TEST STAND FOR HYDRAULIC PUMPS AND MOTORS

Test Components

- Hydraulic pumps and motors
- Gear pumps and motors
- Screw spindle pumps
- Piston pumps and motors
  (Axial, radial, and reciprocating piston pumps)
- Vane pumps and motors
- Orbital motors
- Gerotor

Automated Test Procedures

- Run-in procedures
- Performance tests (load simulation / efficiency verification)
- Suction pressure control
- Leakage test
- Controller check/adjustment

<< TECHNICAL DATA

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Hydraulic Functions

- Automated monitoring of oil tank level, filter condition, motor and oil temperature
- Load circuit according to power class
- Control pressure supply
- Leakage: 2–75 l/min
- Hydraulic load simulation (optional with energy recovery)
- Conditioning (temperature control and filtration)

Test Setup

- Operator-friendly 180° accessibility
- Crane loading possible
- Quick-clamping system for test specimens to optimize setup times
- Quick couplings for control pressure connections
- Optional: test door with drive

Safety

// Testing takes place inside a test cell, providing protection against high-pressure media leakage.

// The test cell is glazed with laminated safety glass, class BR2 according to DIN EN 1063.

// The test cell is monitored by automation.

// Adjustments on the test specimen during pump/motor operation are only possible under safe pressure conditions according to hazard analysis.

// The test bench complies with the European Machinery Directive and applicable standards.

TECHNICAL DATA

Medium:
- HLP46 or equivalent

Hydraulic Data:
- Load circuit:
  Standard pressure: 350 bar
  High pressure: up to 500 bar
- Flow rate:
  Stage 1: up to 25 l/min
  Stage 2: up to 250 l/min
  Stage 3: up to 500 l/min
- Leakage circuit:
  2-75 l/min

Drive Motor:
- Variable speed up to 3000 rpm
- Power up to 315 kW

Measurement Technology:
- Pressure: ±0.5% FS
- Flow: ±0.5% of reading
- Torque
- Temperature conditioning

Electrical Supply:
- 3 x 400 V AC, 50 Hz

Dimensions and Weight:
- Approx. 4500 x 1950 x 2500 mm (LxBxH)
- Approx. 4 t

Optional Features

- Acoustic enclosure
- Oil cleanliness testing (particle sensor)
- Higher hydraulic power classes
- Safety pilot for adjustments under pressure
- Setup table
- Adapter storage
- Electrical control of test specimens

Contact // Sales Manager Test Systems
T +43 732 7892 0, testsystem@hainzl.at

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