

EQUIPMENT DATA SHEET

ITEM NO.: S-5211

SERVICE : Heading Column Decanter

JOB NO. : K-3864

DESCRIPTION : 150,000 MTA KVAM PROJECT

CLIENT : ASIAN ACETYL CO., LTD.

FOR CONSTRUCTION

◇		
◇		
◇		
◇	S. H. LEE	Jun 20 '95
◇		
◇		
REV.NO.	APPROVED BY	DATE
CLIENT APPROVAL		

REV	DATE	MADE	CHECKED	APPROVED	PM	DESCRIPTION
2	95.6.9	A.K. Kim	H. ch / ~	76461.0	K.B. Cho	FOR CONSTRUCTION
1	95.2.23	A.K. Kim	H. ch / ~	76461.0	K.B. Cho	FOR APPROVAL
0	93.9.18	A.K. Kim	H. ch / ~	mll	MY/M/N	PLANT SPECIFICATION

[illegible]

VESSEL

ITEM NO. : S-5211
SERVICE : HEADING COLUMN DECANter
REQ'N NO. : 3300

DESIGN CODE AND STANDARD : ASME SECT.VIII, DIV.1
APPLICABLE SPEC. : SC/TS/20/003, 005,006
TYPE OF HEAD : 2 : 1 ELLIP.
RADIOGRAPH : [] FULL [X] SPOT
P.W.H.T : [] YES [X] NO
FIRE PROOF : [] YES [X] NO

MATERIAL

SHELL / HEAD : A285-C
NOZZLE NECK : A106-B / A285-C
NOZZLE FLANGE : A105
SKIRT/SADDLE/LUG : A285-C
GASKET : ~~S.W.G (08)~~ V# 1501 OR EQ.
EXT. BOLT/NUT : A193-B7 / A194-2H

LOCAL REGULATION :

QUALITY LEVEL : 3
SURFACE FINISH : REFER TO SC/TS/60/001
FLANGE RATING : ANSI 150# WN RF

REMARK

THE MAXIMUM CARBON CONTENT OF CARBON STEEL AND CARBON MANGANESE STEEL SHOULD BE AS FOLLOWS:
FOR ALL PRODUCT FORMS OTHER THAN FORGED FITTINGS 0.23%
FOR FORGED WELDED FITTINGS 0.25%

REV	DATE	MADE	CHECKED	APPROVED	PM	DESCRIPTION
2	95.6.9	<i>T.K.Kim</i>	<i>H.ch./-4P</i>	<i>7/2/96, 1.0</i>		FOR CONSTRUCTION
1	95.2.23	<i>T.K.Kim</i>	<i>H.ch./-4P</i>	<i>7/2/96, 1.0</i>	<i>V.B. de S</i>	FOR APPROVAL
0	93.9.18	<i>T.K.Kim</i>	<i>H.ch./-4P</i>	<i>mhl</i>		PLANT SPECIFICATION

JOHN BROWN

PROCESS SPECIFICATION VESSELS

PREP. BY	<i>H.K. Kim</i>	<i>H.K. Kim</i>	<i>H.K. Kim</i>
CHKD. BY	<i>H. Ch. Kim</i>	<i>H. Ch. Kim</i>	<i>H. Ch. Kim</i>
APPROVED	<i>sub</i>	<i>9/2/2018</i>	<i>26/2/2018</i>
DATE	93.9.18	95.2.23	95.6.9
ISSUE	0	1	2

CLIENT	SAMSUNG BP CHEMICALS CO., LTD. <i>ASACCO</i>	PROJECT NO.	K - 3751 386-4 / <i>A</i>
LOCATION	ULSAN - KOREA	ITEM NO.	S-5211
PLANT	VAM	NO. OFF	ONE
SERVICE	HEADING COLUMN DECANter	P&ID NO.	4801/2041002
		P&ID NO.	4801/2041002
		SECTION/AREA	DISTILLATION / 200

