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 4µm(c), 6µm(c) and 14µm(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 (ß), Dirtholding 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/endcap 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