

COMPUTER OPERATED WATER PUMP TEST RIG

MODEL: PCF09



FEATURES

- Compact, comprehensive, sturdy design
- Versatile operation
- Self contained system
- Menu driven screen
- User friendly data acquisition system

DESCRIPTION

An invaluable aid in the effective understanding of the performance characteristics of a variety of pumps. An electric motor is used as a drive unit. It has a facility to vary the speed of the pumps to get various performance parameters (Optional). Standard configuration will have a centrifugal pump and Reciprocating pumps. Other types of pumps can be supplied on request. The trainer is complete with transducers to measure relevant parameters.



NIYO SOFTWARE
Unit 18, Durgin Industrial Estate,
Plot no. 14, Sr. No. 17/1B, Kothrud Ind. Area
Pune 411 029
Pho. no. 020 2546 7296, Tele Fax no. 020 400 1603

The parameters are fed to the computer via a signal conditioning unit, the interfacing and communication system along with necessary power supply. The acquired data is then analysed and displayed in tabular/ graphical format by the software provided. The software is Windows based user friendly and menu driven. Facility to print the data helps student keep record of their experiments.

INSTRUCTION MANUAL

Self-explanatory operating manuals are provided with each system. Detailed theory as well as practical exercises is also included in the manual.

LIST OF EXPERIMENT

1. To study the construction and operation of water pumps.
2. To study the performance characteristics of water pumps.
3. Determination of total head, power input and efficiency of a pump.

COMPONENTS

1. Pump
2. Sump tank
3. Flow transmitter
4. Electric Motor
5. Torque Transmitter
6. Pressure Transmitter
7. RPM Transmitter
8. Data acquisition and interfacing system
9. Software



OPTIONAL ADDITIONAL

Computer-IBM compatible with Colour monitor.

1. Variable speed drive unit

Note: Details of attachments can be made available on request.

SERVICES REQUIRED

1. Electric supply
2. Water supply and drain arrangement

MODEL

- PCFXX-A-1: Sump Tank: MS, Fibre lined, Load Cell for power measurement
- PCFXX-A-2: Sump Tank: MS, Fibre lined, 1 Ph Energy meter Transmitter
- PCFXX-A-3: Sump Tank: MS, Fibre lined, 3 Ph Energy meter Transmitter
- PCFXX-B-1: Sump Tank: Plastic, Load Cell for power measurement
- PCFXX-B-2: Sump Tank: Plastic, 1 Ph Energy meter Transmitter
- PCFXX-B-3: Sump Tank: Plastic, 3 Ph Energy meter Transmitter
- PCFXX-C-1: Sump Tank: SS, Load Cell for power measurement
- PCFXX-C-2: Sump Tank: SS, 1 Ph Energy meter Transmitter
- PCFXX-C-3: Sump Tank: SS, 3 Ph Energy meter Transmitter

NiYO Engineers
 Unit 1B, Devgiri Industrial Estate, S. No. 17/1B Plot No. 14, Kothrud, Pune 411 029
 INDIA, Tel-91 20 2546 5004, 2546 8051, 2546 7296 Telefax - 91 20 2546 8051
 e-mail- sales@niyoindia.com Web: www.niyoindia.com



(1) Since research and development is an on-going activity, the specifications mentioned herein are subject to change without notice
 (2) Photographs are indicative only.