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-precipitator:**

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.

Technical data are subject to change!