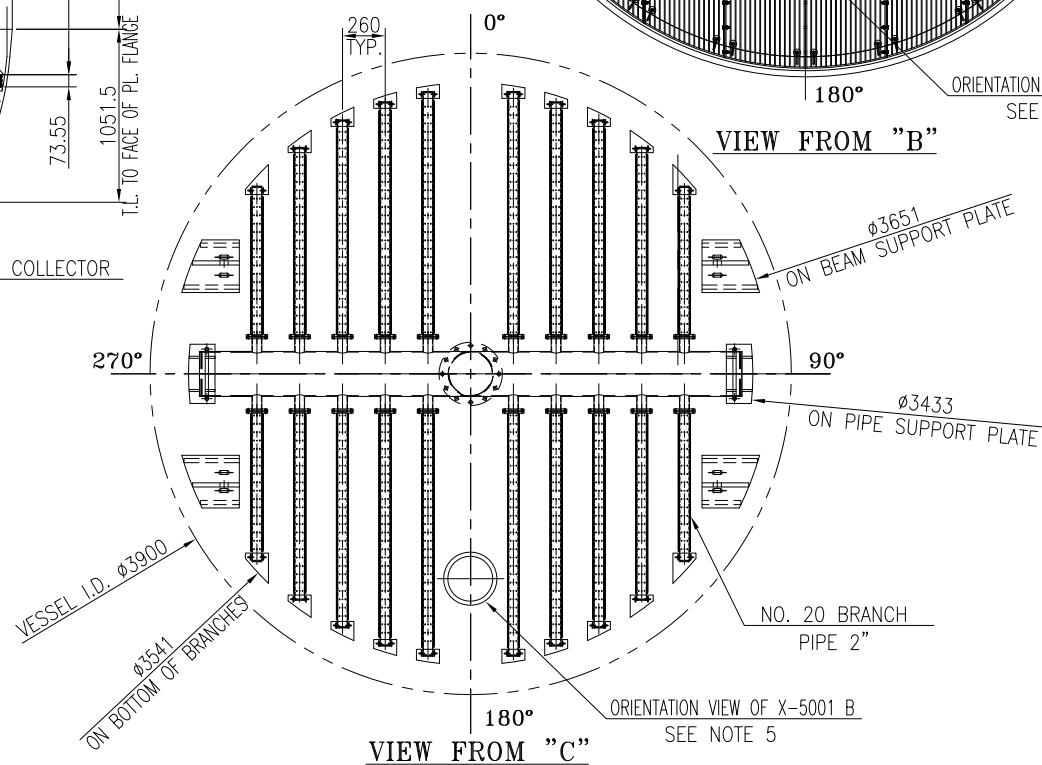
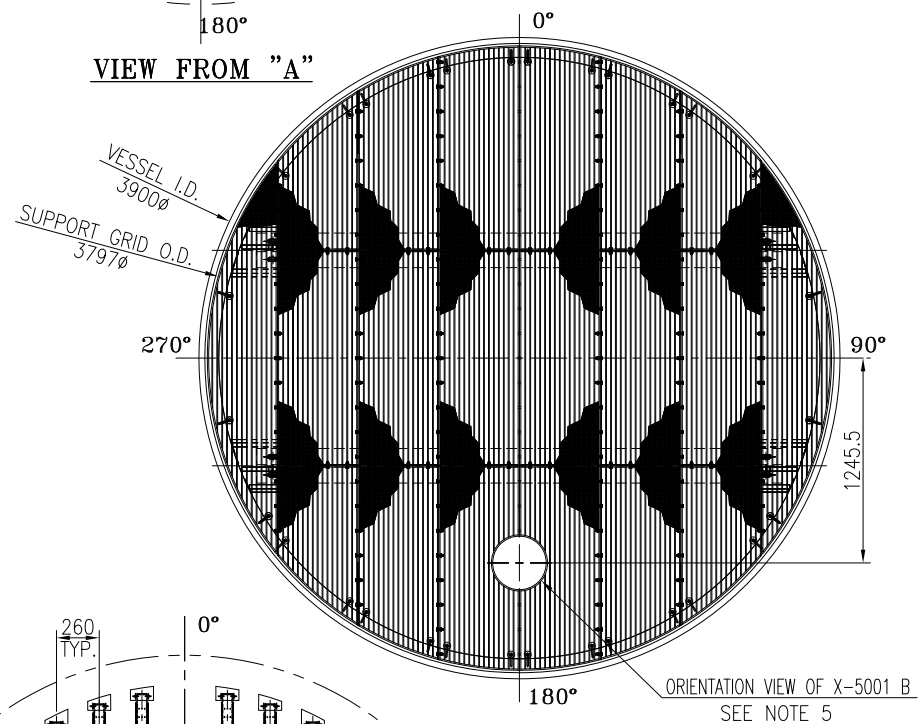
