

## **PUMP TEST FACILITIES**

All E.I.M. Submersible Pumps pass through strict inspection and performance tests before ex-works shipment.

There are two lines of the pump test facilities, which carry out performance tests in order to satisfy the customers' demands and to give the best quality assurance for all E.I.M. products.

One line is for large sized pumps with the large discharge capacities and the other is for small and medium sized pumps with the moderate discharge capacities.

The computer-aided pump testing systems are provided on both of these two lines and all the data of such performance tests can be observed on displays in real time and can be transmitted to the host computer and stored on its hard disc.

Thus, the quality assurance of all E.I.M. Submersible Pumps is guaranteed.

All the stored performance data for all E.I.M. Submersible Pumps can be accessed for immediate reference. These data contribute to our current and future R. & D. activities.



Large Water Tank for Large Sized Pumps

## PERFORMANCE TEST FACILITIES

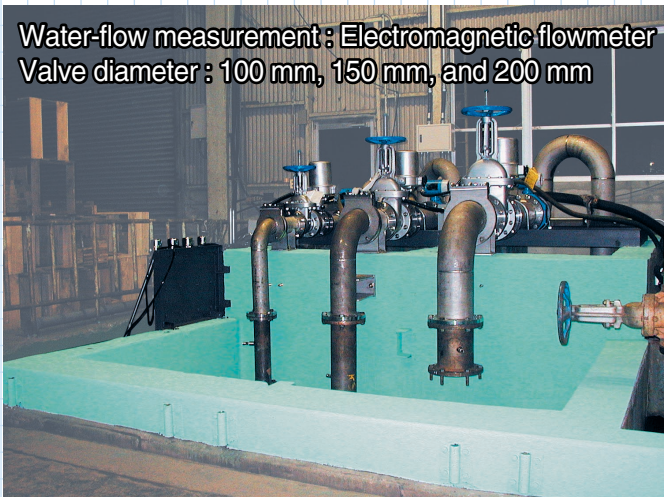
The performance tests for large sized pumps are carried out in the large water tank which has sufficient to conduct efficient performance tests.

The performance tests specifications are as follows :

- Flow rate : Up to 300 m<sup>3</sup> / min ( 80,000 GPM )
- Discharge Port Size : Up to 1,600 mm $\phi$  ( 64 inch )
- Motor Power : Up to 500 kW ( 700 HP )  
with low-voltage of 200 to 600 V  
and medium-voltage of 1,000 to 4,160 V
- Volume of the Tank : 740 m<sup>3</sup> ( 200,000 Gallons )

All the figures measured by the instrumentation will be transmitted to the host computer and to desktop PCs through the local area network connected by optical fiber cables. These data can be observed on computer displays and printed out in real time.

These data are stored in the host computer and contribute to the product development.



Water-flow measurement : Electromagnetic flowmeter  
Valve diameter : 100 mm, 150 mm, and 200 mm

Water Tank for Medium and Small Sized Pumps



Control Console

## COMPUTER-AIDED PUMP TESTING SYSTEM

Our Computer-Aided Pump Testing System consists of ;

- Host Computer
- Desk Top Personal Computers
- Pump Control Consoles
- Programmable Logic Controllers
- Printers
- Measuring Instruments
- Optical Fiber Cable Network
- Other Auxiliary Equipment

This system connects all the equipment from the instruments to the host computer and the desk top PCs through the local area networks by optical fiber cables.

All the data measured with the instruments are transmitted to the host computer automatically and the optical fiber cable network enables real time observation of such performance tests on the displays of the desk top PCs and enables real time print out of the test results.

These data stored in the host computer also contribute to our current and future R. & D. activities and product development.

Schematic Diagram of E.I.M. Computer Aided Pump Testing Facilities :

