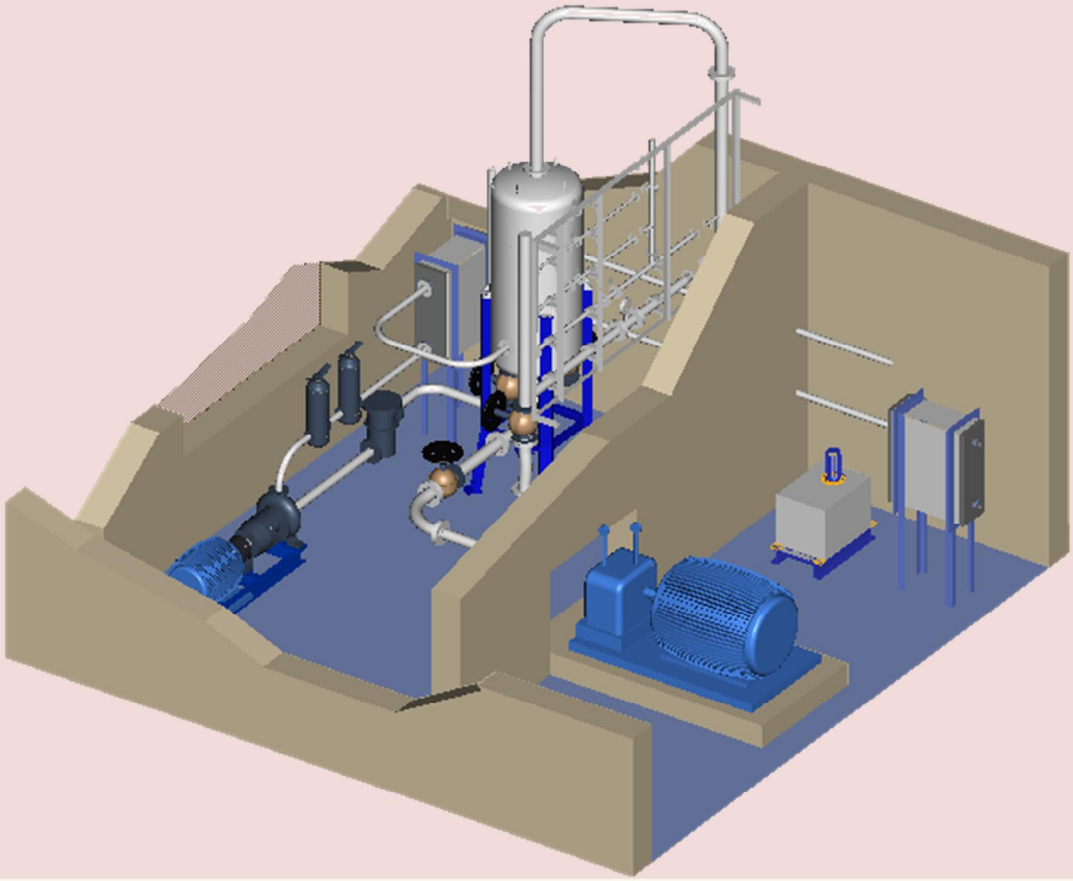
2011

NEOMETRIX



[TESTING OF PUMP DTSN-82]

