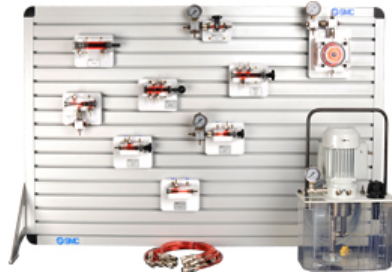


Industrial Hydraulics



Description

The Industrial Hydraulics Training Center, which uses hydraulic components, allows the students to construct complex industrial circuits efficiently. Includes: controls, actuators, timers, valves, gauges, manifolds, and hydraulic pump.

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

- Mount different hydraulic components securely to the profile plate.
- Differentiate stationary and mobile hydraulics.
- Use the force triangle and flow rate formulas to complete a worksheet.
- Identify different industrial technologies.
- Simulate hydraulic circuit operations.
- Convert a double-acting cylinder to a single-acting cylinder.

Activities

- Lesson 1 Hydraulics Systems Safety
- Lesson 2 Principles of Hydraulics
- Lesson 3 Industrial Technologies
- Lesson 4 AutoSIM
- Lesson 5 Hydraulic Power Unit
- Lesson 6 Single-Acting Cylinders
- Lesson 7 Double-Acting Cylinders
- Lesson 8 Pressure Gauges
- Lesson 9 Pressure Control Valves
- Lesson 10 Directional Control Valves
- Lesson 11 Flow Control Valves
- Lesson 12 1-Way Flow Control Valves
- Lesson 13 Check Valves
- Lesson 14 2-Way Flow Control Valves I
- Lesson 15 2-Way Flow Control Valves II
- Lesson 16 Hydraulic Motors I
- Lesson 17 Hydraulic Motors II
- Lesson 18 Regenerative Circuits
- Lesson 19 4/3-Way Hand Lever Valves
- Lesson 20 Pressure Intensification

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, DEPCO Industrial Hydraulics Stand, Profile Plate, Simulation Software, Pressure Gauge (3), Flow Control Valve, Check Valve, One-Way Flow Control Valve, Branch Tee (2), 3-Way Pressure Reducing Valve, 2-Way Flow Control Valve, Double-Acting Cylinder, Hydraulic Motor, 4/2-Way Hand Lever Valve, Hydraulic Power Unit, Pressure Relief Unit, Hose 600 mm (2), Hose 1000 mm (4), Hose 1500 mm (2), special red oil, Safety Glasses (2), Headphones (2)