

Preventive Maintenance of Hydrostatic Pressure Test Machine

Description



For proper using of hydrostatic pressure test unit, hot bath and end caps below considerations will make very long life-time of parts used inside the machine. For the valued customers note below brands used as internal parts with high quality.

1- Main pump: Bertollini Italy

2- Pressure sensors: WIKA Germany

3- Solenoid valves: ODE Italy

4- High pressure accumulators membrane: Italian brand

5- Temperature controller for Hot bath: Autonics Korea

6- Electric parts: Schneider Electric

Beside above mentioned high quality parts that are used, for long-life of the machine below predictive maintenance and maintenance procedure need to be considered by the operators.

Preventive Maintenance

- Water supply need to be filtered with low hardness value
- Samples need to be cleaned before putting them inside hot bath
- Sensors need to be checked every month to have accurate pressure value in all stations (with calibrated pressure read device)
- Temperature sensors need to be checked and internally calibrated every 6 month (with calibrated temperature readout)
- Water filters of hot bath and pressure unit need to be checked every month to be sure water is



- coming to pump properly
- Electric power coming to the computer need to be stabilized power source (preferably UPS is used)
- Automatic refill sensor and valve of hot bath need to be checked periodically to be sure about functioning
- Greasing the end caps o-rings will cause very less damage to them during assembly
- Every 3 months, water inside the hot bath need to be replaced in case of dirt come into that from outside when putting samples inside it
- check the oil level of main pump and add oil in case of need

Maintenance Operation

Description	Frequency
Check if water main line is connected	Daily
Check if compressed air line is connected	Daily
Check if water inside bath is clean and if needed replace it	Weekly
Check the main compressed line pressure in the regulator	Daily - Before Startup
Check and replace the water filters of purifying system	When needed (If there is not any water comping out of the water purifying unit) — Yearly
Check if there is not any leakage from piping and fittings	Daily before and during the test
Check before power off of the machine , Need to click on "Quit" key on software	Daily
Check if you set proper value in "Inpercent" parameter for automatic stop of the line in case of sample burst. There is 2-step diagnose system for the machine to understand burst and leakage of the sample during testing. This will protect damage to the pump.	Daily
Check the user manual of the main pump Bertollini piston pumps	As required
Check if circulation pump of hot bath is working	Daily
Check if water level switch of the bath is working properly . Before startup of heating system of the bath be sure bath is full of water	Daily
Check if pneumatic door of bath working properly, this is important for safety. Before test start be sure to close the door	Daily
Check if overflow line of bath is working properly and not blocked	Weekly
Check if you have proper earthing connection to the body of the machine. This is very important especially in case of failures of heating resistance elements	Monthly



Check if supplied compressed air is dry. Wet compressed air will damage pump, digital pressure regulator...

Weekly and in machine startup

Category

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- 2. Troubleshooting