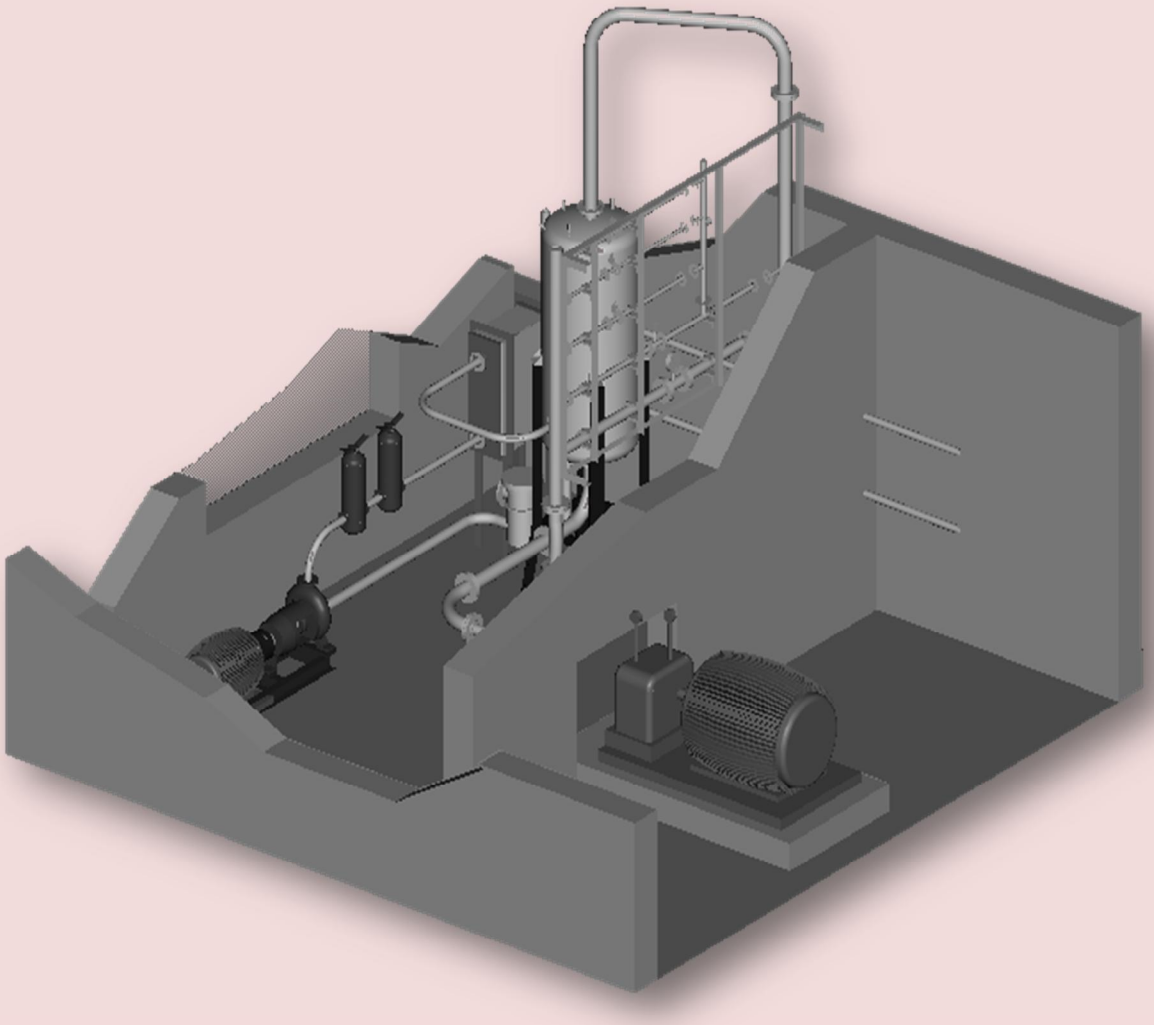
Our products are very popular with high technology industries like Automotive, R &D, Chemical, Oil & Gas Shipping, Defense, & Aviation etc.

