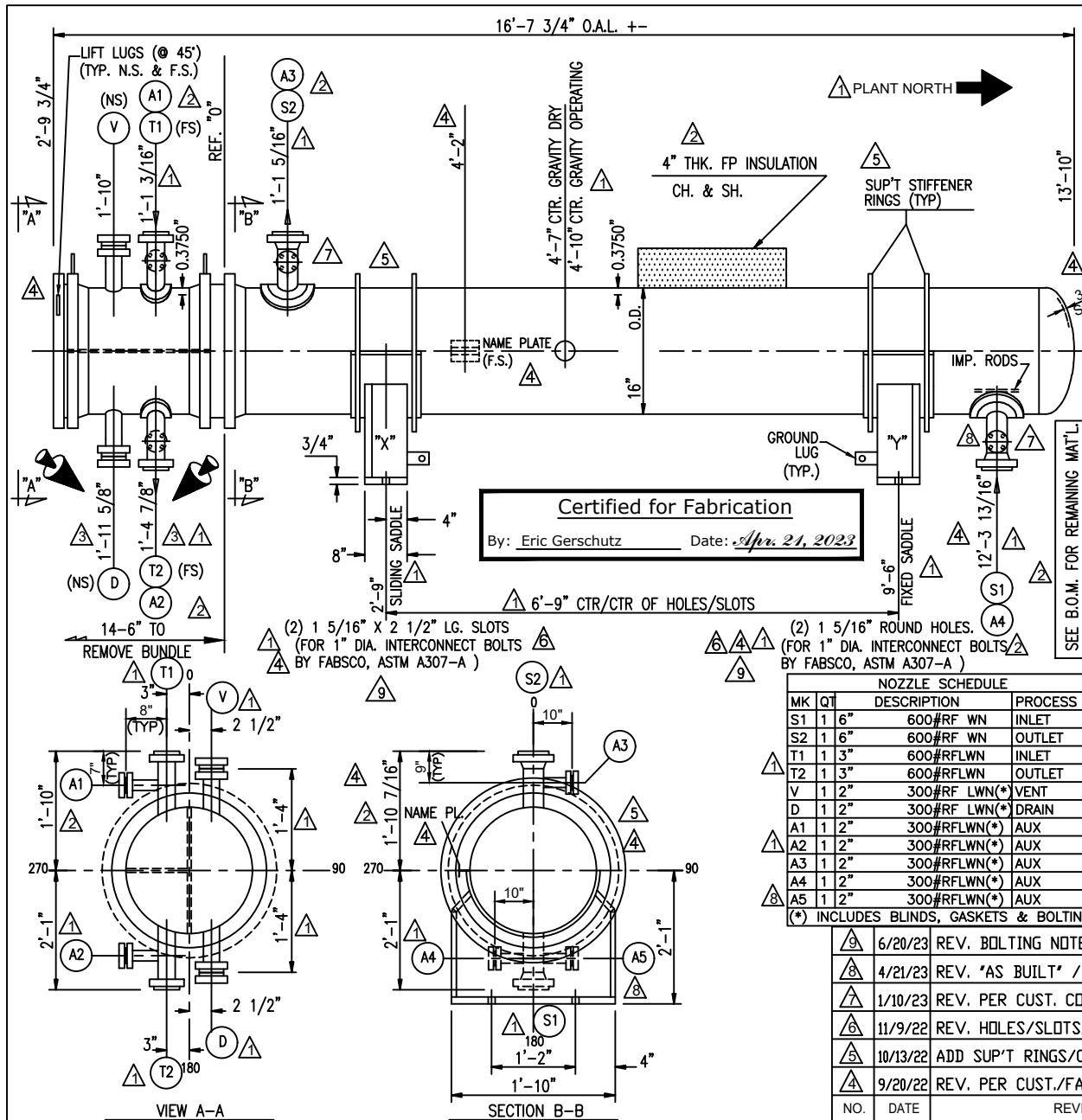




DESIGN DATA	SHELL	TUBE
DESIGN PRESSURE P.S.I.G.	375	400
M.A.W.P. P.S.I.G.	405	405
M.A.P. P.S.I.G.	485	485
LIMITED BY	TUBESHEET	TUBESHEET
VACUUM PRESSURE P.S.I.G.	15 @ 300\" F.	15 @ 300\" F.
TEST PRESSURE P.S.I.G.	SHOP-631/FIELD-527	SHOP-631/FIELD-527
DESIGN TEMP. Deg.F.	300	330
MDMT Deg. F.	5	32
CORROSION ALLOWANCE	1/8"	1/8"
NUMBER OF PASSES	1	4
RADIOGRAPHY	SPOT/UW-11(a)(5)(b)	SPOT/UW-11(a)(5)(b)
HEAT TREAT REQUIRED	NO	NO

