

DEGUSSA-HÜLS ENGINEERING DEPARTMENT

V-3911

01	EQUIPMENT NUMBER V-3911		QUANTITY one	PREPARED BY T. Adcock	APPROVED BY	APPROVED BY	DATE: 8/28/00 SHEET 1 OF 1
02	PLANT Phenol-Chemie	AREA OR UNIT 39 - Distillation			RFQ NUMBER	P.O. NUMBER 40770007	PROJECT NUMBER 4078-00001
03	SERVICE Reflux Separator				ACCOUNT NUMBER	P&ID NUMBER C-39-B-006-00	CAR NUMBER
04	PROCESS DATA				ACCESSORIES		
05	ORIENTATION:	VERTICAL	HORIZONTAL	X	OTHER	ITEM	Y / N DESCRIPTION
06		VESSEL	JACKET		COIL	AGITATOR	N
07	WORKING VOLUME	Gal	230	N/A	N/A	EXTERNAL JACKET	N
08	TOTAL VOLUME	Gal	300	N/A	N/A	INTERNAL COILS	N
09	FLUID		Cumene	N/A	N/A	INTERNAL BAFFLES	N
10	FLUID STATE IN		Liquid	N/A	N/A	METHOD OF SUPPORT	Y 2-Saddles
11	FLUID STATE OUT		Liquid	N/A	N/A	GASKETS	Y Provided by Vendor
12	OPERATING T IN	°C	50	N/A	N/A	INSULATION RINGS	N
13	OPERATING T OUT	°C	50	N/A	N/A	LIFTING LUGS	Y
14	DENSITY IN	#/CF	52.4	N/A	N/A	FIRE PROTECTION CLIPS	N
15	DENSITY OUT	#/CF	52.4	N/A	N/A	GROUND LUGS	Y
16	OPERATING P	Psig	7.5	N/A	N/A	OTHER	Y Dip Pipe, View Port [2]
17	DESIGN & CONSTRUCTION DATA				NOZZLE DATA		
18	DIMENSIONS	DIAMETER	2'-6" OD	T to T LENGTH:	7'-6" TT		
19	HEAD TYPE	TOP	F&D ASME	BOTTOM:	F&D ASME	MARK	SIZE SERVICE TYPE & FACING
20			VESSEL	JACKET	COIL	A1	4" Cumene Inlet (w/ type A, 2"-dip pipe) 150# RFWN
21	DESIGN P	Psig	50 / FV	N/A	N/A	B1	2" Cumene Outlet (Alt. I) 150# RFWN
22	DESIGN T	°C	150	N/A	N/A	B2	2" Cumene Outlet 150# RFWN
23	HYDROSTATIC TEST P		65	N/A	N/A	B3	2" Cumene Outlet (Alt. II) 150# RFWN
24			MATERIALS OF CONSTRUCTION	THICKNESS	CORROSION ALLOWANCE	B4	1" Aqueous Outlet 150# RFWN
25						G1	6" View Port 150# RFWN
26	SHELL		316L SS	0.1875"	None	L1	3" Level Switch High 150# RFWN
27	HEADS		316L SS	0.25"	None	L2	3" Level Transmitter 150# RFWN
28	JACKET		N/A	N/A	N/A	L3	3" Level Transmitter 150# RFWN
29	COIL		N/A	N/A	N/A	L4	2" Level Transmitter 150# RFWN
30	BAFFLES		N/A	N/A	N/A	L5	2" Level Transmitter 150# RFWN
31	NOZZLES		316L SS	-	None	L6	2" Level Guage 150# RFWN
32	FLANGES		316L SS	150#	None	L7	2" Level Guage 150# RFWN
33	BOLTING		A193 B7 w/ A194 2H	-	None		
34	GASKETS		Flat Graphite	0.125"	None		
35	SUPPORTS		316L SS	0.25"	None	M1	18" Manway/ LH Davit Arm 150# RFWN
36	INSULATION	TYPE:	None	THICKNESS:	N/A		
37	INTERNAL FINISH	Per Degussa-Huls Spec.17529				D1	1" Drain 150# RFWN
38	PAINTING	N/A				S1	2" Spare 150# RFWN
39				Y / N	REMARKS	V1	2" Vent 150# RFWN
40	CYCLIC SERVICE			N		V2	3" Pressure Relief Valve 150# RFWN
41	CODE CONSTRUCTION			Y	ASME Sec. VIII, Div. 1	V3	2" Vapor Inlet from X-3910 150# RFWN
42	STRESS RELIEF			N			
43	RADIOGRAPHIC EXAMINATION			Y	Spot		
44	CODE INSPECTION REQUIRED			Y			
45	CUSTOMER INSPECTION REQUIRED			Y			
46	WIND LOAD			Y	150 mph		
47	EARTHQUAKE AREA			Y	Zone 0		
48	REQUIRED JOINT EFFICIENCY				0.85		
49	WEIGHT - EMPTY				2000 lbs		
50	WEIGHT - OPERATING				3600 lbs		
51	WEIGHT - FULL OF WATER				4500 lbs		
52	OTHER REQUIREMENTS				NOTES		
53	(A) If specified above, construction shall be in accordance with the latest ASME code, Section VIII, Division I, Part UW.				1 See the following Degussa-Huls specifications for additional requirements: 17100 General Requirements for Equipment		
54	(B) Locate all welding seams to clear nozzles and saddles.				17529 Pressure Vessels-General Requirements		
55	(C) All bolt holes shall straddle centerlines unless otherwise noted.				SP-9.1.1 Welding Pressure Vessels		
56	(D) All nozzles shall project 6" from outside surface of equipment to face of flange, unless otherwise noted, and shall be mounted true to centerline. When insulation is specified herein, nozzle projections must be reviewed.				2 See 4-B-006-002 for Removable Type A Dip Pipe Details.		
57	(E) Vendor shall furnish bolts, nuts and gaskets where mating flanges are supplied.						
58	(F) All welding shall be full, continuous, free from slag porosity and other defects.						
59	(G) All flanges shall not be warped, but shall be true, and gasket smooth after welding.						
60	(H) All heads preferred hot formed; if cold formed, they must be inspected and dye checked. Stainless steel heads must be fully solution annealed, water quenched and pickled after forming.						
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67	* DATA MARKED BY AN ASTERISK MUST BE FURNISHED BY VENDOR UNLESS SPECIFIED BY PURCHASER WITH QUOTE.						
68	REVISION: A DATE: 8/28/00 APP'D: TDA	REVISION: 0 DATE: 10/12/00 APP'D: TDA	REVISION: 1 DATE: 3/6/01 APP'D: TDA	REVISION:	REVISION:	REVISION:	VES01R03