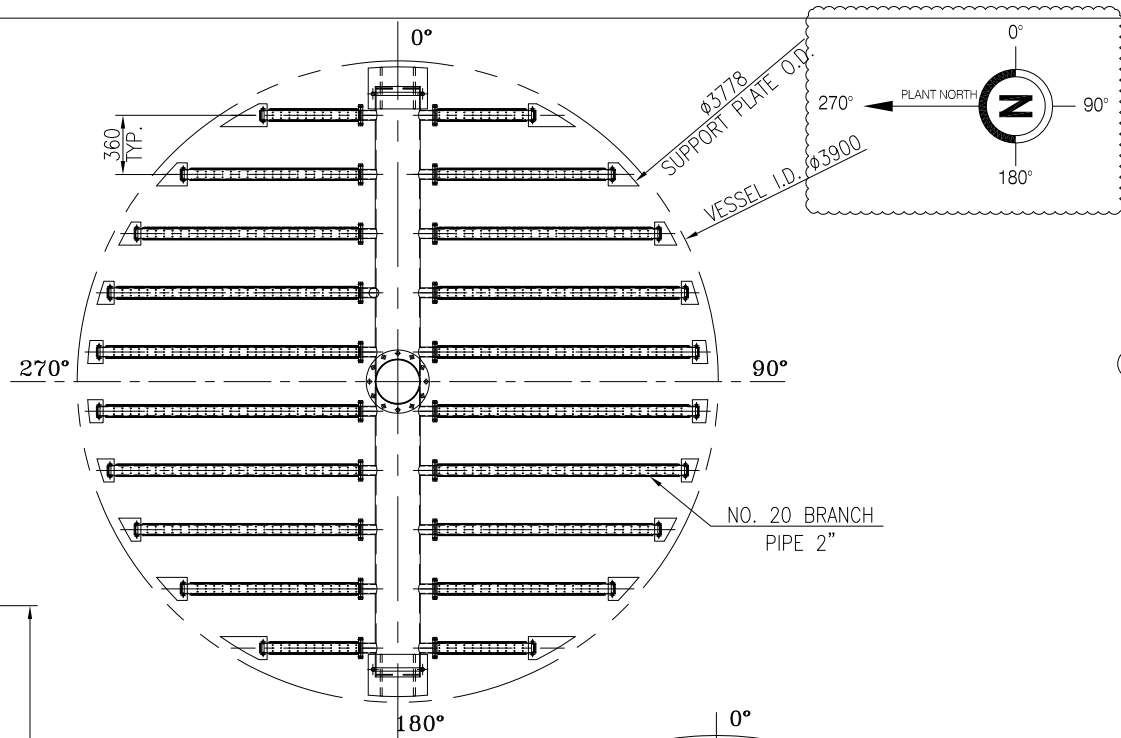
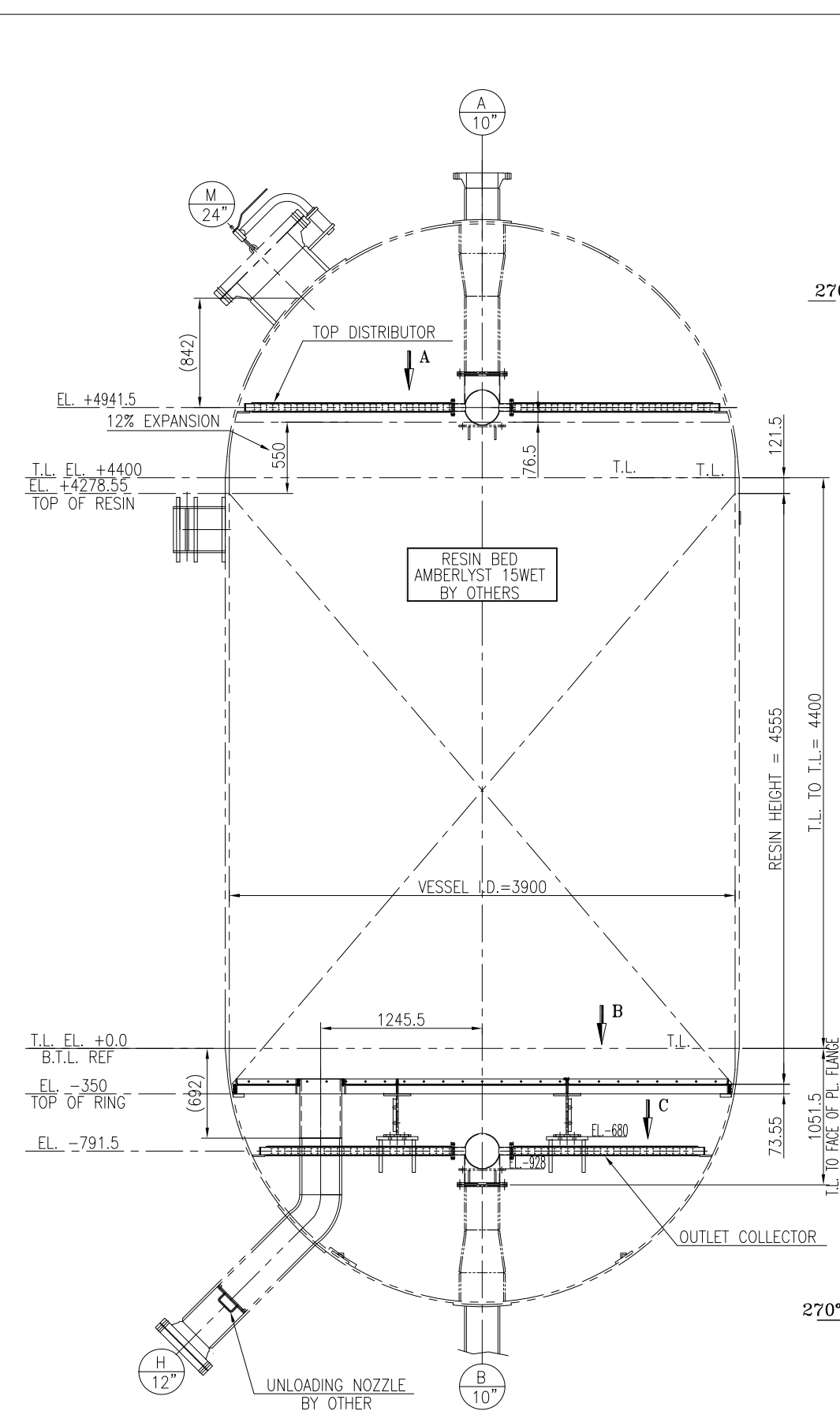




