

## Quality Control Testing of Submersible Pumps at Zoeller Pump Company

The following is a list of testing procedures that all submersible pumps, manufactured by the Zoeller Company, are subjected to, prior to being sold to our customers.

All Zoeller Sump/Sewage Pumps are tested as follows:

1. Air leak test. Motor cavity and case are pressurized and the unit is visually inspected for air leaks. Simultaneously, the operator and the computer check for equalization of pressure between the cavities for cross-over leakage.
2. Performance testing. Units are tested for amperage draw and head pressure, in a no flow condition. A computer compares the performance of the individual unit to established standards and determines pass/fail status. Automatic units are also checked for on/off levels.
3. Optical sensors and gates insure units have been oiled and plugged properly. The oil and plug counts are maintained by the computer and verified by the supervisor 4 times during the shift.
4. A representative sample of every model produced is audited daily. This sample is fully tested for performance at all data points published by Zoeller Company. Correct labeling, tags, and warranties are also verified.
5. All test stations are calibrated annually and audit tanks are calibrated every six months, by a third party provider.

In addition to the tests listed, the following procedurally documented steps are taken to insure our customers receive a product designed to meet or exceed their expectations.

1. All incoming materials, both raw and processed, are inspected to Zoeller Company's design specifications before being moved to the stockroom.
2. In process, inspections are made at specified intervals during all machining and assembly operations to insure all individual components conform to our design specifications.
3. Inspection rounds by Quality Control personnel are conducted twice daily to insure all manufacturing processes and inspections are being conducted in accordance to our documented procedures.

The Zoeller Company is a UL/CSA certified lab, allowing us to do safety certification testing in-house. All product bearing the UL/CSA marking has been fully tested to meet or exceed the UL 778 and CSA 108 safety standards.