



The Advanced Hydraulic Trainer (52287) outlines the basic Principle of Hydraulic Control System, hydraulic Control System Components & its applications.

### Features

- Compact Ergonomic Design.
- ISO Symbol for each mounted components.
- User Friendly, Self Explanatory Systems.
- Leak proof Safety Measures, sturdy piping & Robust Construction.
- Training Manuals mimic Charts for Operation Ease.
- System Frame with Caster Wheel Arrangement for ease in movement.
- M.S. powder coated cubical plant with standard Instrument Mountings.
- Inbuilt Safety Measures to avoid improper usage
- Wall mounting assemblies of hydraulic actuator & self-reciprocating cylinder.
- Hydraulic motor & Hydraulic Accumulator.
- QRC couplings provided, Tubing for circulation of pressure (Hose Pipe Tubing)
- Manifold for distribution.
- Oil Hydraulic power pack for power supply.
- Flow measuring device provided on the kit.
- Optional component are available to allow fault operation and diagnosis training.

### Experiment

- Study of fundamental principles of Hydraulics & its applications.

Note: Specifications are subject to change.

### Tesca Technologies Pvt. Ltd.

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,  
Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,  
Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com  
Website: www.tescaglobal.com

- Study of Meter-in Circuit & Meter-out circuit.
- Study of Bleed-off Circuit.
- Study of Transverse & Feed Circuit.
- Study of sequencing operation using Pressure Sequence Valve.
- Study of Speed Control, Pressure Control & Flow Control.
- Study of Direction Control.
- Study of Hydraulic valves
- Study of Hydraulic Actuators.
- Study of Hydraulic Power Pack.
- Study of Hydraulic Accumulator & Hydraulic Motor.
- Study of operation of Telescopic Cylinder (Optional).
- Study of operation of Limited Rotary Actuator (Optional).
- Study of flow rate measurement for speed control circuit

### Services Required

- Electric supply 1 $\phi$  230 V AC / 3 $\phi$  supply of 415 V, 50 Hz suitably used for direct on line starting of an induction motor

Technical Specification		
No.	Item Name	Technical Specifications
1	Single Acting Cylinder	Bore: 40 mm x Stroke: 75/100mm, Mounting: Foot
2	Double Acting Cylinder	Bore: 40 mm x Stroke: 75/ 100mm, Mounting: Foot
3	Directional Control Valves	2 No.s, 4/3 way & 4/2, 1/4" Hand Lever Operated
4	Flow Control Valve	1/4" (F), Square Body.
5	Pressure Relief Valve	1/4", 60 Kg/cm <sup>2</sup>
6	Pressure Sequence Valve	1/4" (F), Square Body, 60kg/cm <sup>2</sup>
7	Block Manifold	1/4", 4 ways
8	Male Connector	1/4" Quick Release Couplings
9	Pressure Gauge	Range- 100 Kg/cm <sup>2</sup> , Dial Size: 50/60 mm, Glycerin Filled.
10	Hydraulic Motor	3 LPM, 1/4"
11	Drain Plug	Magnetic type
12	Hydraulic Accumulator	Capacity 0.075 Ltrs, mWP bar: 250 bar, Weight: 0.62 Kg, Connection: 1/2" BSP
13	Hydraulic Hoses	10 Nos.
14	Needle Valve	1/4", 1 No.
15	Flow Measuring Device	01No. Capacity: 1 Litre
16	Oil Hydraulic power pack	MS Powder Coated Oil Tank, Capacity: 25 Liters. with Oil Level Indicator, Gear Pump: 3-5 LPM, 40/60 Bar, Breather, Oil filter & suction, Electric Motor: Single Phase, 1/2 HP/ 1HP, 230VAC / 3φ , 1/2 HP/ 1 HP, 415V AC with DOL starter.
17	Transverse & Feed Circuit	
18	Meter-in Circuit & Meter Out Circuit	
19	Bleed-off Circuit	
20	Pulley Arrangement / Circular Weighing Platform to carry load applied to the actuator, i.e., Double Acting Cylinder	
21	Hydraulic Telescopic Cylinder (Optional)	
22	Limited Rotary Actuator (Optional)	
23	System Dimension - 3.5 Ft. (L) X 2Ft. ((W) X 4.5 Ft (H)	
24	Weight: - Approx 125Kg	

Note: Specifications are subject to change.

**Tesca Technologies Pvt. Ltd.**

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,  
Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,  
Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com  
Website: www.tescaglobal.com