



NOZZLE DETAILS										
REF	No. OFF	SERVICE	NOZZLE LOCATION	N.B.	RATING	ORIENTATION	OFFSET	ELEVATION	PROJECTION	REMARKS
N1	1	SLURRY INLET	DISHED HEAD	2"	150#	160°	695	-	1425	
N2	1	FILTRATE OUTLET	BASE	2"	150#	-	0	-	-197	
N3	1	LEVEL INSTRUMENT	DISHED HEAD	2"	150#	140°	695	-	1425	
N4	1	LIGHT GLASS	DISHED HEAD	DN80	PN6	205°	630	-	-	100 DIA. VIEW
N5	1	SIGHT GLASS	DISHED HEAD	DN80	PN6	180°	630	-	-	100 DIA. VIEW C/W WIPER
N6	1	NITROGEN	DISHED HEAD	2"	150#	120°	695	-	1425	
N7	1	SPRAY RING	DISHED HEAD	1.5"	150#	180°	455	-	1450	
N8	1	RESLURRY	SHELL	2"	150#	210°	-	60	-	C/W FLUSH FITTING BLIND COVER
N9	1	TEMPERATURE CONN.	SHELL	1.5"	150#	330°	-	165	-	C/W THERMOWELL & PT100 PROBE
N10	1	SAMPLE CONN.	SHELL	-	-	50°	-	165	-	C/W BLACKFIVE 'SCOOPED BALL'
N11	1	JACKET INLET	JACKET	2"	150#	300°	-	264	1100	
N12	1	JACKET OUTLET	JACKET	2"	150#	300°	-	800	1100	
N13	1	SOLIDS OUTLET	DISCHARGE VALVE	SPECIAL	SEE DRG	90°	-	SEE DRG	-	
N14	2	SAMPLE CIP	DISCHARGE VALVE	0.5"	150#	90°	-	309	1456	
N15	1	VALVE PURGE	DISCHARGE VALVE	0.5"	150#	90°	1316	SEE DRG.	SEE DRG.	
N16	1	VALVE SIGHT/LIGHT	DISCHARGE VALVE	DN50	PN6	90°	-	-	-	50 DIA. VIEW - LIGHT NOT PROVIDED
N17	1	VENT	DISHED HEAD	4"	150#	230°	670	-	1425	

NOTES: DATUM LINE IS MAIN FLANGE JOINT FACE : ORIENTATION IS IN PLAN VIEW.
 OFFSET IS FROM VESSEL VERTICAL CENTRE LINE TO CENTRE LINE OF NOZZLE (HEAD / BASE NOZZLES)
 ELEVATION IS FROM DATUM LINE TO CENTRE LINE OF NOZZLE (SHELL / SHELL JACKET NOZZLES)
 PROJECTIONS: - ARE FROM DATUM LINE TO FLANGE JOINT FACE (NOZZLES IN HEAD / BASE)
 ARE FROM SHELL VERTICAL CENTRE LINE TO FLANGE JOINT FACE (NOZZLES IN SHELL/JACKET)

FINISH	PAINTING	INSPECTION REQUIREMENTS
REMOVE ALL BURRS, SHARP EDGES, WELD SPATTER, ETC. ALL WELDS DRESSED SMOOTH AND CRACK FREE. (0.4Rg APPROX.) ALL INTERNAL SURFACES FINAL POLISHED TO 240 GRIT OR BETTER. FILTER CHAMBER SHALL BE ACID CLEANED.	NONE	1. SUBJECT TO STAGE/FINAL INSPECTION BY HSB IOL. SEE QUALITY PLAN FOR DETAILS. (A4/5921/0P) 2. 2 FINAL COPIES OF DATA FOLDER REQUIRED
REMOVE ALL BURRS, SHARP EDGES, WELD SPATTER, ETC. STAINLESS STEEL PARTS: SHALL BE POLISHED TO 150 GRIT & LEFT UNPAINTED CARBON STEEL PARTS: SHOTBLAST CLEAN OF ALL MILLSCALE & OTHER CONTAMINANTS TO SWEDISH STD S02½	CARBON STEEL PARTS ONLY: PRIMER: 1 COAT TWO-PACK EPOXY ZINC PRIMER - 60µm DFT. FINISH COAT: 2 COATS OF 2 PACK EPOXY ENAMEL PAINT 80 TO 110µm DFT. (TOTAL) TOTAL THICKNESS PRIMER + FINISH COATS = 140 - 170µm DFT FINISH COLOUR: WHITE	NON-DESTRUCTIVE TESTING RADIOGRAPHY 100% MAIN FLANGE RADIAL BUTTS 10% BUTT WELDS IN FILTER BODY (INCLUDING TEE'S.) 10% CIRC'L BUTT WELDS IN NOZZLE PIPE NECKS. 10% LONGIT'L BUTT WELDS IN PLATE NECKS. N.D.E. - D.P.I. (ST.) M.P.I. (CST.) (AFTER POLISHING WHERE APPLICABLE) 100% ALL ATTACHMENTS TO SHELL/JACKET/BASEPLATE 100% ALL NOZZLE ATTACHMENTS. 100% ALL AGITATOR DRIVE ASSEMBLY WELDS. 10% ALL OTHER ATTACHMENT WELDS.

