

SX 2000®



**Steel
Heat
Exchangers**

ITT Standard
ITT FLUID TECHNOLOGY CORPORATION

As the recognized leader in heat exchanger products, systems and technology, ITT Standard has been providing state-of-the-art solutions to heat transfer problems for more than 75 years.

Today, the company is devoted exclusively to the design, engineering and manufacture of shell-and-tube, gasketed plate, brazed plate and air-cooled heat exchanger products. ITT Standard heat exchangers are engineered and manufactured by experienced craftsmen who have been devoted to the science of heat transfer not just for years, but for generations. And because we offer such a wide assortment of different heat exchanger designs, we can assure you of getting the optimum heat transfer solution to your specific application, without bias toward any one particular (or proprietary) product line.



All SX 2000 steel heat exchangers are manufactured with the highest standards of quality. ITT Standard was the first North American heat exchanger manufacturer to be certified under ISO 9001 procedures and guidelines.

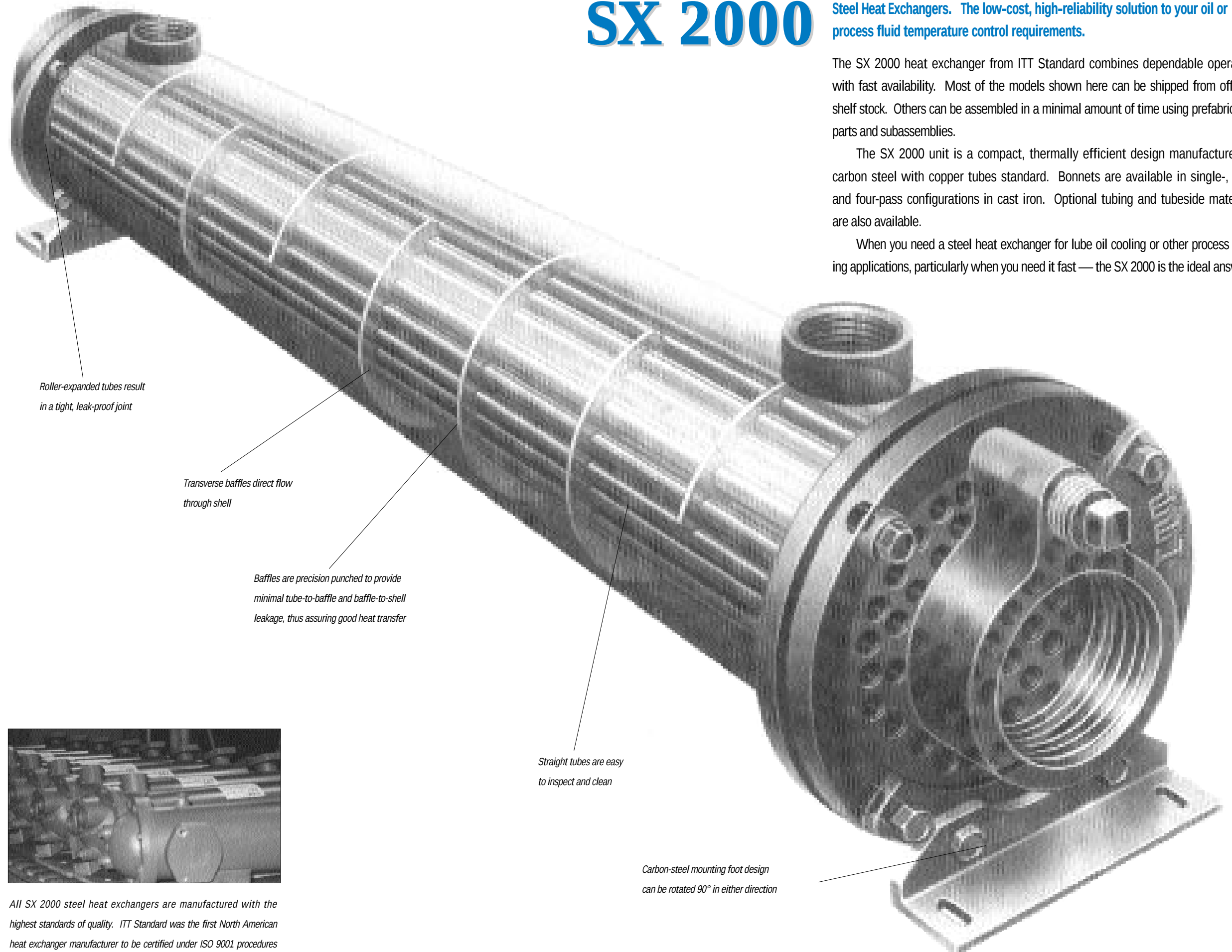
SX 2000

Steel Heat Exchangers. The low-cost, high-reliability solution to your oil or process fluid temperature control requirements.

