



### Technical Description:

The unit enables the students to study the Basic Principals of ice plant cycle within a short period. The test rig is designed for the study of thermodynamics of vapour Compression refrigeration cycle by way of demonstration and experimentation. It has a facility to measure various parameters for experimentation. Ice cans are kept in liquid tank, which is cooled by the refrigerant evaporator. As conventional ice plants take 12-24 hours to complete the cycle, this ice plant is specially designed to demonstrate process of ice formation to be complete within period of 4 hours and hence it is most suitable for laboratory use.

### Learning Objects/Experimentation:

- To study the working of Ice Plant.
- To Study the refrigerator circuit.
- To Calculate Co-efficient of performance

### Requirment For Operation:

- Electric supply: Single Phase, 220V AC, 50 Hz, 10 Amp with earth connection .
- Water supply and drainage
- Floor area : 1.5 m x 1m
- Ethyl Glycole t: 25 Ltr.

### Technical Specification:

- Compressor: Hermitically sealed compressor, Kirloskar make.
- Tank : The inner tank shall be fabricated out of stainless steel
- Condenser : Air cooled compatible to compressor
- Condenser Cooling fan : Compatible capacity with permanent lubricated motor.
- Evaporator: Made of Stainless Steel, Insulated with ceramic wool/puf.
- Expansion Device: Capillary Tube Compatible capacity.
- Pressure Gauges: 2 Nos.
- Safety Control: overload and over current protectors for compressor and Time delay circuit.
- Temperature Sensor: RTD PT-100 Type.
- Control Panel comprises of:  
Digital Voltmeter: 0-300 V

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



Export Sales: +91-9829132777  
 India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area,  
 Sitapura Extension, Jaipur-302022, India.



info@tesca.in  
 www.tescaglobal.com

Digital Ammeter: 0-5 Amp.

- Temperature Measurement: Digital Temperature Indicator with multi-channel switch.
- Instruction Manual : An ENGLISH instruction manual will be provided along with the Apparatus
- All Other accessories like filter drier will be provided.
- All the accessories will be mounted on rigid base frame made of M.S. and it will be powder coated

**Control Panel:**

- Standard make on/off switch, Mains Indicator etc

**Scope of Delivery:**

- 1 Self-contained "ICE PLANT TRAINER" Apparatus
- 1 Instruction Manual consisting of experimental procedures, block diagram etc.

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



Export Sales: +91-9829132777  
India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area,  
Sitapura Extension, Jaipur-302022, India.



info@tesca.in  
www.tescaglobal.com