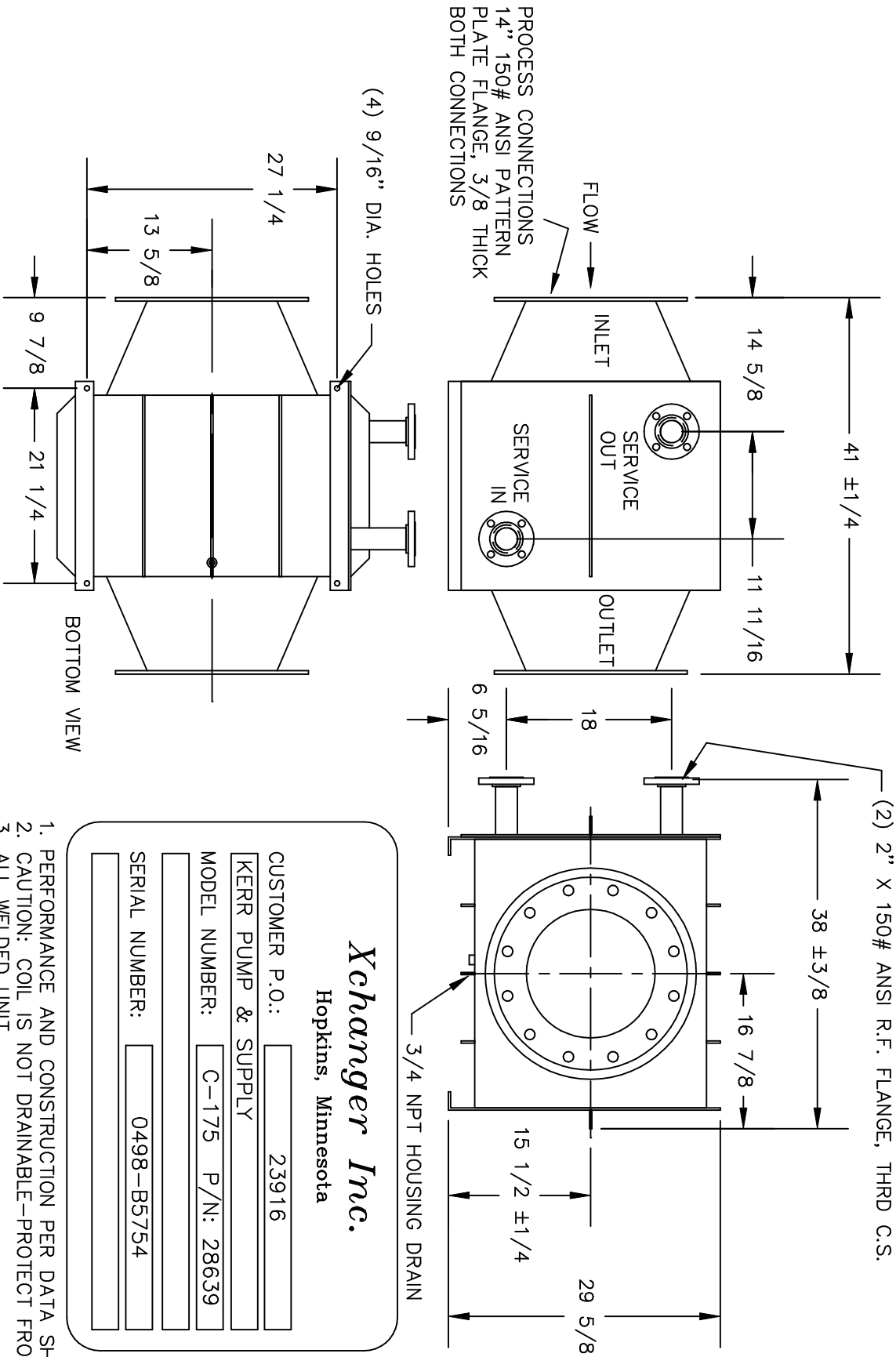


28639



Xchanger Inc.
Hopkins, Minnesota

CUSTOMER P.O.: 23916
 KERR PUMP & SUPPLY
 MODEL NUMBER: C-175 P/N: 28639
 SERIAL NUMBER: 0498-B5754

1. PERFORMANCE AND CONSTRUCTION PER DATA SHEET #37990
2. CAUTION: COIL IS NOT DRAINABLE-PROTECT FROM FREEZING
3. ALL WELDED UNIT

