

Assembly and maintenance exercises pipes, valves, fittings and pumps

HL 962
Assembly stand for pumps



HL 962.01
Standard
chemical
pump



HL 962.02
Canned motor pump



HL 962.03
Side channel
pump



HL 962.04
Standard chemicals
pump with
magnetic
clutch



HL 962.32 Pipe systems and fittings
Set of pipes, valves and fittings and connecting elements,
adapted to the respective order configuration.

HL 962.30
Tank system



Learning objectives

Familiarisation with plant components:

- different pumps and their drives
- elements of pipeline construction
- valves and fittings, fastening and sealing elements, measuring instruments

Electrical connections of a pump drive plus displays and controls

Alignment of pump and drive motor

Operational measurements in piping and pumping systems

Repair and maintenance tasks and procedures

Reading and understanding technical documents such as:
drawings, schematics or original operating instructions

Familiarisation with the procedures for commissioning

Repairing machines such as pumps, piping systems and valves and fittings is an important part of the work of maintenance technicians. In particular, the steps are divided into:

- the removal and installation of pumps for inspection, repair or replacement
- aligning the drive
- commissioning and testing the pump, e.g. for leaks

The complete exercise system that allows the individual steps to be practised consists of the following components:

- 1 the assembly stand HL 962 for holding pumps
- 2 a selection of typical centrifugal pumps in process engineering HL 962.01 – HL 962.04
- 3 the tank system HL 962.30
- 4 and the connecting pipes HL 962.32

Several assembly stands with identical or different pumps can be integrated into the training system and expanded to create a network.

The main component of the training system is the assembly stand, which holds the pumps. This assembly stand is prepared for the installation of different centrifugal pumps and provides the drive. Used in conjunction with the tank system and the connecting lines results in a complete system with a closed water circuit.

The training system represents complex project work for training pipeline and plant fitters as well as for service and maintenance mechanics. Several students can cooperate in a small study group. The planning and exercise instruction manuals can take several days to complete. The detailed technical documents provided, in conjunction with the teacher's notes, effectively support the learning process.

