

Fluid filtration in a lubrication system is strongly suggested because it:

- Eliminates foreign particles and debris picked up from tanks, piping and re-filling of tanks
- Protects lubrication equipment components from contaminants.
- Ensures the lubricant is clean when applied or dispensed.

Where does the foreign debris come from?

Particles and foreign debris are picked up in a lubrication system from:

- Storage tank that could have welding slag, mill scale or surface rust inside the tank before the new oil is introduced. The pump will pick up this debris and pump it suspended in the oil, with the potential of damaging hand held meters and/or fluid solenoids in fluid management systems.
- A new piping installation that may contain metal filings, thread-sealant and/or surface rust.
- Bulk storage tank fill cycle. Nozzles could have dust or particles attached and unknowingly introduced.

How can this problem be eliminated?

Problems associated with contamination of lubricants in an installed system can be sharply reduced by:

- Installing an in-line strainer at the pump fluid outlet, hose reel inlet or console inlets. The appropriate size in-line strainer recommended would be the same size as the pump outlet or reel inlet. For example, most automotive lubrication pumps and hose reels for oils have a ½" male or female thread. In this case a ½" in-line strainer is recommended.
- Flushing the pipes with new oil prior to installing hand held fluid meters or operating fluid solenoids.

What are the symptoms of contamination?

- Most hand-held metered valves have an inlet filter screen built in. The inlet screen is there to protect the meter, not to be a system filter. Progressive slowing of fluid volume over time through plugged filters is one symptom. Hand held meter or valve leaking is another symptom where debris has somehow entered the valve and prematurely worn or damaged internal components. Contaminants could also be caught on the valve's seat that would cause the fluid to continue to leak past the seat even though the valve appeared to be closed. Solenoid valves in a fluid management system may not close properly and allow seepage.

Should grease also be filtered?

Yes, for very similar reasons as fluid oil systems.

We have included a list of filters and in-line strainers that should be used in your existing and upcoming installations that are available from your local Balcrank distributor.

Balcrank filter/strainer recommendations:

Product Family	Filter/Strainer	Screen Mesh Size
3:1 oil pumps	3120-010	60 micron
5:1 oil pumps	3120-010	60 micron
10:1 oil pumps	3120-010	60 micron
50:1 Jet Power	4430-001	30 micron
50:1 Panther	4430-004	30 micron
50:1 Giant Jet	4430-002	30 micron

Adequate fluid filtration will add to the life of the equipment and will reduce equipment failure. Fluid filters are relatively inexpensive to purchase and add to a system considering all the benefits.

I hope this information helps you in running a clean and trouble-free working environment. For more information and/or help please contact your local Balcrank distributor, or you may contact me at www.dsmith@balcrank.com for further details.

Balcrank Corporation
115 Reems Creek Rd
Weaverville NC 28787

www.balcrank.com | p: 800 747 5300 | f: 800 763 0840