

HP 405 MULTI PUMP TEST SET, Motor Dynamometer



Photograph includes optional equipment

GENERAL DESCRIPTION:

This is a self contained set for studying the characteristics for various types of pumps.

The unit consists of four different types of pumps namely- centrifugal, turbine, reciprocating and axial flow pump, a common storage tank, and measuring instruments. Each pump is driven by a motor dynamometer for measuring TRUE pump input power. Speed control is by an inverter. By manipulating flow control valves and a selector switch, each pump can be operated individually. The unit is floor standing with removable supports.

TYPICAL TESTS:

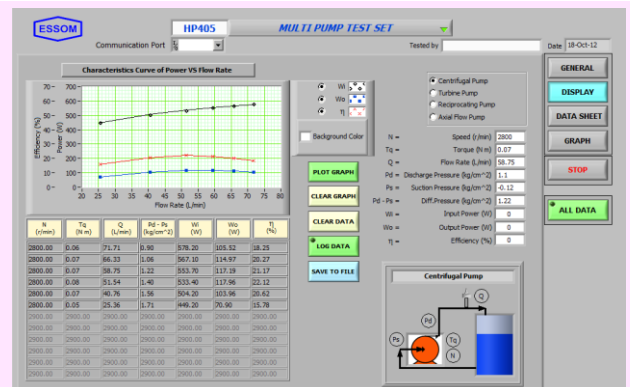
- Flow rate vs head at various speeds.
- Pump input, output, and true efficiency at various speeds.
- Effect of pulse chamber for reciprocating pump.

TECHNICAL DATA:

- Pumps :
 - Centrifugal pump with maximum flow rate 80 lpm and maximum head 18 m water.
 - Turbine pump with maximum flow rate 30 lpm and maximum head 30 m water.
 - Reciprocating pump with reduction gear, maximum flow rate 15 lpm and maximum head 30 m water.
 - 69 mm in axial flow pump with stainless steel impeller, guide vanes, shaft and casing, maximum flow rate 400 lpm and maximum differential head 1.5 m water.
- Accessories for the reciprocating pump : Dash pot 2ea pulse chambers, and pressure relief valve.
- Motor dynamometers for all pumps.
- Selector switch : For operations of each pump alternatively.
- Speed control : Inverter for controlling pump speeds alternatively by selector switch.
- Measuring instruments:
 - Flow rate : Water meter and stop watch for centrifugal, turbine and reciprocating pumps
 - Pressures : Pressure gauges for centrifugal, turbine and reciprocating pumps at common inlet and outlet.
: Differential pressure gauge for axial flow pump.
 - Sensors with digital display : Speed for each motor dynamometer.
: Torque for each motor dynamometer.
: Flow rate for axial flow pump.
- Control panel : Pump selector switches, inverter and display.
- Power supply : 220V 1Ph 50 Hz. Other power supply is available on request.

OPTIONAL EQUIPMENT:

- HP 405-050 Computer Interface
This includes sensors, computer interface unit, and software for data display and analysis by computer (separately supplied).



Net (unpacked) shipping dimensions WxLxH : 85 x 155 x 85 cm
Net weight : Approx. 185 kg

