

# Failure Analysis: including Engine Components

3 Day Proficiency Improvement Programme (PIP)



### **PIP Overview:**

Failure of Components is a disastrous experience for user as well as to manufacturer and efforts are always on to avoid such Failures in future. Hence, it is necessary to understand cause of failures. Only a systematic & painstaking analysis can lead to the real "culprit" responsible for failure. Understanding theoretical aspects of stress, failure modes, fracture mechanisms and applying this knowledge to number of failures can build the expertise over a period of time. The present training programme is designed to cover the theory as well as practical aspects of Failure Analysis.

The course will cover three principal topics of interest viz Procedure analysis, Failure mechanisms, and forms of failure in product & components. Causes of failures will be explained with easy to understand discussion on stress application and distribution. Various case studies of failure and their elimination will be discussed. Participants are requested to bring along the failure cases (resolved or unresolved) for discussion.

The faculty members selected for each topic are experts in that field and bring along a rich experience of theory and application of this theory to systematically resolve failures. So this is most comprehensive course on Failure Analysis.

The course is designed for participants having no prior metallurgical training & has basic understanding of simple chemistry and physics.

Pricing Category	Registration fees per person (incl. 18% Goods Service Tax)
Industry Professionals	Rs. 8,000 + Rs. 1440 = Rs. 9,440
Faculty Member	Rs. 6,000 + Rs. 1080 = Rs. 7,080
Student	Rs. 4,000 + Rs. 720 = Rs. 4,720
Contact Information	

#### Contact Information:

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Save the dates!

13th- 15th Dec 2017 At ARAL

FID- Chakan, Pune

## What's in it for you?

- General procedures, techniques > Typical fatigue characteristics & precautions for Failure > Basic fracture modes and their Analysis.
- > How stress systems relate to Failure analysis
- > Ductile & Brittle materials fracture
- > Identify Design related failure
- > Analysis of factors causing failure
- characteristics, factors affecting ductile-brittle relationships.
- > Wear, shafts, Gears, Bearings etc. failure
- Grasp many inter-related factors involved in examining fractures.

Learn from

Industry

**Experts!** 

#### Who is it for?

This training is useful for all industry professionals, who needs to have comprehensive understanding of Failure Analysis and working in area of:

- ✓ Design Dept., Product Design & Development, R&D, Service Engineers, Inspection, Testing, Quality Control, Assurance & Improvement, CAE and Metallurgy & techno commercial activity will benefit by attending this program.
- ✓ Manufacturing Shop Floor, Shift engineer / manager
- ✓ Sales, Business Development & Marketing
- ✓ Purchase, Vendor development & Supply chain
- ✓ Also working engineers / managers working as Supervisors, Engineers, Technicians, Graduate / Diploma Engineers and Executives, who need to work & analyse materials data & quality issues.