VIEW FROM "C"

GENERAL NOTES

- 1- ALL DIMENSIONS ARE IN MILIMETERS, UNLESS OTHERWISE NOTED.
- 2- RESINS TYPES BY RESIN SUPPLIER.
- 3- ALL REMOVABLE INTERNALS SHALL BE DESIGNED TO PERMIT INSTALLATION AND REMOVAL FROM THE TOP 24" NOZZLE (546mm)
- 4- ALL PREVIOUS INTERNAL PARTS INCLUDES WELDED INLET LIQUID DEFLECTOR, WELDED INTERNAL BOTTOM PERFORATED HEAD & RELATED SUPPORT ANGLES, WIRE MESHES & CERAMIC BALLS SHOULD BE REMOVED"
- 5- UNLOADING NOZZLE (H) ORIENTATION IS 180° FOR X-5001 B AND 0° FOR X-5001 A.
- 6- SUPPORT GRIDS SHALL BE ROTATED 180° TO ONE ANOTHER.
- 7- REMOVE ALL BURRS AND SHARP EDGES.
- 7- PENETRATION TEST (PT) SHALL BE DONE WHEN PREVIOUS WELDED ATTACHMENT REMOVE FROM HEAD OR BODY

SYMBOLS AND LEGENDS

- 1- L.W.L = LONGITUDINAL WELD LINE
- 2- C.W.L = CIRCUMFERENTIAL WELD LINE
- 3- B.C.D = BOLT CIRCLE DIAMETER
- 4- O.D. = OUTSIDE DIAMETER
- 5- I.D. = INSIDE DIAMETER
- 6- I.R. = INSIDE RADIUS
- 7- E.S.P = EUROSLOT PARS
- 8- V.M. = VESSEL MANUFACTURER

REFERENCE & RELATIVE DOCUMENTS

MECHANICAL CALCULATION FOR INTERNALS	13331-ESP-PR-ME-CAL-4-10087
GENERAL ARRANGEMENT DRAWING FOR X-5001 A/B	1248-23993-TSH-ME-DWG-23262
MANHOLE AND NOZZLE DETAILS DRAWING	1248-23993-TSH-ME-DWG-23264
PROCESS SPECIFICATION FOR X-5001 A/B	4338028-59-REV. 2
STANDARD DRAWING	S-02982-SP-471-EN

	Project No.: 1246
Purchaser review and comments shall not be assumed to indicate either responsibility or liability for accuracy and completeness of this document or alter any contractual terms and conditions, and will not absolve vendor from his responsibility for correct	
1	No comments.
2	Comments as marked, proceed.
3	Comments as marked, revise & resubmit.
4	For information, Not reviewed.
Signature:	Date

REV.	DESCRIPTION	PREP.	CHKD	APP	DATE
C	ISSUE FOR APPROVAL	R.SH.	M.P.	M.SH.	20.NOV.18
B	ISSUE FOR APPROVAL	R.SH.	M.P.	M.SH.	12.NOV.18
A	ISSUE FOR APPROVAL	R.SH.	M.P.	M.SH.	04.NOV.18

