



Shell Turbo Oils

Industrial Steam Turbine Oils

Shell Turbo Oils have been specially formulated to satisfy the demanding requirements of steam turbines used in today's power industry.

They are based on a blend of highly refined mineral oils of turbine quality and selected additives to enhance their rust and oxidation properties.

Applications

- Power generation steam turbines
- Industrial steam turbines
- Certain industrial gear units
- High-speed gears
- Certain oil-lubricated bearings

Shell Turbo Oils may also be used for other industrial applications requiring high quality rust and oxidation (R & O) inhibited oils which separate easily from water.

Performance Features

- Good thermal and oxidation stability
Resist the formation of sludge and other harmful products of oxidation. Long oil life
- Excellent corrosion protection
High level of corrosion protection of all metal surfaces
- Excellent oil/water separation properties
Easy drainage of excess water from lubrication systems
- Good air release characteristics
Effective air release without excessive foaming

Oil Care in Service

Shell Turbo Oils have been specifically formulated to give an optimum balance between performance characteristics, such as oxidation stability and surface properties, e.g. foaming, air release and water separation.

It is particularly important, therefore, to ensure that Shell Turbo Oils are not mixed or accidentally contaminated with even traces of any other type of lubricating oil, and that oil storage and dispensing equipment is entirely dedicated.

Health & Safety

Shell Turbo Oils are unlikely to present any significant health or safety hazard when properly used in the recommended application, and good standards of industrial and personal hygiene are maintained.

For further guidance on Product Health & Safety refer to the appropriate Shell Product Safety Data Sheet.

Advice

Advice on applications not covered in this leaflet may be obtained from your Shell Business Development Manager

These characteristics are typical of current production. Whilst future production will conform to Shell's specification variations in these characteristics may occur.



Typical Physical Characteristics

Shell Turbo Oil	32	46	68	100
Kinematic Viscosity @ 40 °C cSt 100 °C cSt (IP71)	32 5.4	46 6.9	68 8.8	100 11.2
Viscosity Index (IP 226)	101	104	102	97
Density @ 15 °C kg/l (IP 160)	0.871	0.874	0.876	0.881
Flash Point °C (Pensky-Martens Closed Cup) (IP 34)	204	207	210	240
Flash Point °C (Cleveland Open Cup) (IP 36)	215	221	227	260
Pour Point °C (IP 15)	-6	-6	-6	-6
Neutralisation Number mg KOH/g (IP 139)	0.15	0.15	0.15	0.15
Colour (ASTM-D1500)	L1.5	L1.5	L1.5	L1.5
Oxidation Stability TAN of oil at 1000 hours. max. Life to 2 mg KOH/g. hours (IP 157)	0.25 3000	0.25 3000	0.25 3000	0.25 3000
Demulsibility Number max. (IP 19)	195	195	210	240
Air release Minutes to 0.2% (air @ 50 °C) (DIN 51381)	5	5	6	10