THE OBJECTIVE

Are you sure about the condition of your piping? What about the buried sections or the insulated parts? It is not easy to assess their condition in an effective way. The piping may be located many meters above the ground where they cross roadways or other pipe racks and what do you know after some local spot measurements? As process piping is a vital element of your facilities good understanding of their reliability is preventing unexpected shutdowns or delays during maintenance periods.

WHY SGS?

SGS understands the importance of safe heat exchanger operations. Thanks to our global network we can be at your service anywhere and anytime. Our teams possess the specific skills and a long track record in carrying out Heat Exchanger Life Assessment. Our job not only includes a report, but also follow-up inspections as well as the comprehensive calculation of remaining lifetimes.

OUR HEAT EXCHANGER LIFE ASSESSMENT SERVICES

SGS Industrial Services offers a complete package of inspection in and around Heat Exchangers, in order to create a full set of data which is easy accessible and ready for follow-up. Several inspection and testing technologies and tools can be applied depending on your preferences and technical requirements.

THE SOLUTION

The Heat Exchanger Life Assessment System (HELAS) was developed to inspect heat exchangers quickly where corrosion is expected. The basic principle of the Heat Exchanger Life Assessment System is the measurement of ultrasonic immersion length, which is then converted into the corrosion depth inside cooling water/air fin type tubes. Using the maximum corrosion measured, an extreme-value analysis is performed and the remaining life of the heat exchanger is estimated. SGS calculates the remaining life by estimating the maximum corrosion with MVLUE (Minimum Variance Linear Unbiased Estimate) and MLH (Maximum Likelihood) methods.

This inspection method is faster and more efficient than Internal Rotating Inspection System (IRIS). All data is directly analyzed and leads to a complete lifetime assessment, aiding forward replacement planning, not simply a ’wall thickness’ report.

ADVANTAGES OF HEAT EXCHANGER LIFE ASSESSMENT SYSTEM TECHNOLOGY

- All materials can be inspected
- High speed inspection of up to 200 mm/sec
- Corrosion data acquisition up to 10,000 points/sec
- High precision data presentation (±0.15 mm of corrosion depth)
- Remaining Life Assessment & Transition Graphs
- Very comprehensive and portable system

CONTACT

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WHEN YOU NEED TO BE SURE

SGS