

DESIGN DATA (MAX):	TUBE SIDE	SHELL SIDE
PRESSURE (PSIG)	150	150
TEMPERATURE °F.	320	320
MIN. DES. METAL TEMP. °F.	20	20
HYDROSTATIC TEST (PSIG)	256	225

WELD SPEC'S: SEE SUMMARY MAP

SHELL 8"-SCH#30(.277")TK WELDED PIPE
SA-53-GR-B

	TUBE SIDE	SHELL SIDE
NOZZLE (PIPE)	SA-312 (WELDED)	SA-106 B"
NECKS	TP-304 S/S	-C/S
NOZZLE (FORGED)	SA-105 C/S	SA-105 S/S
FLANGES		
TUBES 3/4" O.D. x 1/2" GAT-304 S/S	SA-249 (WELDED)	
TUBE SHEETS 1" (NOM.) TK	SA-240	304 S.S.T.
BODY FLANGES	C/S	SA 516 GR 2
BOLTING	SA-193-B7 %	NUTS-SA-194-2H %S
GASKETS	FIBERGLASS-C	4-430

1.	ALL WELDED CONSTRUCTION.
2.	ALL INT. WELDS A.S.M.E. CODE WELDED. PICKLED AND BRUSHED.
3.	ALL EXT. WELDS A.S.M.E. CODE WELDED. PICKLED AND BRUSHED.
4.	ALL S.S.T. SURFACES PASSIVATED.
5.	ALL CARBON STEEL TO RECEIVE ONE SHOP COAT OF PRIMER.
6.	ALL FLANGE BOLT HOLES TO STRADDLE CENTER LINES OF HEAT EXCH. EXCEPT AS OTHERWISE NOTED.
ESTM. WT. (EMPTY) 600 lbs ESTM. WT. (FULL OF WATER) 800 lbs	

REFERENCE DWG'S.

D-ND-72	NOZZLE DETAILS
D-93302	CONDENSER/HEAT EXCHANGER DETAILS
D-ND-73	NOZZLE DETAILS
A-10694	SUPPORT DETAILS

125308

PERRY PRODUCTS CORPORATION
STAINLESS STEEL FABRICATORS

DRN. <i>228</i>	(31) SQ. FT.
DATE 9/28/99	(1) 8" SIZE CONDENSER/HEAT EXCHANGER
CHKD. <i>228</i>	(6) - PASS TUBE SIDE (1) - PASS SHELL SIDE

SER. NO. B-5985	JOB NO. 15627	DWG. NO. D-9930	
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END - VIEW "A-A"

4" 6" "A" (FACE TO FACE OF TUBE SHEETS)

4" 4" 6" 4"

SEE DWG. #D-99302 DETAIL "C"

NAMER.

8" O.D.

E" (TYR)

D

5 1/2"

ROUND HOLES

3'0"

ROUND HOLES 10"

"Z"

VIEW "Z-Z" SEE DWG. #D-99302

SEE DWG. #D-99302, DETAIL "B"

A₁

A₂

B

FOR SUPPORT DETAILS SEE DWG. #A-10694

"B" - NO. OF BAFFLES SEE DWG. #D-99302 FOR DETAIL

2:1 ELLIP. HEADS 8 5/8" O.D. X 1 1/2" S.F. (2) REQ'D. (SEAMLESS)

— (32) $\frac{3}{4}$ " O.D. x #16 GA. (WELDED)
~~7-304 S. ST. TUBES ON $\frac{15}{16}$ "  PITCH~~