OWNER :	MARJAN PETROCHEMICAL CO. 
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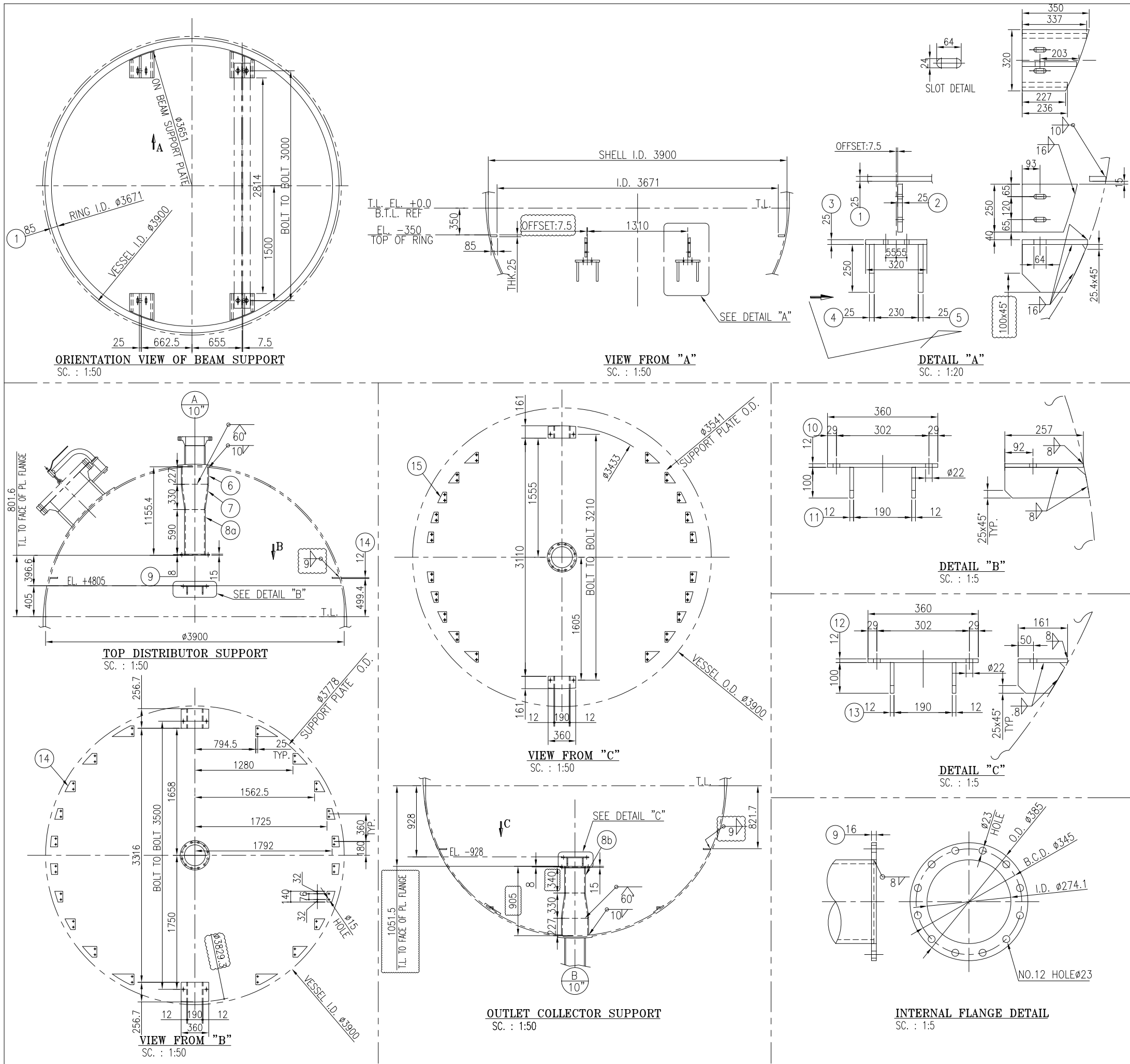
PROJECT :	5,000 MTPD MARJAN Methanol Plant ASSALUYEH
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CONTRACTOR :	 Consulting Engineers, Managers
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VENDOR :	
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TITLE :	GENERAL ASSEMBLY AND INTERNAL DETAIL DRAWING OF X-5001 A/B
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NO CONSTRUCTION PERMITTED UNLESS DWG. APPROVED				
DOCUMENT NUMBER :				
UNIT NO.	GROUP	TYPE	SIZE	DOC. NO.
133/31-ESP-PR	ME	DWG	3	10088
SHEET 1	OF	5		REV. C



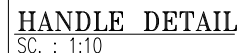
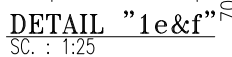
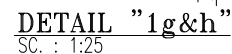
PART LIST				
POS.	QNTY.	DESCRIPTION	DIMENSION	MATERIAL
WELDED PART				
1	1	SUPPORT RING	Ø3841/Ø3671,THK.25	SA-516 Gr.70
2	4	BEAM GUSSET	250X284, THK.25	SA-516 Gr.70
3	4	BEAM SUPPORT	AS. DWG,THK.25	SA-516 Gr.70
4	4	GUSSET	337X250,THK.25	SA-516 Gr.70
5	4	GUSSET	236X250, THK.25	SA-516 Gr.70
6	2	PIPE 14"	L=227, SCH. STD	SA-106 B
7	2	REDUCER FITTING	14" TO 10", SCH. STD	SA-234 WPB
8a	1	PIPE 10"	L=590, SCH. STD	SA-106 B
8b	1	PIPE 10"	L=340, SCH. STD	SA-106 B
9	2	INTERNAL FLANGE	AS. DWG, THK.16	SA-516 Gr.70
10	2	BASE PLATE	360X257, THK.12	SA-516 Gr.70
11	4	GUSSET	253X100, THK.12	SA-516 Gr.70
12	2	BASE PLATE	360X161, THK.12	SA-516 Gr.70
13	4	GUSSET	157X100, THK.12	SA-516 Gr.70
14	1SET	RING SUPPORT	AS. DWG, THK.12	SA-516 Gr.70
15	1SET	RING SUPPORT	AS. DWG, THK.12	SA-516 Gr.70

GENERAL NOTES

- 1- ALL DIMENSIONS ARE IN mm,UNLESS OTHERWISE NOTED
2- CORROSION ALLOWANCE : 3mm
3- REMOVE ALL BURRS AND SHARP EDGES.
4- PART LIST RELATED TO ONE VESSEL
5- QUANTITY OF ORDER: 2 SET
6- ALL PARTS SHOWN ON THIS DRAWING ARE FURNISHED BY ESP
7- ALL VESSEL ATTACHMENTS SHOWN ON THIS DRAWING IS NOT ACTUAL FABRICATION DRAWING.
8- SUPPORT RING ARE TO BE LEVELED ALL AROUND CIRCUMFERENCE OF VESSEL.
9- TO SEE ORIENTATION, SEE. G.A. DWG.
10- SUPPORT RING SHALL BE PASS THROUGH MANHOLE AND WELD INSIDE.
11- PIPE DISTRIBUTOR/COLLECTOR IS WELDED TYP.
12- APPROX WEIGHT: 600 Kg
13- STAINLESS STELL MATERIALS ARE DUAL CERTIFICATED (304/304L).

