

APPLICATIONS

One of the key strengths of sight flow indicators is their remarkable versatility. For example, they can be used:

- In a variety of industries.
- To monitor and verify fluid flow through filter, cooling, intake/outlet pumping lines, as well as numerous other industrial processes.
- For troubleshooting or as backups for meters, switches, process indicators and other control devices.

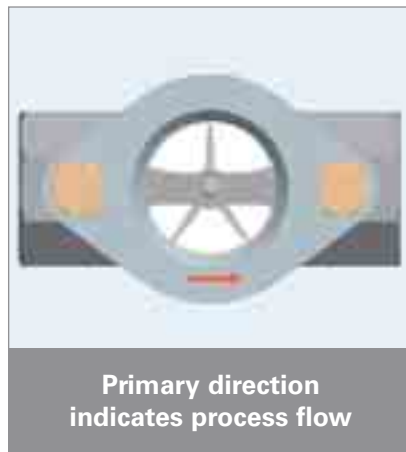
Following are a series of examples where a line problem required the versatility of a VISI-FLO® Sight Flow Indicator solution.



Preventing Coolant Tank Overflow

Problem: Coolant mixture for machine tools periodically overflows, creating spills on the floor of a major pump manufacturing plant. Coolant mixture contained in holding tank enters through open feed line. Electric float switches in coolant tanks close solenoid valve automatically to prevent flow when high level sensor in holding tank is activated. Float switches turn off filling indicator light to alert operator. When overflow occurs, filling indicator light turns off properly; however, solder or other foreign material obstructs solenoid valve, keeping it from closing fully. Tank continues to receive coolant, which causes overflow.

Solution: Install VISI-FIO® next to solenoid valve. By observing propeller indicator, operator is able to determine when valve is open or closed. When tank filling light shuts off, operator checks indicator to verify flow has stopped.



Monitoring Process and Purge

Problem: Several different chemicals use a common line in different stages of the operation at a large chemical plant. After use of each chemical, reverse flush is employed to purge line. Sight flow indication needed to monitor back flush process and be compatible with different chemicals.

Solution: Operators must be able to see flow direction and easily monitor the process and purge cycles. VISI-FIO® indicators featuring bi-directional flapper are specified.

APPLICATIONS

Power Plants

New Power Plants: Sight flow indicators monitor the flow of critical fluids, such as lubricants pumped to turbines in hydro-electric generators and water in cooling lines.

Older Power Plants: New, more reliable sight flow indicators replace aging models (and additional indicators are also deployed) during upgrades.

Waste Water Treatment

VISI-FLO® sight flow indicators visually monitor the filtering process.

The most common point of installation: second stage aeration tank pumping lines.

The purpose: verify sludge removal to ensure efficient aeration.

Petroleum Industry

Sight flow indicators visually monitor drilling pump operations. In the photo below, VISI-FLO® is used to show dirty fluids being pumped from a down-hole hydraulic cleaning process. Should the indicator stop, this is a signal to the operator that the system is not cleaning properly and needs corrective action.



Chemical Industry

Paint and Varnish Processing Plants: VISI-FLO® sight flow indicators are used to notify operators when filters become clogged. Any drops in flow rate or discoloration of blended resins that pass through the press are indications that new filters are needed.

Distilling Operations: Sight flow indicators are used to gauge color and clarity of fluids. An amber fluid color indicates proper distillation; a brown-to-black color signals the process has been disrupted and requires corrective action.

Refineries: Sight flow indicators are used to monitor the draining of water from the bottom of storage tanks. The visual presence of oil in the indicator is a signal that the water is completely drained.

Manufacturing

VISI-FLO® sight flow indicators are used in a variety of manufacturing applications, including, for example, to monitor:

- The draining of hydraulic oil from nitrogen charged accumulators in die casting machine manufacturing facilities.
- Proper coolant flow, which is so vital to the operation of welding machines.
- Efficient filtration of process fluids.

OEM Markets

VISI-FLO® sight flow indicators are used in an array of OEM applications, including, for example:

- Compressor manufacturers install them on their products so end users can monitor the flow of water to compressor heads while in operation.
- Degreasing and defluxing equipment manufacturers use them to monitor recirculating solvent in cleaning operations and, thus, determine efficiency of the distillation/recovery process.
- Evaporators and filtration system manufacturers use them to monitor color and clarity of fluids in outlet lines and to confirm proper intake of fluids on inlet lines.

