# **HYDRO OIL HD SERIES**

High Performance Hydraulic System Oil

## **Description**

It is a high performance HLP type hydraulic system oil with major OEM approvals.

### **Applications**

It is recommended to all industrial and moving hydraulic systems. Among its special industrial applications include construction machines, presses, moving construction equipment, plastic injection and drawing machines and screw-type air compressors.

#### **Benefits**

- Cleans the system.
- Excellent oxidation resistance and water separation characteristic.
- Prevents cavitations due to its high air release properties.
- Adopts to wide range of climatic conditions due to its high Viscosity Index.
- Used in hydraulic system operating under extremely high temperatures like plastic injection machines with its high thermal stability.
- Saves energy by preventing pressure surge in the pumps during cold start-ups.
- Ensures efficient system operation and perpetual power transmission.

#### **Performance**

DIN 51524 Part II (HLP), JCMAS P041 HK, ISO 20763 Conestoga Vane Pump Tests, Eaton M-2950 S, Eaton I-286 S3, Parker HF-0, HF-1, HF-2 (approval for ISO VG 32, 46 and 68 grades), Cincinnati P 68, 69,70 (approval for SAE 32, SAE 68, SAE 46 grades, respectively), Bosch Rexroth RDE 90235 (approval for ISO VG 32, 46 and 68 grades)

# **Typical Specifications\***

ISO Viscosity Grade		ISOVG							
		10	22	32	46	68	100	150	220
Density, @ 15 °C, kg/m³	ASTM D 4052	0,857	0,869	0,877	0,880	0,886	0,888	0,894	0,899
Flash Point COC, °C	ASTM D 92	138	202	220	236	242	248	266	266
Viscosity, 40 °C, mm²/s		10	22	32	46	68	100	150	220
Viscosity, 100 °C, mm²/s	ASTM D 445	2,658	4,31	5,36	6,76	8,73	11	14,45	18,5
Viscosity Index	ASTM D 2270	100	101	101	100	100	94	94	93
Pour Point, °C	ASTM D 97	-33	-30	-27	-24	-21	-18	-12	-9

<sup>\*</sup> Values shown may differ between productions.

