

Steam Heater

The Expro steam heater offers a high-efficiency heat transfer with a small foot print. The steam heater is mounted on a sturdy, oilfield-type skid with a lifting/crash frame enclosure. Heat transfer is accomplished by applying superheated steam directly to the high-pressure upstream pre-heat process tube bundle with a full opening two-inch adjustable choke separating the low-pressure downstream post-heat process tube bundle. The tubes are sealed in an ASME vessel set with automated steam process controls for both temperature and pressure control. Steam condensate is directed to a steam trap for recycling back to the steam generator. The steam heater comes with a high-pressure

diverter (by-pass) manifold on the inlet to the outlet for bypassing the tube bundles. Safety systems in this type of heater include a relief-valve and rupture-disc located on the heater vessel, and a fail-safe temperature control device. A high-pressure pilot monitoring the vessel pressure is available for interfacing with an Expro ESD system. The steam heater is built in accordance with Expro Equipment Sales "Engineering Standards and Practices" which meets or exceeds most International standards and codes, and is offered with third party Independent Design Review Certification and fabrication Certificate of Conformance.



Expro Steam Heat Exchanger Variations								
Nominal Diameter inches	Max. Working Pressure psi	Steam Capacity Btu/hr	Inlet - outlet connections	Weight lbs	Dimensions (h x l x w) ft	Chokes	Special features	Design Code and Serv
Direct Steam								
3"	5,000 Up 2,000 Down	4 MM. Requires 5,340 lbs/hr @ 80% efficiency	3" fig 602, steam 2" fig 206	20,000	8 x 20 x 6	single adjust	14 passes upstream and 10 passes downstream of choke. Vessel is insulated, rated at 150 psi, 42" dia. x 14.5' fitted with relief valve and rupture disc assembly	ASME VIII Div. 1, ANSI B31.3, NACE MR-01-75
3"	10,000 Up 5,000 Down	4 MM Requires 5,932 lbs/hr @ 80% efficiency	3" fig 1502, steam 2" fig 206 unions	20,500	8 x 20 x 6	single adjust	14 passes upstream and 10 passes downstream of choke. Vessel is insulated, rated at 230 psi, 42" dia. x 14.5' fitted with relief valve and rupture disc assembly	ASME VIII Div. 1, ANSI B31.3, NACE MR-01-75
4"	5,000 Up 2,000 Down	4 MM Requires 5,932 lbs/hr @ 80% efficiency	4" fig 602, steam 2" fig 206 unions	20,500	8 x 20 x 6	single adjust	8 passes upstream and 8 passes downstream of choke. Vessel is insulated, rated at 150 psi, 42" dia. x 14.5' fitted with relief valve and rupture disc assembly.	ASME VIII Div. 1, ANSI B31.3, NACE MR-01-75
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