



GASKET DATA		BOLTING DATA		REFERENCE DRAWINGS:	
LOCATION	NO. REQ.	DESCRIPTION	MATERIAL	NO. REQ.	DESCRIPTION
COVER TO CHAN. CONN.	2	1 1/2" THK. x 30 1/4" O.D. x 31 1/2" O.D. FLEXITALIC STYLING W/ 1/16" THK x 52 3/8" O.D. RETAINING RING ON OUTSIDE.	SA-193, 87/SA-194, 2H	80	5/8"-11 STUD BOLTS-674 "G.1622 SA-193, 87/SA-194, 2H

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DESIGN DATA		
CODE:	SHELL SIDE	TUBE SIDE
ASME SECT. VIII DIV. 1 1971 EDITION		
DESIGN PRESS.	75 PSIG	75 PSIG
HYDRO TEST PRESS.	115 PSIG	120 PSIG
DESIGN TEMP.	350° F	350° F
COR. ALLOW.	1/8"	0"
POST WELD H.T.	NONE	NONE
RADIOGRAPH	SPOT PER UW-52	SPOT PER UW-52
NO. OF PASSES	ONE (1)	ONE (1)

MATERIALS		
SHELL	SA-515 GR.70	SA-240 TP 3
COVER		SA-240 TP 316 LIN.
SHELL FLANGES		SA-515 GR.70
NOZZLE FLANGES	SA-181 GR. I	SA-240 TP 316
NOZZLE NECKS	SA-53 GR. B (SMLS)	SA-240 TP 316
GASKETS (MAIN FLGS.)		5.5. 3/4" x 1.588. FILL
PRESS. BOLTING		SA-193, 87/SA-194
INTERNAL BOLTING		
NOZZLE REIN. PAD		SA-240 TP 3
COUPLINGS	SA-181 GR. I	SA-182 F-316
PLUGS	CARBON STEEL	S.S. TP 316
TUBES	SA-249 TP 316 (AVE. WALL)	WELDED
TUBESHEETS	SA-240 TP 316	
BAFFLE/TUBE SUPPORT PL.	CARBON STEEL	
IMPINGEMENT PL.	CARBON STEEL	
TIE RODS/SPACERS	CARBON STEEL	
SEALING STRIPS		
FLTG. HD. COVER		
FLTG. HD. RING FLANGE		
FLTG. HD. GASKET		
FLTG. HD. BOLTING		
SPLIT/BACKING RINGS		
PASS PARTITIONS		
LIFTING LUGS	CARBON STEEL	
SHELL SUPPORTS	CARBON STEEL	
SHELL SUPPT. REIN. PAD	SA-515 GR.70	
EXPANSION JOINT	SA-240 TP 304	
CHANNEL & NOZZLE LAPS	SA-240 TP 316	

NOZZLE DATA									
MARK	NO. REQ.	SIZE	A. S. A. RATING	FAC. ING.	TYPE	NECK	SERVICE	DE	
S1	1	20"	150"	R.F.	S.O.	570, RT (375)	SHELL INLET		
S2	1	6"	150"	R.F.	S.O.	2280"	SHELL OUTLET		
T1	1	14"	150"	R.F.	S.O.	1/4"	CHANNEL INLET		
T2	1	30"	SPECIAL			L.J. 1/4"	CHANNEL OUTLET		
D	1	1"	3000"	THRD	PIPE FULL CPG		SHELL DRAIN (PLUGGED)		
D1	1	1"	3000"	THRD	PIPE FULL CPG		CHAN. DRAIN (PLUGGED)		
A, A1	4	3/4"	3000"	THRD	PIPE FULL CPG		P.G. (PLUGGED)		
B, B1	4	3/4"	3000"	THRD	PIPE FULL CPG		T.W. (PLUGGED)		
V	1	3/4"	3000"	THRD	PIPE FULL CPG		SHELL VENT (PLUGGED)		
V1	1	3/4"	3000"	THRD	PIPE FULL CPG		CHAN. VENT (PLUGGED)		

ALSO DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH TEMA CLASS "B" 1968 EDITION AND CUS SPEC. SCS-3E1. SO INSPECTED AND CODE STAMPED.

1) BOLT HOLES OF ALL FLANGES TO STRADDLE MAIN Q'S  
 2) COVER FLG. FACES WITH WOODEN COVERS BOLTED ON.  
 3) COAT THREADS OF BOLTS WITH A LUBRICANT.  
 4) PAINT OR STENCIL CUST. ITEM NO. AT LEAST 3" HIGH IN A CONSPICUOUS LOCATION.  
 (A) 100 PER USAS B16.30-1969.

PREPARATION AND PAINTING OF C. STEEL EXTERNAL UNMACHINED SURFACES:  
 HAND OR POWER TOOL CLEAN AND APPLY ONE COAT OF RED LEAD PRIMER.

GROSS SURFACE		
EMPTY	BUNDLE	FLOODED (WITH H)
24,500 LBS.		43,200 LBS.

CUST. ORDER NO. 026-35043 # 104205  
 CUST. ITEM NO. E-4205-2A # 104206

NO. OF UNITS REQUIRED: 1

B.P.F. NO. 42317 DATE 8/81  
 SHEET 2 APPARATUS E-421  
 PROJECT & ACCOUNT NO. E-4204-26035 2027  
 ORDER NO. 336-026-3504

**INDUSTRIAL**  
 B LISTER A

METHANOL 57 PLANT HANOVER  
 APPROVED H.G. Schol

HERCULES INC. HANOVER PA

CONTRACT 1685  
 REVISIONS  
 2-1-72 2-7-72 2-8-72  
 F-6900-2