



AGIP OTE products are designed to satisfy even the most severe lubrication requirements of steam, gas and water turbines. They are formulated from highly-refined, additive treated mineral base stocks. The wide range of viscosities available ensures that all possible lubricating requirements can be met.

CHARACTERISTICS (TYPICAL FIGURES)

AGIP OTE

Characteristics	ASTM	Unit	ISO VG GRADE		
			32	46	68
Density at 15°C	D 4052	kg/l	0.850	0.856	0.861
Viscosity at 100°C	D 445	mm ² /s	5.45	7.09	8.93
Viscosity at 40°C	D 445	mm ² /s	30	45	64
Viscosity Index	D 2270		118	116	114
Flash Point, COC	D 92	°C	220	230	240
Pour Point	D 97	°C	-15	-15	-15

PROPERTIES AND PERFORMANCES

- The high Viscosity Index of all grades 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 sludges or deposits. They are therefore suitable for extended service. Indeed they exceed 3000 hours in the Turbine Oil Stability Test (TOST) and amply exceed the oxidation level 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 cavitations in the circulation pump, 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.

SPECIFICATIONS

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

- ABB HTGD 90117
- AEG KANIS 14-7-1970 (DIN 51515)
- AEG PV 198851
- BS 489

- CEI 10-8 SEPTEMBER 1994-2367
- CINCINNATI P-38 (VG 32), P-55 (VG 46), P-54 (VG 68)
- DIN 51515 (Teil I)
- ESCHER WYSS 2050995 F
- GENERAL ELECTRIC GEH-709 V
- GENERAL ELECTRIC GEI-41003 G
- GENERAL ELECTRIC GEK-28143 Type I (VG 32), Type II (VG 68), Type III (VG 100) gas-turbine.
- IEC 962-1988
- ISO-L-TSA
- KWU TLV 901301
- NATO O-240 (MM-O-2001)
- NF 384 AFT 141
- SIEMENS KR 900/01-1 (DIN 51515)
- UNI ISO 8086

APPLICATION

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

They provide outstanding performance in turbo-blowers, hydraulic machinery and air compressors where the temperature of the compressed air is not too high (DIN 51506 VCL) and in all other applications requiring a superior lubricant of good stability which separates readily from water.