



## QUALUBE HYDRAULIC HM FLUIDS

Qualube Hydraulic HM Fluids are available in ISO VG grades of 10, 15, 22, 32, 46, 68, and 100 meeting the HM Classification. (Other grades are available on request).

Qualube Hydraulic HM Fluids incorporate characteristics that give:

1. protection against oxidation, anti-wear properties to reduce the wear occurring in all moving parts
2. rust inhibitor treatment to help reduce the detrimental effects of water contamination
3. low foaming to prevent inadequate lubrication and potential damage to pumps
4. good demulsibility characteristics allowing quick separation from water helping to prevent rust
5. excellent hydrolytic stability to protect equipment from corrosion in the presence of water

Qualube Hydraulic HM Fluids offer superior wet filterability as measured by the AFNOR 48-691 performance test providing protection against fine filtration blockage due to the presence of water. This allows the product to meet the stringent requirements of increasingly fine filters being built into many modern hydraulic systems.

The advanced chemistry that enhances the formulation's filterability affords it extreme thermal stability. As a result of this combination of characteristics, Qualube Hydraulic HM Fluids helps reduce the formation of sludge and varnish which can lead to unexpected downtime.

For end users of hydraulic equipment this high standard of performance means protection of their equipment against the damaging affects of water, contamination, and longer service between filter and fluid replacement, excellent anti-wear, anti-rust performance and a more reliable system in operation.

Qualube Hydraulic HM Fluids meet or exceed the requirements for industrial and mobile hydraulic systems which call for:

Parker Denison HF-0 (formerly Denison HF-1, HF-2, HF-0)  
Vickers Product, Eaton Brochure 694 (formerly Vickers I-286-S and M-2950-S)  
MAG IAS, LLC (formerly Cincinnati Milacron P-68, P-69 and P-70) US Steel 127, 136  
DIN 51524, Part 2 Rexroth General Motors LH-04-1, LH-06-1, LH-15-1  
Sauer Danfoss Bosch, variable vane pumps ISO 11158 (replaced ANFOR specs)  
Commercial Hydraulics\*

\*except for PM-500 series silver containing pumps which require R&O additive systems



# HYDRAULIC MEGASTORE

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Typical summary performance for Hydraulic HM Fluid range is shown below:

<b>Viscosity Grade</b>	<b>32</b>	<b>46</b>	<b>68</b>
Density @ 15.6°C	0.871	0.878	0.884
Cst: @ 40°C	31	46	66
Cst: @ 100°C	5.34	6.69	8.87
Viscosity Index	108	109	108
L38 Shear @ 100°C	No Data	No Data	No Data
Inj Shear @ 100°C	No Data	No Data	No Data
NOACK Volatility	17.8	12.9	8.4
ASTM Volatility	7.9	6.0	4.2
cP @ -5°C	414	778	1387
cP @ -10°C	677	1350	2539
cP @ -15°C	1276	2462	4498
cP @ -20°C	1924	3755	6935
cP @ -25°C	4003	8310	16239
cP @ -30°C	6878	15182	31383
HTHS @ 150°C	1.656	2.055	2.504