

## TH 105A TRAINING BOILER, 500 kg/hr



### GENERAL DESCRIPTION

This is a set of steam boiler and standard accessories for a study of boiler performance.

The basic unit consists of a small industrial boiler with a burner, a feed water system, a fuel system, and instruments for monitoring boiler operation as well as instruments for control and safety. The complete unit can be arranged as a package on a pallet for easy site installation.

The available steam is adequate for use in process such as heat exchanger and for use with prime mover such as steam turbine.

Instruction manual is also included.

### EXPERIMENT CAPABILITIES

- Pressure, temperature and flow measurements.
- Heat of combustion, heat given to steam and boiler efficiency.

### TECHNICAL DATA

- Boiler unit:
  - Type : Vertical, water tube
  - Rated heat output : Approx. 313 kW (260,500 kcal/h)
  - Equivalent evaporation : Approx. 500 kg/h steam
  - Maximum working pressure : 10 kg/cm<sup>2</sup> (0.98 MPa)
  - Measuring instruments : Pressure gauge for steam outlet  
: Temperatures for feed water steam outlet and exhaust stack
  - Safety devices : Safety valve  
: Low level alarm.
  - Boiler accessories : Steam pressure regulator  
: Steam separator  
: Feed water pump  
: Stack 6 m stainless steel with elbows
- Burner:
  - Type : Forced draft, pressure atomized
  - Control : On – Off
  - Fuel : Diesel or kerosene (LPG is available as an option.)
- Fuel system
  - Fuel tank
  - Fuel flow meter
  - Oil strainer
- Feed water system
  - Resin filter for public water
  - Soft water tank
  - Water meter for steam rate monitoring
- Power supply : 220V, 1 Ph, 50Hz. Other power supply is available on request.

### OPTIONAL EQUIPMENT

- Optional equipment such as condenser or cooling tower is available on request.
- Portable pH meter

### Boiler Package

Net (unpacked) shipping dimensions WxLxH : 200 x 320 x 225 cm  
Net weight : N/A

