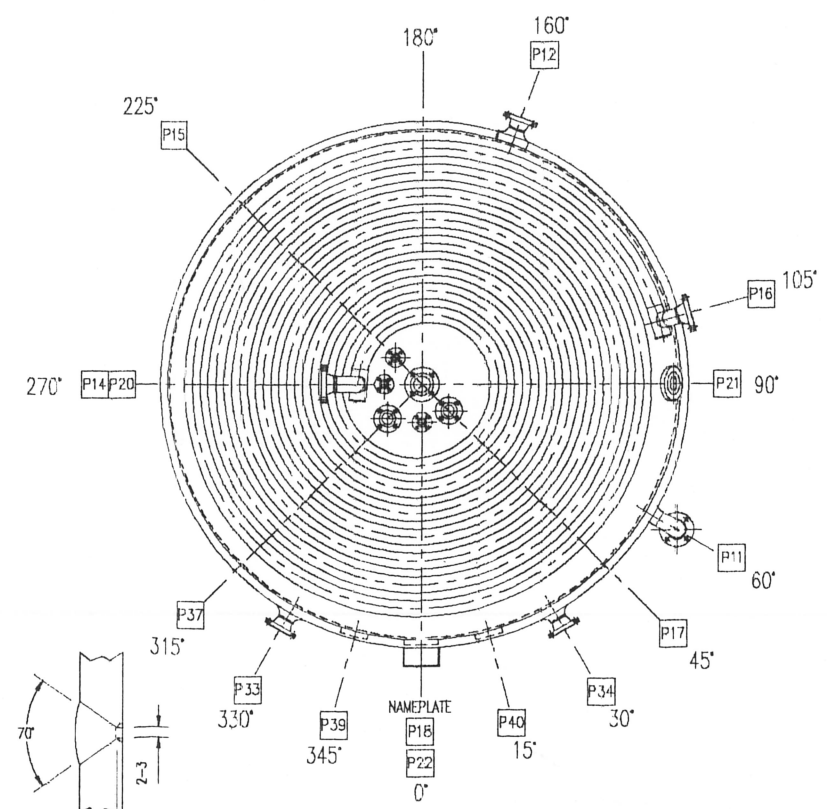
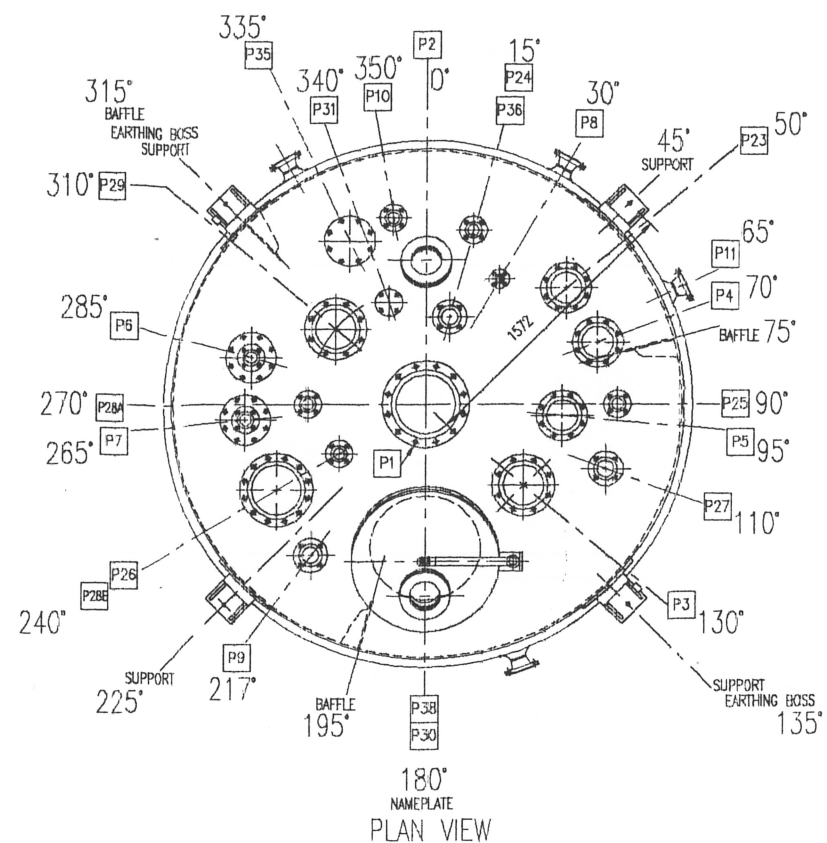
