© 2003. Dynamatic Technologies Limited

**DYNAFILTER**

**FILLING AND FILTRATION SYSTEM**

It is an established fact that at least 70% of hydraulic system failures are attributable to fluid conditions, and the largest contributing factor is the contamination level in the fluid. A high level of contamination will invariably lead to premature failure of various hydraulic components like pump, valves etc.

The contaminants in the hydraulic oil enter the spaces between the moving parts of a component and act as abrasives. This abrasive action, in turn, leads to further generation of fine chips, thus setting up a ‘contaminant generating’ system. This causes a loss in efficiency due to increased clearances, as also increased heat generation in the hydraulic system. This leads to loss in overall efficiency, thereby affecting the performance of the machine.

This can be avoided by maintaining the contamination level in the hydraulic oil to within the range specified by the component manufacturer. Also, it is imperative that the hydraulic oil be cleaned before replacing any element of the hydraulic system.

The Dynamatic® Filling and Filtration System is a compact, portable and light equipment; designed for easy handling. It can filter the oil rapidly. It can even fill / empty the reservoir, depending on requirements. Optimum performance is achieved with fluid viscosity in the range 97 to 456 SUS (20 to 100 cst) range.

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>APPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic gear pump with built-in relief valve - 12 lpm</td>
<td>Industries such as Machine tools, Presses, Injection moulding machines, Blow moulding machines, Pressure die casting machines, SPM’s, Textile machinery, Foundry machinery, Aircraft ground support equipments, CNC machines, Steel plants, etc.</td>
</tr>
<tr>
<td>3-phase electric motor - 0.50 hp</td>
<td>Earthmoving equipment such as Loaders, Dumpers, Dozers, Backhoe loaders, Tippers, Side Discharge loaders, Drill rigs, Excavators, Concrete mixers, etc.</td>
</tr>
<tr>
<td>DOL starter</td>
<td>Fork lifts, Garbage compactors, Pavers, Vibro compactors, etc.</td>
</tr>
<tr>
<td>In-line filter with clog indicator - 10 microns</td>
<td>Refilling tanks.</td>
</tr>
<tr>
<td>Suction strainer - 150 microns</td>
<td></td>
</tr>
<tr>
<td>Power cable - 3 mtrs</td>
<td></td>
</tr>
<tr>
<td>Two flexible hoses - each 3 mtrs</td>
<td></td>
</tr>
<tr>
<td>Fabricated trolley with castor wheels</td>
<td></td>
</tr>
</tbody>
</table>
CAPABILITIES

- Clean the hydraulic oil to remove paint, metal chips, welding shots, lint etc.
- Periodically clean the oil without the need to empty the hydraulic tank or stop the machine, thereby reducing downtime.
- Filter each change of oil, to prevent introduction of contaminants into the system during oil change. In fact, oil manufacturers recommend that even the fresh oil be filtered, prior to usage.
- Top up hydraulic oil.
- Empty the hydraulic tank and refill the same with fresh oil.
- Can also be used as Offline filtration unit.

BENEFITS

- Maintain the contamination level in the hydraulic oil within the range specified by the component manufacturer.
- Avoid ingress of air-borne contaminants as also other contaminants during topping up of the oil.
- Increase life of the components of the hydraulic system, due to decrease in wear of the moving parts.
- Reduce spillage and wastage of oil during oil changes and top ups.
- Reduce downtime due to lower machine breakdowns.
- Eliminate the necessity to stop the machine during traditional oil filtration methods.
SCHEMATIC DIAGRAM

- FABRICATED TROLLEY WHEEL - 4"
- INLINE FILTER TRAY
- PUMP SUCTION STRAINER
- MOTOR STARTER
- SUCTION HOSE DELIVERY HOSE HAND GRIP

ALL DIMENSIONS ARE IN MM UNLESS SPECIFIED.
**OPERATING DATA**

- **MAX. WORKING PRESSURE**: 2500 lbf/in² (173 Bar)
- **MAX. INPUT FLOW**: 25 Imp. gal/min (40 l/min)
- **MAX. PRIORITY FLOW**: 8.80 Imp. gal/min (40 l/min)
- **MOUNTING FLANGE**: 3/4" or 1" - 4 BOLT SAE bolt spacing on 1" SAE Flange Profile. Attachment cap screw and "O" ring seal supplied.

**ORDERING**

**CHOOSE THE PRIORITY FLOW REQUIRED FROM THE TABLE & COMPLETE THE ORDERING CODE AS SHOWN BELOW.**

**EXAMPLE:**

- **VALVE REQUIRED**: FLOW 3.52 Imp gal/min
- **PRESSURE**: 1250 lbf/in²
- **MOUNTING FLANGE**: 3/4" SAE BOLT SPACING
- **CODING IS**: 7495 / 16 / 1250

**NOTE:**

- RELIEF VALVE IS SET AT REQUIRED PRIORITY FLOW.
- PLEASE CONSULT OUR TECHNICAL SALES DEPARTMENT FOR GUIDANCE.

**X-INSERT** 7495 for 3/4" SAE bolt spacing or 7506 for 1" SAE bolt spacing.

**O-INSERT** Relief valve pressure setting required from range 600 to 2500 lbf/in² If Relief valve is not required insert N.