

# (ME#03) INSPECTION, REPAIRS, AND ALTERATIONS OF PRESSURE VESSELS

*Turning GOOD Engineers into GREAT Engineers!*

## **COURSE OVERVIEW**

This course is a comprehensive introduction to the requirements of various codes and standards, regarding inspection, repairs and alterations of pressure equipment, and in particular pressure vessels. The requirements of the National Board Inspection Code and the API-510 will be covered in detail. A brief introduction to API-579, Fitness for Service will also be included. Simple flaw evaluation procedures will be evaluated. The activities of ASME's Post Construction Committee will be explained and documents published by this Committee will be discussed.

## **WHO SHOULD ATTEND**

Individuals from users, manufacturers, repair organizations, inspection agencies and other organizations involved with maintenance and repair of pressure equipment. This course is intended for beginners, as well as experienced personnel wishing to update their knowledge.

## **LEARNING APPROACH**

Each session will be conducted in:

- Lecture
- Discussion
- Problem solving format

Which is designed to provide intensive instruction and guidance on understanding Code requirements. The instructor will be available following each day's session to provide participants with further opportunity for discussion and consideration of specific problems.

## **AMONG INTERESTING TOPICS COVERED DURING THE COURSE**

- Introduction to post construction codes and standards and the interrelation of various documents
- Explanation of the responsibilities of the users, manufacturers, repair organizations, regulatory agencies and authorized inspectors
- How to obtain a National Board stamp
- Detailed requirements of the NBIC
- Differences between the NBIC and API-510
- Examples of repairs and alterations and the documentation requirements for each
- An introduction to API-579
- Evaluation of corroded areas
- Evaluation of pitted areas
- Evaluation of misalignments and other geometric flaws
- Simple Level 1 evaluation procedures for other flaws
- An introduction to the ASME Post Construction Committee
- Introduction to ASME post-construction standards
- Overview of work being performed by API, ASME, and PVRC related to post construction issues
- Examples demonstrating the application of the rules
- Open discussion of specific situations and problems brought up by the attendees