FROM INSIDE FACE OF
TUBE SHEET

— CENTER TO CENTER

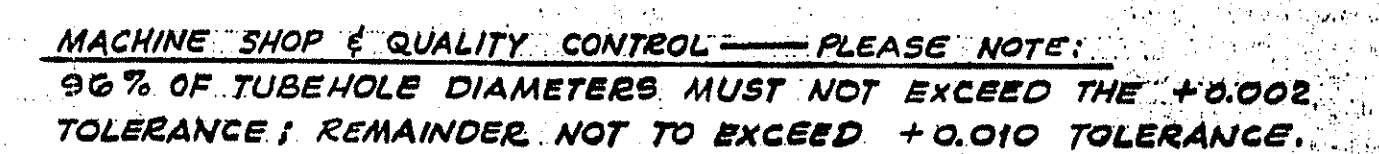
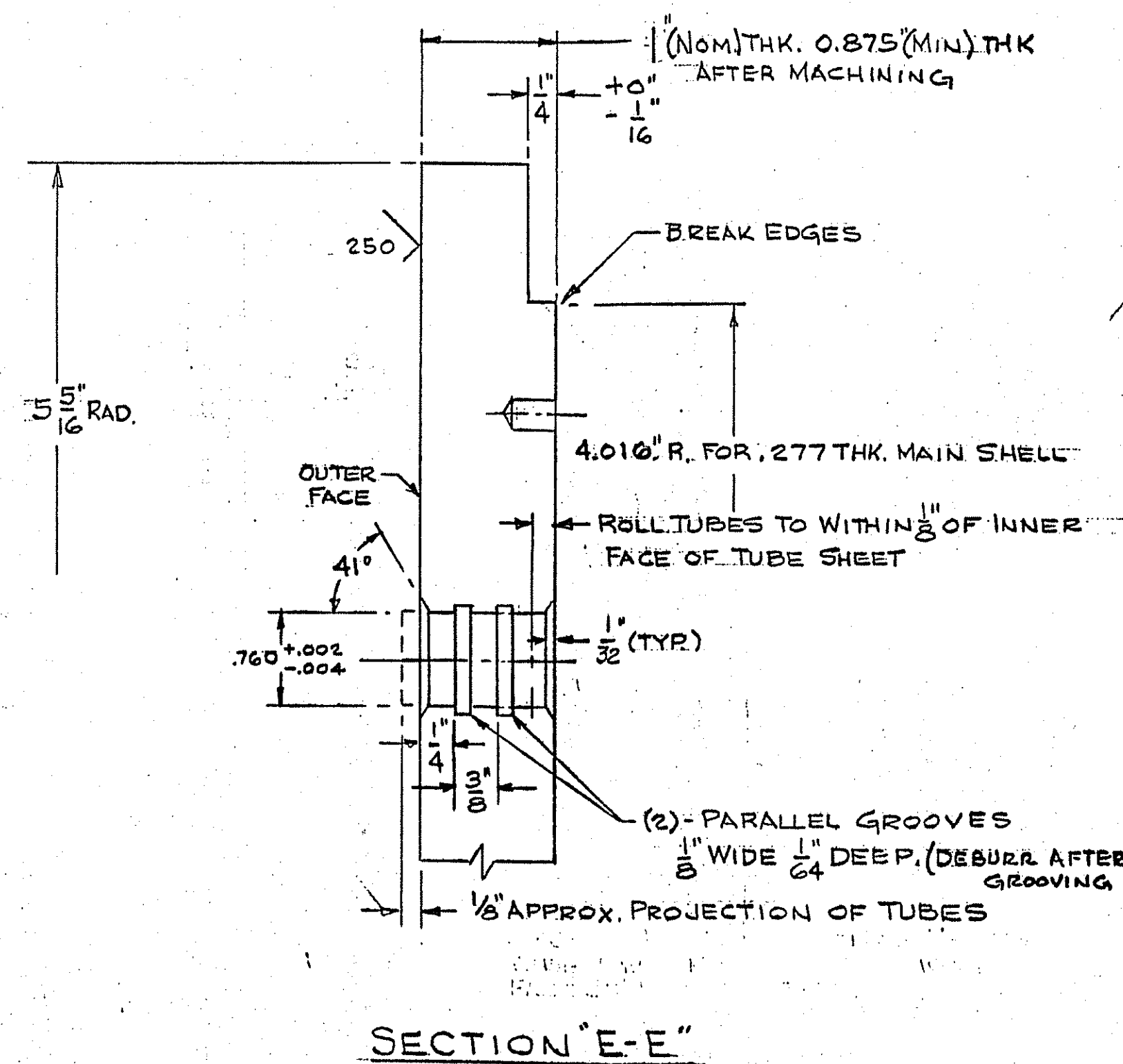
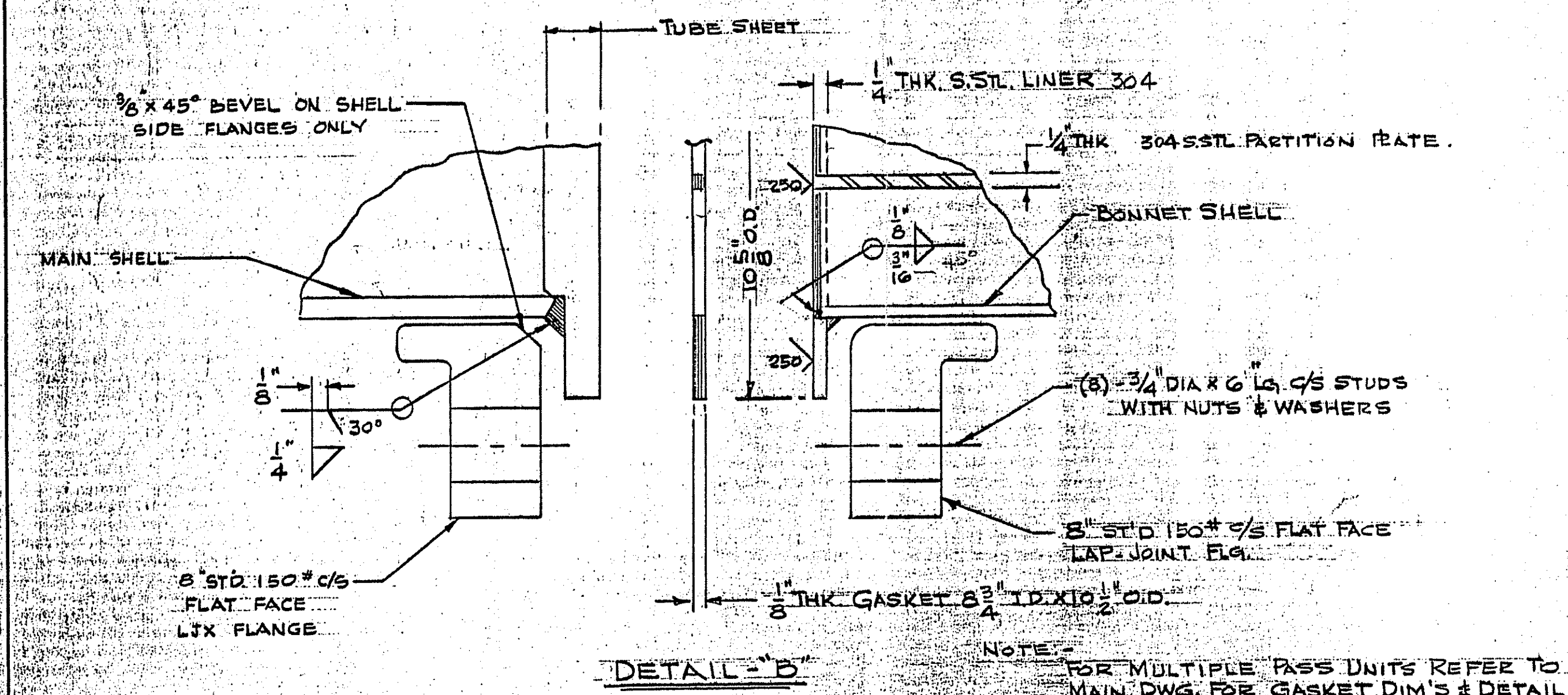
FINAL CERTIFIED PRINT
DATE 9/29/99 P. PROD.

