# AGIP OTE



AGIP OTE products are designed to satisfy even the most severe lubrication requirements of steam, gas and water turbines. All grades, on exception of the grade ISO VG 100, are formulated utilizing highly refined group II base stocks with the latest technology additive. The wide range of viscosities available ensures that all possible lubricating requirements can be met.

#### CHARACTERISTICS (TYPICAL FIGURES)

AGIP OTE		32	46	68	80*	100
Viscosity at 40°C	mm²/s	30	45	64	73	100
Viscosity at 100°C	mm²/s	5,45	7,09	8,93	9,73	11,9
Viscosity Index	-	118	116	114	113	108
Flash Point COC	°C	220	230	240	245	250
Pour Point	°C	-15	-15	-15	-15	-12
Mass density at 15°C	kg/l	0,850	0,856	0,861	0,863	0,875
(*) no ISO VG grade	·					

#### **PROPERTIES AND PERFORMANCE**

- The high Viscosity Index minimizes changes in viscosity throughout the normal temperature range, thus ensuring that a proper lubricant film is maintained even at high operating temperatures.
- AGIP OTE oils have especially high oxidation and aging resistance and do not form either sludge or deposits. They are therefore suitable for extended service. Indeed they exceed 4000 hours in the Turbine Oil Stability Test (TOST) and amply exceed the oxidation levels of IP 280 (CIGRE) test.
- Their anticorrosion and antirust properties provide effective protection of all lubricated parts, the oil circuit, storage tanks, heat exchangers, etc.
- They have very good antifoam properties and readily eliminate entrained air thus reducing the danger of discontinuity in the lubricant film, air locks and cavitation in the circulation pumps, erratic regulator operation and overflow of oil from storage tank vents.
- They have very high demulsibility. This characteristic prevents formation of stable emulsions and ensures quick, complete, spontaneous separation of entrained water, thus guaranteeing continuity and homogeneity of lubricant film which is essential for correct lubrication and for minimum friction and wear.

#### APPLICATIONS

AGIP OTE oils are essentially intended for the lubrication of all parts (bearings, control systems, etc.) of turbines of various types, i.e. steam, water and gas.

They provide outstanding performance in turbo-blowers, hydraulic machinery and air compressors with medium/high temperature of the compressed air and in all other applications requiring a superior lubricant of good stability which separates readily from water.

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### SPECIFICATIONS

AGIP OTE products meet the requirements of the following classifications and specifications:

## - ABB HTDG 90117 E mod. M

- ALSTOM HTDG 90117 V0001 V
- ANSALDO ENERGIA 3.2-0092-8430
- ASTM D 4304 type 1
- BS 489:1999
- CEI 10-8 (1994)
- DIN 51515-1 L-TD
- GENERAL ELECTRIC GEK 28143A Type I, II and III
- ISO 6743/5
- ISO 8068
- ISO -L-THA (OTE 100)
- ISO -L-TSA / -TGA
- JIS K 2213 (1983)
- MITSUBISHI SPEC. NO. E00-001 REV.1
- NUOVO PIGNONE N. SOS 02111/4 (OTE 46)
- NUOVO PIGNONE SOM 17366 (OTE 32)
- SIEMENS TLV 9013 04/01