ISS	DESIGN DATA	UNITS	VESSEL	JACKET/COIL
	CAPACITY GROSS	m ³	1.0 (NOMINAL)	
	PERCENTAGE FILL			
	INSIDE DIAMETER	mm	750	
	LENGTH/HEIGHT	mm	2050	
	TYPE OF TOP HEAD		2:1 ELLIPS.	
	TYPE OF BOTTOM HEAD			
	INSULATION THICKNESS	mm	75 <i>A</i>	
	MATERIAL OF CONSTRUCTION		CS	
	CORROSION ALLOWANCE	mm	3.0	
	LINING		NONE	
	TYPE OF DUTY		DECANTER	
	HORIZONTAL/VERTICAL AXIS		HORIZONTAL	
	OPERATING CONDITIONS			
	FLUID HANDLED		NOTE 2	
	FLAMMABLE/EXPLOSIVE		YES	
	TOXIC		YES	
	CORROSIVE/EROSIVE DUE TO		ACETIC ACID	
	DENSITY	kg/m ³	878 935	
	OPERATING PRESSURE	kg/cm ² g	0.1	
	MECH. DESIGN PRESSURE (1)	kg/cm ² g	3.5 / FV & 42 C	
	OPERATING TEMPERATURE	°C	42.0	
	MECH. DESIGN TEMPERATURE	°C	100 450 NOTE 3	
	MIN. AMBIENT OR BUILDING TEMP.	°C	-19	

DETAILS OF INTERNALS	
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AGITATOR ITEM NUMBER	
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BRANCHES			
	SIZE	NO.OFF	FUNCTION
A	150	1	Liquid inlet
B	80	1	Organic outlet
C	50 40	1	Aqueous outlet
D	50 40	1	Inhibitor inlet
E	100	1	Vent
F			
G	50 40	4	Level gauge
H	50 40	4	Level trans.
J	500	1	Manhole
K	50	1	Drain
L			
M			
N			

NOTES.

(1) DESIGN PRESSURE AT TOP OF VESSEL

(2) Inlet composition :-

79.2 wt % Vinyl acetate
15.4 wt % Acetaldehyde
4.3 wt % Water
1.1 wt % Ethyl acetate

(3) Steamout at 150 °C.

(4) By detailed design contractor.

(5) Insulation Classification : ~~None~~ IF (BOOT ONLY.)

(6) PROCESS DATA FOR CORRUGATED PLATE

FLUID FLOWING	MAJOR PHASE	EXTRACTED PHASE
COMPOSITION	83 wt.% VINYL ACETATE + 15 wt.% ACETALDEHYDE + 2 wt.% H ₂ O	2 wt.% VINYL ACETATE + 18 wt.% ACETALDEHYDE + 80 wt.% H ₂ O
FLOW RATE(kg/h)	9,020	295
DENSITY(kg/m ³)	877.8	935.3
VISCOSITY(cP)	0.31 (AT 42 °C)	0.57 (AT 42 °C)
SURFACE TENSION(dyne/cm)	23	65
PRESSURE DROP (kg/cm ²)	<i>A</i> 0.1 3 (MAX)	

• CORRUGATED PLATE SUPPLIER: BURWELCO, NATCO, PREMABERG

PR634 / REV1 (FDP5) - BP

REV. 3

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PROCESS SPECIFICATION CONTINUATION SHEET

PREP. BY	T.K. V. 100	T.K. V. 200	T.K. V. 300
CHKD. BY	H. Ch. 100	H. Ch. 100	H. Ch. 100
APPROVED	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
DATE	93.9.18	95.2.23	95.6.9
ISSUE	0	1	2