C	ISSUE FOR APPROVAL	R.SH.	M.P.	M.SH.	20.NOV.18
B	ISSUE FOR APPROVAL	R.SH.	M.P.	M.SH.	12.NOV.18
A	ISSUE FOR APPROVAL	R.SH.	M.P.	M.SH.	04.NOV.18
REV.	DESCRIPTION	PREP.	CHKD	APP	DATE

OWNER : MARJAN PETROCHEMICAL CO. 				
PROJECT : 5,000 MTPD MARJAN Methanol Plant ASSALUYEH				
CONTRACTOR : 				
VENDOR : 				
TITLE : GENERAL ASSEMBLY AND INTERNAL DETAIL DRAWING OF X-5001 A/B				
NO CONSTRUCTION PERMITTED UNLESS DWG. APPROVED				
DOCUMENT NUMBER :				
UNIT NO.	GROUP	TYPE	SIZE	DOC. NO.
133/31-ESP-PR	ME	DWG	3	10088
SHEET 2	OF	5		REV. C



GENERAL NOTES

- 1- ALL DIMENSIONS ARE in mm, UNLESS OTHERWISE NOTED
- 2- PART LIST RELATED TO ONE SUPPORT GRID, QTY. OF ORDER: 2 SETS.
- 3- SUPPORT GRID SEGMENTS WILL BE PASS THROUGH MANHOLE 24" WITH I.D.546
- 4- DIRECTION OF WIRES SHALL BE PERPENDICULAR TO DIRECTION OF GRATING BARS.
- 5- DIRECTION OF RODS SHALL BE PARALLEL TO DIRECTION OF GRATING BARS.
- 6- ALL BOLTS ARE ACCORDANCE TO A193 CLASS1.
- 7- TO SEE ORIENTATION, SEE G.A. DWG.
- 8- S.P.= EUROSLOT PARS Co.
- 9- SCREEN DETAIL: WIRE 220E/ROD C30, SLOT: 0.18 ± 0.05 mm, OPEN AREA: 7.5%
- 10- APPROX. WEIGHT : 1900kg
- 11- MANWAY WEIGHT : 70 Kg
- 12- STAINLESS STEEL MATERIALS ARE DUAL CERTIFICATED (304/304L).

OWNER : MARJAN PETROCHEMICAL CO. 

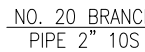
PROJECT :	5,000 MTPD MARJAN Methanol Plant ASSALUYEH
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CONTRACTOR :	 namvaran Consulting Engineers & Managers
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VENDOR : *Euroslot Pars*

TITLE :
GENERAL ASSEMBLY AND INTERNAL DETAIL DRAWING
OF X-5001 A/B

NO CONSTRUCTION PERMITTED UNLESS DWG. APPROVED				
DOCUMENT NUMBER :				
UNIT NO.	GROUP	TYPE	SIZE	DOC. NO.
133/31-ESP-PR	ME	DWG	3	10088
SHFFT 3	OF	5		REV. C



Technical drawing of a wellhead assembly, showing a side view and a top view.

Side View Dimensions:

- Vertical height from the base to the top of the wellhead: 1155.4
- Horizontal distance from the centerline to the edge of the wellhead: 541.6
- Horizontal distance from the centerline to the edge of the wellhead (labeled 2): 2
- Horizontal distance from the centerline to the edge of the wellhead (labeled 11): 11

Top View Dimensions:

- Horizontal distance from the centerline to the edge of the wellhead: 541.6
- Horizontal distance from the centerline to the edge of the wellhead (labeled 2): 2
- Horizontal distance from the centerline to the edge of the wellhead (labeled 11): 11

Other Labels:

- EL. +4941.5 (Elevation)
- T.L. (Top Line)
- PIPE "10 10S" (Pipe specification)
- Ø273.1 (Pipe diameter)
- GASKET (Gasket label)
- A (Arrow pointing down)

Technical drawing of a circular plate. The side view shows a thickness of 15. The top view shows a central hole with a diameter of $\phi 23$ and eight peripheral holes. The outer diameter is $\phi 385$, the bore center diameter is $\phi 345$, and the inner diameter is $\phi 274.1$. A label "NO. 10 - HOLE 107" points to one of the peripheral holes.

TOP SIDE

$\phi 60.3$
PIPE 2' 10S

$\phi 6$
HOLE

40°

40°

PERFORATED DETAIL
SC. : 1:2.5

(4e)

10x @50.8=508
HOLE QTY. 33

20

58

8

530

613

SCREEN LENGTH

TOTAL LENGTH

ø73

ø60.3

(4d)

19x @50.8=965.2
HOLE QTY. 60

20

58

8

1010

1096

SCREEN LENGTH

TOTAL LENGTH

ø73

ø60.3

Technical drawing of a 12-inch diameter, 12-foot long steel pipe with 12 tie rods. The drawing shows a side view with dimensions: overall diameter 73 inches, outer diameter 60.3 inches, and inner diameter 54.5 inches. The tie rods are 1/2 inch diameter, spaced 12 inches apart, and have a 3/4 inch diameter thread. The tie rods are welded to the pipe with tack welds. The drawing is labeled "TYP." and "TACK WELD EACH ROD".

Technical drawing of a mechanical part, showing front and side views with dimensions and callouts.