The SX 2000 heat exchanger from ITT Standard combines dependable operation with fast availability. Most of the models shown here can be shipped from off-the-shelf stock. Others can be assembled in a minimal amount of time using prefabricated parts and subassemblies.

The SX 2000 unit is a compact, thermally efficient design manufactured of carbon steel with copper tubes standard. Bonnets are available in single-, two- and four-pass configurations in cast iron. Optional tubing and tubeside materials are also available.

When you need a steel heat exchanger for lube oil cooling or other process cooling applications, particularly when you need it fast — the SX 2000 is the ideal answer.



Straight tubes are easy to inspect and clean

Carbon-steel mounting foot design can be rotated 90° in either direction

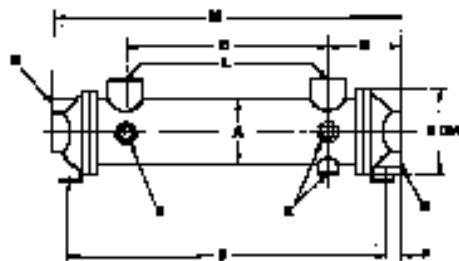
STANDARD SIZES AND DIMENSIONS

SIZE	A	B	C	D	E	F	G	H	J	K NPT	L NPT	R NPT
03014			10.000		16.375							
03024	3.250	4.500	20.000	2.312	26.375	2.750	4.500	1.625	.438 DIA.	1/4"	1"	3/8"
04014			9.000		16.625							
04024	4.250	6.000	19.000	3.125	26.625	3.500	4.250	1.750	.438 DIA.	1/4"	1-1/2"	3/8"
04036			31.000		38.625							
05014			9.000		17.125							
05024	5.250	6.750	19.000	3.438	27.125	4.000	5.250	2.000	.500 X .750	1/4"	1-1/2"	3/8"
05036			31.000		39.125							
06024			18.250		27.125							
06036			30.250		39.125							
06048	6.250	7.750	42.250	4.062	51.125	4.500	6.250	2.500	.500 X .750	3/8"	2"	1/2"
06060			54.250		63.125							
08024			17.000		27.500							
08036			29.000		39.500							
08048	8.625	10.500	41.000	5.438	51.500	5.750	8.250	3.500	.625 X .875	3/8"	3"	1/2"
08060			53.000		63.500							
08072			65.000		75.500							

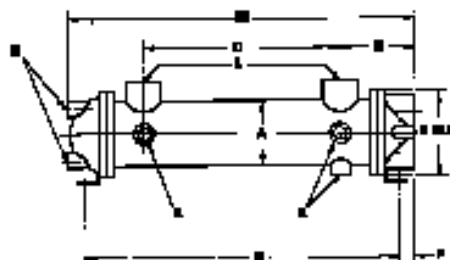
DESIGN TEMPERATURES AND PRESSURES

		Shell side	Tube side
DESIGN PRESSURE	psi	300	150
	kPA	2068	1034
TEST PRESSURE	psi	450	225
	kPA	3100	1551
DESIGN TEMPERATURE	°F	300	300
	°C	149	149

