

# HYDRAULIC

## Premium Hydraulic Oil



### Features

Meets or exceeds the following industry performance specifications:

- Denison HF-0 (grades 32, 46 and 68), HF-2
- Cincinnati-Milacron P-68, P-69, P-70 (grades 32, 68 and 46 respectively)
- Racine model 'S'
- Vickers M-2950-S, I-286-S, 35VQ25
- ASTM D-2882 (includes Vickers V-104C vane pump test)
- Bosch Rexroth Corp.
- Sundstrand
- Linde
- CGSB 3-GP-36Mb – grades 22, 32, 68 and 100 (Canadian Government and Military standard)

**HYDRAULIC** series of oils are premium performance anti-wear hydraulic oils. They are blended from quality paraffinic mineral oil for its stability and high natural Viscosity Index, which gives these oils their ability to maintain their viscosity over a relatively wide range of operating temperatures. All grades of **HYDRAULIC** oils are fortified with additives to provide the best possible wear-protection and service life.

Hydraulic oil performance is defined in three ways:

- Ability to protect hydraulic pumps and motors from wear damage, particularly at the high operating pressures often used in modern hydraulic systems.
- Ability to resist deterioration, particularly oxidation, which is caused by the effect of air on the oil and thermal degradation, caused by the effect of heat.
- Ability to resist the harmful effects of water contamination, which can hydrolyze additives, accelerates oxidation, promote sludge formation and cause filters to plug.

**HYDRAULIC OILS** provide superior performance in all critical areas as proven by industry standard tests, many of them developed by the pump manufacturers themselves.

**HYDRAULIC** oils are available dyed red or blue for easy identification. Please contact your sales representative for list of dyed products.

**HYDRAULIC** oils are suitable for use with all types of hydraulic pumps and motors, even at pressures as high as 5,000 psi (350 Bar). They are NOT recommended for use with those pumps that contain silver-plated parts. For these applications, use Irving **D&E oils**.

### Benefits

- Excellent corrosion and wear protection for long pump life
- Excellent foam resistance for efficient pump operation
- Excellent water tolerance where contamination is unavoidable
- Outstanding oxidation resistance for long service life

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## Typical performance results

HYDRAULIC OIL	15	22	32	46	68	100	150	220
COLOUR (ASTM D1500)	1.0	1.0	1.0	1.5	1.5	1.5	2.5	3.0
VISCOSITY (D-445)								
CST @ 40°C	15.8	22.4	32.4	47.4	68.9	103.0	154.4	222.7
CST @ 100°C	3.6	4.6	6.0	6.8	8.9	11.8	15.1	18.8
DENSITY (D-4052), KG/L	0.8575	0.8640	0.8765	0.8797	0.8826	0.8855	0.8909	0.8958
BROOKFIELD VISCOSITY (D-2983), CP @ -30°C	1005	2238	-	-	-	-	-	-
VISCOSITY INDEX (D-2270)	110	124	133	96	98	97	98	96
POUR POINT (D-97), °C	-42	-48	-33	-33	-27	-27	-24	-6
FLASH POINT (D-92), °C	200	214	202	238	238	258	270	284
OXIDATION LIFE (D-943), HRS	4000+	4000+	4000+	4000+	4000+	4000+	4000+	4000+
CORROSION RUST PROTECTION	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
COPPER CORROSION 3HR/100 °C	1a	1a	1a	1a	1a	1a	1a	1a
ZINC CONTENT, %WT	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
USEFUL OPERATING TEMP RANGE, °C – MIN/MAX	-25/46	-17/55	-12/64	-6/75	1/84	6/95	14/104	20/113
DEMULSE (D-1401), TIME TO 40/40/0, MIN.	10	15	10	5	10	5	10	15

## Available sizes & part numbers

	3.78L (1 US Gal)	18.9L (5 US Gal)	205L (54.2 US Gal)	1000L (264 US Gal)	Bulk
HYDRAULIC 15		F0087640	F0013050		B0006101
HYDRAULIC 22		F0087740	F0013150	F0006460	B0006401
HYDRAULIC 22R					
HYDRAULIC 32	F0006626	F0082840	F0013250	F0006660	B0006601
HYDRAULIC 32B		F0087940			B0006801
HYDRAULIC 32R		F0088040	F0068550		B0006801
HYDRAULIC 46		F0088140	F0013350	F0007060	B0007001
HYDRAULIC 68		F0088240	F0013450	F0007260	B0007201
HYDRAULIC 68R					B0007401
HYDRAULIC 100		F0087540	F0012950		B0006001
HYDRAULIC 220					B0034401

Check with sales representative or website for the latest product approvals.



Lubricants

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