Front View (Left):

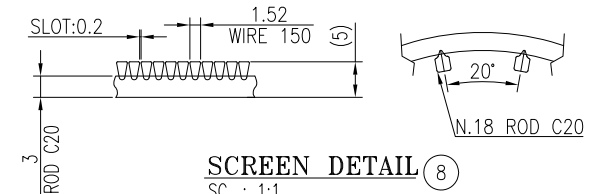
- Overall width: 105
- Overall height: 3.1
- Bottom flange thickness: 4.19
- Top flange thickness: 8
- Top flange width: 4.19
- Top flange hole diameter: $\phi 273.1$
- Top flange hole position: 180 (from centerline), 360 TYP. (between holes)
- Top flange hole position: 60° (from vertical centerline)
- Top flange hole position: TYP. (from vertical centerline)
- Top flange hole position: 2 (from vertical centerline)
- Top flange hole position: 1 (from vertical centerline)

Side View (Right):

- Overall width: 250
- Overall height: 15
- Top flange thickness: 15
- Top flange hole diameter: $\phi 273.1$
- Top flange hole position: 225 (from centerline), 225 (between holes)
- Top flange hole position: 60° (from vertical centerline)
- Top flange hole position: TYP. (from vertical centerline)
- Top flange hole position: 2 (from vertical centerline)
- Top flange hole position: 1 (from vertical centerline)
- Top flange hole position: 5a (from vertical centerline)
- Top flange hole position: 3 (from vertical centerline)

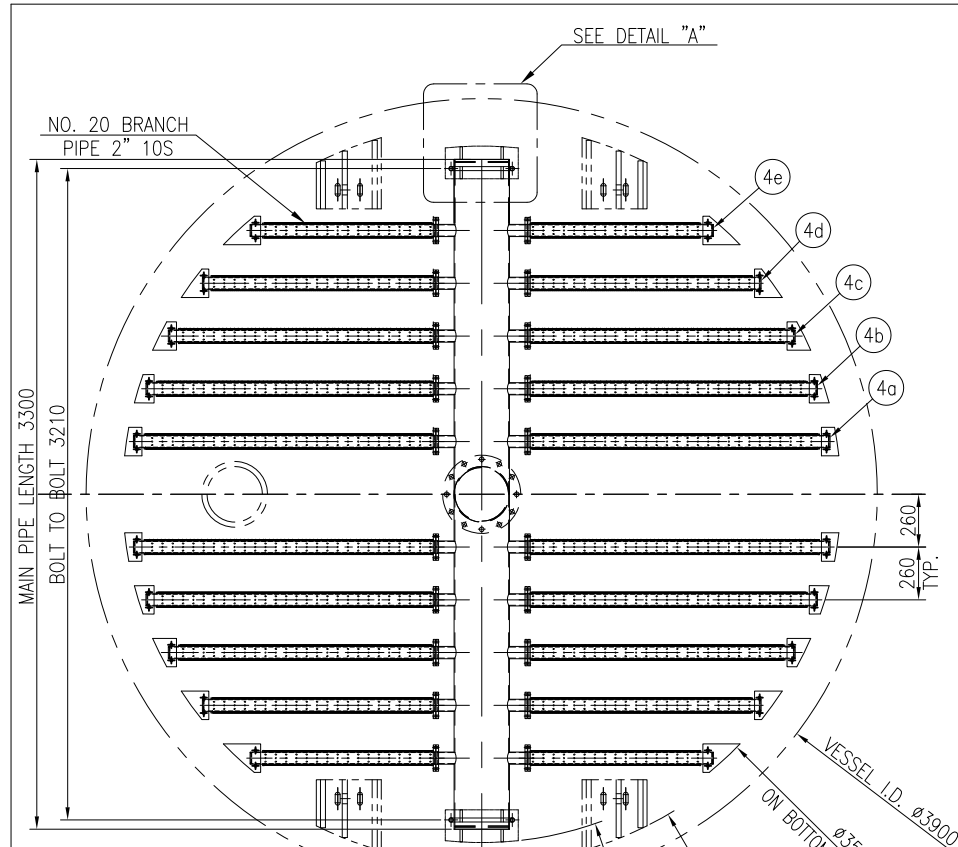
Technical drawing of a 2" PIPE. The drawing shows a cross-section of the pipe with a diameter of 130 mm. The wall thickness is 12 mm. The bore diameter is 105 mm. The drawing includes a cross-section view and a side view with dimensions.

- 1- ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
- 2- PART LIST RELATED TO ONE DISTRIBUTOR, QTY. OF ORDER: 2 SETS.
- 3- COMPLETE PICKLING & PASSIVATION.
- 4- SEGMENTS WILL BE PASS THROUGH MANHOLE 24"
WITH I.D.546.
- 5- V-WIRE SCREEN AVERAGE SLOT:0.2mm
- 6- CORROSION ALLOWANCE : 0mm
- 7- VESSEL I.D.: 3900 mm
- 8- REMOVE ALL BURRS AND SHARP EDGES.
- 9- TO SEE ORIENTATION, SEE G.A. DWG.
- 10- E.S.P.= EUROSLOT PARS Co. V.M.= VESSEL MANUFACTURER.
- 11- PIPE DISTRIBUTOR/COLLECTOR IS WELDED TYP.
- 12- APPROXIMATE WEIGHT : 350 Kg
- 13- STAINLESS STEEL MATERIALS ARE DUAL CERTIFICATED (304/304L).

