

# Saturation Pressure Apparatus

## Overview

The saturation pressure apparatus tends to demonstrate the relationship between the pressure and temperature of water in a straightforward manner. A temperature limiter and pressure relief valve are fitted as safety devices and protect the system against overpressure.



## Specifications

- The unit consists of pressure boiler with insulating jacket to control the pressure and temperature of water.
- The boiler is provided sensor, temperature sensor and pressure gauge.
- The trainer is provided with a control panel supplied with trainer ON/OFF switch, emergency switch, temperature, heater power and pressure digital displays, heater ON/OFF switch and heater power regulator.
- The temperature and pressure can be

continuously monitored via a digital temperature and pressure displays.

- Siphon tube pressure gauge is also equipped in the unit to indicate pressure.
- A pressure relief valve is fitted as a safety device to protect the system against overpressure.
- The educational unit is provided with a software to demonstrate the measured values

### Experiments

- Marcet Boiler.
- Recording vapor pressure curve of water.
- Relation of temperature and pressure.

### Technical Data

- Temperature sensor range: 0 ~ 350.
- Pressure sensor range: -1 ~ 25 bar.
- Heater power: 2Kw.
- Boiler tank capacity: 3 liters.

### Components



v	Marcet boiler.
2	Pressure gauge.
3	Pressure sensor.
4	Inlet V1.
5	Vent V4.
6	Safety valve.
7	Heater socket.
8	Pressure and temperature sensors sockets.
9	Pressure digital display.
10	Heater power .
11	Siphon tube.
12	Temperature digital display.

### Scope of Delivery

- Saturation Pressure Apparatus (TD - 006)
- Hard copy user manual
- bedo software

### Required for Operation

- Laboratory PC

### Options

- Digital Content (BI-01)