

## *Inspection Basics (formerly called Initial Inspection)*



**Course Length:** 5 day (40 hrs)

**Cost:** \$1100

**Instructor:** Mark Smith

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This class is designed for pressure equipment inspectors working in refineries, chemical plants, gas plants, pipeline terminals, and oil fields. This class is also useful to those interested in knowing more about the pressure equipment discipline.

### **Course Overview**

This course is an introduction to inspection and is a must for newer inspectors who want to get a “jump-start” in their career. This class covers a smorgasbord of inspection information including:

- Role of the Inspector
- Inspection Philosophy
- Basic NDE
- Metallurgy & Corrosion
- Record-Keeping
- Welding
- Inspection Codes
- Inspection Issues by Equipment Type
- Final Exam

### **Objectives**

The course provides participants with the knowledge necessary to:

- Explain the basic responsibilities of pressure equipment inspectors
- Explain the personal traits needed by successful inspectors
- Explain the operating principles and limitations of basic NDE techniques. Techniques include: UT, RT, MT, PT and Visual
- List basic welding process and discuss the purpose and limitations of each welding process. Basic processes include: SMAW, SAW, GMAW, GTAW
- List major pressure equipment codes
- List basic fabrication and inspection requirements for pressure equipment
- Perform basic inspection calculations: corrosion rate and remaining life
- Understand basic properties of metals: strength, ductility, hardness, toughness
- Understand basic forms of corrosion
- Explain the purpose of pressure testing and list applicable requirements
- Discuss the basic types of inspection records

### **Class Participants**

Suitable candidates should have 1-3 years of experience at a petrochemical facility. There are no class prerequisites.

### **Notes**

This is an introduction class. A great way to “jump-start” your inspection career!

### **Bring to Class**

Students should bring to class: a calculator, pencils, highlighters, and an inquisitive mind.

*“A wise man will hear and increase in learning.”*