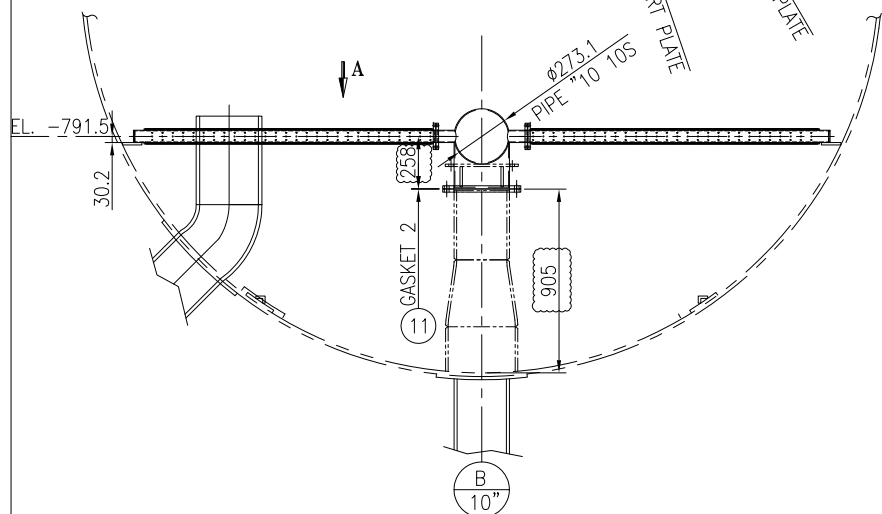


SCREEN DETAIL (8)
SC. : 1:1

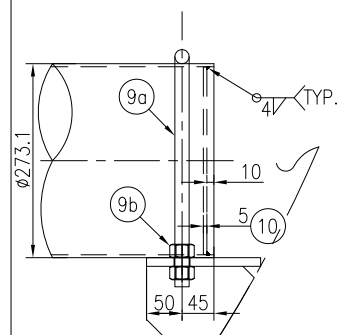
NO CONSTRUCTION PERMITTED UNLESS DWG. APPROVED				
DOCUMENT NUMBER :				
UNIT NO.	GROUP	TYPE	SIZE	DOC. NO.
133/31-ESP-PR	ME	DWG	3	10088
SHEET 4	OF	5		REV. C



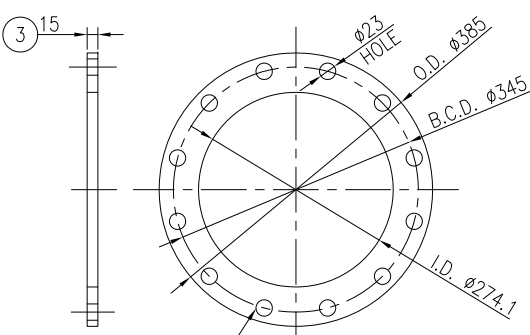
VIEW FROM "A"
SC. : 1:35



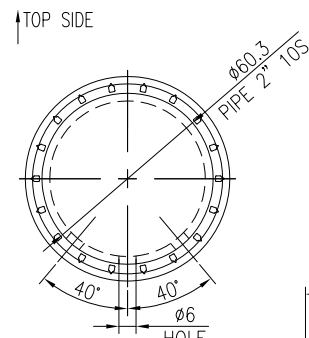
OUTLET COLLECTOR (NOZZLE "B")
SC. : 1:35



