Hydraulic test- and pressure test unit

**HPS380S**

Developed for pressure test with Skydrol, flushing, particle counting and insufflation with compressed air for pipes of Airbus A380-sections 13 and 18/19.

Can be adapted for other aircraft types

- Automatic test stand with predefined test sequences
- Fully automatic control of the complex test runs and display of all necessary measuring parameters (flows, NAS Class, pressure, temperatures, electric parameters, etc.) on the monitors
- Use of dummy valves for the tests as replacement for the aircraft valves
- Hydraulic supply with pressure-, flow- and temperature controlled medium (Skydrol)
### GENERAL INFORMATION

- Compressed air supply for the unit with high storage capacity
- High versatility due to automotive ground trolley
- Test trolley for selftest of the unit
- Low length of lines and pipes due to a separate control trolley close to the UUT with radio transmission
- Three filters for high exhaust air cleaning
- 2 operation stations

### TECHNICAL DATA

#### Hydraulic parameters:

- **Hydraulic supply:**
  - Medium: Skydrol LD4
  - Tank: approx. 500 liter (132.1USgal)

- **Radial-piston pump for high pressure circuit:**
  - $p_{\text{max}}$: 500bar (7251.9psi)
  - $Q_{\text{max}}$: 10lpm (2.6USgpm)

- **Internal-gear pump for circulation circuit:**
  - $p_{\text{max}}$: 5bar (72.5psi)
  - $Q_{\text{max}}$: 170lpm (44.9USgpm)

- **Two axial-piston pumps for circulation circuit:**
  - $p_{\text{max}}$: 75bar (1087.8psi)
  - $Q_{\text{max}}$: each 80lpm (21.1USgpm)

- **Two particle counting devices for purity grade instruction according NAS**

- **Compressed air supply:**
  - Output pressure: 25bar (362.6psi)
  - Air flow: max. 4000lpm
  - (1056.7USgpm)
  - 2 pressure tanks, capacity: 2000 liter (528.3USgal)

#### Measurement range:

- **Pressure:**
  - 0 - 100bar ± 0.5% o.m.r.
  - (0 - 1450.4psi ± 0.5% o.m.r.)
  - 0 - 500bar ± 0.5% o.m.r.
  - (0 - 7251.9psi ± 0.5% o.m.r.)

- **Flow:**
  - 0 - 100lpm ± 0.5% o.m.r.
  - (0 - 26.4USgpm ± 0.5% o.m.r.)

- **Temperature:**
  - 0 - 100°C ± 1K
  - (0 - 212°F ± 1K)

#### Electrical parameters (requirements):

- 3/N/PE AC 50Hz 400V
- Nominal current: 210A
- Power: 145.5kVA
User software:

- General survey of the test circuit
- Display of important parameters
- Choice of preassigned test sequences
- Printing of protocols

Components of the pressure station with electrostatic-precipulator:

- Compressed air supply of the unit via on-site connection
- Humidity sensor in the inlet pipe

Test trolley for the self test of the unit:

- Simulation of the resistance of the pipes of the aircraft sections
- Electric and pneumatic control of the dummy valves

Control trolley and operation unit of the dummy valves:

- Enabling of the performance of test runs close to the UUT’s

OPTIONS

Many options are possible for adaption, e.g. adaption to other aircraft types, different operation stations etc.