

This approval does not relieve the vendor of his responsibility to meet all requirements of the purchase order.

☒ **APPROVED PROCEED WITH FABRICATION**
 Proceed with fabrication in accordance with comments - resubmit corrected drawings certified for record.

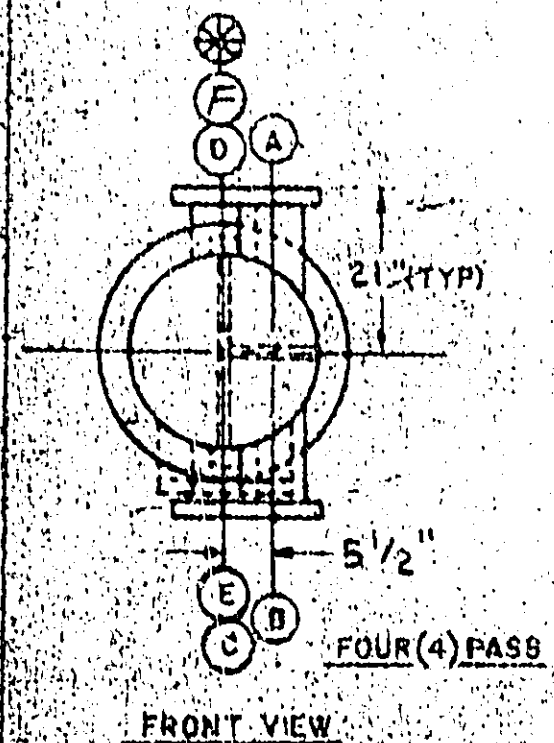
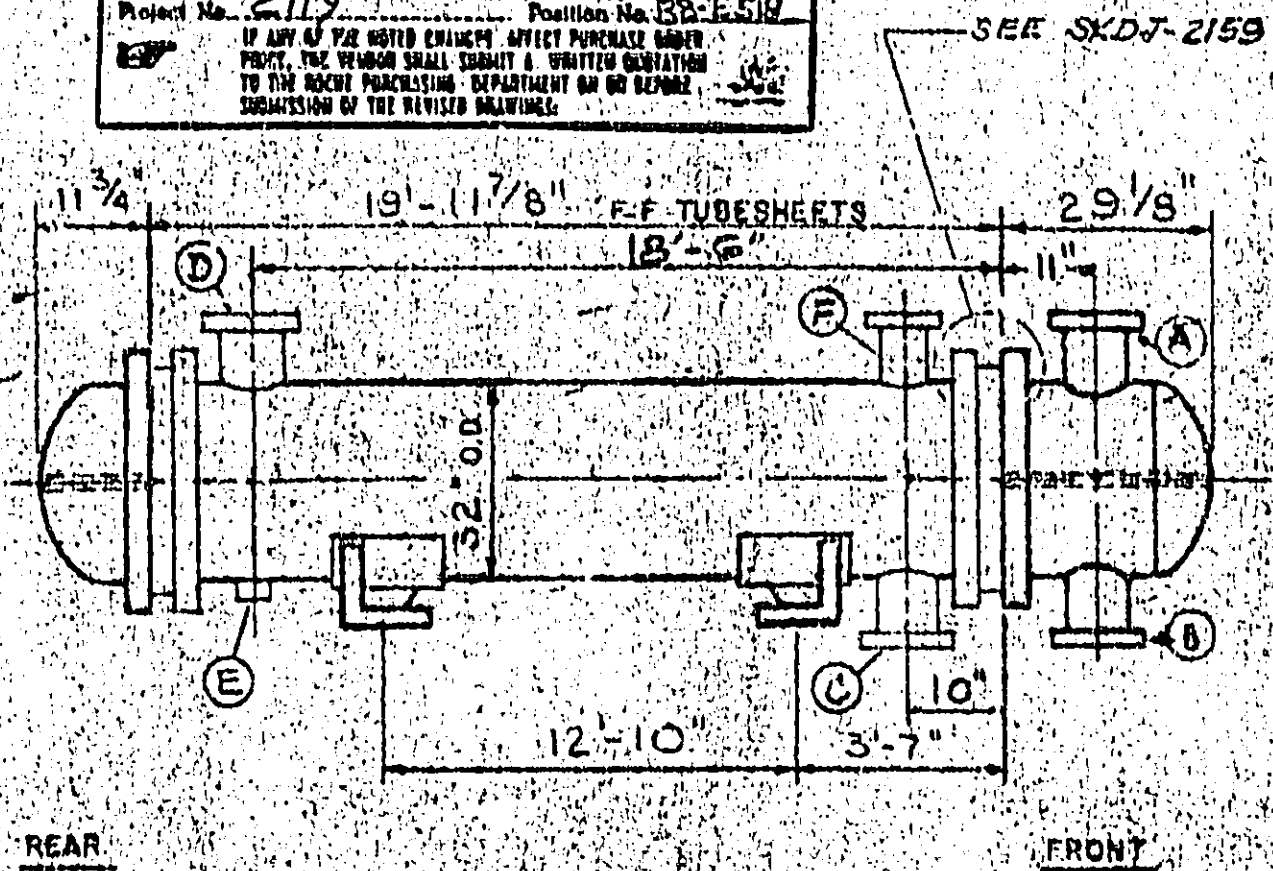
☐ **APPROVED AS NOTED**
 Proceed with fabrication in accordance with comments - resubmit corrected drawings certified for record.

