

# Hy-Pro Media Lube **Design Modification**

## Hy-Pro G8 Dualglass

High Performance DFE Rated Filter Media

An option for high flow lube systems with low terminal element differential pressure indicator alarm and bypass settings (~15 psid, 1 bar). Lube design can extend element life (paper machine lube systems).

May be suitable for hydraulic systems where original housing is undersized or when upgrading to a higher efficiency media grade to improve ISO codes.

#### **Dualglass Media Lube Design Modification**

Hy-Pro DFE rated Dualglass media filter elements are optimized for capture and retention efficiency and long element life. When upgrading from some element manufacturers to Hy-Pro the clean element pressure drop experienced with the Hy-Pro element may be slightly higher. The Hy-Pro standard design with M media code (HP L - M ) typically yields a drop (improvement) of one to two codes in each particle size of the ISO fluid cleanliness codes (4/6/14). In most hydraulic and lube applications the Hy-Pro element will also last longer than the original once it has cleaned up the fluid and achieved a clean fluid equilibrium.

There are some applications where the standard Hy-Pro media pack element design (HP\_\_L\_-\_M\_) clean pressure drop results in element life that is shorter than optimum. For these applications Hy-Pro has developed an alternate media pack design called the lube design denoted by replacing the M in the standard design with an L (HP\_\_L\_-\_L\_ ). The lube design will result in a lower clean element pressure drop because the glass pre-filter layer has been removed allowing a higher pleat count and lower flow resistance because the fluid only passes through a glass media layer and there are more pleats.

#### **Lube Applications**

In some lube systems (ie paper machine main bearing lube) the fluid viscosity is high (i.e. ISO VG220) and the alarm for terminal differential pressure is relatively low (i.e. 15 psid, 1 bar). In such applications the lube design might yield longer element life because the clean element plays such an important role in overall element life. If the same system had a terminal differential pressure of 50 psid, 3.5 bar the standard M pack design would yield a longer element life than the lube design.

### **Hydraulic Applications**

In some hydraulic systems the housing might be sized close to its maximum rated flow. In such cases the clean element differential pressure might be > than 15 psid, 1 bar. If this is the case the lube design will provide a lower clean element pressure drop and might be more suitable. Also, if the intent is to upgrade to a filter element with higher efficiency to achieve a lower ISO code the lube design might be required to avoid excessive clean element pressure drop. For example if the original element specified by the OEM was a 10 micron absolute and that element is replaced with a 3 micron the clean element pressure drop could double. In this instance the lube design could provide enough of a decrease from the standard M pack design to make the change possible.

