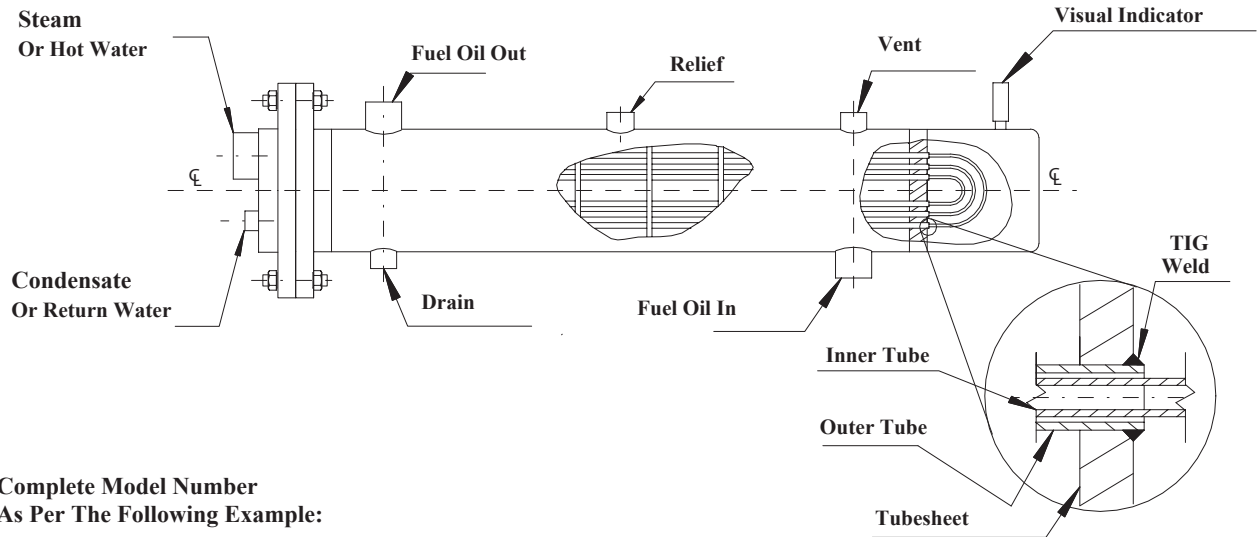


"Hermetic Safe Guard" Fuel Oil Preheaters Series "HDT"

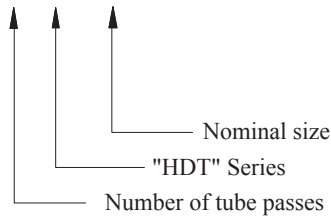
The Alstrom "Hermetic Safe Guard" preheaters series HDT are used for preheating fuel oil with steam or boiler water. The HDT preheater features a tube-within-a-tube. The inner tube contains the boiler water or steam, the outer tube is surrounded by the fuel oil. The space between the two tubes contains heat transfer solution and is charged in the factory. Should an oil leak occur, the oil goes into the rear safety chamber and becomes visible in the Alstrom visual indicator. The high efficiency design includes baffles spaced to provide optimal crossflow and higher heat transfer rate between highly viscous fuel oil and outer tubes.

Typical Applications	To have the capacity to heat _____ (gpm) (gph) of _____ in the shell
Fuel oil heaters	from _____ F to _____ F using _____, entering at _____
The most reliable construction prevents contamination of the boiler system	Unit to be constructed in accordance with ASME requirements. ASME Stamp is (not) required.
	Unit to have no more than _____ ft. of length and _____ psi pressure drop in the shell and _____ psi in the tubes.



Complete Model Number
As Per The Following Example:

2-HDT-812



Stainless steel tubes have superior mechanical properties and corrosion resistance. TIG weld provides the best tube to tubesheet joint (ASME joint efficiency equals 1).

