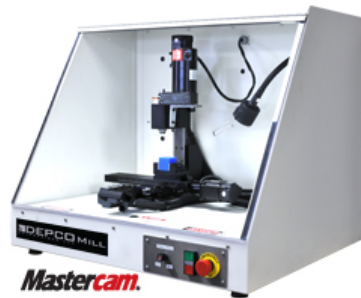


CNC Machining



Description

The CNC Machining Industrial Training Center introduces students to the industrial process used to machine complex parts on a computer controlled milling center. Students will gain knowledge in setup, safety, operation, and NC programming.

Objectives

- Understand and demonstrate good safety practices when operating the CNC mill.
- Identify and locate important parts of the CNC mill.
- Type code to generate an NC file the CNC mill can understand.
- Write NC code based on product drawings.
- Apply the digital caliper to precision measuring.
- Machine a part using two different types of materials.

Activities

- Lesson 1: Safety and Accuracy
- Lesson 2: Digital Precision
- Lesson 3: Machine a Sample Part
- Lesson 4: NC Code and Verification
- Lesson 5: Coordinate Positioning
- Lesson 6: NC Code Translation
- Lesson 7: Two-Sided Machining
- Lesson 8: Project 1 - Gear and Sphere
- Lesson 9: Project 1 - Rotor and DEPCO Logo
- Lesson 10: Project 1 - Sunburst and Spiral
- Lesson 11: Code Verification and Editing
- Lesson 12: Create Your Own Code
- Lesson 13: CAD/CAM
- Lesson 14: 2-D Design
- Lesson 15: 2-D Toolpaths
- Lesson 16: Post-Processing
- Lesson 17: Project 2 - Contour and Pocket
- Lesson 18: Project 3 - Materials
- Lesson 19: Project 4 - Mating CNC Parts
- Lesson 20: Challenge and 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:

Level 1 Industrial Training Center Includes: DEPCO CNC Machining Training Manual, DEPCO CNC Machining Instructor's Manual, DEPCO CNC Machining Installation CD, CNC Milling Center, Mastercam Software, Mill Control Software, Precision Vice, Dial Indicator with Holder, Digital Caliper, Edge Finder, CNC Mill Supply Kit, Jacob's Chuck, Knock-Out Bar, Aluminum Rod, Mallet, Ruler, 7/16" Wrench, 1/16" Endmill, 1/8" Endmill, Parallels, Toolbox with Tool Trays, Safety Glasses (2), and Headphones (2).

Requirements

Computer required and sold separately