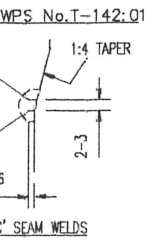
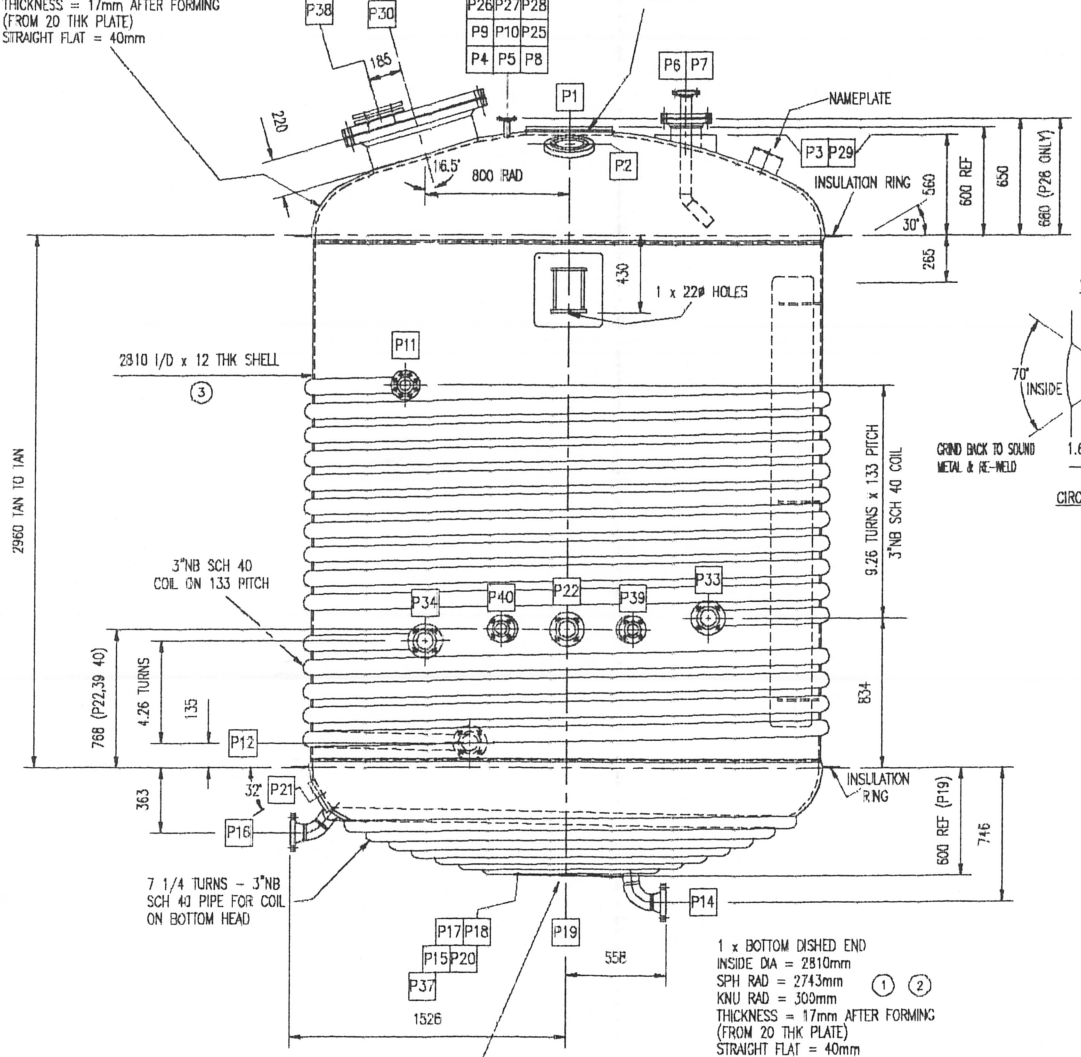


