

# Two-days intensive training on "Damage Mechanisms of Boiler Tubes"

**Dates:** 7<sup>th</sup> & 8<sup>th</sup> October,2022 **Timing**: 9:00 am to 6:00 pm. **Venue:** Evolve by TCR, 215 Pancham Icon, Nr. D-mart, Vasna Road, Vadodara, Gujarat.

# **Course Objective:**

- Understanding will be developed for different damage mechanisms prevailing in boiler tube failures.
- Gain a valuable working understanding of fundamental principles of degradation that occurs in short term and long-term operation of boilers.
- Knowledge to increase the problem-solving attitude and take the first-hand judgment on the boiler tube failures.
- Attitude to analyse the difference in metal behavior helps to decide better mitigation to the persistent boiler tube failure.
- Recognize general procedures, techniques and precautions in failure analysis and how stress systems relate to fracture of ductile and brittle materials.
- Achieve the knowledge required to conduct or supervise basic failure investigation and effectively communicate with metallurgists & other experts on more complicated cases. Invention to improve reliability of company operations, cost savings, increase profitability, and enhance performance

## **Course Content:**

- Materials & Metallurgy
- Damage Mechanism of Boiler Tubes
- Water Chemistry
- Boiler Inspection
- NDT techniques for Boiler Tube Components
- Erosion Problem
- Case studies of Failure Investigation of Boiler Tube
- TCR lab Visit & Question Answer Session

#### Who should attend?

- Maintenance Engineers of middle management level
- Maintenance / Inspection Engineers
- Process engineers
- Boiler Inspectors
- Plant Engineers / Managers
- QA / QC Engineers
- Reliability Engineers
- Metallurgical / Materials Engineers
- HAZOP Engineers / Managers
- Other Technical, Laboratory, Sales Personnel, engineer from allied disciplines, management and administrative staff who need a working understanding of metals and their applications.

# **Registration:**

The course is limited to 25 participants only and will be decided on first come first served basis. Interested candidates can register by filling attached registration form. The course fee includes participation, course material and stationery. Tea / coffee and working lunch will be served. Participants have to make their own arrangements for accommodation and local conveyance. The course fee is non-refundable; however, in the event of cancellation of training program by Evolve for some unavoidable reasons, it will be refunded. Evolve accepts the change in nomination.

### Course fee:

Single participant: INR 15,000.00 for Indian delegates & USD 450 for Foreign Delegates.
GST @ 18.00 % applicable on above fees.

## Payment mode:

Interested participants should mail/ E-mail the registration form along with DD/at par cheque in favour of "TCR ADVANCED ENGINEERING P LTD." at the address mentioned in attached registration form.

#### **Forward your Registration forms to:**

Email: evolve@evolvetcr.com evolve@tcradvanced.com

Mobile: +91 7574801050/7600014754

Evolve by TCR, 215, Pancham Icon, Vasna, Vadodara TCR Advanced Engineering Pvt. Ltd., 250/9 GIDC, Makarpura, Vadodara, Gujarat. Ph: 0265-2657233, 7574805594-96

Registration form can be downloaded from our website: <a href="https://www.evolvetcr.com/course-calendar.php">https://www.evolvetcr.com/course-calendar.php</a>
For more details, check our FB, LinkedIn page and You Tube channel

## **Key Benefits:**

- ✓ Understanding different damage mechanisms prevailing in boiler tube failures.
- ✓ Gaining knowledge to increase the problem solving attitude.
- ✓ Gaining knowledge to analyse the difference in metal behaviour helps to decide better mitigation to the persistent boiler tube failure.
- ✓ Gaining the knowledge required to conduct or supervise basic failure investigation and effectively communicate with metallurgists & other experts