J. Guaduto

GASKET DETAILS

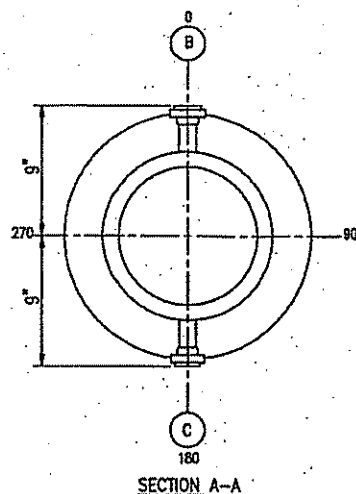
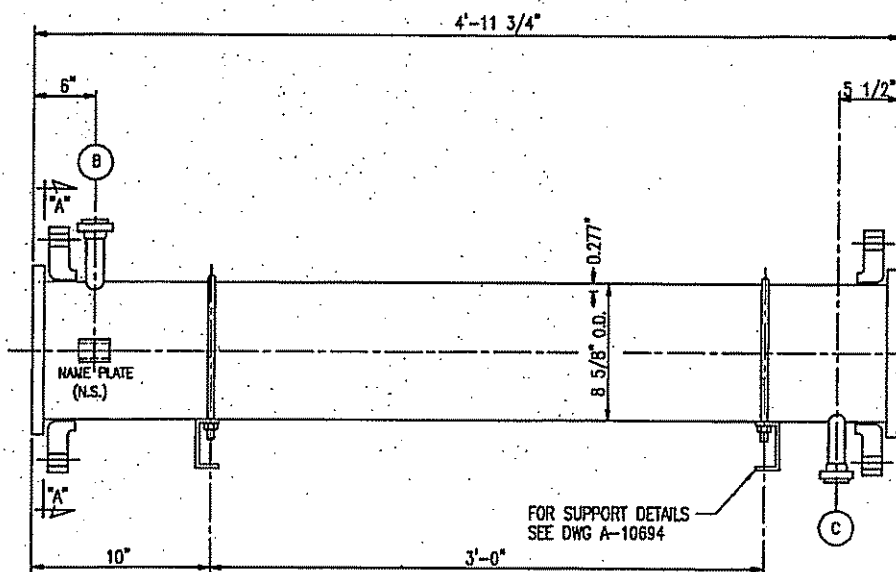
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PERMISSION.

