

TS-360-OD Reformer External 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.

With our latest developed technology in our industry for inspecting reformer tubes is now being introduced as the **TS-360-OD** an external automated scanning system that is equipped with a powerful proprietary hybrid NDT technique for sensitive crack detection in reformer tubes up to 23mm wall thickness that inspects truly 360° around each tube. As the proprietary technique needs no couplant, the readings are repeatable from one inspection to the next inspection.

Our diameter measurement inspection system is performed by using multiple lasers for creep detection and diametric growth. Both procedures are performed simultaneously to the powerful proprietary inspection technique at a fast rate. The laser modules are mounted on both sides of the scanner. By differential measurements a maximum of accuracy for the diameter measurement will be achieved and correlated with the crack detection system.

Testing from the external surface TS-360-OD

For testing from the external surface, the complete unit will be moved by a remote-controlled scanning system allowing the passage from the furnace floor to the roof assuring a fast and reliable inspection.

The key benefits

- Accurate, robust and reliable by computer-controlled data acquisition
- A powerful proprietary technique for sensitive crack detection
- An integrated laser module system for expansion measurement
- High inspection speed
- Accurate location and sizing of features
- Highly repeatability allowing indication monitoring
- On-site reporting