4-B-006-002

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08	<p>NOTES</p> <p>1. MATERIAL, PRESSURE, DESIGN DATA, AND CONSTRUCTION SHALL BE SPECIFIED ON THE PURCHASE ORDER, SPECIFICATION, OR DRAWING.</p> <p>2. NOZZLE ATTACHMENT WELD AND MINIMUM WALL THICKNESS FOR PIPE TO MEET REQUIREMENTS SPECIFIED IN THE ASME BOLIER AND PRESSURE VESSEL CODE (LATEST EDITION).</p> <p>3. FLANGE FACE FINISH AT GASKET CONTACT SURFACES SHALL BE AS SPECIFIED ON THE PURCHASE ORDER, SPECIFICATION, OR DRAWING.</p> <p>4. IF NONCONDUCTING MOUNTING FLANGE BOLTS ARE USED, GROUNDING BONDS AROUND THE FLANGES MUST BE PROVIDED.</p> <p>5. FLANGE TO BE REDUCING SLIP-ON FLANGE, OR BLIND FLANGE MAY BE USED IF ASME REINFORCING REQUIREMENTS ARE NOT MET. SIZE AND RATING TO SUIT MOUNTING NOZZLE FLANGE. AN ALLOY LINER PER P6E CAN BE USED IN PLACE OF A SOLID ALLOY FLANGE.</p> <p>6. TYPE A DIP TUBE MAY NOT BE AS EFFECTIVE IN PREVENTING STATIC ELECTRIC ACCUMULATIONS AS TYPE B DIP PIPES AND SHOULD BE SPECIFIED ONLY WHERE PROCESSS CONDITIONS DO NOT PERMIT THE USE OF TYPE B DIP PIPES.</p> <p>7. FOR CLASS IB AND CLASS IC LIQUIDS OTHER THAN CRUDE OILS, GASOLINES, AND ASPHALTS, THE DIP PIPE SHALL BE DESIGNED AND INSTALLED AS TO MINIMIZE THE POSSSIBILITY OF GENERATING STATIC ELECTRICTY BY TERMINATING WITHIN 6 INCHES OF THE BOTTOM OF THE TANK. CLASS IB SHALL INCLUDE LIQUIDS HAVING FLASHPOINTS BELOW 73 DEG. F (22.8 DEG C) AND HAVING A BOILING POINT AT OR ABOVE 100 DEG. F (37.8 DEG. C).</p> <p>8. CLASS IC SHALL INCLUDE LIQUIDS HAVING FLASHPOINTS AT OR ABOVE 73 DEG F (22.8 DEG C) AND BELOW 100 DEG F (37.8 DEG C). DIP PIPE SHALL BE INSTALLED TO AVOID EXCESSIVE VIBRATION.</p> <p>9. WELDED FITTINGS MAY BE SUBSTITUTED PROVIDED CLEARANCES ARE ADEQUATE FOR INSERTION & REMOVAL OF DIP PIPE.</p>																																																																																		
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