

PETRONAS LUBRICANTS

Jenteram HC Extra Extended Service Life Premium Quality Turbine Oil

Intro

PETRONAS Jenteram HC Extra is an extended service life anti-wear type turbine oil specially developed to completely satisfy the severe lubrication requirements of steam, hydroelectric and frame type gas turbines couple with gearing system.

They are manufactured with highly-refined unconventional base oils and specially selected high performance additives to provide good viscosity/temperature characteristics, rapid air release, good water separation, excellent oxidation stability and excellent rust and corrosion resistance.

Applications

Recommended for use in all steam, hydroelectric and frame type gas turbines requiring non-antiwear types turbine oils. Also suitable for use in speed reducers, air compressors, vacuum and deep well pump, electric motors, lightly loaded plain bearings and other equipment requiring turbine oil quality.

Customer Benefits

- Excellent anti-wear properties
- Superior oxidation control and thermal stability - longer life, deposits free
- Extended oil service life and reduced operating and maintenance cost
- Superior water separation capability - less processing and disposal cost (minimize purification needs)
- Low foaming and rapid air release - full fluid lubrication (enhance performance) in high-speed bearings and meshing gear teeth.

Product Typicals

| Characteristics | ISO Viscosity Grade | | | |
|--------------------------------|---------------------|--------------|--------------|--------------|
| | 32 | 46 | 68 | 80 * |
| Density @ 15 °C, kg/l | 0.854 | 0.870 | 0.874 | 0.876 |
| Pour Point, °C | -12 | -9 | -9 | -9 |
| Flash Point, °C | 218 | 218 | 226 | 232 |
| Kinematic V iscosity, cSt | | | | |
| @ 40 °C 31.7 | 45.9 | 68.1 | 78.8 | 100 |
| @ 100 °C | 5.7 | 7.1 | 9.0 | 9.6 |
| Viscosity Index | 118 | 112 | 107 | 99 |
| TAN, mgKOH/g | 0.09 | 0.10 | 0.09 | 0.10 |
| Rust Test | Pass | Pass | Pass | Pass |
| Foaming characteristics, ml | | | | |
| Sequence I | 0/0 | 0/0 | 0/0 | 0/0 0/0 |
| Sequence II | 10/0 | 20/0 | 40/0 | 10/0 |
| Sequence III | 0/0 | 0/0 | 0/0 | 0/0 |
| Water Separability | 40/40/0 (10) | 40/40/0 (15) | 40/40/0 (20) | 40/40/0 (20) |
| RBOT, minutes | 1136 | 1296 | 1010 | 1164 |
| +Oxidation Control (TOST), hrs | > 15,000 | > 15,000 | > 15,000 | > 15,000 |

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| Characteristics | ISO Viscosity Grade |
|--------------------------------|---------------------|
| | 100 |
| Density @ 15 °C, kg/l | 0.882 |
| Pour Point, °C | -9 |
| Flash Point, °C | 228 |
| Kinematic Viscosity, cSt | |
| @ 40 °C | 31.7 |
| @ 100 °C | 11.3 |
| Viscosity Index | 100 |
| TAN, mgKOH/g | 0.10 |
| Rust Test | Pass |
| Foaming characteristics, ml | |
| Sequence I | |
| Sequence II | 10/0 |
| Sequence III | 0/0 |
| Water Separability | 40/40/0 (10) |
| RBOT, minutes | 1134 |
| +Oxidation Control (TOST), hrs | > 15,000 |

* Not an ISO Viscosity Grade

+ Test was stopped at 15,000 hrs with TAN of 0.17 mgKOH/g (way below limit of 2.0 mgKOH/g)

Specifications

- General Electric - GEK 32568 F, GEK 107395 & GEK 101941 A
- Siemens / KWU TLV 9013/04-01
- DIN 51524 Part 2
- DIN 51524 Part 1 (HL)
- DIN 51515 Part 1 (L-TD)
- BS 489 (CIGRE)