△			
NO.	DATE	BY	REVISIONS



SER. NO. B-5985	JOB NO. 15627	DWG. NO. D-99302
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1			
NO.	DATE	BY	REVISIONS



FOR SUPPORT DETAILS
SEE DWG A-10694

NOZZLE SCHEDULE				
MK	QT	DESCRIPTION	PROCESS	AUXILIARIES
B	1	2" SCH 40 150# RF SO	INLET	
C	1	1" SCH 40 150# RF SO	OUTLET	

DESIGN DATA	SHELL	TUBE
DESIGN PRESSURE P.S.I.G.	150	150
VACUUM PRESSURE P.S.I.G.	N/A	N/A
TEST PRESSURE P.S.I.G.	195	N/A
DESIGN TEMP. Deg.F.	320	320
MDMT Deg. F.	20	20
CORROSION ALLOWANCE	0"	0"
NUMBER OF PASSES	1	6
RADIOGRAPHY	NO	NO
HEAT TREAT REQUIRED	NO	NO

ESTIMATED WEIGHTS, LBS.		
DRY: 450	BUNDLE: 200	WET: 550

SPECIFICATIONS		
ASME CODE SECT. VIII DIV.1, 2007 EDD., 2008 ADDENDA (STAMP YES)		
TEMA CLASS B		
NATIONAL BOARD REGISTRATION REQUIRED		

MATERIAL		
SHELL: SA-53E/B (WL'D)	BODY FLANGES: SA-105	
TUBESHEETS: SA-240-304	NOZZLES: SA-106-B W/ SA-105 FLANGES	
BAFFLES: SA-36		
TUBES: SA-249TP304 (WL'D)		
(32)	3/4" O.D. X 0.065" X 5'-0" LG.	
TUBE PITCH	15/16" Δ SURFACE 31 SQ. FT.	

- GENERAL NOTES
1. ALL WELDED CONSTRUCTION.
 2. ALL INT. WELDS A.S.M.E. CODE WELDED, PICKLED AND BRUSHED.
 3. ALL EXTERNAL WELDS A.S.M.E. CODE WELDED, PICKLED AND BRUSHED.
 4. ALL S/S SURFACES PASSIVATED.
 5. ALL FLANGE BOLT HOLES TO STRADDLE CENTER LINES OF HEAT EXCHANGER EXCEPT AS OTHERWISE NOTED.
 6. PAINT C/S WITH ONE COAT OF SHOP PRIMER.
 7. SHELL ASSEMBLY REPLACEMENT OF PERRY JOB #15627.
 8. CUSTOMER TO USE EXISTING BONNETS AND HARDWARE.

GASKETS: .1250" THK. C4430 KLINGERSIL (BY OTHERS)

CUST: BLUE ISLAND PHENOL LLC.
P.O. NO.: 24179
ITEM NO.: -
SERVICE: -
SHIP TO:

PERRY JOB #17205 SERIAL NO. B-7305

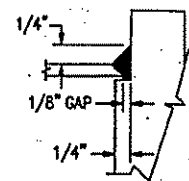
ASSEMBLY AND SPECIFICATIONS FOR
"SHELL ASSEMBLY"
ONE B - 60 B E M

OWN. BY G. Gtx
DATE 01-22-09
PERRY PRODUCTS CORPORATION
STAINLESS STEEL FABRICATORS
26 MT. LAUREL ROAD
HADESPOUT, NEW JERSEY 08036

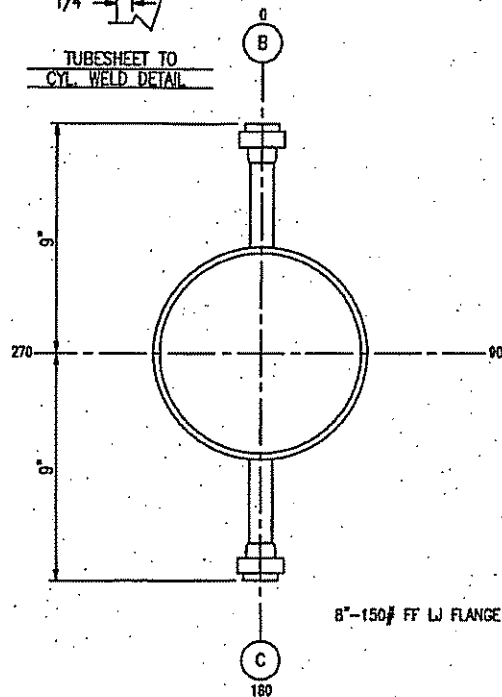
CKD. BY A. Sheltz DWG. NO. 17205-A REV.