DRG. NO. F10787-1

1 x TOP DISHED END
INSIDE DIA = 2810mm
SPH RAD = 2743mm
KNU RAD = 300mm
THICKNESS = 17mm AFTER FORMING
(FROM 20 THK PLATE)
STRAIGHT FLAT = 40mm

AGITATOR LOADINGS :-
DEAD WEIGHT LOADINGS = 1500 KG
TORQUE LOADING = 5000 Nm
AXIAL BENDING MOMENT = 15000 Nm

AGITATOR MOUNTING FLANGE
SHALL BE MACHINED AFTER
ALL WELDING IS COMPLETE



GRIND BACK TO SOUND METAL & RE-WELD
WPS No. T-142:01
LONG SEAM WELDS

REF	SIZE	RATING	DESCRIPTION	WALL THICKNESS	NOBS/SWAGHT
P20	25NB	Cl.150b R.F. PAD	TEM. TRANSMITTER TT128100A	NOT APPLICABLE	210 RADIUS
P19	80NB	Cl.150b R.F. PAD	OUTLET	NOT APPLICABLE	CENTRE
P18	25NB	Cl.150b R.F. PAD	SPARE C/W BLIND	NOT APPLICABLE	210 RADIUS
P17	50NB	Cl.150b R.F. PAD	PT128100	NOT APPLICABLE	270 RADIUS
P16	80NB	Cl.300b R.F.W.N.	HEATING COIL INLET	Sch.40	1567 RADIUS
P15	25NB	Cl.150b R.F. PAD	TEM. TRANSMITTER TT128100B	NOT APPLICABLE	210 RADIUS
P14	80NB	Cl.300b R.F.W.N.	HEATING COIL OUTLET	Sch.40	354 RADIUS
P12	80NB	Cl.150b R.F.W.N.	LOWER COOLING COIL INLET	Sch.40	1574 RADIUS
P11	80NB	Cl.150b R.F.W.N.	UPPER COOLING COIL OUTLET	Sch.40	1524 S/O
P10	50NB	Cl.150b R.F.S.O.	PRESSURE INDICATOR PI128401C	Sch.40	1050 RADIUS
P9	80NB	Cl.150b R.F.S.O.	FILTER AD ADDITION	Sch.40	1050 RADIUS
P8	25NB	Cl.150b R.F.S.O.	NITROGEN BLANKETTING	Sch.40	800 RADIUS
P7	150/50NB	Cl.150b R.F.S.O.	SOLVENT FEED (SPECIAL 'J' PIPE)	Sch.40	1000 RADIUS
P6	150/50NB	Cl.150b R.F.S.O.	SOLVENT FEED (SPECIAL 'J' PIPE)	Sch.40	1000 RADIUS
P5	200NB	Cl.150b R.F.S.O.	FROM REACTOR H12-VR801	Sch.40	750 RADIUS
P4	200NB	Cl.150b R.F.S.O.	FROM REACTOR H12-VR601	Sch.40	1000 RADIUS
P3	200NB	Cl.150b R.F. PAD	SPRAY WASH	NOT APPLICABLE	700 RADIUS
P2	150NB	Cl.150b R.F. PAD	LIGHTGLASS (VESSEL HEAD)	NOT APPLICABLE	800 RADIUS
P1	300NB	Cl.150b R.F. PAD	AGITATOR MOUNTING FLANGE	NOT APPLICABLE	CENTRE