HYDRO. TEST	SHELL		JACKET	
	SHOP	9.5 Bar.g	9.5 Bar.g	-
	SITE	9.5 Bar.g	9.5 Bar.g	-

****IMPORTANT****
 SIGHT & LIGHT GLASS (PN6) MUST NOT BE FITTED DURING HYDRO-TEST. USE METAL BLANKS FOR TEST.

HYDRO-TESTS TO BE IN ACC. WITH BS-5500 : SECTION 5.8. EACH SECTION TO BE TESTED INDEPENDENTLY.
 MIN. TEST WATER TEMPERATURE TO BE 7°C.
 USE POTABLE WATER WITH 30ppm MAXIMUM CHLORIDE CONTENT.
 HOLD EACH TEST AT PRESSURE FOR 30 MINS MIN. OR UNTIL INSPECTION IS COMPLETE.
 EACH SECTION IS TO BE DRAINED & DRIED IMMEDIATELY AFTER TEST

PREPARATION FOR TRANSIT

- UNIT SHALL BE THOROUGHLY DRIED
- ALL OPEN NOZZLES SHALL BE BLANKED USING 6 THK. PLYWOOD COVERS - SECURED IN POSITION USING STANDARD 'TIE-WRAPS' OR EQUIVALENT.

ESTIMATED WEIGHTS	
FILTER BODY COMPLETE	= 2621 kg
BASE ASSEMBLY	= 2180 kg
AGITATOR/DRIVE ASSEMBLY	= 1670 kg
DISCHARGE ARM ASSEMBLY	= 450 kg
FABRICATED WEIGHT EMPTY	= 6921 kg
WEIGHT F.O.W.:- (TOTAL VOL. 3.3 CUB.M. @ SG 1.0)	= 10221 kg

NOTE: FOR DETAILS AND SPECIFICS OF SUPPLY, SYSTEM DESCRIPTION & ARCHITECTURE, SCOPE OF HARDWARE SUPPLY & OPERATING INSTRUCTIONS /CONTROL MODES SEE THE FUNCTIONAL DESIGN SPECIFICATION FOR FILTER /DRYER CONTROL SYSTEMS - DOCUMENT REF. 5921 DOC FDS

MECHANICAL DESIGN DATA	
DESIGN CODE	BS5500 : 1997 CATEGORY 2
ADDITIONAL SPECS.	C.T.LTD. Doc. Ref. 5921 doc Spec
DESIGN PRESSURE	SHELL 6.0 BarG/F.V. HEATING JACKET 6.0 BarG/F.V.
DESIGN TEMPERATURE	150°C 150°C
CORROSION ALL'CE	NONE NONE
STRESS RELIEF	NONE NONE
TOTAL VOLUME	3.3 M³ 0.134 M³

TECHNICAL DATA	
DESIGN FILTRATION AREA	2.5 m²
VESSEL NOMINAL DIA	1800 mm
MAX SLURRY CAPACITY	2500 LITRES
MAX CAKE CAPACITY	1000 LITRES
STROKE OF AGITATOR	400 mm
PRODUCT DISCHARGE LATERAL	300 mm
SPEED OF AGITATOR	8 / 16 rpm
ELECTRIC MOTOR (DRIVE SYSTEM)	8.5 / 6 kW
ELECTRIC MOTOR (HYD POWER SYSTEM)	3 kW
AREA CLASSIFICATION	ZONE 1 IIC T4
INSULATION	SS CLAD 40 THK VERMICULITE - SHELL ONLY
FIREPROOFING	NONE mm

