

Lubricants for industry.

## Turbine HD



Recommended lubricant for steam, gas and hydraulic turbines.

### Use

- A product formulated with highly refined and hydro-treated paraffinic base oils, alongside selected additivation that affords this product with excellent properties for multiple applications.
- Specifically designed and recommended for circulation lubrication of elements of steam, gas and hydraulic turbines that require an oil with a long service life and high stability against oxidation.

### Benefits

- High chemical and thermal stability.
- Good oxidation stability.
- Good anti-rust properties.
- Fast deaeration speed.
- Excellent anti-foam capacity.
- Exceptional control of deposit formation and sludge.
- Its high performance allows for a longer service life, achieving longer oil load change intervals, and reducing maintenance stoppage costs.

### Specifications

- ISO 6743-5 L TSA/TGA/TGB
- British Standard 489 (CIGRE)
- CEEB Standard 207001
- General Electric GEK 107395A
- General Electric GEK 28143A
- Siemens MAT 812101/02
- DIN 51515 Part II (L-TG)
- MIL-L-17672 D
- AIST 120, 126
- General Electric GEK 32568H
- ALSTOM HTGD 90 117 (non-EP)
- Siemens TLV 901304/901305 (non-EP)
- ASTM D-4304, Type I
- JIS K 2213
- FIVES CINCINNATI P-Specs
- General Electric GEK 46506E
- MAN Turbo – TED 10000494596
- Solar ES 9-224Y Class II 6E

### Physical and chemical properties

| Parameter              | Units   | Method         | Turbine HD |           |           |
|------------------------|---------|----------------|------------|-----------|-----------|
| <b>ISO Grade</b>       | -       | -              | <b>32</b>  | <b>46</b> | <b>68</b> |
| Density 15°C           | Kg/l    | ASTM D-4052    | 0.859      | 0.863     | 0.864     |
| Flash point V/A        | °C      | ASTM D-92      | 206        | 228       | 240       |
| Pour point             | °C      | ASTM D-5950    | -12        | -12       | -12       |
| Viscosity at 40°C      | cSt     | ASTM D-445     | 30.7       | 43.2      | 65.3      |
| Viscosity at 100°C     | cSt     | ASTM D-445     | 5.38       | 6.67      | 8.93      |
| Viscosity index        | -       | ASTM D-2270    | 110        | 107       | 111       |
| Rust (with salt water) | -       | ASTM D-665 (B) | pass       | pass      | pass      |
| RPVOT                  | minutes | ASTM D-2722    | >1000      | >1000     | >1000     |
| TOST                   | hours   | ASTM D-943     | >7500      | >7500     | >7500     |

### Health & safety and environment

A Material Safety Data Sheet providing information on product hazards, handling precautions, first aid measures, and relevant environmental data is available for this product as per applicable legislation.