Single-pass



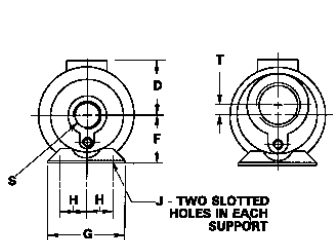
*Two- and
four-pass*



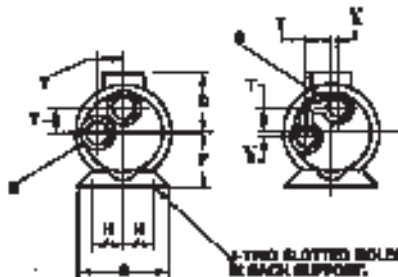
STANDARD SIZES AND DIMENSIONS

1-PASS					2-PASS					4-PASS				
M	N	P	S NPT	T	M	N	P	S NPT	T	M	N	P	S NPT	T
17.375					17.125					17.125				
27.375	3.688	.500	1-1/2"	.375	27.125	3.562	.375	1"	1.000	27.125	3.562	.375	3/4"	1.000
17.875					17.875					17.875				
27.875	4.438	.625	2"	—	27.875	4.438	.625	1-1/4"	1.062	27.875	4.438	.625	3/4"	1.250
39.875					39.875					39.875				
19.000					19.000					18.812				
29.000	5.000	.938	2-1/2"	—	29.000	5.000	.938	1-1/2"	1.500	28.812	4.812	.750	1"	1.688
41.000					41.000					40.812				
29.125					29.125					29.125				
41.125					41.125					41.125				
53.125	5.438	1.000	3"	—	53.125	5.438	1.000	2"	1.562	53.125	5.438	1.000	1-1/2"	2.000
65.125					65.125					65.125				
31.125					30.625					30.625				
43.125					42.625					42.625				
55.125	7.062	1.812	3"	—	54.625	7.062	1.812	2-1/2"	2.250	54.625	7.062	1.812	2"	2.500
67.125					66.625					66.625				
79.125					78.625					78.625				

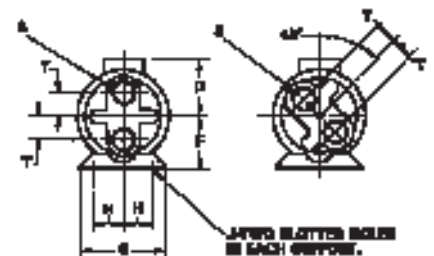
"S" dimension represents both connections on multi-pass units



Single-pass



Two-pass



Four-pass

*Note: On multi-pass units, the vent and drain bosses on the in/out bonnet will not be drilled or tapped unless specifically requested.



ITT Standard has a number of sophisticated software programs to determine the best heat exchanger type, model and size for your particular application. Your ITT Standard representative has all the details.

Selecting the right heat exchanger

Your ITT Standard representative has complete information on SX 2000 and other heat exchanger products to help you meet your particular application requirements. What's more, we can use advanced computer software programs to quickly and easily determine the most efficient heat exchanger to match your specific parameters. The process of heat exchanger design and performance calculations is condensed into one simple, dependable program that we can use to solve virtually any heat transfer problem. Give us a call.

Selection

Many ITT Standard units are stocked in Buffalo as well as in distributor locations nationwide. The result is faster delivery of both off-the-shelf heat exchangers as well as many specially engineered products. Thanks to the economies of standardization and production, we can provide standard, readily delivered solutions for even the most special requirements — at a lower cost.

SX 2000 Heat Exchanger specification

GENERAL : Heat exchanger shall be of shell-and-tube design, of carbon steel construction, including shell, tubesheets, and baffles, providing single-, two- and four-pass configurations as determined by thermal requirements.

TUBING: Unit(s) to be furnished with 1/4" OD copper tubing for shell diameters of 3" and 4", and 3/8" OD copper tubing for shell diameters of 5", 6" and 8" for maximum heat transfer.

BONNETS: Shall be cast iron, pass arrangements selected to optimized design.

TUBESHEETS: Shall be constructed of SA516 Grade 70 steel, precision drilled, and welded to the shell.

BAFFLES: Shall be punched steel, maintaining tight shell side and tubehole tolerances to minimize fluid bypass.

MOUNTING: Heat exchanger supports shall be bolted to the unit, and provide elongated mounting holes to compensate for thermal expansion.

Specifications

OPTIONS:

- stainless steel, copper-nickel, or steel tubes
- stainless steel or copper-nickel tubesheets
- ANSI and SAE four-bolt flanged connections

Our advanced thermal research lab is one of the largest and best-equipped testing facilities in the industry. Staffed by a team of experienced chemical, mechanical and metallurgical engineers, it is used to solve problems and identify opportunities for product improvement and development. It is also available to our customers to test products and systems under actual operating conditions, assuring reliability prior to field deployment.