NEOMETRIX
The Complete Engineering Solutions Company

Testing of pump DTSN-82

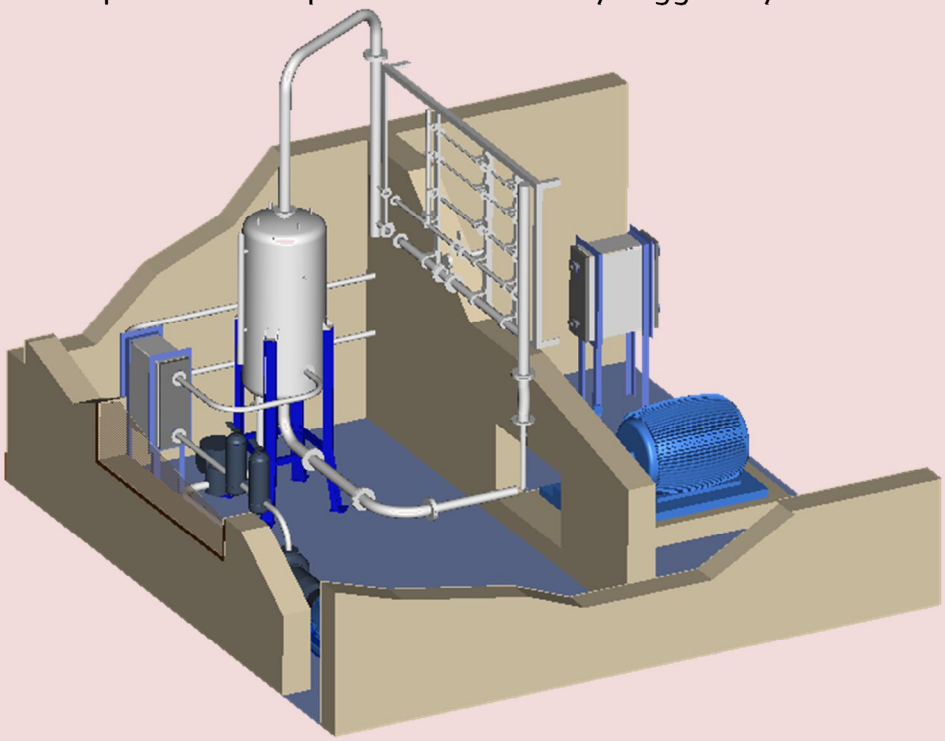
INTRODUCTION

The purpose of this test rig is to carry out the running in and testing of the centrifugal fuel booster pump DTSN-82,whichis the part of the fuel injection system of the air craft, at different input absolute pressure and corresponding delivered flow at varied RPM of the unit under test.(UUT)



