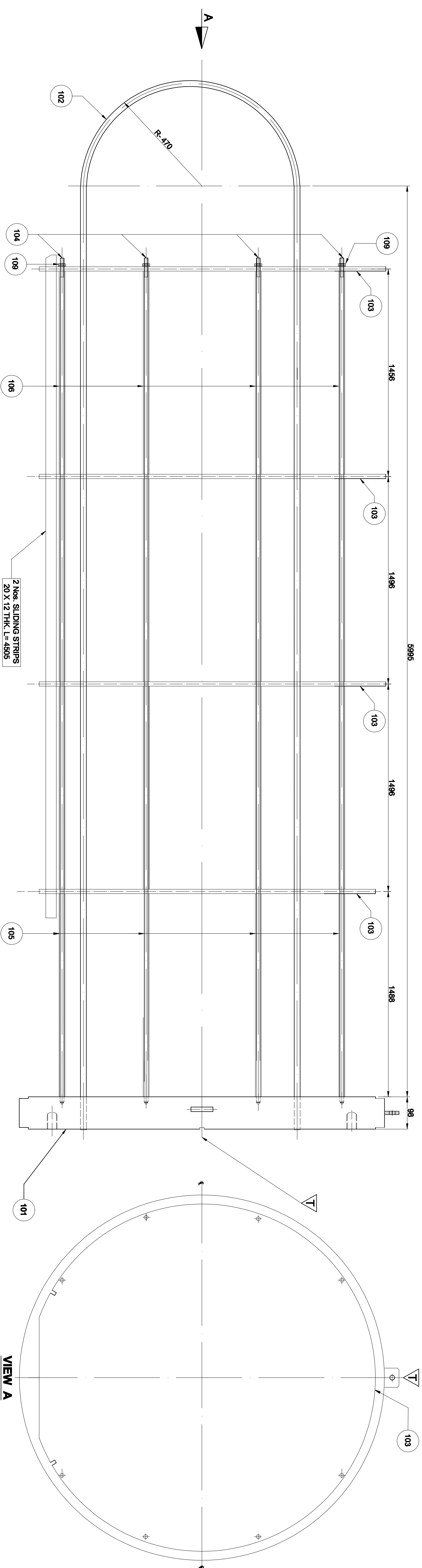
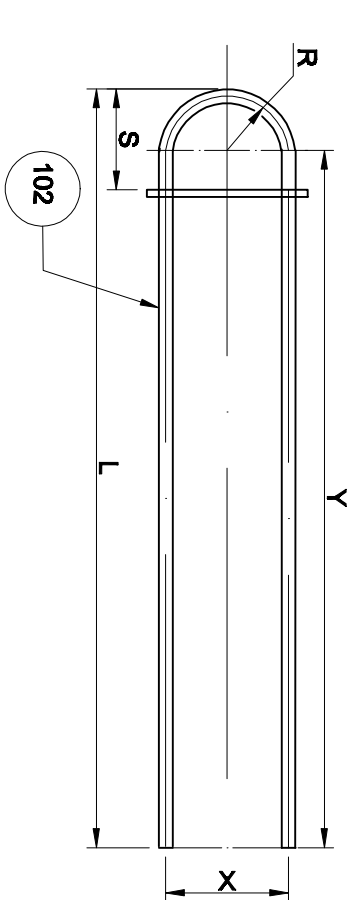


TUBE BUNDLE DETAIL



TUBES DETAIL



ROW	QTY.	R	X	Y	L	DEVELOP	S
1	43	29	58	6098	6134.5	12284	89.5
2	43	64.4	108.8	6159.9	12363	114.9	
3	43	79.8	159.6	6185.3	12443	140.3	
4	43	106.2	210.4	6210.7	12523	165.7	
5	41	130.8	261.2	6236.1	12603	191.1	
6	41	156	312	6261.5	12682	216.5	
7	41	181.4	362.8	6286.9	12762	241.9	
8	39	206.8	413.6	6312.3	12842	267.3	
9	39	232.2	464.4	6337.7	12922	292.7	
10	37	257.6	515.2	6363.1	13002	318.1	
11	37	283	566	6388.5	13081	343.5	
12	35	308.4	616.8	6413.9	13161	368.9	
13	35	333.8	667.6	6439.3	13241	394.3	
14	33	359.2	718.4	6464.7	13321	419.7	
15	31	384.6	769.2	6490.1	13401	445.1	
16	29	410	820	6515.5	13480	470.5	
17	27	435.4	870.8	6540.9	13560	495.9	
18	23	460.8	921.6	6566.3	13640	521.3	

