



HIGH VISCOSITAS INDEX HYDRAULIC OIL

HYDO HV range of high-performance mineral-base hydraulic oils possessing a Viscosity Index (VI) of 125-150.

They do not contain zinc-based anti-wear additives, which have proved to be susceptible to water-contamination and the consequent formation of precipitates that block fine filters.

Thus the **HYDO HV** oils combine high lubrication performance with outstanding high filterability.

They also have excellent anti-wear properties and multi-metal compatibility.

- ◆ Rexnord-Racine vane pumps. Mannesmann Rexroth Hydromatik piston pumps.
- ◆ DIN 51 524 specification.
- ◆ Sperry-Vickers 1-286-S and M-2950-S specifications.
- ◆ Approved for Frank Mohn (Framo) marine cargo-handling systems.
- ◆ Poclain (France) have also expressed satisfaction with Bartran HV fluids. tibility.
- ◆ Sigma-Rexroth gear pumps.
- ◆ Lucas axial-piston pumps.

- ▣ Reduced risk of breakdown due to over-loading of hydraulic systems.
- ▣ Potential cost-savings from maintenance.
- ▣ Full utilization of the new 'same-size' higher efficiency hydraulic equipment.
- ▣ Improved surface finish in modern machine tools filterability and sensitivity of movement required by hydraulic systems with smaller clearances, electronic controls and very fine filters.
- ▣ Potential energy savings where, because of the excellent wear-protection
- ▣ Compatible with all metals used in hydraulic systems, including silver, copper and bronze.



| GRADE | Test Method | Units | HYDO HV | | | | | | | | | |
|-----------------------|-------------|---------|---------|---------|------|------|------|------|------|---------|------|-----|
| | | | 10 | 15 | 22 | 32 | 46 | 68 | 100 | 150 | 220 | 320 |
| Density @ 15°C | ASTM D1298 | kg/l | 0.86 | 0,865 | 0.87 | 0.87 | 0.87 | 0.88 | 0.89 | 0.89 | 0.89 | 0.9 |
| Flash Point | ASTM D92 | °C | 220 | 219 | 220 | 230 | 230 | 235 | 240 | 267 | 270 | 270 |
| Kin Viscosity @ 40°C | ASTM D445 | cSt | 9.4 | 14.7 | 23 | 33 | 45.9 | 69 | 100 | 159 | 223 | 325 |
| Kin Viscosity @ 100°C | ASTM D445 | cSt | 2.5 | 3.32 | 4.19 | 5.4 | 6.9 | 10 | 13 | 16 | 21 | 28 |
| Viscosity Index | ASTM D2270 | | 126 | 132 | 134 | 134 | 136 | 140 | 140 | 135 | 125 | 127 |
| Pour Point | ASTM D97 | °C | -45 | -33 | -33 | -30 | -30 | -30 | -24 | -24 | -24 | -24 |
| 4-Ball Welding Load | | Kg | | 180/200 | | | | | | 200/220 | | |
| Neutralization Value | ASTM D664 | mgKOH/g | | | | | | 0.1 | | | | |