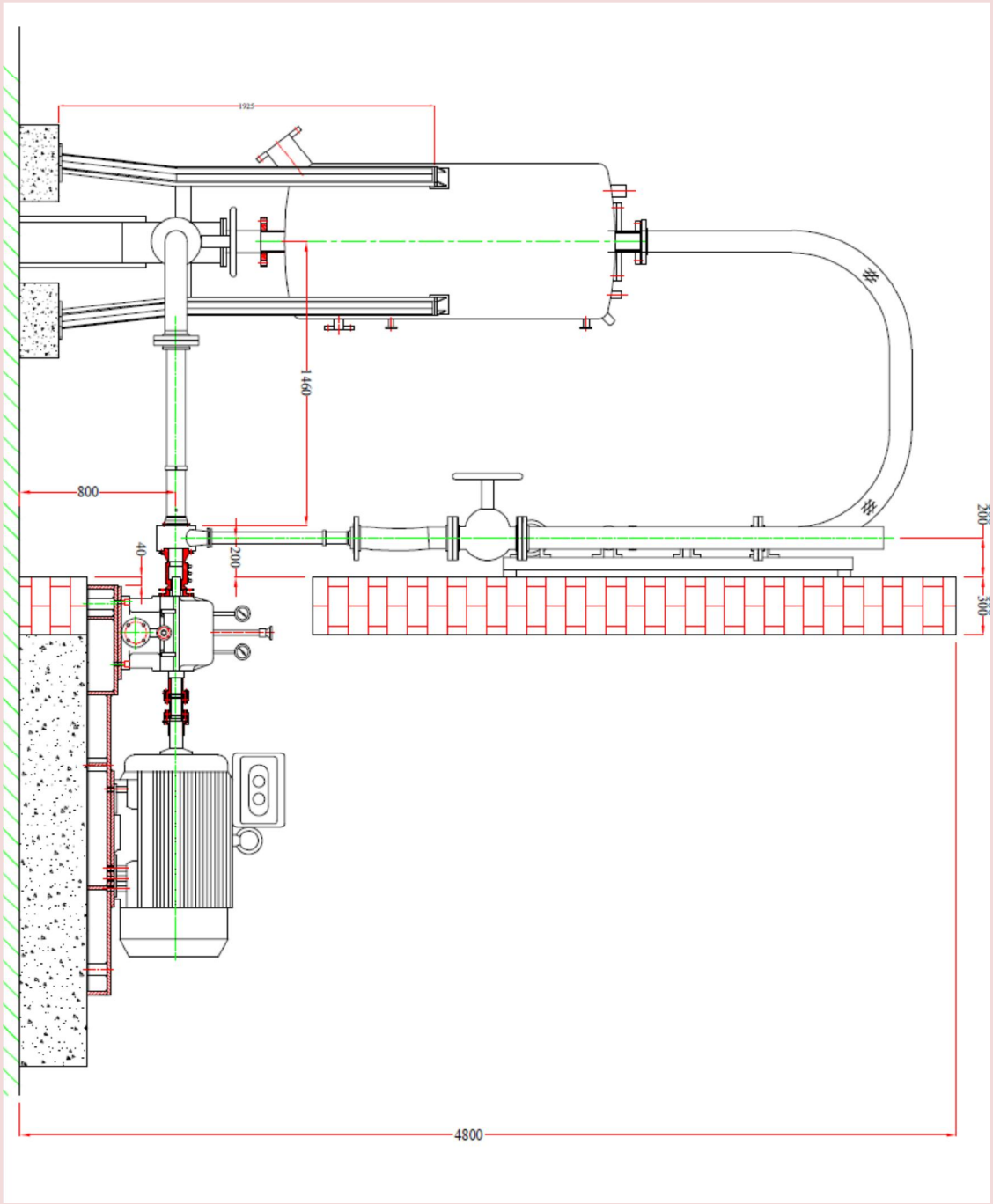
FEATURE

- All components, gauges, measuring instruments will be approved by competent agencies. All parts of the system coming in contact with the working fluid will be made up of stainless steel.
- All pipelines of the system will be seamless stainless steel suitable for pressure up to 1.5 times of working pressure and volumetric flow rate of 150000LPM
- All components and parts will be clearly tagged by suitable labels.



- All other necessary control to safe guard the operating personnel and the rig will be provided.
- The entire instrument on the rig should be properly calibrated and calibration certificate to be provided by vendor from accredited lab or from original manufacturer of the instruments.

Layout of the project



General Characteristics

- **Wiring:-**All wires used to connect various components should be of heat resistant/moister resistant nature and it should be properly coded. Wires are bunched and routed through cable tray and adhere to is norms.

- **LEAK PROOF: -** Components (Proposed) are leak tested and final assembly is also leak tested.

- **SAFETY:-**Safety requirement such as emergency shutdown, interlocking of drives to be provided.

- **AESTHETIC LOOK: -** panels should be painted in suitable colour (mat. finish).other items and structures should be painted in presentable colour scheme.

USER FRIENDLINESS

- Operation of the Rig is desirable by single operator; size of rig will be optimum for handy operation etc. Controls on control panel will be in sequence and accessible for easy operation.

TECHNICAL SPECIFICATIONS

S.NO.	NAME OF PARAMETER	VALUE
1.	Working fluid for the rig	Aviation turbine fuel
2.	Density of working fluid at 20°c	0.78 gm/cm²
3.	Cleanliness of the working fluid , better than	NAS 1638 class-4
4.	Absolute pressure at the inlet of UUT (unit under test)	0.2…….3.2kg/cm²
5.	Pressure attainable in ATF tank with the help of the shop air and vacuum pump.	-1….3.2kg/cm²
6.	Permissible tem. Of the working fluid during test.	20……..120°c
7.	Flow through UUT.	500…..150000LPH.
8.	medium of cooling	Circulating water.
9.	Speed of drive shaft for running-in of the pump(UUT)	up to 1000rpm
10.	Power supply to the rig	415V±10%,3-phage,50±2hz