Mobile Hydraulic Test Stand for Long Range Wide Body

Developed for Airbus types:
WB: A300-600 (passenger/cargo version) and A310,
LR base: A330-200/300 and A340-200/300,
LR stretch: A340-500/600

Can be adapted for other aircraft types

> Hydraulic tests: pressurize by Skydrol, flushing, counting of particles, blowing out by compressed air

> Use of dummy valves for testing, substitute for aircraft valves

> Hydraulic supply by pressure / flow / temperature controlled medium (Skydrol)

> Mobility of the unit ensures high flexibility during operation

> 3 filter levels ensure high purity of exhaust air
GENERAL INFORMATION

> Fully automatic control of complex test runs and indication of all necessary measuring parameters at monitors (flow, NAS class, pressures, temperature, electro parameters, etc.)
> Compressed air supply for the unit with high storage capacity
> Short line / pipe connections by an individual control trolley, close-by the UUT (radio transmission)
> Automatic testing device with pre-defined testing chronology
> 2 control panels
> 3 separate test circuits (yellow, green and blue circuit)

TECHNICAL DATA

> **Hydraulic parameters:**

  Radial piston pump for high pressure circuit:
  \[ P_{\text{max.}}: 370\text{bar (5.366psi)} \]
  \[ Q_{\text{max.}}: 10\text{lpm (2.6USgpm)} \]

  Internal gear pump for circulation circuit:
  \[ P_{\text{max.}}: 5\text{bar (72.5psi)} \]
  \[ Q_{\text{max.}}: 290\text{lpm (76.6USgpm)} \]

  2 axial piston pumps for scavenging circuits:
  \[ P_{\text{max.}}: 130\text{bar (1.885psi)} \]
  \[ Q_{\text{max.}}: \text{each } 100\text{lpm (each 26.4USgpm)} \]

  Main reservoir: approx. 750 liter (198USgpm)

  7 particle counters for determination of the purity level, i.a.w. NAS

> **Measurement range:**

  Pressure:
  \[ 0 - 160\text{bar (0 - 2.320psi)} \pm 0.5\% \text{ o.m.r.} \]
  \[ 0 - 400\text{bar (0 - 5.800psi)} \pm 0.5\% \text{ o.m.r.} \]

  Flow:
  \[ 1 - 100\text{lpm (0.3 - 26.4USgpm)} \pm 0.5\% \text{ o.m.r.} \]

  Temperature:
  \[ 0 - 100^\circ\text{C (0 - 212^\circ\text{F}) } \pm 1\text{K} \]

> **Operating conditions:**

  Temperature: \[ 0 \text{ to +40^\circ\text{C}} \]
  \[ (+32 \text{ to 104^\circ\text{F}}) \]

  Humidity: 20 to 90%

> **Medium:**

  Skydrol LD4

> **Electrical parameters (requirements):**

  3/N/PE AC 50Hz 400V
  Nominal current: 210A
  Nominal power: 145.5kVA

> **Dimensions and weight:**

  Length: 4.100mm (161.4inch)
  Width: 2.390mm (94.1inch)
  Height: 2.140mm (84.3inch)
  Weight: approx. 5.000kg (11.023lb)

> **Blow-out system:**

  Output pressure: 25bar (362.6psi)
  Air volume: max. 4.000lpm
  \[ (\text{max. } 1.056.7\text{USgpm}) \]
  Pressure reservoir capacity: 2.000 liter (538USgal)
Pressure component, pneumatic with switch cabinet, compressor and pressure reservoir

Mobile pressure system with positioner

Two loop through trolleys

Four particle counter trolleys

Technical data are subject to change!