NO.	DATE	REVISIONS

11/26/09
#110407

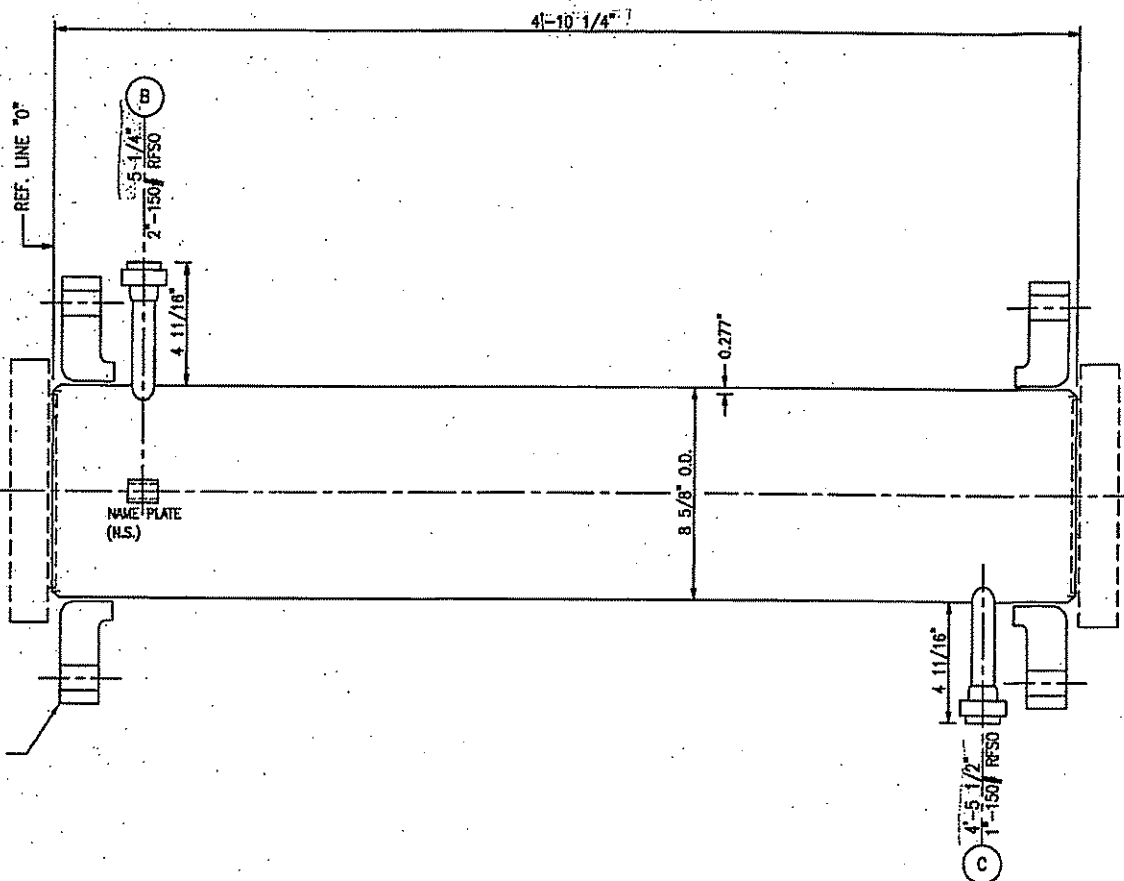


TUBESHEET TO
CYL. WELD DETAIL



SHELL END VIEW

8"-150# FF LJ FLANGE (TYP)



SHELL SIDE VIEW

NOTES:

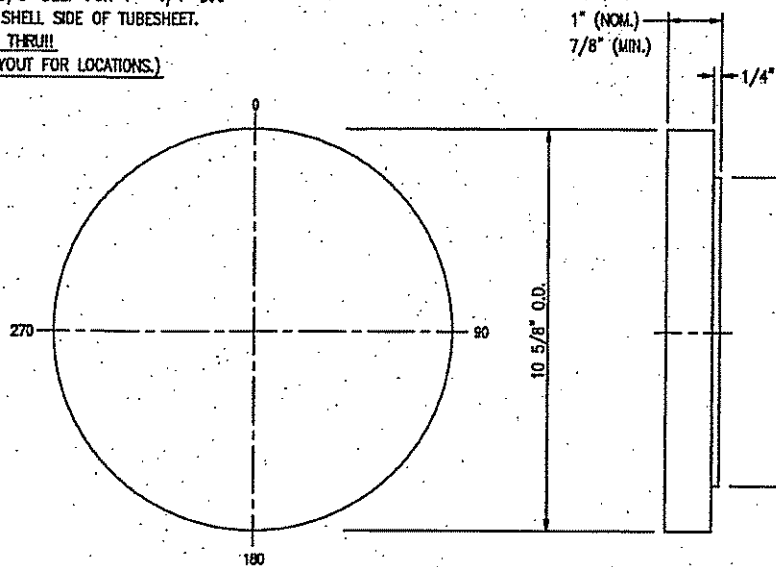
- 1) ALL WELDING TO BE IN ACCORDANCE W/ PROCEDURES.
- 2) ALL BOLT HOLES TO STRADDLE CENTER LINES.
- 3) FOR WELD AND BEVEL DETAILS SEE DWG. 17205-Z
- 4) GRIND ALL INSIDE WELDS FLUSH.
- 5) NO RADIOGRAPHY.

