

**PNEUMATICS** 

# Test Stand For Pneumatic Valves





The equipment is developed to test different pneumatic engine components for troublefree function.

# Testing of:

- Bleed Valves
- Butterfly Valves
- HPT/LPT ACC Valves
- Solenoid Valves
- Differential Pressure Switches
- Pressure Switches
- Oil Tanks

- > Modular pneumatic circuitry provides many different interconnections
- > Hydraulic fixtures for easy UUT mounting
- Manual and automatic test procedures
- > Ergonomically designed test and operation area with rotatable and pivotable operating arm and touch panel
- > Evaluation of electrical parameters of the UUTs

# safety in test > safety in flight 5/17/71/19

#### **GENERAL INFORMATION**

- > Stainless steel profile frame, aluminium front panels and doors or covers of stainless steel
- > Big clamping bed for diverse adaptions for UUT mounting
- > Broad sliding doors of laminated safety glass (LSG) and integrated safety door monitoring to protect the user
- > Colourless anodized front panels with bilingual labelling (German and English) are permanently resistant against mineral and synthetic oils, fuels and cleaning detergents
- > Remote maintenance of the test stand by the Ethernet connection
- > Compact setup and easy accessibility for maintenance tasks

#### **TECHNICAL DATA**

# > Electrical supply (requirements):

Mains supply: 3/N/PE AC 50Hz 400V

Nominal current: max. 10A Power: 7kVA Preliminary fuse: 16A

#### > Pneumatic supply (requirements):

Compressed air:

Pressure : 6bar (87.0psi)
Flow : min. 700lpm (184.9USgpm)

<u>In-house nitrogen line:</u>

Pressure : 27bar (391.6psi)
Flow : min. 700lpm (184.9USgpm)

Nitrogen bottle:

Pressure: 65bar (942.7psi) Flow: min. 700lpm (184.9USgpm)

# > Operating conditions:

Ambient temperature: 5 to 35°C

(41 to 95°F)

Storage temperature: 0 to 60°C

(32 to 140°F)

Height: up to max. 1,000m MSL

(3,280ft)

Rel. humidity: 5 to 95%

(non-condensing)

Max. noise emission: <68.0dB(A) in 1m distance

# > Dimensions and weight:

Width: approx. 3,400mm (133.9in)
Depth: approx. 2,500mm (98.4in)

(incl. swivel arm)

Height: approx. 2,550mm (100.4in)

Weight: approx. 1,950kg (4,300.0lb)

# safety in test > safety in flight 7/17/7/19

#### **MEASUREMENTS**

#### > Pressure measurements:

#### Measuring circuit 1:

0 to 1bar (0 to 14.5psi) 0 to 10bar (0 to 145.0psi) 0 to 60bar (0 to 870.2psi)

# Measuring circuit 2:

0 to 1bar (0 to 14.5psi) 0 to 10bar (0 to 145.0psi) 0 to 60bar (0 to 870.2psi)

#### <u>Differential pressure measurement:</u>

0 to 0.2bar (0 to 2.9psi)

Tolerance: ±0.25% of measuring range

#### > Flow measurements:

#### Flow measuring track 1:

0.05 to 2.5NI/min (0.013 to 0.7USgpm) 0.7 to 35NI/min (0.18 to 9.2USgpm) 5.4 to 270NI/min (14.3 to 71.3USgpm)

# Flow measuring track 2:

0.2 to 10NI/min (0.05 to 2.6USgpm) 2 to 100NI/min (0.5 to 26.4USgpm) 14 to 700NI/min (3.7 to 184.9USgpm)

Tolerance: ±1% of full scale

#### > Current measurements:

(2-off) 0 to 1ADC

Tolerance: ±0.5% of measuring range

#### > Voltage measurements:

(2-off) 0 to 35V (1-off) 0 to 10Vrms

Tolerance: ±0.5% of measuring range

# > Temperature measurements:

(1-off) -20 to +80°C (-4 to +176°F) (2-off) 20 to 90°C (68 to 194°F)

Tolerance: ±1°C (±1.8°F) absolute

### **OPTIONS**

Various options are available to meet our customers' requirements. e.g.: Adaption to numerous UUTs, test program command, dimensioning,...