ESTIMATED WEIGHTS, LBS. (PER UNIT)
 DRY: 5500 W/INSUL: 5790 BUNDLE: 1400 WET/HYDROTEST: 6700 SHELL: 1250 CHAN.: 900

SPECIFICATIONS
 ASME Code Section VIII, Division 1, 2021 Ed. (Stamp: Yes)
 TEMA Class R 10th Ed.; & Nat'l Bd Reg. is Req'd. API-660 9th Ed.
 Design Reviewed For Compliance With The Requirements of UG-120(d).
 Impact Test Exempt per UCS-66(a),(c),(g), Fig. UCS-66 Gen. Note (c), & UCS-67

MATERIAL	
CHANNEL: SA-106-B	TUBESHEETS: SA-516-70N
SHELL: SA-106-B	BAFFLES: SA-36
TUBES: SA-179(SMLS.) (60) U's 3/4" O.D.X 0.083" (min.) x 13'-0" LG.	
TUBE PITCH 1" □	SURFACE 301 SQ.FT.

GENERAL NOTES
 ALL BOLT HOLES TO STRADDLE NATURAL CENTER LINES.
 INSULATION: SHELL = 4" FP; CHAN. = 4" FP (BY OTHERS)
 INSULATION SUPPORTS BY FABSCO
 FIRE PROOFING ON SADDLES IS REQ'D.
 STRESS RELIEVE U-BENDS PLUS 1'-0" OF STRAIGHT LENGTH
 SEAL WELD & EXPAND TUBES TO TUBESHEET
 STATIC HEAD: SHELLSIDE: 0.546 PSI; TUBESIDE: 0.546 PSI
 SHELLSIDE FLAMMABLE & TOXIC; TUBESIDE FLAMMABLE
 THIS EXCHANGER STACKS OVER ITEM 18-X-372B, JOB-S21-13258-10.
 SEE STACKING ARRANGEMENT ON DWG. S21-13258-10-1B.
 GASKETS: .1750" THK. 316 S.S. SPIRAL WOUND W/ GRAPHITE FILLER & 316 S.S. INNER & OUTER COMP. RINGS.
 10% SPARE BOLTING FOR BODY FLG'S.
 2 SETS OF SPARE GASKETS REQUIRED.
 PAINT: SEE DWG. -1A.

PROJECT NAME: WORLD ENERGY RENEWABLES PROJECT
 EQUIPMENT OWNER: AIR PRODUCTS MANUFACTURING LLC
 SERVICE: STRIPPER FEED / DEBUTANIZER BOTTOMS EXCHANGER
 LOCATION: WORLD ENERGY, PARAMOUNT, CA. USA
 PRODUCT: **STRIPPER FEED / DEBUTANIZER BOTTOMS EXCHANGER**
 ITEM NO.: 18-X-372A
 AIR PRODUCTS P.O. NO.: 4505600057 / A8KM-4-402-PO-2
 AP PROJECT NO.: EN-20-7120
 VDR CODE NO.: HC09
 SERIAL NO.: S21-13258-9
 ENGINEER: EG
 CUSTOMER / CLIENT: WORLD ENERGY PARAMOUNT

NOZZLE SCHEDULE			
MK	QT	DESCRIPTION	PROCESS
S1	1	6" 600#RF WN	INLET
S2	1	6" 600#RF WN	OUTLET
T1	1	3" 600#RFLWN	INLET
T2	1	3" 600#RFLWN	OUTLET
V	1	2" 300#RF LWN(*)	VENT
D	1	2" 300#RF LWN(*)	DRAIN
A1	1	2" 300#RFLWN(*)	AUX
A2	1	2" 300#RFLWN(*)	AUX
A3	1	2" 300#RFLWN(*)	AUX
A4	1	2" 300#RFLWN(*)	AUX
A5	1	2" 300#RFLWN(*)	AUX
(*) INCLUDES BLINDS, GASKETS & BOLTING			

NO.	DATE	REVISIONS
1	6/20/23	REV. BOLTING NOTE/CUST. DD/DG
2	4/21/23	REV. "AS BUILT" / FABSCO AS/DD
3	1/10/23	REV. PER CUST. COMMENTS DD/DG
4	11/9/22	REV. HOLES/SLOTS/CUST. DD/DG
5	10/13/22	ADD SUP'T RINGS/CUST. DD/DG
6	9/20/22	REV. PER CUST./FABSCO B.W./DD

ASSEMBLY AND SPECIFICATIONS FOR		
ONE 15.25-156 A E U		
DWN. BY	Fabscos SHELL & TUBE, LLC	
EMG		
DATE		
12-31-21	DWG.NO.	S21-13258-9-1
CKD. BY	DiCarlo	REV. 9