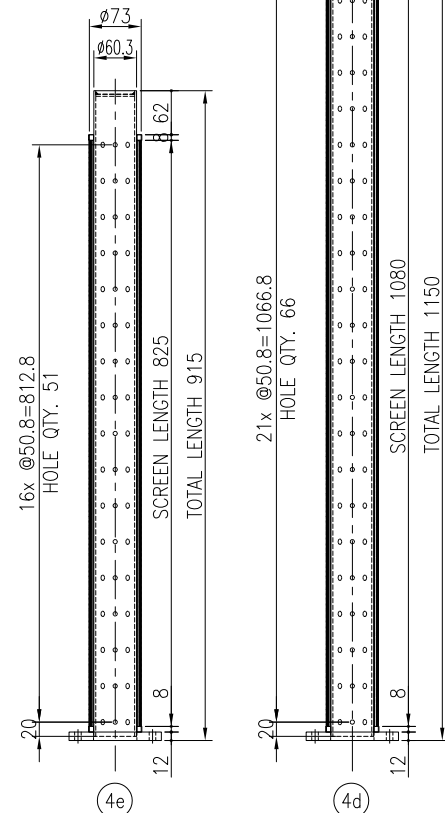
DETAIL "A"
SC. : 1:10



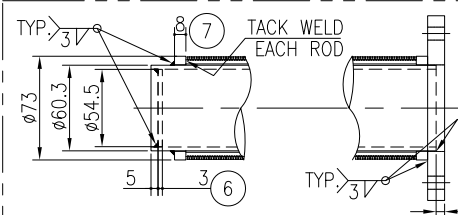
INTERNAL FLANGE
SC. : 1:10



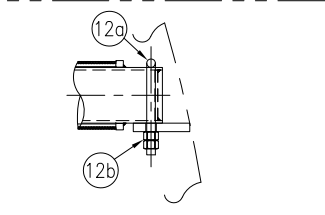
PERFORATED DETAIL
SC. : 1:2.5



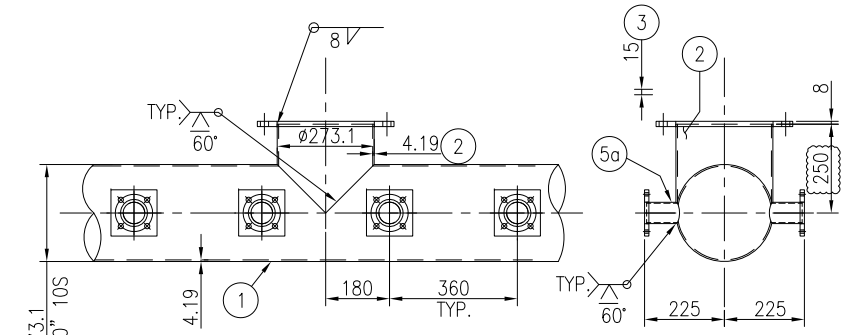
BRANCH DETAIL
SC. : 1:10



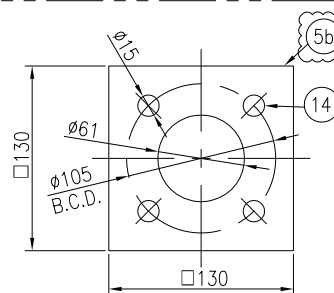
BRANCH CAP DETAIL
SC. : 1:5



2" PIPE SUPPORT
SC. : 1:5



MAIN PIPE DETAIL
SC. : 1:10

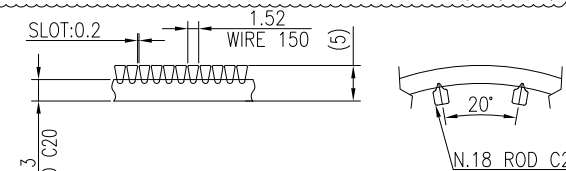


INTERNAL FLANGE 2"
SC. 1:5

PART LIST					
POS.	QNTY.	DESCRIPTION	DIMENSION	MATERIAL	SUP. BY
1	1	MAIN PIPE	10" SCH.10S L=3300	SA-312 304	ES.P.
2	1	PIPE	10" SCH.10S L=250	SA-312 304	ES.P.
3	1	INTERNAL FLANGE	AS. DWG, THK.15	SA-240 304	ES.P.
4a	4	PERFORATED PIPE	AS. DWG, SCH. 10S	SA-312 304	ES.P.
4b	4	PERFORATED PIPE	AS. DWG, SCH. 10S	SA-312 304	ES.P.
4c	4	PERFORATED PIPE	AS. DWG, SCH. 10S	SA-312 304	ES.P.
4d	4	PERFORATED PIPE	AS. DWG, SCH. 10S	SA-312 304	ES.P.
4e	4	PERFORATED PIPE	AS. DWG, SCH. 10S	SA-312 304	ES.P.
5a	20	CONNECTION PIPE	2" SCH.10S, L=86	SA-312 304	ES.P.
5b	40	INTERNAL FLANGE	130X130X12	SA-240 304	ES.P.
6	20	CAP PLATE	OD 54.5, THK.3	SA-240 304	ES.P.
7	40	SCREEN END RING	73/61 DIA. THK.8	SA-240 304	ES.P.
8	1set	SCREEN	AS. DWG	S.S.304	ES.P.
9a	2	U BOLT	10" DIN3570	S.S.304	ES.P.
9b	8	HEX NUT	M20	SA-194 8	ES.P.
10	2	CAP PLATE	264 DIA. THK.5	SA-240 304	ES.P.
11	1	GASKET	10" THK.3	RUBBR	ES.P.
12a	20	U BOLT	2" DIN 3570	S.S.304	ES.P.
12b	80	HEX NUT	M12	SS. 304	ES.P.
13	20	GASKET (AS DWG)	THK.3 (BEF. COMP.)	RUBBER	ES.P.
14	80	BOLT/NUT/WASHER	M12 L=50Min	SA-193 B8 / SA-194 8 / SA-240 304	ES.P.

GENERAL NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
- PART LIST RELATED TO ONE COLLECTOR, QTY. OF ORDER: 2 SETS.
- COMPLETE PICKLING & PASSIVATION.
- SEGMENTS WILL BE PASS THROUGH MANHOLE 24" WITH I.D.578
- V-WIRE SCREEN AVERAGE SLOT:0.2mm
- CORROSION ALLOWANCE : 0mm
- VESSEL I.D.: 3900 mm
- REMOVE ALL BURRS AND SHARP EDGES.
- TO SEE ORIENTATION, SEE G.A. DWG.
- E.S.P.= EUROSLOT PARS Co. V.M.= VESSEL MANUFACTURER.
- PIPE DISTRIBUTOR/COLLECTOR IS WELDED TYP.
- APPROXIMATE WEIGHT : 340 Kg
- STAINLESS STEEL MATERIALS ARE DUAL CERTIFICATED (304/304L)



SCREEN DETAIL (8)
SC. : 1:1

REV.	DESCRIPTION	PREP.	CHKD	APP	DATE
C	ISSUE FOR APPROVAL	R.SH.	M.P.	M.SH.	20.NOV.18
B	ISSUE FOR APPROVAL	R.SH.	M.P.	M.SH.	12.NOV.18
A	ISSUE FOR APPROVAL	R.SH.	M.P.	M.SH.	04.NOV.18

OWNER :
MARJAN PETROCHEMICAL CO.

PROJECT :
5,000 MTPD MARJAN Methanol Plant ASSALUYEH

CONTRACTOR :
namvaran
Consulting Engineers, Managers

VENDOR :
Euroslot Pars

TITLE :
GENERAL ASSEMBLY AND INTERNAL DETAIL DRAWING OF X-5001 A/B

NO CONSTRUCTION PERMITTED UNLESS DWG. APPROVED				
DOCUMENT NUMBER :				
UNIT NO.	GROUP	TYPE	SIZE	DOC. NO.
133/31-ESP-PR	ME	DWG	3	10088
SHEET	OF			REV.
5				C