



092 – Basic Manufacturing Skills – Blueprint Reading

Onsite – 1 Day, 6 Hour session – Optimum class size, 12 students

Training Description:

The Basic Manufacturing Skills Module #2, Blueprint Reading, provides the foundational skills for more advanced technical skills training. This class is structured to explain how to interpret as well as read engineering mechanical product drawings. Navigating the format, understanding where to locate all the information required to produce product is part of the course. The orthographic or 3rd angle system is covered in great detail. The different lines, dimensioning, sections, views, type of drawing are also covered in this course. This class is geared for our employees who need to work with engineering drawings, not creating them.

Training Objective:

The objective of the module is to upgrade the skills of the students to help them become more productive in today's ever-changing factory. This basic print reading program explains the importance of engineering drawings in manufacturing and thoroughly describes the generation and duplication of such drawings. It discusses the basic elements of a blueprint and introduces the concepts which students must master to successfully interpret engineering drawings.

Skill Attainment:

Students learn how to read and interpret technical drawings (blueprints). They gain a fundamental understanding of the critical role the technical drawing plays with respect to work process, quality control and a product's critical features.

These skills are transferable within the company, industry and are highly desirable by any manufacturer.



This program teaches the fundamentals of mechanical drawings in easily understandable steps. The practical hands-on approach ensures everyone will feel confident interpreting blueprints.

Specifications

- Audience: Operators, first-line supervisors, those who have little or no prior exposure to statistical process control. Also ideal for ongoing and refresher training.
- Training Time: Approximately 6 hours
- Prerequisites: Shop Math
- Training Design: Performance-based Instruction. Video and print materials are interactive; requires active audience participation.

Program Content

<p>Module 1: Line Drawings</p> <ul style="list-style-type: none"> • Types of Projections • Types of Lines • Title Block Information • Basic Part Characteristics • Features and Dimensions • Dimensions of Size and Location • Defining and Interpreting Tolerances • Fractional and Decimal Dimensions • Diameters and Angles • Scale Drawings and Drawings in Section 	<p>Module 2: Special Part Features and Configurations</p> <ul style="list-style-type: none"> • Undercutting and Grooving • Rounds and Fillets • Chamfers and Tapers • Beveled Surfaces • Knurls • Slots and Keyways • Bosses and Pads • Finishing Marks • Holes <ul style="list-style-type: none"> ○ Countersunk, Counterbored and Spotfaced • Threads and Thread Terminology • Straight and Tapered Threads
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