REF	SIZE	RATING	DESCRIPTION	WALL THICKNESS	NOBS/SWAGHT
P40	50NB	Cl.150b R.F. PAD	TE128041	NOT APPLICABLE	1445 S/O
P39	50NB	Cl.150b R.F. PAD	PT128401B	NOT APPLICABLE	1445 S/O
P38	150NB	Cl.150b R.F. PAD	SIGHTGLASS (IN MANNWAY)	NOT APPLICABLE	SEE DETAIL
P37	50NB	Cl.150b R.F. PAD	SPARE C/W BLIND	NOT APPLICABLE	270 RADIUS
P36	80NB	Cl.150b R.F.S.O.	SPARE C/W BLIND	Sch.40	500 RADIUS
P35	150NB	Cl.150b R.F.S.O.	SPARE C/W BLIND (FUTURE REACTOR)	Sch.40	1000 RADIUS
P34	80NB	Cl.150b R.F.W.N.	LOWER COOLING COIL OUTLET	Sch.40	1567 S/O
P33	80NB	Cl.150b R.F.W.N.	UPPER COOLING COIL INLET	Sch.40	1567 S/O
P31	50NB	Cl.150b R.F.S.O.	PS 12841D	Sch.40	600 RADIUS
P30	600NB	Cl.150b R.F.S.O.	MANNWAY C/W COVER & DAVIT	15mm	SEE DETAIL
P29	200NB	Cl.150b R.F. PAD	SPARE SPRAY WASH C/W BLIND	NOT APPLICABLE	650 RADIUS
P28B	80NB	Cl.150b R.F.S.O.	TO VENT HEADER	Sch.40	550 RADIUS
P28A	50NB	Cl.150b R.F.S.O.	TO VENT HEADER (BLANKED - OFF)	Sch.40	650 RADIUS
P27	80NB	Cl.150b R.F.S.O.	FROM SCHENK FILTER H12-SS627	Sch.40	1050 RADIUS
P26	250NB	Cl.150b R.F.S.O.	CONDENSER CONNECTION	Sch.40	950 RADIUS
P25	50NB	Cl.150b R.F.S.O.	DRUM ADDITION	Sch.40	1050 RADIUS
P24	50NB	Cl.150b R.F.S.O.	PRESSURE SENSOR PS12840G	Sch.40	1000 RADIUS
P23	150NB	Cl.150b R.F. PAD	LEVEL SWITCH	Sch.40	1000 RADIUS
P22	80NB	Cl.150b R.F. PAD	SPARE C/W BLIND	NOT APPLICABLE	1445 S/O
P21	80NB	Cl.150b R.F. PAD	SAMPLE VALVE (BLACKFIVE)	NOT APPLICABLE	SEE DETAIL

REF	SIZE	RATING	DESCRIPTION	WALL THICKNESS	NOBS/SWAGHT
P28,36	RENAMED	P28B	ADDED	P11	MOVED
P28	COIL	REDUCED			
P4,P5	NOW	200NB			
P25,P8,P24,P28,P23	ALTERED				
P25,P8,P24,P28,P23	ALTERED				
P13	WAS	SCH 40			
P23&24	MOVED	TO TOP HEAD			

DESIGN DATA	VESSEL	UPPER LIMPET COIL	LOWER LIMPET COIL
CODE	BS 5500:1997 CATEGORY 2	BS 5500:1997 CATEGORY 2/ KNICAL	BS 5500:1997 CATEGORY 2/ KNICAL
CLIENT SPEEDS	CLIENT DATA SHEET	CLIENT DATA SHEET	CLIENT DATA SHEET
DESIGN PRESSURE	5 BAR G + FULL VACUUM	8 BAR G + FULL VACUUM	8 BAR G + FULL VACUUM
DESIGN TEMPERATURE	250°C	100°C	340°C
OPERATING PRESSURE	ATMOSPHERIC	100°C TO 100°C	200°C TO 300°C
OPERATING TEMPERATURE	25°C TO 220°C	100°C TO 100°C	200°C TO 300°C
CORROSION ALLOWANCE	Nil	Nil	Nil
STRESS RELIEF	Nil	Nil	Nil
RADIOGRAPHY	TOX MAIN SEAMS INCLUDING TEES	TOX MAIN SEAMS INCLUDING TEES	TOX MAIN SEAMS INCLUDING TEES
N.D.E.	100% DYE-PEN ALL BRANCH IMPLANTS	100% DYE-PEN ALL BRANCH IMPLANTS	100% DYE-PEN ALL BRANCH IMPLANTS
	100% ALL LIFTING EQUIPMENT	100% COIL TO SHELL WELDS	100% COIL TO SHELL WELDS
	100% OTHER	100% OTHER	100% OTHER
* HYDRAULIC TEST (SHOP)	5.8 BAR (AT BOTTOM)	15.8 BAR	15.8 BAR
	* NOTE: TEST WATER TO BE DEMINERALISED.		

