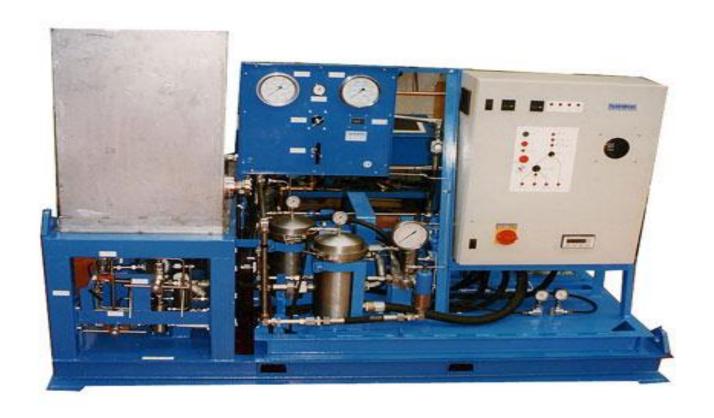


The Complete Engineering Solutions Company

HYDRAULIC FLUSHING RIG



INTRODUCTION

- Flushing rigs are ideal for troublesome systems or where large amounts of contamination have been introduced to a machine.
- They are designed to work on any system Machine can be supplied to perform both oil flushing and pressure testing and is ideal for:-
- When any system does not run properly due to contamination.
- New plant Installation Prior to Commissioning.
- System with Performance problems.

OTHER KEY FEATUTRE:

- Cleanliness verification to the appropriate standard.
- All mild steel construction/Stainless steel construction on demand.
- All pipes/fittings-SS304.
- Wide range of pressure and flow combinations.
- Suitable for water and oil based fluids.
- Booster pump based close loop filtration and cooling circuit.
- Water cooling/Air cooling options.

BASIC FLUSHING RIG SPECIFICATIONS

| S.N | PARAMETER | Value |
|-----|-------------------------------------|----------------------------------|
| 0. | | |
| 1 | Dimension (L,W,H) in mm | 1500/1100/1400 |
| 2 | Weight | 1100 Kg |
| 3 | Working Fluid | Hydraulic Oil |
| 4 | Tank Volume | 300 liters |
| 5 | Cleanliness level of Oil | NAS 6 |
| 6 | Pressure Adjustment Range of | Up to 350 |
| | working fluid in pressure line | Kgf/cm2 |
| 7 | Max. Pressure of working fluid | 350 Kgf/cm2 |
| 8 | Temperature Range of working fluid | MAX. 60°C |
| 9 | Capacity of Pumping station of Rig | MAX. 58 LPM |
| 10 | Electric Power supply requirement | * 3Ø Power supply 37.5 kw, 50 HZ |
| 11 | Chilled water Supply (by customer) | |
| 12 | Certification | SONCAP Certified |



Hydraulics System:

Hydraulic System is as per the Hydraulics Circuit Diagram & Hydraulics Bill of Material.

It consists of <u>identical</u> Main System & Duplicate System. The System consists of a SS Test Panel with Drip Tray. Control apparatus, Levers, Hydraulic Supply/ Return Ports are mounted on this Panel. Measurement Gauges for Manual Testing are installed on the Panel.

The Drip Tray/Test Table/Test Panel has drawers on both sides for the operators to keep Fittings/ Spares/ Hydraulic Connectors/ Plugs and other necessities needed to connect the Test Rig Equipments/ Components

- Configuration of Hydraulic Flushing Rig:
- Hydraulic Flushing Rig consists of following components:
- Tank: Tank is used as reservoir to supply the hydraulic oil to the pump.
- Tank is equipped with following accessories:
- 1. Visual Level Indicator
- 2. Level Switch for high oil level and low level
- 3. Drain valve
- 4. Suction strainer
- 5. Suction valve for main Pump & Cooling Pump
- 6. Filler breather
- 7. Thermostat
- 8. Temperature Gauge

Pumping Station:

- The pump station is installed on the base of the movable platform for Main & Cooling system. Main system Pumping station Capacity: 37 Kw, 1470 RPM, 58LPM@350 Kgf/cm2. For reducing vibration following arrangement is given at pumping station
- Flexible Hose between tank and pump suction,
- Flexible hose between Pump outlet and filters/Heat Exchanger.
- Anti-Vibration pad at bottom of Motor.
- Cooling System Pumping Station Capacity: 1.5 Kw, 1450 RPM, 100 LPM.

- Heat Exchanger: A heat exchanger is given for the purpose to maintain temperature of Hydraulic oil. Chilled water is required for this heat exchanger. Temperature Switch is installed on the Hydraulic Tank to Switch off the system if temperature goes above 60°C.
- Filtration System: A set of filter of 10 micron, 5 micron and 2 micron are given in series. Max. Working pressure of filters are 350 Kgf/cm2 and all having electrical clogging indication and indicators are mounted on Panel (electrical panel).
- Flow meter: A Turbine type Flow meter with Digital Read Out is given to Measure the flow of the system.

BASIC FEATURES OF THE HYDRAULIC SYSTEM ARE AS FOLLOWS

- All Tubing/ Fittings are of Compression Type & certified material SS 316 only.
- All wetted part of Hydraulic System is of SS 316 only.
- ▶ For all Connections (of the Test Components) with the Test panel SS 316 QCDC are provided on the Test Panel.
- Sampling Ports are provided for connecting Oil Quality Measuring Instruments.
- All Measuring Instruments/ Gauges have In Situ Calibration facility through Ports.
- All Selector valves are automatic and can be operated manually as well.

ELECTRICAL SYSTEM



THANK YOU