Engine Driven Hydraulics Pumps Loading System

The loading system is developed for use with the AIRBUS A400M engine (TP400-D6) test stand.

It is possible to adapt this loading system for other aircraft engines.

- The equipment supplies the engine driven pump with hydraulic oil.
- The pump can be loaded by controlling the flow.
- Cooling of hydraulic oil is ensured.
- The return pressure of hydraulic oil is controlled.
## MISCELLANEOUS

- The system is operated and controlled using an external control unit.
- The temperature is controlled by the engine test stand.
- The test bench has an ergonomic and compact design.
- The test bench can be transported by fork lift truck or by crane.

## TECHNICAL DATA

### Electrical connected loads:
- **Power supply:**
  - 3/N/PE AC 50Hz 400V
  - Nominal current: 25A
- **Control unit supply:**
  - 2/DC/24V
  - Nominal current: 1.4A

### Hydraulical parameters:
- **Input pressure:** max. 250bar (3,626psi)
- **Flow:** max. 250lpm (66USgpm)
- **Main reservoir:** 60l (15.9USgal)
- **Filtration level:** 3μ filter

### Compressed air supply:
- **Pressure:** 4.5 to 10bar (65.3 to 145psi)
- **Flow:** 220lpm (58USgpm)
- **Nominal diameter:** 3/8”

### Cooling water supply:
- **Pressure:** 3 to 16bar (43.5 to 232psi)
- **Flow:** 20lpm (5.3USgpm)
- **Nominal diameter:** 1 1/4”

### Medium:
- SKYDROL Type IV and V

### Control range:
- **Temperature:** 0 to 100°C (32 to 212°F)
  - (required values can be set manually or from the engine test stand)
- **Flow:** 10 to 250lpm (2.6 to 66USgpm)
  - (required values can be set manually or from the engine test stand)

### Measurement range:
- **Pressure:** 0 to 400bar (0 to 5,802psi)
  - ±0.5%
- **Flow:** 10 to 250lpm (2.6 to 66USgpm)
  - ±1%
- **Temperature:** 0 to 100°C (32 to 212°F)
  - ±1.5°C (±2.7°F)

### Dimensions and weight:
- **TEST BENCH <HPLS400+1>**:
  - Width: 1,970mm (6.5ft)
  - Depth: 1,130mm (3.7ft)
  - Height: 1,280mm (4.2ft)
  - Weight: 830kg (1,830lb)
- **CONTROL UNIT <HPLS400+2>**:
  - Width: 250mm (0.8ft)
  - Depth: 330mm (1.1ft)
  - Height: 125mm (0.4ft)
  - Weight: 4.8kg (10.6lb)

Technical data are subject to change!