NO.	DATE	REVISIONS

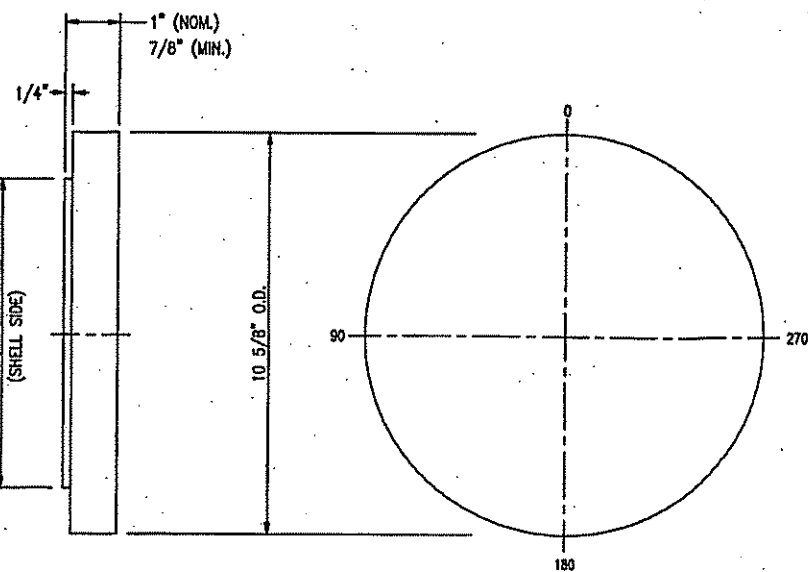
PERRY JOB #17205		SERIAL NO. B-7305	
SHELL DETAILS			
DWN. BY G. Gix		PERRY PRODUCTS CORPORATION STAINLESS STEEL FABRICATORS 25 MT. LAUREL ROAD HAINESPORT, NEW JERSEY 08036	
DATE 01-22-09			
CKD. BY A. Shok			
DWG. NO. 17205-B		REV.	

John P. [Signature] 1/26/09

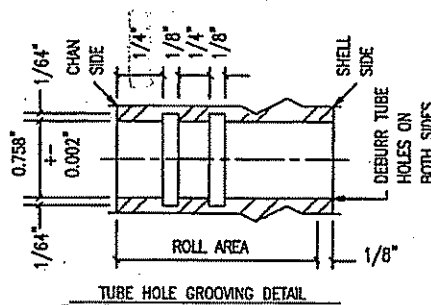
DRILL & TAP 3/8" DEEP FOR 4 - 1/4" DIA.
TIE RODS ON SHELL SIDE OF TUBESHEET.
DO NOT DRILL THRU!!
(SEE TUBE LAYOUT FOR LOCATIONS.)