☐ **DISAPPROVED - DO NOT FABRICATE**
 Resubmit drawings for approval.

ROCHE **HOFFMANN-LA ROCHE INC.**
 NUTLEY, NEW JERSEY

By: *[Signature]* Date: 6/4/72
 Project No. 2119 Position No. SB-E518

IF ANY OF THE NOTED CHANGES AFFECT PURCHASE ORDER PRICE, THE VENDOR SHALL SUBMIT A WRITTEN QUOTATION TO THE ROCHE PURCHASING DEPARTMENT ON OR BEFORE SUBMISSION OF THE REVISED DRAWINGS.



Q & R S D VS 3264-20H
MODEL

316 SS SHELLSIDE CONSTRUCTION
WITH STEEL BONNETS

GENERAL NOTES

- CONSTRUCTION TO COMPLY WITH ASME CODE SECTION VIII DIV. 1 LATEST EDITION W 77
- ASME STAMP & NATEC INSPECTOR'S MARKING
- ITEM CLASS "B" TYPE BEM
- 3062 SQ FT HEAT TRANSFER SURFACE
- ALL BOLT HOLES TO HEAD & CENTERLINE
- SEE FRONT VIEW FOR TRUE NOZZLE ORIENTATION
- PAINT CARBON STEEL ONLY - ONE SHOP COAT GRAY ZINC CHROMATE PRIMER
- WEIGHT 13000 LBS EMPTY
- 22700 LBS FLOODED WITH WATER
- WELD TUBES TO TUBESHEET OVER 2ND

DESIGN CONDITIONS		
DESIGN TEMPERATURE	180 °F	150 °F
DESIGN PRESSURE	20 PSI	100 PSI
TEST PRESSURE	30 PSI	150 PSI
CORROSION ALLOWANCE	NONE	1/16"
RADIOGRAPHY	NONE	NONE

CUSTOMER: HOFFMANN-LA ROCHE INC.
HLR PROJ. No. 2119
E 665502 B
P.O. NO.
D & R JOB NO. J-2159-5
TAG POSITION NO. E518 EQ CODE NO. CSE-3

NO. UNITS REQ'D. ONE (1)
EQUIP. CODE CSE-3

DOYLE & ROTH MFG CO INC
ONE BROADWAY, NEW YORK, N.Y. 10004

DRAWING NO. 3264-20H
CHECKED BY: [Signature]
DATE: 6/4/72
APPROVED BY: [Signature]
DATE: 6/4/72

MATERIALS OF CONSTRUCTION				NOZZLES & FITTINGS			
ITEM	SIZE	QUANTITY	DESCRIPTION	MARK	SIZE	DESCRIPTION	NECK
SHELL	32" O.D.	1	316 SS CYLINDER SA-240 1/4" TK	A	8"	STD ANSI F 50 SA-105	30
TUBESHEETS	32" O.D.	1	316 SS SA-240 1/4" TK	B	8"	STD ANSI F 50 SA-105	30
TUBES	1 7/8" O.D. x 16	16	316 SS TUBES 20' LG ON 5/8" Δ PITCH	C	4"	STD ANSI L J SA-105 WITH STUB END	10
BONNET FLD	32" O.D.	1	STEEL CYLINDER 2 1/2" TK	D	1 1/2"	STD ANSI 1/2" SA-105 FACED W/SS	1 1/8"
BONNET CYL	32" O.D.	1	STEEL CYLINDER SA-285C 3/8" TK	E	3/4"	NOODP HALF COLO. SA-182, 316 SS W/SS PLUG	
BONNET COVER	32" O.D.	1	STEEL CYLINDER 3/8" TK	F	4"	STD ANSI L J SA-105 WITH STUB END	10
SUPPORT (7)	316 SS	7	SEGMENTAL TYPE 24" DIA. PITCH 45° VERT. CUT				
GASKET	TEF. ENVELOPED ASB. FILLED	1	33 1/2" O.D. x 32 1/4" I.D.				
BOLTING	ALLOY SA-193 B7	1	1/2" DIA. x 35" LG				
SHELL SUPPTS	STEEL X 1/2" DIA. x 4' LONG	4	W/ 2" DIA. PAD				
SHELL BACKRING	36 1/8" O.D. STEEL SA-181 GFI	1	2 1/6" TK				