

WS SERIES HEAT EXCHANGERS WS-20-2P-1 | SUBMITTAL

File No: XX.XX
Date: XXX. XX, 2012
Supersedes: XX.XXX
Date: DEC. 01, 1994

Job: _____ Representative: _____

Ordered by: _____ Date: _____

Engineer: _____ Submitted by: _____ Date: _____

Contractor: _____ Approved by: _____ Date: _____

DESIGN CONDITIONS

SHELL

Design pressure: 150 psig (1034 kPa)
Design temperature: 375°F (191°C)
Minimum design metal temperature: 40°F (4.4°C)
Hydraulic test pressure: 225 psig (1551 kPa)
Contents: Steam

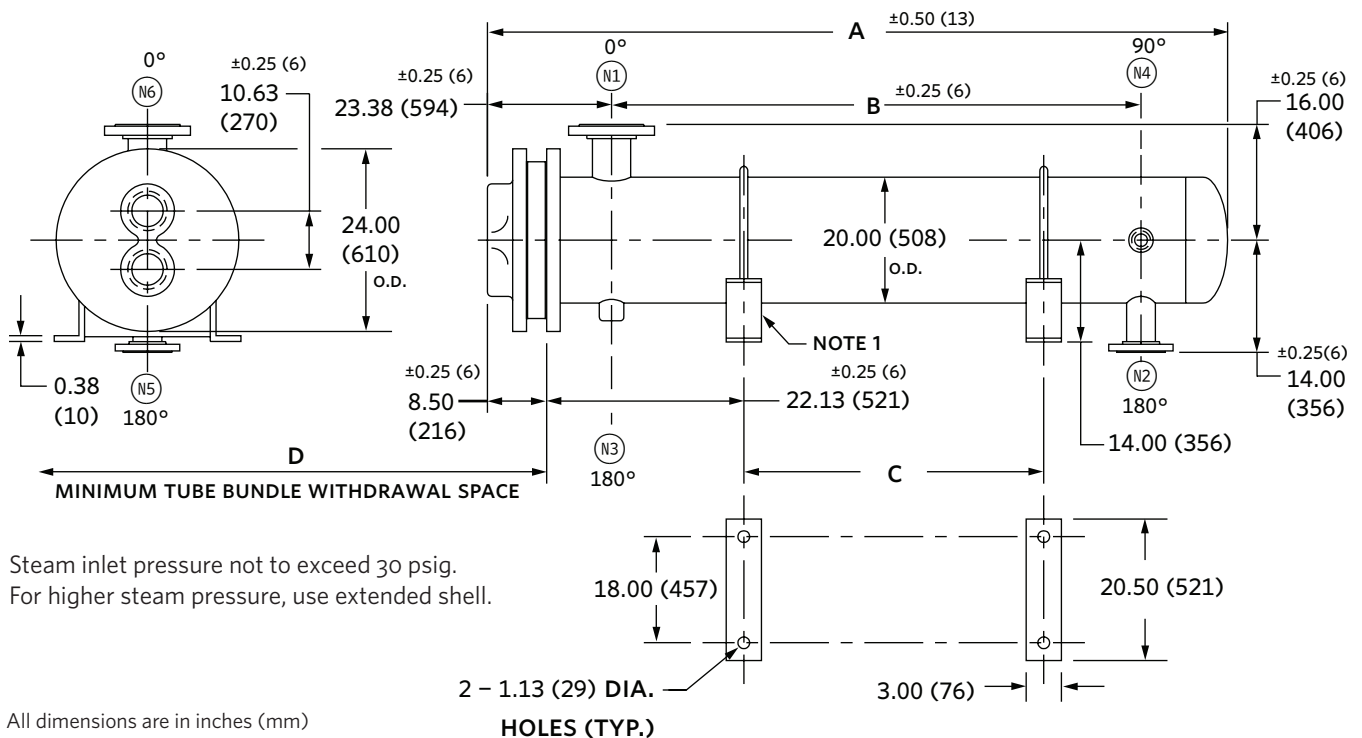
TUBES

Design pressure: 125 psig (862 kPa)
Design temperature: 375°F (191°C)
Minimum design metal temperature: 40°F (4.4°C)
Hydraulic test pressure: 250 psig (1723 kPa)
Contents: Water

NOZZLE SCHEDULE

SERVICE	MARK	SHELL SIDE	MARK	TUBE SIDE
Inlet	(N1)	As per table	(N5)	8.00 (203) NPT
Outlet	(N2)	As per table	(N6)	8.00 (203) NPT
Drain	(N3)	0.74 (18) NPT		
Vent	(N4)	0.74 (18) NPT		

All dimensions are in inches (mm)



Steam inlet pressure not to exceed 30 psig.
For higher steam pressure, use extended shell.

All dimensions are in inches (mm)

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EXCHANGER SIZE	DIMENSIONS INCHES (mm)					
	A	B	C	D	(N1)	(N2)
ws-203-2-1	45.50 (1156)	12.50 (318)	N/A	39.00 (991)	12.00 (305)	4.00 (102)
ws-204-2-1	57.50 (1461)	25.50 (648)	10.50 (267)	51.00 (1295)	12.00 (305)	4.00 (102)
ws-205-2-1	69.50 (1765)	37.50 (953)	22.50 (572)	63.00 (1600)	12.00 (305)	4.00 (102)
ws-206-2-1	81.50 (2070)	49.50 (1257)	34.50 (876)	75.00 (1905)	12.00 (305)	4.00 (102)
ws-207-2-1	93.50 (2375)	61.50 (1562)	46.50 (1181)	87.00 (2210)	12.00 (305)	4.00 (102)
ws-208-2-1	105.50 (2680)	73.50 (1867)	58.50 (1486)	99.00 (2515)	12.00 (305)	4.00 (102)
ws-209-2-1	117.50 (2985)	85.50 (2172)	70.50 (1791)	111.00 (2819)	12.00 (305)	4.00 (102)
ws-2010-2-1	129.50 (3289)	97.50 (2477)	82.50 (2096)	123.00 (3124)	12.00 (305)	4.00 (102)
ws-2011-2-1	141.50 (3594)	109.50 (2781)	94.50 (2400)	135.00 (3429)	12.00 (305)	4.00 (102)
ws-2012-2-1	153.50 (3899)	121.50 (3086)	106.50 (2705)	147.00 (3734)	12.00 (305)	4.00 (102)
ws-2013-2-1	165.50 (4204)	133.50 (3391)	118.50 (3010)	159.00 (4039)	12.00 (305)	4.00 (102)
ws-2014-2-1	177.50 (4509)	145.50 (3696)	130.50 (3315)	171.00 (4343)	12.00 (305)	4.00 (102)
ws-2015-2-1	189.50 (4813)	157.50 (4001)	142.50 (3620)	183.00 (4648)	12.00 (305)	4.00 (102)

NOTES:

- 1 Supports supplied only if specified on order.
- 2 Nozzle sizes shown are recommended for maximum exchanger life.
- 3 Fabricated to ASME code section VIII division 1 and latest addenda.
- 4 Drawing is not to scale.
- 5 All dimensions 0.13 (3) unless otherwise shown.

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