MATERIALS OF CONSTRUCTION	
SHELL / HEAD	ASTM A240-316L
MAIN GIRTH FLG.	ASTM A240-316L
PIPE	ASTM A312-TP316L
NOZZLE BAR	ASTM A182-F316L
PLATE	ASTM A240-316L
NOZZLE PADS	ASTM A182-F316L
NOZZLE FLANGES	ASTM A182-F316L (RFSO)
EXT'L PRESSURE BOLTING	ASTM A193-B7/2H (ZINC PLATED)
DISCHARGE VALVE PAD	ASTM A240-316L / ASTM A182-F316L
DRIVE SUPPORT PLATE	ASTM A240-316L
DRIVE SYSTEM SUPPORT ASS'Y	CARBON STEEL / STAINLESS STEEL
AGITATOR SHAFT	DUPLEX UNS S31803
AGITATOR BLADES/BOSS	STAINLESS STEEL 316L
MAIN FLG. CLAMPS	WALTER G. RATHMANN TYPE M27-K
MAIN FLG. GASKETS (SERV/TEST)	34 Cr 4 (1.7033) CLASS B - ZINC PLATED
'O' RINGS	FEP / PTFE
WASH RING/NOZZLES	STAINLESS STEEL 316
JACKET/BLOCKING RINGS/BAFFLE	ASTM A240-304L
NOZZLE NECKS	ASTM A312 TP316L
NOZZLE FLANGES	ASTM A182-F316L
BASEPLATE	BS.1501-224-490B (LT.50) + 316L CLAD
FILTER SUPPORT PLATE	ASTM A240-316L
CLAMP RING	ASTM A240-316L
INTERNAL BOLTING	STAINLESS STEEL 316 OR EQUIV.
SUPPORT PLATE STAYS	STAINLESS STEEL 316L
NOZZLE NECKS	ASTM A312-TP316L
NOZZLE FLANGES	ASTM A182-F316L (RFSO)
FILTER MESH	POLYPROPYLENE 20 MICRON DOUBLE WEAVE
ATTACHMENTS	STAINLESS STEEL 316L
EXTERNAL PRESSURE BOLTING	ASTM A193-B7/2H (ZINC PLATED)
VALVE PLUG	ASTM A479-316L
CABINET BODY AND WETTED ATTACHMENTS	STAINLESS STEEL 316L
SEAL RING	ASTM A240-316L
'O' RINGS/SCRAPERS	FEP 'O' RING ENERGISED PIPE (DOUBLE ACTING)/PTFE
EXTERNALS	ST. STL TYPE 316L / CARBON STEEL
MECHANICAL SEAL	JOHN CRANE TYPE 7700 SERIES DRY RUNNING CARBON PFE SEALS
GEARED MOTOR	AS PER SPECIFICATION A4/5921/06/GB
HYDRAULIC CYLINDERS	AS PER SPECIFICATION A4/5921/06/HC & HC1
SIGHT/LIGHT GLASSES	WELDING FLANGE - ASTM A240-316L OR EQUIV. BOROSILICATE GLASS (300°C) MAX. PTFE GASKETS
DRIVE SUPPORT ASS'Y	CARBON / STAINLESS STEEL
SUPPORT LEGS & ATTACHMENTS	STAINLESS STEEL
NAMEPLATE & BRACKET	STAINLESS STEEL
EARTHING BOSS/STUD	CARBON STEEL / STAINLESS STEEL

GENERAL NOTES

- ALL PARTS IN CONTACT WITH THE PRODUCT WILL BE MADE OF 316L STAINLESS STEEL MATERIAL.
- ALL PARTS EXTERNAL TO THE FILTER ENVELOPE, AND NOT IN CONTACT WITH THE PRODUCT TO BE MADE OF EITHER CARBON STEEL OR TYPE 304L/316L STAINLESS STEEL
- ALL MATERIAL MARKINGS TO BE ON THE OUTSIDE OF VESSEL, AND TO BE TRANSFERRED BEFORE THE MATERIAL IS CUT. ALL MARKINGS ON STAINLESS STEEL TO BE VIBRO-ETCHED.
- ALL FIXED (WELDED) FLANGE/PAD BOLT HOLES TO BE OFF-CENTRES TO MAIN VESSEL CENTRELINES (E-C/180° CENTRELINES IN PLAN, VERTICAL CENTRELINE IN ELEVATION) U.O.S.
- NOZZLE FLANGE FACES TO HAVE A STOCK JOINT FACE FINISH
- ALL STANDARD FLANGES TO BE DIMENSIONALLY IN ACCORDANCE WITH ANSI B16.5

SUBSIDIARY DRAWINGS	
G.A. + GENERAL NOTES	A1/5921/00 (THIS DRAWING)
SHELL DETAILS	A1/5921/01/01
BASE DETAILS	A1/5921/02/01
AGITATOR DETAILS	A1/5921/03/01
DRIVE DETAILS	A1/5921/04/01
DISCHARGE ARM ASSEMBLY	A1/5921/05/01
NAMEPLATE DETAILS	A4/5921/NP
DIMENSIONAL TOLERANCES.	A2/STD/101. (BS.5276 Pt.3)

CORRECTIONS	
NO. OFF	1 (ONE)
W.O.No.	5921

REV	BY	CHKD.	DATE	REV	BY	CHKD.	DATE	REV	BY	CHKD.	DATE
C	PC	PC	28.3.00	B	PC	PC	7/2/00	A	PC	PC	13/1/00
			28.3.00				7/2/00				13/1/00

CHARLES THOMPSON LIMITED
 GLASSHOUSE LANE
 ROTHERHAM
 SOUTH YORKSHIRE.
 S62 5TD
 ENGLAND
 FM 21344

CLIENT - PHOENIX CHEMICALS LTD.
 GENERAL ARRANGEMENT DRAWING / DATA SHEET
 PRESSURE FILTER / DRYER
 2.5 Sq. Metres FILTRATION AREA
 CT 11800

DRN. BY	P.C.	DATE	CHKD. BY	D.P.	DATE
		12.12.99			13.12.99

STATUS CODES: - P=PRELIM. C=FOR COMMENT. A=APPROVED. F=FINAL

DRAWING NUMBER	REV.	STATUS
A1/ 5921 /GA	F	C