

## Raysun Capella EP

### Supreme performance Turbine Oil for Geared & Non-geared Turbines

Raysun Capella EP series are supreme performance turbine oils specially designed for use in geared and non-geared 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.

#### Advantages

- Outstanding thermal and oxidation stability prevents sludge formation, controls deposits and minimizes 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 steam 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

#### Specification

- (DIN 51515 Part 1 (TD) and Part 2 (TG)
- (ASTM D 4304, Type I (non-EP) and Type II (EP)
- British Standard BS 489
- Alstom HTGD 90117 V 0001 S
- GEK 32568 A/C
- Siemens TLV 9013-04
- CEGB Standard 207001
- Brown Boveri HTGD 90117
- U.S. Steel 120

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ISO Viscosity Grades				Test Method	Specification
100	68	46	32		
0.874	0.871	0.869	0.865	ASTM D 1298	Density @ 15°C, kg/l
100	68	46	32	ASTM D 445	Viscosity @40 °C, cSt.
100	100	100	100	ASTM D 2270	Viscosity Index
244	236	224	220	ASTM D 92	Flash Point, °C
-21	-27	-30	-33	ASTM D 97	Pour Point, °C
Pass	Pass	Pass	Pass	ASTM D 665A/B	Rust Test
1a	1a	1a	1a	ASTM D 130	Copper Corrosion
5	4	3	2	ASTM D 3427	Air Release, minutes
≥850	1300+	1300+	1300+	ASTM D 2272	RPVOT, minutes
≥8	≥8	≥8	≥8	DIN 51354 Part II	FZG A/8.3/90, Stage, min

Note: "All of the results are typical and the results of each batch are presented in the COA sheet."