wheeler Power Products
- . E. Green & Son
- YIMPACT

TEI Ltd has its headquarters in Wakefield and has regional offices in Northumberland, South Wales, Kent, and Middlesex that provide clients with local access to the complete TEI porfolio.

As part of a UK wide business these local offices can draw upon central resources for support in such areas as:

- · Thermal Design
- Specialist Welding
- Metallurgical Laboratory Services
- Welder Training and Testing
- · Engineering and Design Services
- · Condenser and Heat Exchanger repair and refurbishment





Normal Engineering International Lit-Interhantial Services

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- QUALITY 150 9001
- ENVIRONMENT ISO 14001
- · SAFETY OHSAS 18001

TEVs integrated management system, IMS, is certified by LRQA. for all 3 standards.

"Not only do we provide superior quality services but your contract will be completed on time to the highest safety and environmental standards"

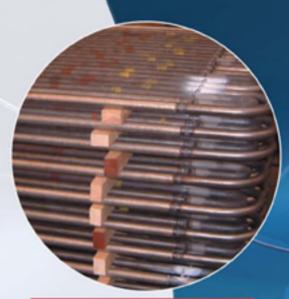
LRQA Certificate No. 902035A/B/C



ISO9001 • ISO14001



Wall tube - after weld overlay and manipulation



Superheater panels - ready for dispatch

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Close up - 2.5mm thick Inconel 625 welded automatically onto 15Mo3 boiler tube. 0017

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