

HL 960

Assembly station: pipes and valves and fittings



Learning objectives/experiments

- design and function of valves and fittings, piping elements and system components
- planning of piping and system installations according to specification, e.g. a process schematic
- selection of components and drafting of requirement lists
- technically correct preparation and execution of system assembly
- reading and understanding engineering drawings and technical documentation
- operational testing of the constructed systems (in conjunction with suitable water supply and disposal)

Description

- practically oriented assembly of real piping and system installations
- detailed, practically-based familiarisation with system components

HL 960 is a practical exercise and training system which provides an entirely authentic introduction to industrial pipes and valves and fittings. The assembly kit comprises a wide variety of valve and fittings, piping elements and one pressure tank, as well as sealing and fastening components. A sturdy U-shaped mounting frame permits assembly of a variety of piping systems, plant components and functional units. The piping elements are prepared ready for assembly, and matched to installation lengths and flange connections. The components permit multiple assembly and disassembly.

The training system is designed for students to work together in a learning group. The complete process of constructing a system may take several days if all the steps are followed: obtaining information, planning, deciding, executing, checking and assessing.

The detailed instructional material assists in creating an effective and ordered learning process. It contains technical descriptions of all the system components as well as various specimen systems and installations.

Finished setups can be subjected to real testing with water. The pump system HL 960.01 (closed circuit) is available for this purpose.



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- 1 mobile frame, 2 DN15 pipe, 3 connection for HL 960.01 (outlet),
- 4 connection for HL 960.01 (inlet), 5 various valves and fittings, 6 DN25 pipe,
- 7 pressure vessel with manometer



The picture shows HL 960 with a completed specimen installation. In the foreground: pump system HL 960.01.

Specification

- [1] assembly exercise for engineering training
- [2] piping network comprising pipe bends, elbows,T-pieces and transitions in nominal widthsDN15, 25, 40
- [3] pipe connections via flanges or cutting ring screw fittings
- [4] standard commercially available flanged fittings: shut-off valve, non-return valve, strainer, condensation drain, inspection glass, ball valve, gate valve
- [5] ball valve with cutting ring screw fitting
- [6] pressure vessel with manometer, connection via DN15 flanges
- [7] connection to water supply via hose with coupling
- [8] mobile frame for mounting of pipe network
- [9] the kit forms part of the GUNT assembly, maintenance and repair practice line

Technical data

Flange fittings

- grey cast iron
- nominal pressure: PN16 for DN15, 25 / PN10 for DN40

Ball valve with cutting ring screw fitting

- brass, nickel-plated
- nominal pressure: PN25
- nominal size: G1/2"

Manometer: 0...4bar

LxWxH: 1540x1840x2020mm

Weight: approx. 300kg

Required for operation

Water connection and drain via hoses with couplings

Scope of delivery

- 1 frame
- set of valves and fittings, pipes, piping elements with sealing and fastening material
- 1 set of tools
- 1 set of instructions, comprising drawing set and instructional material



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Optional accessories

065.96001 HL 960.01 Assembly and Alignment of Pumps and Drives