FRONT TUBESHEET DETAIL



REAR TUBESHEET DETAIL



TUBE HOLE GROOVING DETAIL

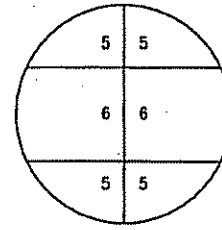
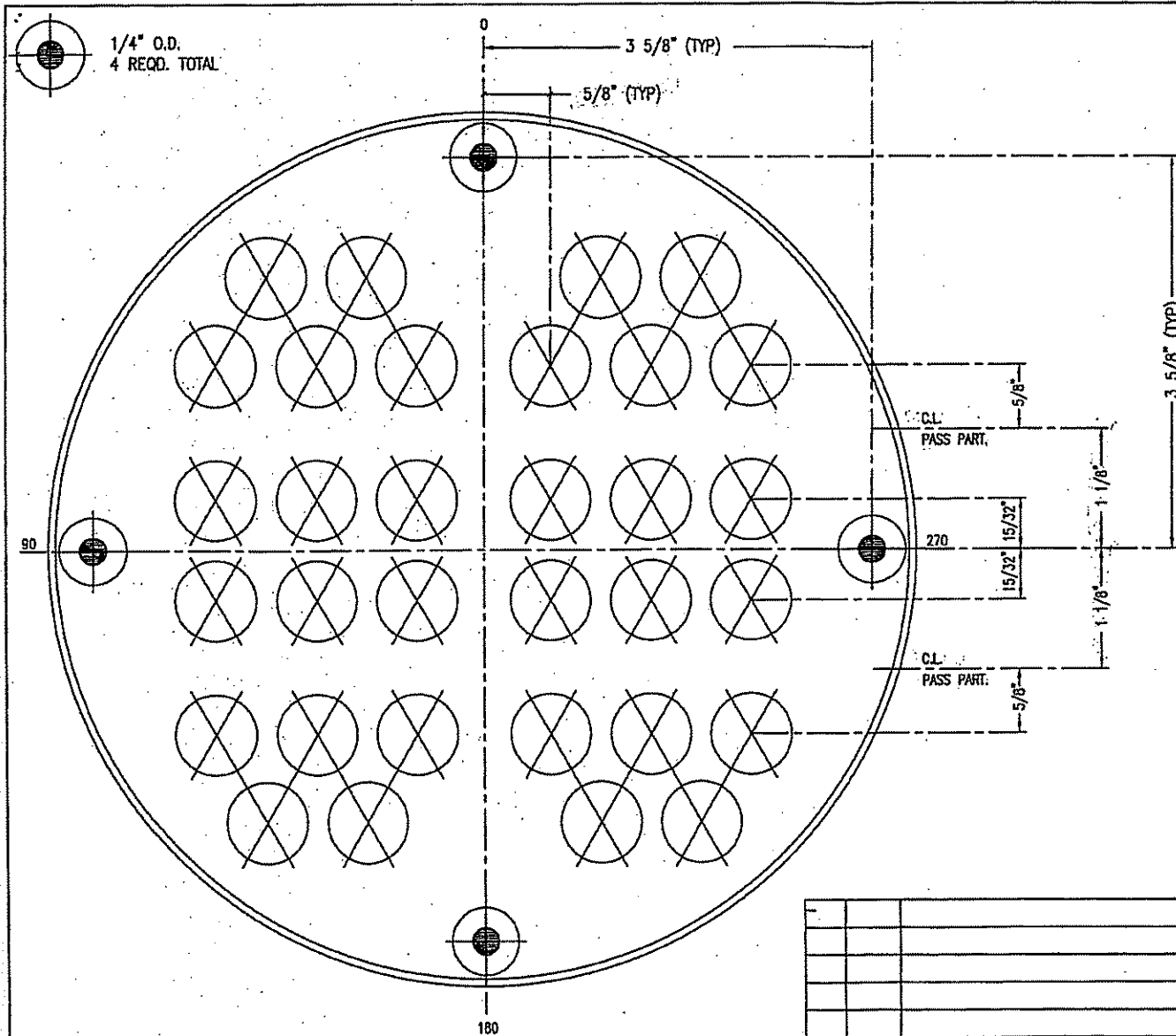
NOTES:

- 1) MACHINE ALL SURFACES TO 250 RMS
EXCEPT GASKT FACES TO BE 125 RMS.

NO.	DATE	REVISIONS

PERRY JOB #17205		SERIAL NO. B-7305
TUBESHEET DETAILS		
DWN. BY G. Gix	PERRY PRODUCTS CORPORATION STAINLESS STEEL FABRICATORS 25 MT. LAUREL ROAD HAINESPORT, NEW JERSEY 08036	
DATE 01-22-09		
CKD. BY A. Shah	DWG. NO. 17205-F	REV.