DESIGN DATA
CONSTRUCTION CODE : ASME VIII DIV. 1 (SUMMER 85) - TEMA "A"

DESIGN DATA
SHELL SIDE
3.5 Bar (50 PSIF/V.)
14.82 Bar (215 PSIF)
138 °C
190 °C

WORKING PRESSURE
122 / 122 °C
157 / 141 °C

WORKING TEMPERATURE (INLET / OUTLET)

TUBE SHEET DESIGN TEMPERATURE
190 °C

HYDROTEST PRESSURE
5.3 Bar (76 PSIF)
22.4 Bar (322 PSIF)

BUBBLE TEST PRESSURE
1.7 Bar (25 PSIF)
HOT OIL

FLUID
20% DEA SOLUTION
3.2 mm
3.2 mm

CORROSION ALLOWANCE (ACCEPT EXCH. TUBES)
1
0.85

WELDING JOINT EFFICIENCY
100 %
SPOT

XRAY
/

PRODUCTION TEST PLATE
/

STRESS RELIEVING
YES
NO

NUMBER OF PASSES
1
2

THERMAL INSULATION
YES
YES

INSPECTION
ASME "V" STAMP

GEOM CAPACITY
~ 1700 LITER
~ 2400 LITER

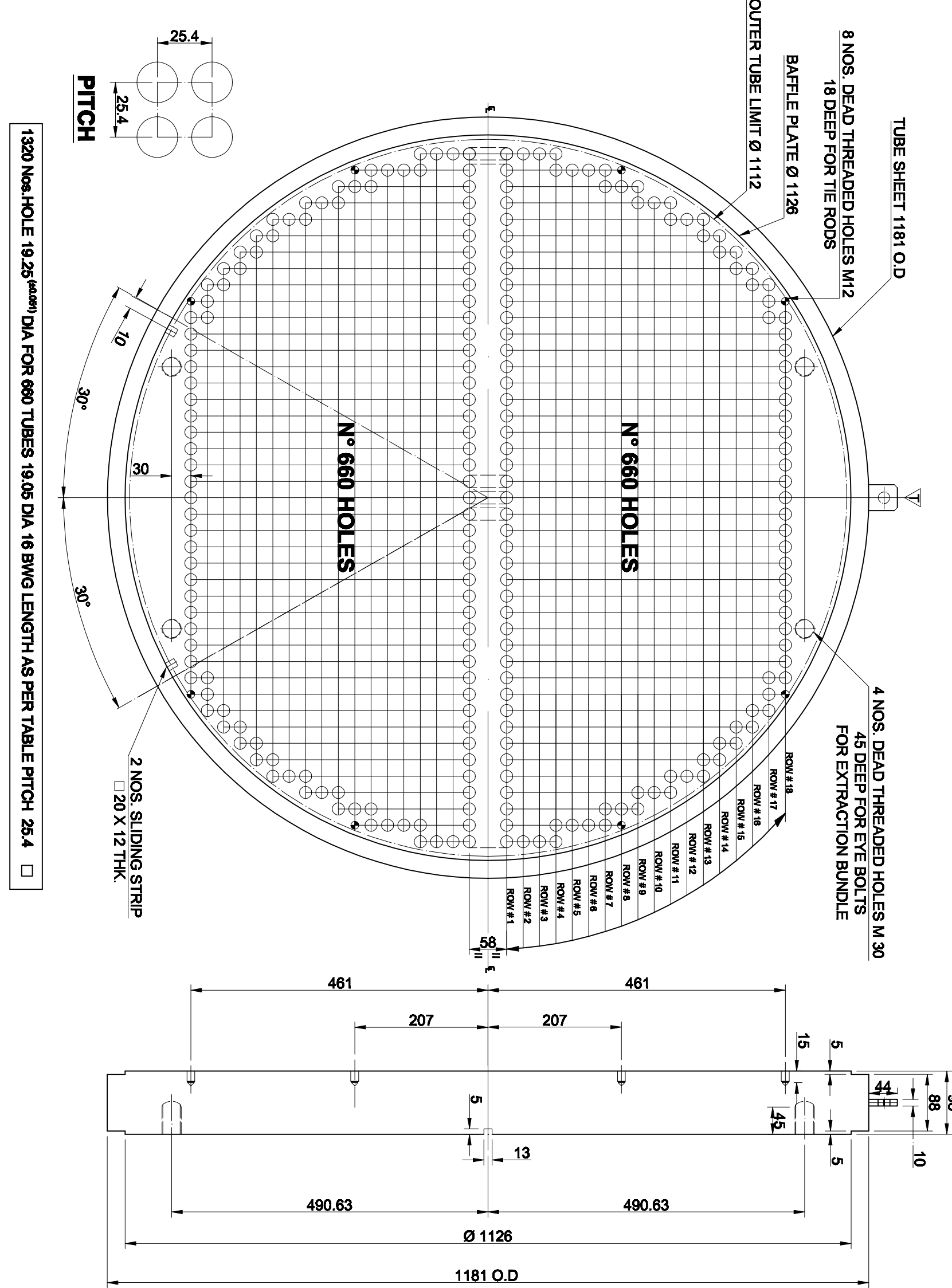
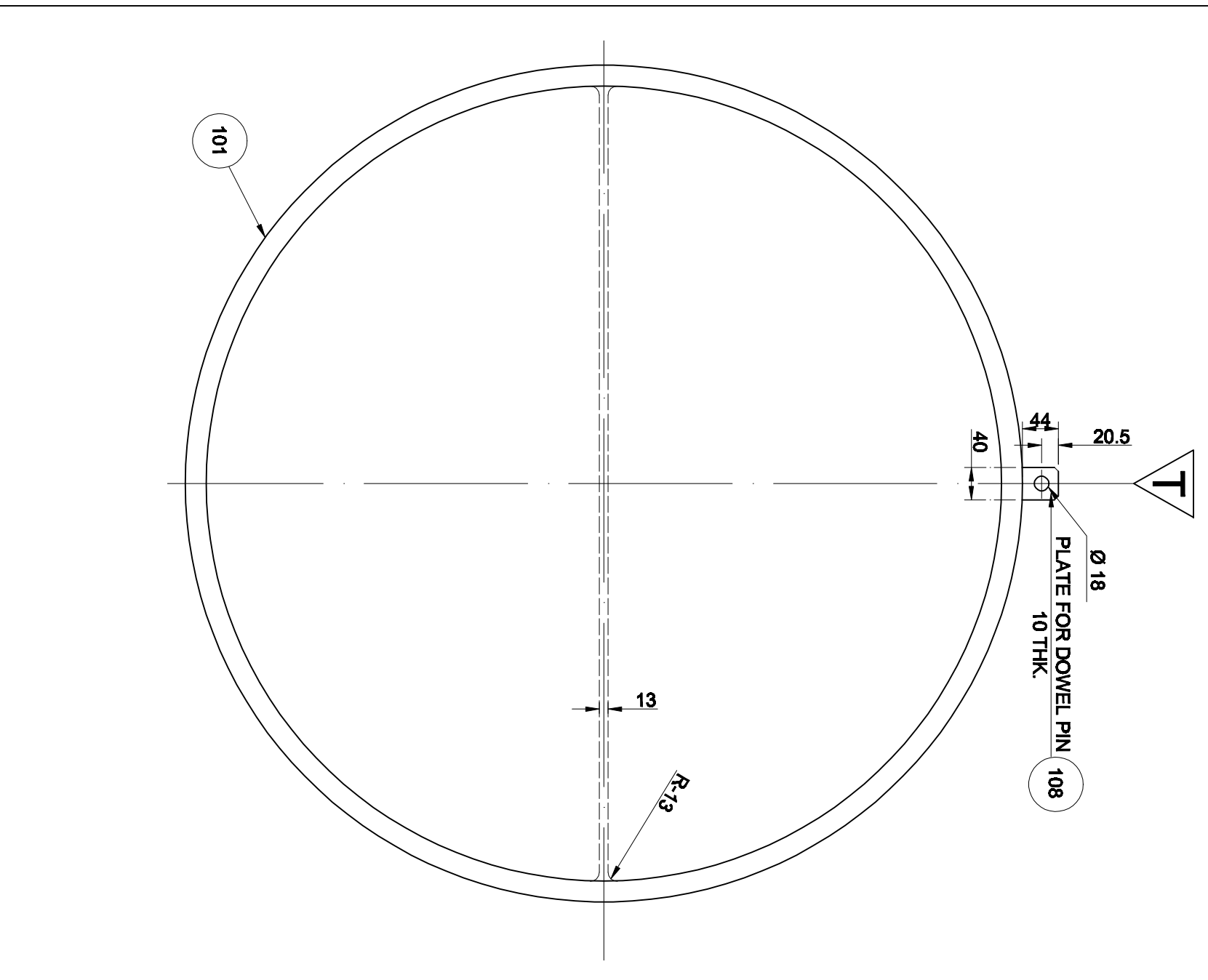
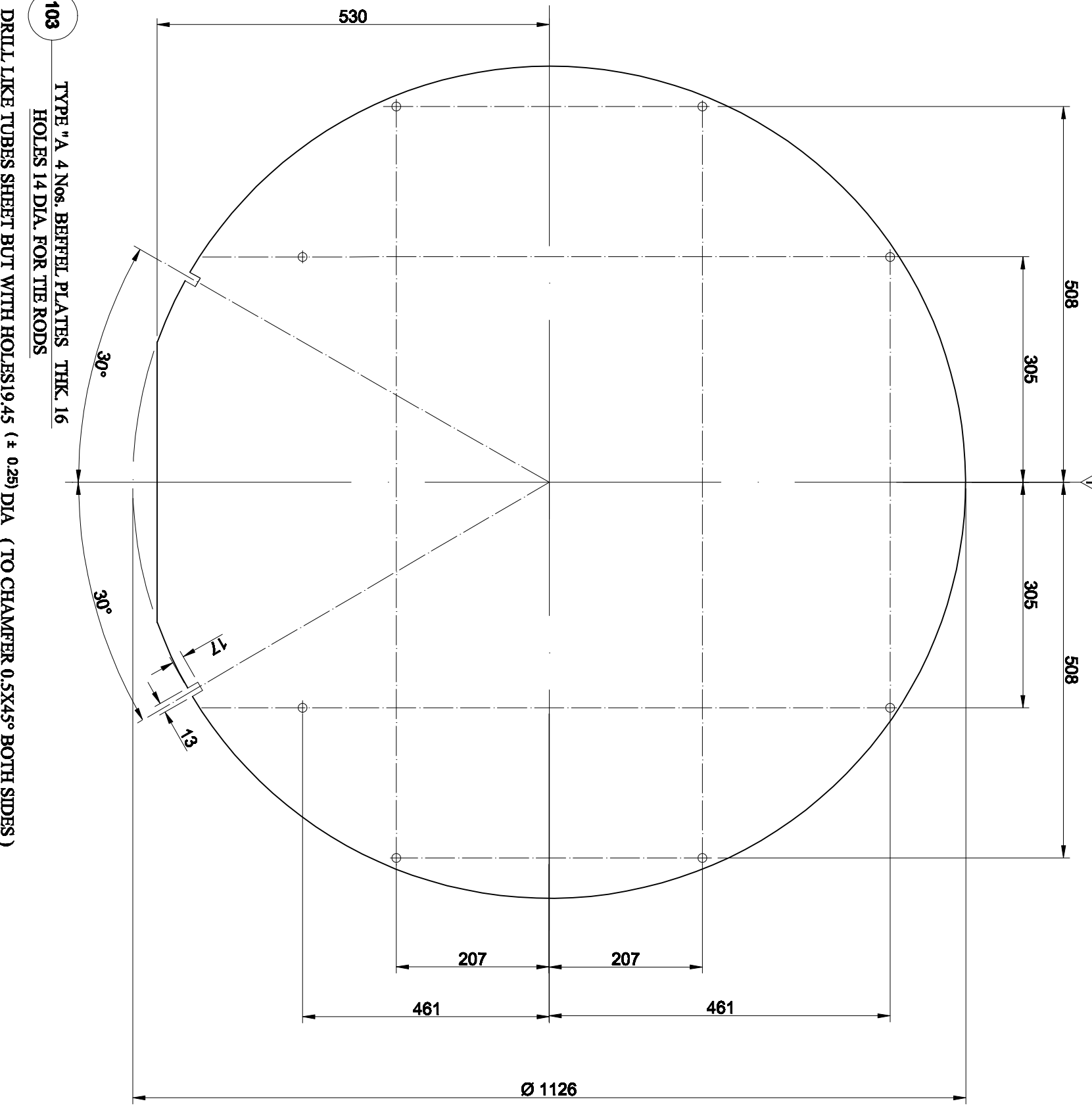
TUBE BUNDLE WEIGHT
7800 KG

