



GENERAL NOTES

1. CONSTRUCTION TO COMPLY WITH A.S.M.E. CODE SECTION VIII, DIV 1 LATEST EDITION.
2. A.S.M.E. STAMP & NAT'L BD. INSPECTION & REGISTRATION.
☒ YES ☐ NO
3. TEMA CLASS "B ", TYPE "BEM "
4. 71.6 SQ. FT. HEAT TRANSFER SURFACE AREA.
5. ALL BOLT HOLES TO STRADDLE CENTERLINES.
6. SEE VIEW "A-A" FOR TRUE NOZZ. ORIENTATION.
7. ALL DIMENSIONS ARE IN INCHES.
8. WEIGHT: 510 LBS. EMPTY
 545 LBS. FLOODED
9. PAINT (CARBON STEEL ONLY):

ONE SHOP COAT RED OXIDE
10. SEAL WELD TUBES TO TUBESHEETS
11. DYE CHECK TUBE TO TUBESHEET WELDS

MECHANICAL DESIGN CONDITIONS	SHELL SIDE	TUBE SIDE
DESIGN TEMPERATURE, °F	450	350
MIN.DESIGN METAL TEMP.,*F	−20	−20
DESIGN PRESSURE, PSIG	150	150
TEST PRESSURE, PSIG	195	—
CORROSION ALLOWANCE	1/16"	
RADIOGRAPHY	—	—
HEAT TREATMENT	—	—

CUSTOMER	PATRIOT FUELS BIODIESEL LLC
ADDRESS:	101 PATRIOT WAY ANNAWAN IL 61234

ITEM	MAT'L SPEC	SIZE & DESCRIPTION	MARK	FLG & FITTING SPECIFICATIONS		NECK SPECIFICATIONS		SERVICE	REMARKS		
				SIZE, RATING & TYPE	MATERIAL	SIZE & SCH.	MATERIAL				
SHELL	SA-53B ERW	8 5/8"O.D. SCH.30 (.277"NOM.TK.)									
TUBESHEETS	SA-182 304L	13 1/2"O.D. X 1"TK. (8"-150#BLND FLG)	A	3"-300#RFSO	SA-105	3"SCH.40	SA-106B	PARATHERM IN			
TUBES	SA-249 304L	(73)-5/8"O.D. X 18 BWG 6'-0" LG. ON 13/16"TR. PITCH	B	3"-300#RFSO	SA-105	3"SCH.40	SA-106B	PARATHERM OUT			
BAFFLES	C.S.	SEGMENTAL TYPE 2 3/8"NOM. PITCH 25% HORIZ.CUT (22 REQ'D)	E 1-2	3/4"-3000#HCPLG	SA-105			VENT/DRAIN	WITH PLUG		
SUPPT'S	A-36	AS PER RUBICON STD-100 REV.4 TYPE "B "									
EXP. JNT	SA-240 304	BELLOWS TYPE BY ADSCO									
			0	ISSUED FOR APPROVAL						07/14/14	Y.P.
			NO.	REVISION						DATE	BY

RUBICON

INDUSTRIES
CORP.

848 E. 43rd ST., BROOKLYN, N.Y. 11210

ORN. Y.P.	DATE	07/14/14	B-4021-2	REV.0
CHK.	DATE			
APP.	DATE			