



TURBINE HYDRAULIC OIL

PREMIUM, TURBINE QUALITY CIRCULATING OILS

March 2010

Turbine Oils are high performance, rust and oxidation inhibited petroleum oils formulated to meet the severe operating demands of industrial turbines and a wide variety of equipment requiring high quality circulating oils.

In service **Turbine Oils** offer the following benefits:

- ◆ Excellent protection from rust and corrosion
- ◆ Excellent demulsibility, air release and foam control
- ◆ Resistance to oxidation degradation and the formation of harmful sludge and deposits

Product Applications

The lighter viscosity products, **Turbine 150, 200 and 300** are primarily recommended for use as turbine, non-antiwear hydraulic, compressor and non-EP gear oils. The heavier viscosity products **500, 750, and 1000** find wide usage as bearing and gear oils in industrial applications.

Oil requirements for stationary steam turbines and turbine reduction gears are most rigid due to extremely long periods of continuous service demanded. The lighter viscosity grades are used chiefly for turbines with circulating oil systems and the higher viscosity oils are used to lubricate bath and ring oiled steam turbine bearings.

Non-antiwear hydraulic oils are usually recommended when hydraulic pressures are not high and/or the hydraulic pump contains silver plated components.

The lighter grades of **Turbine Oils** have also been found suitable as heat transfer fluids for systems operating up to 130 °C.

Product Recommendations and Approvals

Turbine Oils meet the requirements of major turbine builders. They meet Cincinnati-Milacron specifications P-38(150), P-55(200), P-54(300), P-57(500) and Denison HF-1 specification.

Product Maintenance and Handling

Turbine Oils are manufactured from quality petroleum base stocks blended with selected additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact with the skin, splashing into the eyes, ingestion, or vapour inhalation. Please refer to the Material Safety Data Sheet for further information.

Note: This product is NOT controlled under the Canadian WHMIS legislation.

Typical Properties

Turbine Oil Grade	150	200	300	500	750	1000
ISO Viscosity Grade	32	46	68	100	150	220
SAE Viscosity Grade	10W	15W	20W	30	40	50
AGMA Number	--	--	1	3	4	5
Density @ 15°C, kg/m ³	869	877	883	890	895	885
Pour Point, °C	-33	-27	-20	-15	-12	-9
Flash Point, °C	204	210	220	226	236	248
Kinematic Viscosity, cSt						
@ 40°C	32	46	68	100	150	220
@ 100°C	5.3	6.7	8.5	11.4	14.3	18.6
Oxidation Life	3000	3000	3000	2500	2500	2500
Rust Test (2)	Pass	Pass	Pass	Pass	Pass	Pass

The typical properties shown above are representative of current production. Some are controlled by manufacturing and performance specifications while others are not. All may vary within modest ranges.