



Product Overview

The **Refrigeration Trainer** is a comprehensive educational and practical training system designed for refrigeration technology instruction, laboratory applications, and hands-on skill development. The trainer enables learners and technicians to perform refrigerant charging, pump-down operations, and full refrigerant recovery while understanding refrigeration cycle principles and electrical/electronic control systems.

The system is engineered with an industrial-grade modular structure, integrated instrumentation, and practical toolkits to support advanced refrigeration training programs.

Functional Capabilities

The Refrigeration Trainer is capable of:

- Charging refrigerant
- Pump down of refrigerant
- Full recovery of refrigerant

Training Equipment Design

The trainer is designed with a durable and ergonomic structure suitable for laboratory and workshop environments.

Mechanical Construction

- Constructed from aluminum and metal plate
- Table top working area of at least **90 cm x 75 cm**
- Electrical/electronic control system mounted on a drawer platform below the table top
- Storage cabinet provided below the drawer platform
- Mounted on four universal caster wheels for mobility

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.



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 India Sales: +91-9588842361



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Refrigeration System Design

The trainer incorporates a complete refrigeration system integrated with electronic and electrical control arrangements.

Included Systems

- Electronic temperature control system
- Electrical control system

Electronic Temperature Control System Components

The refrigeration system shall include at least the following components:

- Refrigerator compressor
- Multi-level wire tube condenser
- Capillary tube
- Hand valve
- Freezing chamber evaporator
- Refrigerating chamber evaporator
- Liquid level glass
- Pressure gauge
- Refrigerator body simulator
- Refrigerator door lamp

Modular Power & Instrumentation Panel

The trainer is equipped with a modular power and instrumentation panel featuring:

- Single-phase power supply arrangement
- Power indicator
- Digital AC voltmeter
- Digital AC ammeter
- Power outlet

Modular Electronic Control Panel

The refrigeration trainer includes a dedicated modular electronic control panel for:

- Refrigeration electronic control operations
- Display of control circuit schematic diagram

Additional Features

- Wiring area for connection of electrical modules and controlled components
- Terminal blocks integrated within the wiring area

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Available Toolkits

The following toolkits and accessories are included with the trainer:

- Portable welding torch
- Rotary-vane vacuum pump
- Pipe bender
- Dual-gauge valve
- Adapter suite
- Monkey wrench
- Tapeline
- Charging hose
- Socket head wrench
- Expand tube reamer
- Cutting-off tool
- Chamfering tool
- Set of connecting leads

Electrical Specifications

Parameter	Specification
Power Supply	220 Vac
Phase	1-Phase
Frequency	60 Hz

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