PRODUCT DATASHEET

Super-Duplex Seawater Cooler

Shell-and-tube and hairpin coolers in UNS S32750, up to 6 m

Product page





Close-up: channel head and seawater nozzles

OVERVIEW

The Tech Inc. Super-Duplex Seawater Cooler cools lube oil, seal gas, glycol and compressor gas with seawater, using super duplex stainless steel (UNS S32750, 2507) for every part the seawater touches.

TYPICAL DESIGN DATA

Seawater-side material	Super duplex UNS S32750 (2507); duplex 2205 or titanium on request
Design code	ASME VIII Div. 1 with TEMA class R, C or B; PED on request
Design pressure	To about 100 barg shell side and 25 barg tube side, higher on request
Tube length	Up to about 6 m
Weld testing	Ferrite count, ASTM A923 and ASTM G48 corrosion tests on procedures
Sour service	NACE MR0175 / ISO 15156 on request
Inspection	Hydrotest, PMI on all alloy parts, radiography to code

MODELS AND CAPACITIES

- **TI-SDX-030** – shell about DN 150, up to about 30 kW, tube length to 2 m
- **TI-SDX-400** – shell about DN 400, up to about 400 kW, tube length to 4.5 m
- **TI-SDX-2500** – shell about DN 800, up to about 2.5 MW, tube length to 6 m
- **TI-SDX-120** – shell about DN 250, up to about 120 kW, tube length to 3 m
- **TI-SDX-1000** – shell about DN 600, up to about 1 MW, tube length to 6 m

Indicative oil-to-seawater duties; the final rating depends on fluids, temperatures and allowed pressure drop.

ORDERING CODE

Example **TI-SDX-120-U-16-30-N**: **120** size by indicative duty, kW; **U** construction: F fixed tubesheet, U U-tube, R floating head, H hairpin; **16** shell-side design pressure, barg; **30** tube length in decimetres (30 = 3.0 m); **N** options: N NACE MR0175, S stacked pair, P PED.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual.
Options: titanium or duplex 2205 tubes; sacrificial anodes and isolation kits; stacked pairs for long duties.

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Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

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