



TSF SAMPLE COOLER (standard materials)

Compact, efficient sample cooling for gases and liquids

- **Single helical coil design**
- **Wide variety of exotic alloys for corrosion resistance**

The TSF series sample cooler is a compact sample cooler that provides broad application flexibility through the use of a variety of sample tube materials. Optimal service for flows below 1200 ccm for single phase heat transfer. Standard tube side materials are 316SS, Inconel® 625 and Hastelloy® C. Special materials include Alloy 20, Titanium, Zirconium and variety of nickel alloys (see spec sheet 4.8).

Specifications - TSF Series

Model No.	Shell Design	Tube Design	Tube Material	Shell Material	Area	Weight	Part Number
TSF4225	450 psi @ 650°F 31 bar @ 343°C	5000 psi @ 1000°F 344 bar @ 537°C	316SS 1/4" O.D. x 0.042"MW	304/316SS	1.2 ft² 0.11 m²	10 lbs 4.5 kg	7-00687A
TSF4225U	450 psi @ 650°F 31 bar @ 343°C	4400 psi @ 1000°F 303 bar @ 537°C	316SS 1/4" O.D. x 0.042"MW	304/316SS	1.2 ft² 0.11 m²	10 lbs 4.5 kg	7-00686C
TSF42B5	450 psi @ 650°F 31 bar @ 343°C	5000 psi @ 1100°F 344 bar @ 593°C	Inconel® 625 1/4" O.D. x 0.035"AW	304/316SS	1.2 ft² 0.11 m²	10 lbs 4.5 kg	7-00687H
TSF42B5U	450 psi @ 650°F 31 bar @ 343°C	5000 psi @ 1100°F 344 bar @ 593°C	Inconel® 625 1/4" O.D. x 0.035"AW	304/316SS	1.2 ft² 0.11 m²	10 lbs 4.5 kg	7-00687J
TSF44B5	150 psi @ 250°F 10 bar @ 121°C	5000 psi @ 1100°F 344 bar @ 593°C	Inconel® 625 1/4" O.D. x 0.035"AW	Cupro-Nickel	1.2 ft² 0.11 m²	11 lbs 5 kg	7-00693F
TSF4271	450 psi @ 600°F 31 bar @ 315°C	1000 psi @ 600°F 68 bar @ 315°C	Hastelloy® C276 1/4" O.D. x 0.035"AW	304/316SS	1.2 ft² 0.11 m²	10 lbs 4.5 kg	7-00899C

NOTE:

- Canadian Registration Number available for most models. Consult factory for CRN and other options and information.
- U in model number denotes ASME stamped model.
- Vessels are exempt from CE marking per PED 97/23/EC. Vessels are below or equal to the limits set forth in Article 3, Sections 1.1, 1.2, 1.3 and Section 2 as applicable, and are designed and manufactured in accordance with sound engineering practice (meets the general requirements of the ASME Section VIII, Division 1, Boiler And Pressure Vessel Code). Nameplate will bear the name of Sentry Equipment Corp. and safety instructions will be included per Article 3, Section 2.