Milton J. [Signature] 1/24/09



TUBE DISTRIBUTION

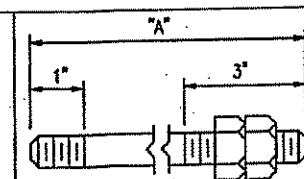
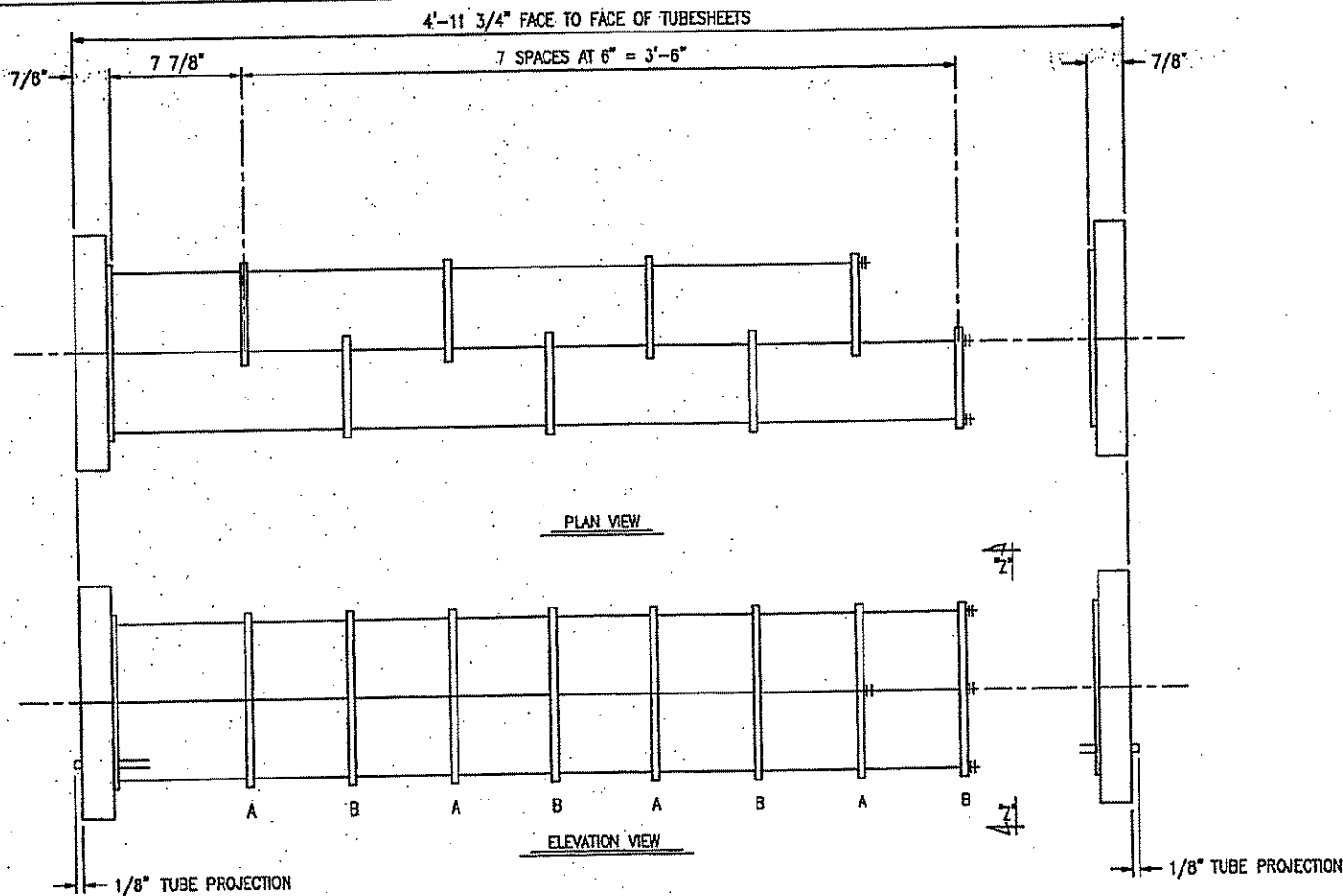
NOTES:

- 1) DRILL AND REAM TUBE HOLES IN TUBESHEETS TO 0.758" $\pm$ 0.002" DIA. FOR 32 - 3/4" O.D. TUBES.
- 2) TUBE PITCH = 15/16" TRIANGLE.
- 3) NUMBER OF PASSES = 6
- 4) SEE DRAWING 17205-F FOR TUBE GROOVING DETAILS.
- 5) BAFFLE O.D. = 7 15/16"
- 6) O.T.L. = 7 9/16"

VIEW LOOKING AT SHELL SIDE TUBESHEET

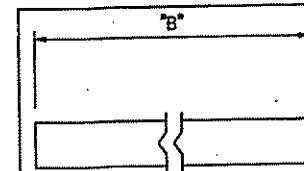
PERRY JOB #17205		SERIAL NO. B-7305	
TUBE LAYOUT			
OWN. BY G. Gix		PERRY PRODUCTS CORPORATION STAINLESS STEEL FABRICATORS 25 MT. LAUREL ROAD HALESPOUR, NEW JERSEY 08036	
DATE 01-22-09			
CKD. BY A. Shah		DWG. NO. 17205-H	REV.
NO.	DATE	REVISIONS	

2/20/09



1/4" O.D. TIE RODS - C/S

REQ'D.	"A"
(A) 3	4'-4 3/8"
(B) 1	3'-10 3/8"
(C)	
(D)	



5/8" O.D. SPACER TUBING - C/S

REQ'D.	"B"
(1) 3	7 13/16"
(2) 1	13 13/16"
(3) 14	5 7/8"
(4) 6	11 7/8"
(5)	
(6)	

NOTES:
1) FOR SECTION AND VIEW DETAILS SEE DWG. 17205-J

NO.	DATE	REVISIONS

PERRY JOB #17205		SERIAL NO. B-7305
BUNDLE DETAILS		
DWN. BY G. G&	PERRY PRODUCTS CORPORATION	
DATE 01-22-09	STAINLESS STEEL FABRICATORS	
CKD. BY A. Shale	25 MT. LAUREL ROAD	
	HAJESPORT, NEW JERSEY 08038	
	DWG. NO. 17205-1	REV.

William J. Shale 1/26/09