



Hydra 1000 Heavy Duty Hydraulic Oil

Dyna-Plex 21C® Hydra 1000 Hydraulic Oils are premium anti-wear oils, which provide maximum pump life and trouble-free service. The rust and oxidation preventive capabilities of Hydra 1000, including superior demulsibility properties, make these oils rugged, even in high-output systems. These oils also feature excellent vane pump and piston pump performance, anti-foam characteristics and superior hydrolytic stability. Hydra 1000's ability to control formation of contaminants helps prevent filter blockage. The hydraulic oils also demonstrate excellent compatibility with other major brands of hydraulic oils, including the MOBIL DTE numbered series.

Dyna-Plex 21C Hydra 1000 Hydraulic Oils resist deterioration and perform at superior levels, even at high operating temperatures, pressures and speeds and low pour point ensures easy system startup in cold conditions.

PROPERTY	ASTM TEST METHOD	R&O/AW ISO 10	R&O/AW ISO 15	R&O/AW ISO 22	R&O/AW ISO 32	R&O/AW ISO 46	R&O/AW ISO 68	R&O/AW ISO 100	R&O/AW ISO 150	R&O/AW ISO 220	R&O/AW ISO 320
Viscosity @ 40°C, cSt	D-445	10.80	15.20	22.14	31.20	46.07	68.10	101.29	149.54	219.50	320.0
Viscosity @ 100°C, cSt	D-445	3.00	3.70	4.35	5.25	7.00	8.80	11.5	15.10	19.12	24.50
Viscosity Index	D-2270	140	130	103	98	109	101	100	101	98	97
Flash Point, COC, °C	D-92	200	200	199	210	216	220	232	254	238	270
Flash Point, COC, °F	D-92	392	392	390	410	420	428	450	490	460	518
Pour Point, °C	D-97	-45	-45	-42	-39	-36	-36	-24	-15	-15	-9
Pour Point, °F	D-97	-49	-49	-44	-38	-33	-33	-11	5	5	15
Color	D-1500	0.5	0.5	1.0	1.0	1.0	1.5	1.5	2.0	3.0	5.0
Gravity, °API	D-287	36.5	36.5	32.8	31.5	30.5	29.5	28.2	28.3	27.6	26.5
Turbine Oil Oxidation	D-943	3600+	3600+	3600+	3600+	3600+	3600+	3600+	3600+	3600+	3600+
Copper Strip	D-130	1b	1b	1b	1b	1b	1b	1b	1b	1b	1b
Rust Test	D-665	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Vane Pump, mgs wt loss	D-2882	12	12	12	12	12	12	12	12	12	12
Dielectric Strength, kv		35	35	35	35	35	35	35	35	35	35

- Meets or exceeds the following tests and requirements:
- AFNOR E 48-603
 - ASTM D6158 HL, HM, HMHP
 - B.F. Goodrich – 0152
 - Bosch Rexroth – RDE 90235
 - Fives Cincinnati – P-68, P-69, P-70 (light hydraulic oils)
 - Danieli – 0.000.001 Type 10 & 11
 - DIN – 51524, Part 1 HL, Part 2 HLP
 - Eaton Brochure – 03-401-2010, EFDGN-TB002-E
 - Eaton Vickers – I-286-S, M-2950-S, 35VQ25
 - FMC – High-Performance Hydraulic Oil
 - Ford – M-6C32
 - General Motors – LH-04-1, LH-06-1, LH-15-1, LS-2
 - ISO 11158 HL, HM
 - Jeffrey – #87
 - Lee Norse 100-1
 - Parker Denison – HF-0, HF-1, HF-2
 - Racine – Model S, variable volume vane pump
 - SAE MS 1004
 - U.S. Steel – 136, 127, 126
 - ZF – TE-ML 07H, TE-ML 21M