



NOZZLE PRESSURE RATIO

CONTROL





†††**NEOMETRIX** The Complete Engineering Solutions Company

An ISO 9001-2008 Certified Company

Company Profile:

Neometrix Technology Pvt. Ltd. is a Noida (India) based complete engineering solutions company.

We specialize in Hydraulics (We have an association with Parker), Mechanical Test Benches, Complete PC Based Automation Solutions (We are National Instruments, USA (www.ni.com) Alliance Partners.)

Parker USA (www.parker.com) are world leader in Hydraulics and the National Instruments USA (www.ni.com) are world leader in PC Based Test Measurement and Automation.

With such alliances and our own engineering capabilities, we are in a position to deliver you state of the art world class Test Rig.

Introduction:

The semi automatic Test Rig is designed/developed & fabricated for carrying out the testing of the Nozzle Pressure Ratio Control (NPRC), which are the part of the Reheat fuel control unit system of the aircraft.



Power Pack System

The Test rig has its power pack mounted on a frame with anti vibration pads
The ATF Power Pack
System comprises of the following key components.

- Reservoir
- Pump Inlet Shut Off Valve:
- Filtration System
- Pump
- Fuel Pump Outlet
 Relief Valve
- Motor
- Cooling System
- Scavenging System

Major Components of the Test rig

Test Rig ATF Power Pack System

Test Rig ATF System Controls & Measurements

Scavenging System

Test Rig Air & Vacuum System

Test Rig Air & Vacuum System Controls & Measurements

Data Acquisition & Control System

Industrial Cabinet housing the DAQ System, Industrial Computer and Monitor

Test Rig Software

Data Recording, Storage & Reporting System

Test Rig Safety Systems

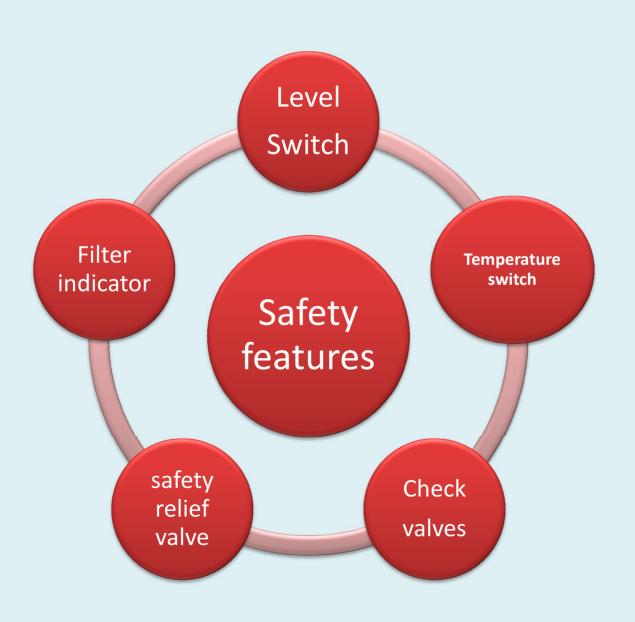
Operator Safety Systems

Features:

Key feature of the proposed solution are:

- SAFETY
- USER FRIENDLINESS

safety features have been provided for the system, keeping in view the highly inflammable nature of the ATF fluid.



Specification:



Power Pack control system

The ATF Power Pack System comprises of the following key components

- Reservoir
- Pump Inlet Shut Off Valve:
- Filtration System
 - Suction of the Pump:
 - Discharge of the Pump:
 - Tank Return Line:
- Pump
- Fuel Pump Outlet Relief Valve
- Motor
- Cooling System
- Scavenging System

We use Dome Loaded Pressure

Controller. The dome is loaded

through pneumatic and the pneumatic

pressure is controlled through I/P

regulator



Pressure controller

We use Dome Loaded Back Pressure Controller. The dome is loaded through pneumatic and the pneumatic pressure is controlled through I/P regulator





the pneumatic pressure is controlled through I/P regulator.

The control is pneumatic to make the system flameproof

Suitable pressure gauges are used for measuring Test Rig Air/ Vacuum pressure



Neomatrix Product Ranges

Heat Transfer Systems Testing

Burst Test for Radiator & Condensers

Pressure Cycle Test for Radiator & Condensers

Vibration Test for Radiator & Condensers

Combined Pressure & Vibration Test

Combined all above mentioned Test

Endurance Test Machines

Door Testing Machine

Tyre Rim Testing Machine

Steering Testing Machine

Gear handle testing Machine

Ring and Gear tooth Testing Machine

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