

Tolerance and Quality Control



Description

The Tolerance and Quality Control Training Center incorporates high quality industrial Starrett digital measuring tools: micrometer and caliper. Computer software included provides students the opportunity to analyze the data collected.

Skills

- Focuses on the development of academic knowledge, employability skills, and technical skills. As students progress through the curriculum, the classroom instructor uses a detailed rubric to subjectively evaluate the student's skill and proficiency.

Objectives

- Identify and use the English system of measurement.
- Demonstrate measuring skills using the fractional rule.
- Convert fractions to decimals.
- Convert measurements from the English system to the metric system.
- Apply the micrometer to precision measure.
- Identify and discuss the use of the dial indicator Vernier caliper.

Activities

- Lesson 1 History of Measurement
- Lesson 2 Decimal Rule and Fractional Measurement
- Lesson 3 Metric Measure
- Lesson 4 Steel Tape Measure
- Lesson 5 Introduction to Precision Measure
- Lesson 6 Micrometer
- Lesson 7 Thumb Lock Vernier Caliper
- Lesson 8 Dial Indicator Vernier Caliper
- Lesson 9 Micrometer Depth Gauge
- Lesson 10 Bore Diameter, Fasteners, Threads, and Pitches
- Lesson 11 Layout, Tool Setup, and Dial Indicators
- Lesson 12 Visualizing Shapes and Projection Drawings
- Lesson 13 Line Usage
- Lesson 14 Title Blocks
- Lesson 15 Dimensioning
- Lesson 16 Tolerance
- Lesson 17 Four-Stroke Engine Operation
- Lesson 18 Engine Measurement
- Lesson 19 Engine Measurement Challenge
- Lesson 20 Level 1 Review

Standards

DEPCO courseware is developed from the Manufacturing Skill Standards Council (MSSC) and the National Skill Standards Board (NSSB). Close correlation with these standards will provide students with the skills and knowledge necessary for success in the workplace.

Module Includes:

Training Manuals, Instructor's Manual, Installation CD, Precision Block (3), Starrett Dial Indicator Inspection Set, Starrett 6 in. Thumb Lock Vernier Caliper, Starrett 6 in. Dial Indicator Vernier Caliper, Starrett Steel Rule (2), Starrett 12 ft Steel Tape Measure, Starrett Micrometer Depth Gauge, Starrett Micrometer, Briggs & Stratton 3-1/2 hp Horizontal Shaft Engine, Starrett Granite 12 in. x 18 in. Surface Plate, Starrett Steel Protractor, Hole Gauge Set, Telescoping Gauge (3), V-block Set, Screw Pitch Gauge (2), Feeler Gauge, Precision Bolt (4), Tool Cabinet with Tool Trays, Calculator, Headphones (2)

Computer is required and sold separately.

Requirements

Computer required and sold separately

Curriculum Specifications

Academic Representative



Technology Education Concepts

www.TECedu.com | 800-338-2238

Industrial Training Manuals 1 and 2
Instructor's Guide
MediaPlus Installation CD

©2020 DEPCO, LLC