



TS-360-ID Reformer Tube Inspection

Creep & Expansion Inspection

One of the most important tasks for a reliable operation of reformer furnaces is the integrity of the reformer tubes. The early detection of expansion and micro-cracks can lead to improved reformer operation, a better-balanced furnace and better planning of tube replacement, eliminating unnecessary, unplanned outages.

The Reformer Tube Scan type **TS-360-ID** is equipped with a powerful proprietary hybrid NDT technique for sensitive crack detection in reformer tubes up to 23mm wall thickness. As the proprietary technique needs no couplant, the readings are repeatable from inspection to inspection. Our tool was developed to inspect furnaces from below the floor to the top of each tube to give complete full 100% inspection for creep and cracking of each tube.

The diameter measurement results of our 360° laser for creep detection is performed simultaneously to the powerful proprietary technique testing in a 3-dimensional overview of each tube. The laser is rotating thus giving us a complete profile of the inside of the tube. As the inside of the tube is a machined surface this allows an accurate measurement and your able to detect problem areas much earlier than traditional methods.

Inspecting from the Internal Surface TS-360-ID

Inspecting from the internal surface, the complete unit will be moved by a remote-controlled puller/pusher unit allowing the passage from the bottom of the tube to the roof assuring a fast and reliable inspection.

The Key Benefits

- Only system offering 360° crack detection and 360° laser scan of entire tube
- Accurate, robust and reliable by computer-controlled data acquisition
- Powerful proprietary technique for sensitive crack detection
- Integrated rotating laser module for expansion measurement
- High rate inspection speed
- Accurate location and sizing of features
- High repeatability allowing indication monitoring
- On-site reporting

