

# Three-Day Intensive training program on “Risk Based Inspection (RBI) in Process, Petrochemical, Oil and Gas Plants”



**Date:** 8<sup>th</sup> to 10<sup>th</sup> August, 2019

**Timing:** 9:00 am to 6:00 pm

**Venue:** Evolve by TCR, 215 Pancham Icon, Nr. D-mart, Vasna Road, Vadodara, Gujarat.

## Course Objective:

The program shall cover the identification of high-risk areas of operating units, estimate the risk values with operation of each equipment items in a refinery, petrochemical and chemical process plants, prioritize the equipment inspections, design appropriate inspection program and systematic management of risk of equipment failures. The program will guide to proper understanding of consequences of failures and the likelihood of failures.

## Who should attend?

- Experienced Professionals who wish to brush up their knowledge and stay abreast with the latest in the industry.
- Engineers and Technologists and fresher from varied technical background interested in learning more about Welding technology, Quality Assurance, Inspections and Evaluation of Weld Defects.

## Topics to be covered:

### **Day 1:**

- Introduction and Application of Risk based Inspection (RBI) to Process plant Safety
- Risk Analysis including Hazards Analysis
- Qualitative and Quantitative Approach to RBI
- Consequence Analysis (Fluid Properties, amount available for release, estimate of release rate, post leak response and estimate of potentially hazard area)

### **Day 2:**

- Likelihood Analysis (Failure Frequencies, Equipment modification factor, Plant Management System, Auditing)
- Development of Inspection Programs to Reduce Risk
- Plant Database Structure

### **Day 3:**

- Explanation of Base Resource Documents and Technical Modules (includes thinning, stress corrosion cracking, high temperature hydrogen attack, furnace tubes, mechanical fatigue, brittle fracture, equipment lining, external damage)
- Role of Proper Selection of Materials of Construction of Equipment & Machines  
Discussions on Plant Case Histories

## Registration:

The course is limited to **25 participants** only and participation will be decided on first come first served basis. Interested participants 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 TCR for some unavoidable reasons, it will be refunded. TCR accepts the change in nomination.

## Course fee:

Single participant: Rs. 20,000.00 for Indian delegates & USD 400 for Foreign Delegates.  
GST @ 18.00 % applicable on above fees.

## Payment mode:

Interested participants should post/ E-mail the registration form along with DD/at par cheque in favour of “**TCR ADVANCED ENGINEERING PVT. LTD.**” at the address mentioned in attached registration form.

## Faculty:

This course will be conducted by renowned expert with vast experience in pipe, vessels and tanks.



**Mr. Narendra Kumar Roy**

### Academic Qualification:

- B.Sc. (Engineering)- Mechanical (1st Class), Bihar Institute of Technology, Sindri, Ranchi University, India (Year 1966).
- Master of Engineering; Specialisation in Mechanical Machine Design; University of Roorkee; India (Year 1968).

### Professional Experience:

- Working as Director on the board of Charisma Careers Pvt. Ltd, Vadodara, Gujarat and Technical Expert with Charisma Global Networks Ltd, Auckland, New Zealand.
- Many training programs on Process Equipment Design, Fabrication and Inspection and Piping Design, Inspection and Engineering including failure analysis and corrosion controls were conducted for the benefit of engineers & supervisors in India and abroad (Oman, Qatar, Malaysia, Indonesia and New Zealand).
- Worked as Executive Director of Gramya Research Analysis Institute for its Scientific & Technical Consultancy Division. Worked as Advisor since inception of the organization (since Year 1984). Number of Pressure Vessel Design, Fabrication and Inspection training programs were conducted for the benefit of engineers & supervisors in India and abroad (Oman, Qatar).

### Awards & Prizes:

- Received the President of India Cash Prize instituted by the Indian Society of Theoretical & Applied Mechanics, Kharagpur for the best paper presented at the annual conference in Surat 1977.

### Publications / Seminars & Conferences

#### Organized:

- 120+ papers had been published in various National

and International Technical Journals / Proceedings of the seminars and conferences

and presented at different forums for training of engineers. Main subjects covered related to pressure vessels designs & Inspection as per ASME Code.

- Co-authored two books as published by Projects & Development India Ltd., Sindri;
  - : Engineering Manual - Valves
  - : Thermal Insulation

### Forward your Registration forms to:

#### Mr. Rajesh Lakhnotra

HOD - Training

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Registration form can be downloaded from our website:

<http://tcradvanced.com/coursecalender.php>

For more course details, check our FB page: -

<https://www.facebook.com/EvolveTCR/>