



Fundamentals of Dimensional Metrology Seminar

GOAL: The system of measurements we use today insures that the components from various manufactures can be produced in factories thousands of miles apart, yet still be assembled into working devices. This system relies on the acceptance of primary standards such as the feet and meter and use of these standards by all who wish to share components.

BENEFITS OF TRAINING: Participants in this workshop will gain an understanding of the measuring tools used in manufacturing today and their proper use and level of accuracy.

HOW THE PROGRAM WORKS: This practical program features a series of hands-on measurement workshops where standard component dimensions will be measured with various tools, including steel rules, micrometers, vernier calipers, dial indicators, squares, protractors, and height gauges.

PROGRAM OUTLINE:

- Measurement the Language of Precision
- Measuring with Basic Graduated Instruments
- Angle Measuring Instruments
- Common Comparison Instruments
- Fixed Size Gages
- Surface Plates and Gages
- Comparators and Indicating Gages

Methodology: Training sessions are comprised of lecture, written exercises, hands-on measurement exercises, and PowerPoint presentations. Workshops materials include a copy of *Measuring and Gauging in the Machine Shop*.

Who Should Attend: Machine operators, quality control inspectors, shop supervisors, metalworking manufacturing personnel, engineering managers, and other manufacturing persons interested in learning to read manufacturing prints or updating their knowledge in this area.