

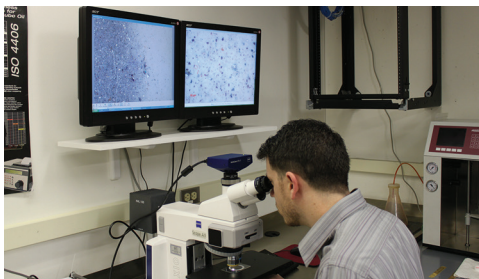


FLUID SERVICES

The Research
& Development
Center for
Fluid Expertise

LAB Services Bethlehem, PA

- **Multi-pass** – Filter efficiency and dirt holding capability, static flow conditions
- **Dynamic Multi-pass** – Filter efficiency and dirt holding capability, varied flow conditions
- **Flow Characteristic Testing/Pressure Drop** – Filter elements and housings, valves and other hydraulic components
- **Static Burst Testing / Proof Pressure Testing**
- **Fatigue / Cycle Pressure Testing**
- **High Viscosity Pressure Drop Testing** (Cold Start Test)
- **Environmental Testing** – Varied temperature and humidity
- **Technical Cleanliness Testing** – ISO 17025 accredited
- **Fluid Analysis** – Fluid Cleanliness, viscosity, conductivity, water content, gravimetric and microscopic particle analysis
- **Element Analysis** – Dirt loading and microscopic analysis of debris
- **Filter Element Integrity Testing** (*Bubble Point Test*)
- **Filter Element End Load Test** – Adhesion strength testing for epoxy/endcap on filter elements
- **Universal Tester** – Tensile and compression testing
- **FT-IR Spectroscopy** – Identification of material compounds, solids and liquids
- **Air-in-Oil** – Air in hydraulic system testing with HYDAC Air Content Sensor



Fluid Care Center Leetsdale, PA

- **Automatic Particle Counter** - Automatic particle counting for oil analysis, Generates 4 μ m(c), 6 μ m(c) and 14 μ m(c) cleanliness codes per ISO 4406
- **Air-in-Oil** - Air in hydraulic system testing
- **Bubble Point Tester** - Non-destructive filter element integrity test
- **Contamination Test Unit (CTU)** - Parts Cleanliness Verification
- **Cyclic Pressure Test Stands** - Rated Fatigue Pressure (RFP) testing
- **Flow Bench** - Pressure drop across a housing, element and assembly as a function of flow, Cracking and full flow pressure setting of a bypass valve
- **Hydraulic Load Cycle Test (HLCT) Stand** - MPT testing with dynamic application specific flow profiles
- **Karl Fisher Titration System** - Water Content Determination
- **Multi-Pass Test (MPT) Stand** - Filter Efficiencies (β), Dirt-holding Capacity (DHC), Beta Stabilities, collapse/burst and Pressure Drop
- **Multi-Purpose Test Stand** - Coalescing (continuous injection and draw-down), Custom testing
- **Photomicroscope** - Subjective identification and sizing of particulate contamination, Used element and used oil analysis
- **Pull Tester** - Bond strength testing of the epoxy/end cap adhesion on our filter elements
- **Static (Burst) Test Stand** - Burst Pressure Rating testing
- **Tensiometer** - Interfacial Tension between oil/diesel and water
- **Viscometer** - Kinematic Viscosity Testing