MATERIALS	
HEADS	BS1501 316 S11
SHELL	BS1501 316 S11
LIMPET COIL	ASTM A312 TP 316L
MANNWAY FLANGE & BLIND	BS1501 304 S11
NOZZLE FLANGES (LIMPET COIL)	ASTM A182 F304
NOZZLE FLANGES (SHELL)	ASTM A182 F304
NOZZLES (INCLUDING SIGHTGLASS)	BS1501 304 S11
NOZZLE NECKS (LIMPET COIL)	ASTM A312 TP 316L
NOZZLE NECKS (SHELL)	ASTM A312 TP 304L
BLINDS (LIMPET)	ASTM A182 F316
BLINDS (SHELL)	ASTM A182 F304L
LIFTING LUGS	BS1501 304 S11
LIFTING LUG BACKING PADS	BS1501 304 S11
LIFTING LUGS	BS1501 304 S11
LIFTING LUG BACKING PADS	BS1501 304 S11
NAMEPLATE BRACKET	BS1501 304 S11
EARTHING BOSSSES	BS1501 304 S11
INTERNAL Baffles	BS1501 304 S11
INTERNAL Baffle BRACKETS	BS1501 304 S11
FIBRES	SA 403 316L
GASKETS	NON ASBESTOS FIBRE
THERM ADING	METAL
SCREWS	A5-640 GR M8B (INTERVALS TO BE 30AL ST. STEEL BOLTS C/W LOCKNUTS)
NUTS	A5-640 GR M8B
NAMEPLATE	ST. STEEL
PAINT	1 COAT RED OXIDE PRIMER TO CARBON STEEL PARTS ONLY

VESSEL WEIGHTS & VOLUMES	
FABRICATED WEIGHT	= 6562 KGS
TEST WEIGHT	= 29282 KGS
OPERATING WEIGHT	= 31612 KGS
VOLUME	= 22.92 M ³

REFER DRGS.	
F10787-2	- DETAILS
F10787-3	- DETAILS
F10787-4	- DETAILS
S10787-1	- NAMEPLATE DETAILS

GENERAL NOTES	
M/C FINISH	6.3 Ra µm TO 12.5 Ra µm
INTL/EXTL FINISH	VESSEL TO BE PICKLED & PASSIVATED BOTH INTERNALLY & EXTERNALLY TO REMOVE ALL WELD SPATTER, STAINS, LOOSE SCALE, GRIT, OIL & GREASE. ALL INTERNAL WELDS TO BE DRESSED SMOOTH.
TRANS. PROT.	COVER ALL UNCOVERED NOZZLES & PADS WITH WOODEN BLANKS & ALUMINIUM TAPE.
FLANGE RATINGS	FLANGE RATINGS ARE TO BE BS1560. (UNLESS OTHERWISE STATED)
SIGHT/ LIGHTGLASS FITTINGS	LIGHT UNITS SHALL BE OF 'MAX MULLER' SUPPLY & EPOXY COATED. LIGHT GLASSES DERIVED FOR ZONE 1 AREA. ELECTRICAL SUPPLY SHALL BE 240V 1ph, 50Hz. LIGHT FITTINGS SHALL BE CHEMILUX TYPE PCL 50 deph VI CERTIFIED TO Exd OR Exe, GAS GROUPS I/2A/IB, TEMP CLASSIFICATION T3 WITH 25mm (METRIC) CABLE FITTING. SIGHTGLASSES SHALL BE TO DIN 28120 DN125 PN16, 150mm VIEWING DIAMETER. GLASS SHALL BE TOUGHENED BOROSILICATE TO DIN 7080 & 25 THK.
INSULATION (BY OTHERS)	INSULATION THICKNESS TO BE CONFIRMED.
INSPECTION	EAGLE STAR

CLIENT.	COURTAULDS COATINGS LTD
CONTRACTOR.	
CLIENT ORDER No.	
VESSEL ITEM No.	H12-VD821
PROJECT.	PROJECT 2000

20 TONNE THINNING TANK
GENERAL ARRANGEMENT

DRAWN	D. TIFFANY	SCALES	DRAWING NO.	SHEET NO	REVISIONS
DATE	03.11.97	1:20	F10787	1	E
CHECKED				4	
DATE					

ARDETH ENGINEERING LTD.
ELLAND, WEST YORKSHIRE, ENGLAND.