

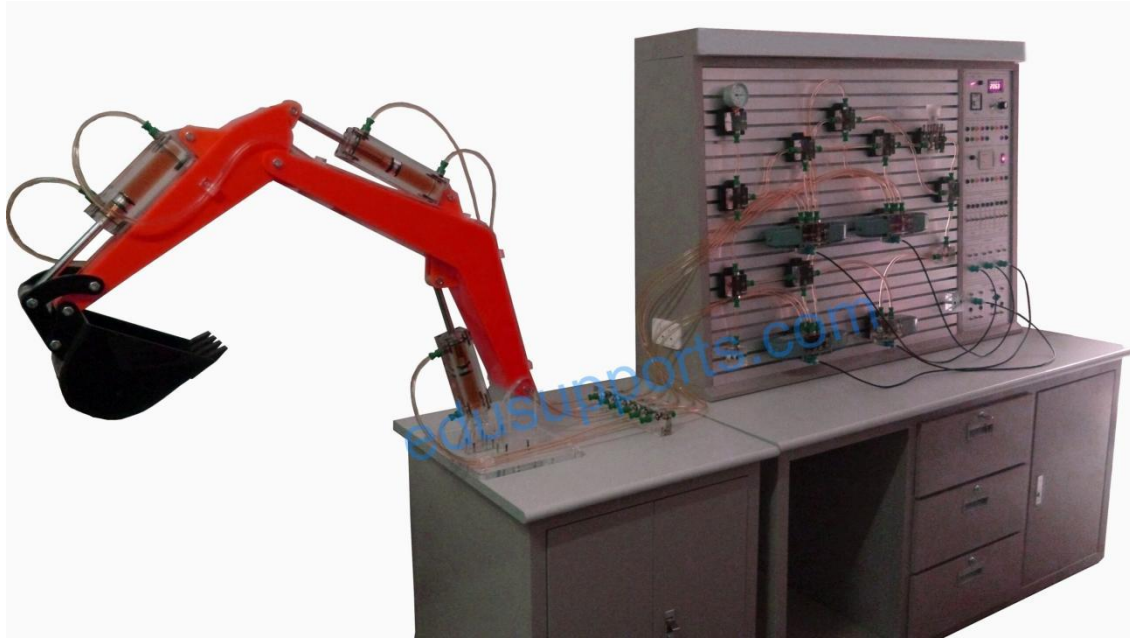
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PLC Hydraulic Excavator Training System



PN:0401010040

PLC Hydraulic Excavator Training System is an intuitive and visual platform for hydraulic circuit design and hydraulic control demonstrating. The internal structure and working principle of various hydraulic components is vivid and intuitive because all transparent hydraulic components are made of transparent plexiglass according to industrial standard. PLC Hydraulic Excavator Training System enable students to learn the structure, work principle and function of each single hydraulic components. Meanwhile, Students can constitute hydraulic circuits to survey movement situation of spool in the loop tank and flow direction of fluid in the spool body. The excavator on this PLC Hydraulic Excavator Training System is used to simulate the action of mining, discharging, lifting, etc. Students learn hydraulic system, its working and control principle of an excavator. PLC Hydraulic Excavator Training System meets different hydraulic disciplines.

PLC Hydraulic Excavator Training System Features

1. The training panel is T-slot, and all hydraulic components adopts rapid joint for easy operation.
2. The hydraulic components are made of transparent plexiglass, the inner structure and the working process of the hydraulic components are vividly demonstrated.
3. Circuit experiment adopts leak proof fast inserted interface to make

experiment circuit assembly simple, quick and clean.
4.The are two control methods:PLC control and relay control.

PLC Hydraulic Excavator Training System Typical Training Contents

1.Direction control circuits

1.1Sequence action circuits

- 1.1.1 Reversing circuit of manual directional/reversing valve
- 1.1.2 Reversing circuit by pilot oriented pressure relief valve/overflow valve

1.2 Sequence action circuits

- 1.2.1 Sequence action circuit of sequence valve
- 1.2.2 Sequence action circuit of pressure relay
- 1.2.3 Sequence action circuit of limit switch
- 1.2.4 Sequence action circuit of travel/reversing valve

1.3 Lock circuits

- 1.3.1 Lock circuit of mid position function solenoid reversing valve
- 1.3.2 Lock circuit by pilot check valve

2.Pressure control circuits

2.1 Pressure regulating circuits

- 2.1.1 Pressure regulating circuit
- 2.1.2 Two-stage pressure regulated circuit

2.2 Pressure reducing circuits

- 2.2.1 Pressure reducing circuit of pressure reducing valve

2.3 Booster circuits

- 2.3.1 Booster circuit of booster cylinder
- 2.4 Pressure relief circuit(Pressure-venting circuit)

- 2.4.1 Pressure relief circuit by reversing valve

3.Speed control circuits

3.1 Throttle speed regulating circuits

- 3.1.1 Oil-inlet throttle speed regulating circuit
- 3.1.2 Oil-return/back throttle speed regulating circuit
- 3.1.3 Reversing speed regulating circuit of gear pump
- 3.1.4 Complex speed control circuit by joint gear pump and speed regulating valve
- 3.1.5 Secondary feed circuit of series speed regulating valve
- 3.1.6 Secondary feed circuit by parallel speed regulating valve

3.2 Speed shift circuits

- 3.2.1 Speed shift circuit of flow valve
- 3.3 Synchronization circuit
- 3.3.1 Synchronization circuit of series hydraulic cylinder

4.Excavator training contents

4.1 Excavator hydraulic circuits

- 4.2 To demonstrate mining,discharging,lifting and other actions of a physical/real excavator
- 4.3 To understand the hydraulic system components and working principle of

an excavator, and internal structure and working process of the components.

4.4 Disassembly and assembly of an excavator's hydraulic system

4.5 Electrical control system circuit experiments of an excavator.

4.6 To measure the parameters such as pressure, flow and others of the excavator hydraulic system in experiment.

PLC Hydraulic Excavator Training System Technical Parameters

Description	Specifications
Motor	Power: 400W Speed: 0-1500r/min
Hydraulic Pump	Maximum pressure:2.5MPa Circuit action pressure:0.3-0.8MPa Noise \leq 58dB Dimensions:550mm×350mm×600mm
Power supply	AC supply:AC220V 50HZ DC supply:input AC220V,output DC24V/3A
Dimensions	Bench:1250mm×650mm×1800mm Overall:1850mm×650mm×1850mm