

Gulf Crest EP

Supreme performance turbine oils for geared and non-geared turbines

Product Description

Gulf Crest EP series are supreme performance turbine oils specially designed for use in geared and nongeared steam turbines, gas turbines and combined cycle gas turbines (CCGT) including the gas turbines operating at high temperatures. These oils are formulated with high quality severely hydroprocessed API Group II base oils and a proprietary ashless additive package containing anti-oxidants, FZG booster, corrosion inhibitors and metal deactivators. These oils possess outstanding thermal and oxidation stability, good load carrying capacity, excellent water separability, superior rust and corrosion inhibition, low foaming tendency, good air release properties and resistance to chemical degradation to provide excellent equipment protection, reliable operation, with reduced down-time and extended service life. These oils exceed the performance requirements of major gas and steam turbine manufacturers.

Features & Benefits

- Outstanding thermal and oxidation stability prevents sludge formation, controls deposits and minimises oil degradation leading to reliable operation
- Superior anti-wear property and load carrying capability provide excellent protection for geared turbines
- Excellent water separation capability resists formation of emulsion and leads to easy removal of excess water from the lubrication system
- Effective rust and corrosion inhibitors provide long term protection to critical system components
- Good air release properties and foam control avoid erratic operation and pump cavitation leading to trouble free operation

Applications

- Power generation gas turbines
- Combined cycle gas turbines (CCGT)
- Large heavy-duty industrial gas turbines
- Power generation and industrial steam turbines
- · Turbines with heavily loaded gears
- Turbo compressors



Specifications, Approvals & Typical Properties

Meets the following Specifications		32	46	68	100
ASTM D 4304, Type I(non-EP) and Type II (EP)		Х	Х	Х	Х
BS 489		Х	Х	Х	Х
DIN 51515 Part 1 (TD) and Part 2 (TG)		Х	Х		
ISO 8086 TSE, TGE, TSA and TGA		Х	Х		
Alstom HTGD 90117 V 0001T		Х	Х	Х	
GEK 32568E/F		Х			
GEK 46506e		Х			
GEK 28143A		Х	Х		
GEK 107395a		Х			
GEK 101941A		Х			
Siemens TLV 901304		Х	Х		
Solar ES 9-224, Class II		Х	Х		
Has the following Approvals					
Siemens TLV 901304, Alstom HTGD 90117		Х			
Siemens TLV 901304 and 901305 (for use in Siemens			v		
turbosets with and without gearbox)			Х		
Typical Properties					
Test Parameters	ASTM Method	Typical Values			
Viscosity @ 40 °C, cSt	D 445	32.2	46.3	68.3	100.5
Viscosity Index	D 2270	105	104	104	98
Flash Point, °C	D 92	212	220	222	224
Pour Point, °C	D 97				ZZ4
	D 97	-24	-21	-15	-15
Density @ 15°C, Kg/l	D 1298	-24 0.852	-21 0.855	-15 0.858	
					-15
Density @ 15°C, Kg/l	D 1298	0.852	0.855	0.858	-15 0.862
Density @ 15°C, Kg/l Rust Test	D 1298 D 665A/B	0.852 Pass	0.855 Pass	0.858 Pass	-15 0.862 Pass
Density @ 15°C, Kg/l Rust Test Copper Corrosion	D 1298 D 665A/B D 130	0.852 Pass 1b	0.855 Pass 1b	0.858 Pass 1b	-15 0.862 Pass 1b
Density @ 15°C, Kg/l Rust Test Copper Corrosion Acid Number, mg KOH/g Water separability, minutes to 3 ml	D 1298 D 665A/B D 130 D 974	0.852 Pass 1b 0.1	0.855 Pass 1b 0.1	0.858 Pass 1b 0.1	-15 0.862 Pass 1b 0.1
Density @ 15°C, Kg/l Rust Test Copper Corrosion Acid Number, mg KOH/g Water separability, minutes to 3 ml emulsion @ 54 °C Foam Test, foam after 10 minutes of	D 1298 D 665A/B D 130 D 974 D 1401	0.852 Pass 1b 0.1 Pass	0.855 Pass 1b 0.1 Pass	0.858 Pass 1b 0.1 Pass	-15 0.862 Pass 1b 0.1 Pass
Density @ 15°C, Kg/l Rust Test Copper Corrosion Acid Number, mg KOH/g Water separability, minutes to 3 ml emulsion @ 54 °C Foam Test, foam after 10 minutes of settling for all sequences	D 1298 D 665A/B D 130 D 974 D 1401 D 892	0.852 Pass 1b 0.1 Pass Nil	0.855 Pass 1b 0.1 Pass	0.858 Pass 1b 0.1 Pass	-15 0.862 Pass 1b 0.1 Pass
Density @ 15°C, Kg/l Rust Test Copper Corrosion Acid Number, mg KOH/g Water separability, minutes to 3 ml emulsion @ 54 °C Foam Test, foam after 10 minutes of settling for all sequences Air Release, minutes	D 1298 D 665A/B D 130 D 974 D 1401 D 892 D 3427 DIN 51354	0.852 Pass 1b 0.1 Pass Nil 3	0.855 Pass 1b 0.1 Pass Nil 4	0.858 Pass 1b 0.1 Pass Nil 5	-15 0.862 Pass 1b 0.1 Pass Nil

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