TOLERANCES (UNLESS OTHERWISE NOTED)		Xchanger Inc. 1401 SOUTH 7TH ST HOPKINS, MN 55343		MODEL C-175 HEAT EXCHANGER ASSEMBLY	
DECIMAL ± .13	FRACTIONAL ± 1/8	DRAWN BY: MJR APPROVED BY: .	SCALE: NONE DATE: 04/21/98	JOB NUMBER B5754	SHEET 1 OF 1
				DRAWING NUMBER 28639	REV. .

1	Xchanger, Inc. Rating for Model C-175 ref #37990		Page 1 of 1
2	Engineer: Aaron Groh		February 6, 1998
3	Prepared for:		
4	Kerr Pump & Supply		
5	Tom Gross		
6	PH: 248-543-3880, FAX: 248-543-3236		
7			
8	PERFORMANCE	PROCESS MEDIA SIDE	SERVICE MEDIA SIDE
9	Fluid Circulated	Argon	Water
10	Volumetric Flow Rate	1,000.0 Std. ft ³ /min	63.1 gal/min
11	Total Fluid Entering	6,209.8 lb/hr	31,338.9 lb/hr
12	Liquid		31,338.9 lb/hr
13	Vapor		
14	Non-Condensibles	6,209.8 lb/hr	
15	Vaporized or (Cond.)		
16	Temperature In	1,000.0 °F	90.0 °F
17	Temperature Out	190.0 °F	110.0 °F
18	Inlet Pressure (Absolute)	400.016 mm Hg	
19	Velocity (Standard)	457.1 ft/min	6.4 ft/sec
20	Pressure Loss	3.1 in. water	4.5 lb/in ²
21	Fouling Factor	0.00010 ft ² -°F-hr/BTU	0.00100 ft ² -°F-hr/BTU
22	Total Heat Exchanged: 625,188 BTU/hr		
23			
24	AVERAGE MEDIA PROPERTIES		
25	Thermal Conductivity	0.01686 BTU/hr-ft-°F	0.36002 BTU/hr-ft-°F
26	Specific Heat	0.12429 BTU/lb-°F	0.99740 BTU/lb-°F
27	Absolute Viscosity	0.09212 lb/ft-hr	1.71207 lb/ft-hr
28	Density	0.02737 lb/ft ³	61.91566 lb/ft ³
29	Latent Heat of Vapor		
30			
31	CONSTRUCTION		
32	Design Temperature	-400 to 1,000 °F	-400 to 1,200 °F
33	Design Pressure (Gauge)	-8.0 to 8.0 lb/in ²	-15.0 to 200.0 lb/in ²
34	Test Pressure (Gauge)	12.0 lb/in ²	300.0 lb/in ²
35	Cyclic Pressure	No	Not Applicable
36	Test Procedure	Bubble Test	Bubble Test
37	Design Calculations	Not Supplied	Not Supplied
38	ASME Code Stamp	Not Applicable	Not Applicable
39			
40	Tube Material : 304L Stainless Steel	Housing Material : 304 Stainless Steel	
41	Fin Material : 304 Stainless Steel	Casing Material : 304 Stainless Steel	
42	Sealant Material : None	Phenolic Coating : None	
43	Removable Core : No	Mist Eliminator : None	
44	Tube Circuit Type: Nontrapped	Gas Flow Dir. : Horizontal	
45	Drawing Number : 10746	Weight (Dry/Wet) : 452 / 475 lb	
46			
47	CONNECTIONS		
48	Process Inlet : 14" ANSI 150 lb pattern FFF, 3/8" thick		
49	Process Outlet : 14" ANSI 150 lb pattern FFF, 3/8" thick		
50	Service Inlet : 2" Pipe with 2" C.S. ANSI 150 lb RFF		
51	Service Outlet : 2" Pipe with 2" C.S. ANSI 150 lb RFF		
52			
53	NOTES		
54	Construction material suitability must be determined by customer.		
55	Rotary lobe blower type pulsation must be dampened by a chambered silencer.		
56	This unit must be protected from freezing.		
57	This unit is not designed for cycling process gas pressure.		
58			
59			
60			
61			
62			