CLIENT: SANGHVI BP CHEMICALS CO., LTD. **ASACCO**

PROJECT NO. K - 3864

LOCATION: ULSAN - KOREA

ITEM NO. S-5211

NO. OFF ONE

PLANT: VAM

PTD NO. 4801/2040002

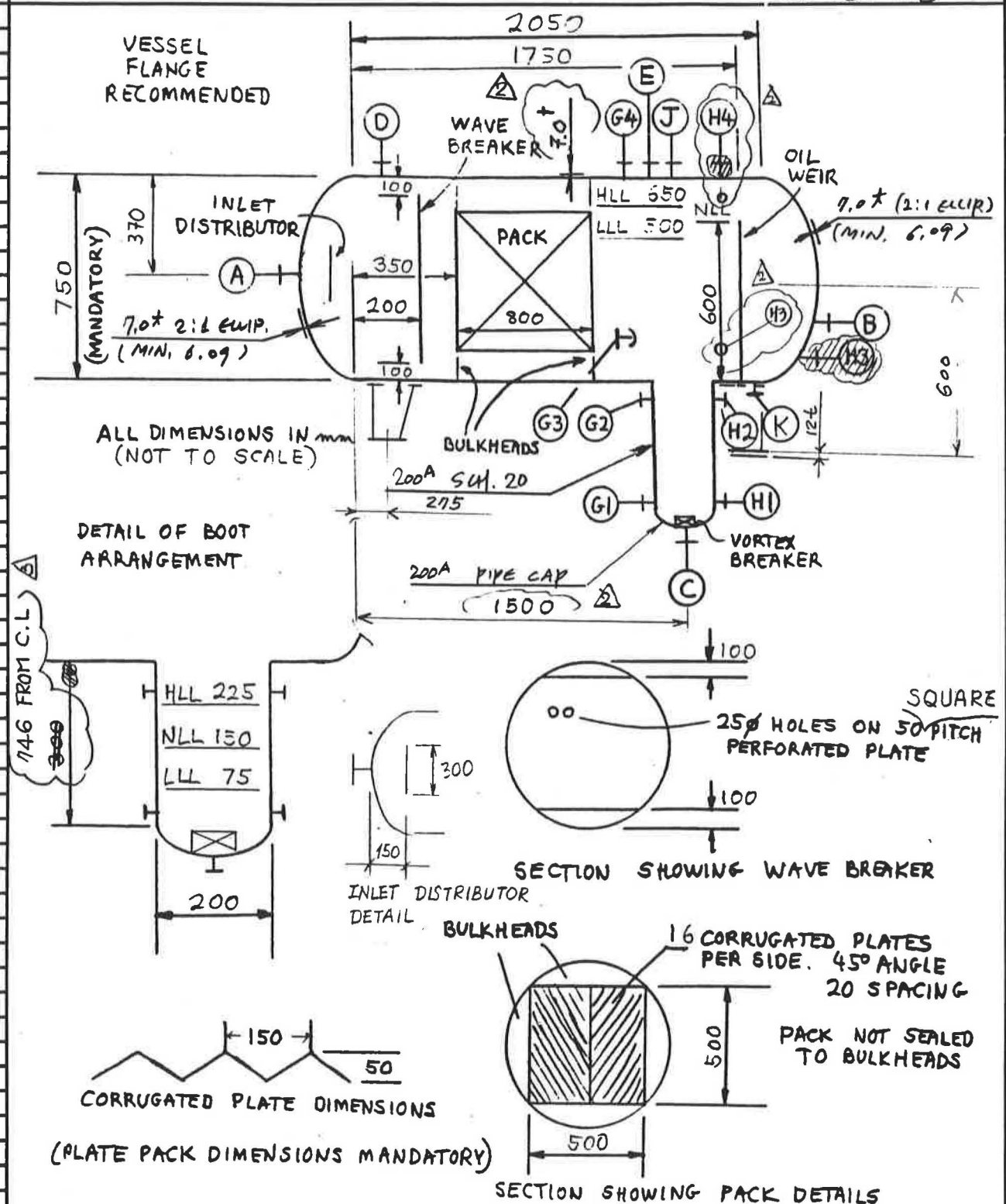
PTD NO. 4801/2041002

SERVICE: HEADING COLUMN DECANTER

SECTION/AREA: DISTILLATION / 200

ISS

SHEET 30F 3



PR374 / REV1 (FDP5) - BP

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