

Safety, Hand Tools, and Print Reading

This two and a half day course covers the fundamentals of safe work practices and job setup. Maintenance personnel should gain a thorough understanding of how to read prints and select the proper tools for the job. Participants will be asked to bring prints to class for review and study allowing them to compare classroom materials to their day to day job.

I. Safety

- Accident Prevention
- Equipment Layout
- Equipment Lockout
- Personal Safety Equipment
- Rotating Equipment
- Hand Tool Safety
- Welding Safety
- Cutting Operations
- Fire Safety

- Conventional Breaks
- Flow Diagrams
- Piping Plans and Elevations
- Piping Isometrics

III. Tool Use, Equipment and Maintenance

- Hand Tools
- Power Tools
- Test Equipment
- Special Devices

II. Mechanical Print Reading

- Types of Drawings
- Parts of a Drawing
- Mechanical Drawing Views
- Arrangement of Views
- Dimensions and Drawing Notes
- Standards for Dimensioning
- Construction, Size, and Location
- Dimensions
- Tolerance
- Decimal Dimensions
- Specifying Decimal Tolerances
- Representing & Dimensioning Screw Threads
- Dimensioning Tapers and Machined Surfaces
- Dimensioning with Shop Notes
- Cutting Planes, Section Lining, and Full Sections