Construction

Design Pressure	Shell Side	300 psi & 400 deg. F
	Tube Side	100 psi & 400 deg. F
	Front Head	Cast Iron, Carbon Steel
	Inner Tubes	Copper or Stainless Steel
	Outer Tubes	Stainless Steel
	Shell	Carbon Steel
	Tubesheet	Carbon Steel

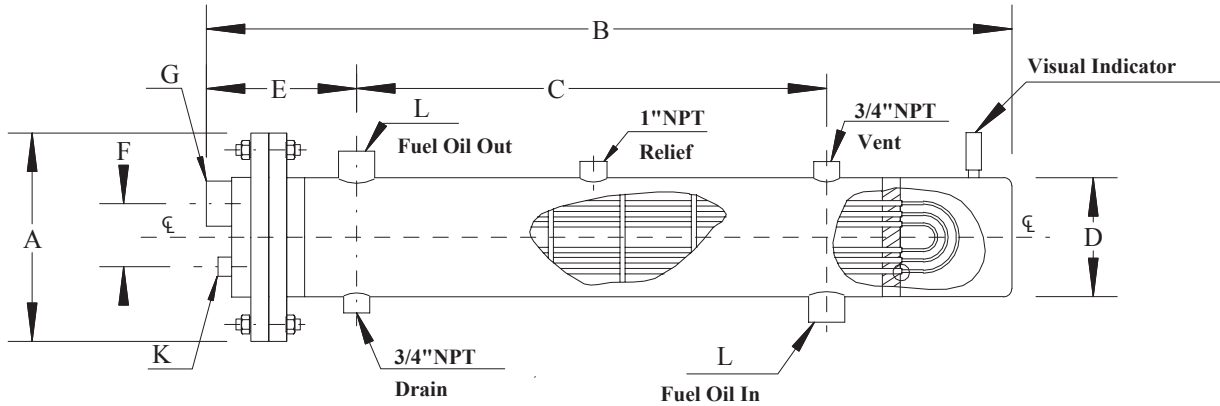
- * - Various materials and working conditions can be provided.
- Legs can be supplied when specified.
- Space equal to or greater than dimension "B" should be provided for removal of tube bundle.

- * - All Heat Exchangers are designed and manufactured according to ASME Code, Section VIII, Div.1. ASME U-1 Form, Stamp, and N.B. Number are provided upon request for an additional cost.

- * - All heaters have a one year guarantee against failure caused by materials or workmanship, but not against gasket failure or damage caused by corrosion, water hammer, fouling, sealing, excessive pressure or temperature, incorrect installation or other factor beyond the manufacturer's control.



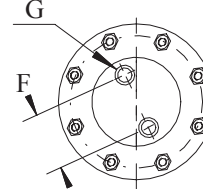
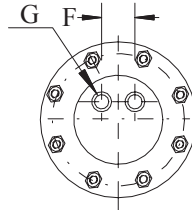
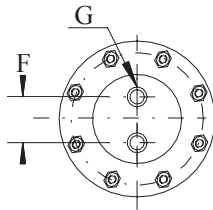
“Hermetic Safe Guard” Fuel Oil Preheaters Series “HDT”



2 HDT
2 Passes

4 HDT
4 Passes

6 HDT
6 Passes



Recommended connections sizes - Inches

G	K	L	F

Approved by the State Housing Authorities
of New York, Michigan and Oregon

HDT	A in	B in	C in	D in	E in	WGT lbs
42	7-3/4	34	17	4-1/2	7	100
43	7-3/4	46	29	4-1/2	7	120
44	7-3/4	58	41	4-1/2	7	140
45	7-3/4	70	53	4-1/2	7	160
46	7-3/4	82	65	4-1/2	7	180
52	9-1/4	33	17	5-9/16	7	130
53	9-1/4	45	29	5-9/16	7	155
54	9-1/4	57	41	5-9/16	7	180
55	9-1/4	69	53	5-9/16	7	205
56	9-1/4	81	65	5-9/16	7	230
64	9-1/4	57	41	6-5/8	7	235
65	9-1/4	69	53	6-5/8	7	265
66	9-1/4	81	65	6-5/8	7	295
68	9-1/4	105	91	6-5/8	7	360
610	9-1/4	129	113	6-5/8	7	425
612	9-1/4	153	137	6-5/8	7	490

Customized Heat Exchanger →

HDT	A in	B in	C in	D in	E in	WGT lbs
86	12	82	64	8-5/8	8	480
88	12	106	88	8-5/8	8	590
810	12	130	112	8-5/8	8	700
812	12	154	136	8-5/8	8	810
106	15	88	64	10-3/4	9	695
108	15	112	88	10-3/4	9	855
1010	15	136	112	10-3/4	9	1015
1012	15	160	136	10-3/4	9	1175
126	17	90	64	12-3/4	9	965
128	17	114	88	12-3/4	9	1185
1210	17	138	112	12.750	9	1405
1212	17	162	136	12.750	9	1625
1412	19	164	136	14	10	1880
1612	21	164	136	16	10	2475
1812	23	166	136	18	12	3060
2012	25-1/2	166	136	20	12	3800