MATERIAL LIST

S. NO.	REFER. NO.	ITEMS	MATERIAL	QTY.
1	101	TUBES SHEET 1181 O.D X 98 THK	SA-182 F 316	01
2	102	U TUBES 19.05 Ø X18 BWG	SA-213 TP 316	660
3	103	BAFFLE PLATS Ø 1128 X 16 THK	SA-240 316	04
4	104	THE RODS Ø M 12 X 9896 L	SA-240 316	08
5	105	SPACER 19.05 O.D. X 14 BWG X 1480 L	SA-213 TP 316	24
6	106	SPACER 19.05 O.D. X 14 BWG X 1440 L	SA-213 TP 316	08
7	107	SLIDING STRIPS 20X 12 THK X 4905 L	SA-96	02
8	108	PLATE FOR DOWEL PIN	SA-240 TP 316	01
9	109	NUTS M12	B-7	16

GENERAL NOTES

- ALL DIMENSIONS ARE IN MILLIMETER
- OTHERWISE STATED
- BLIND ACCEPT AFTER HYDROTEST
- ✓ MATCH MARK FOR ASSEMBLY

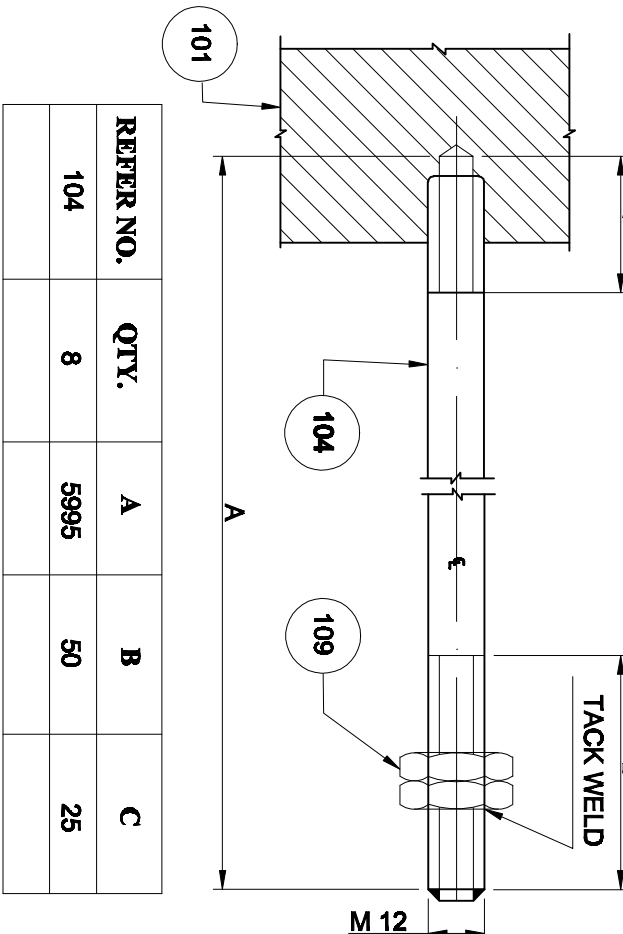


BAFFLE PLATES DETAIL

TUBE SHEET

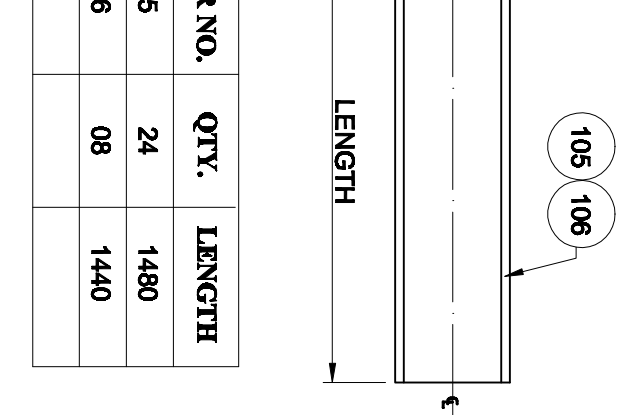
TUBES SHEET DETAIL

TIE RODS DETAIL



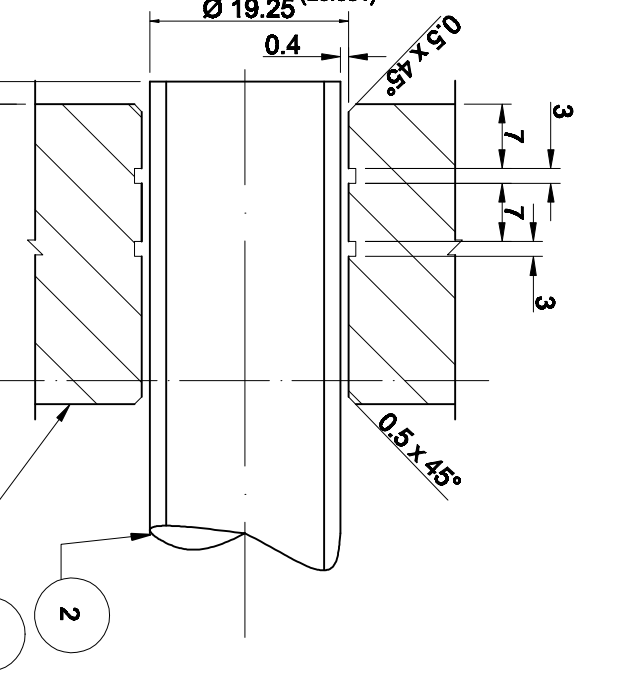
REFER. NO.	QTY.	A	B	C
104	8	5995	50	25

SPACER

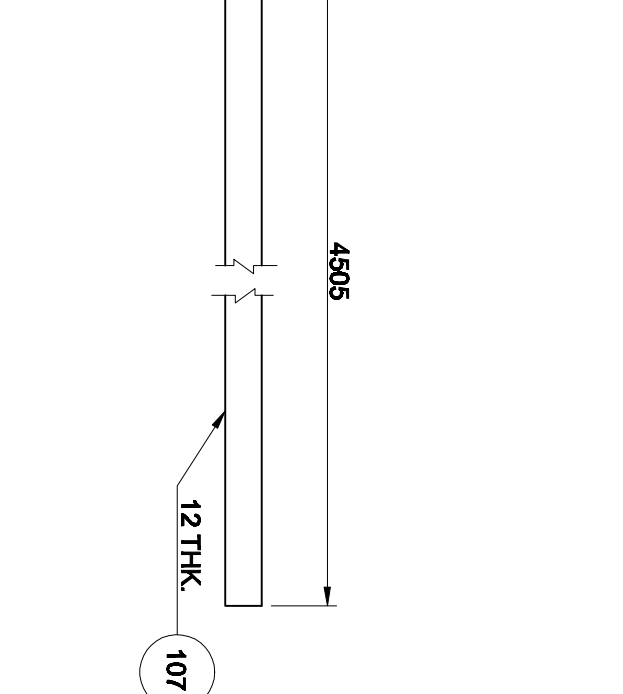


REFER. NO.	QTY.	LENGTH
105	24	1480
106	08	1440

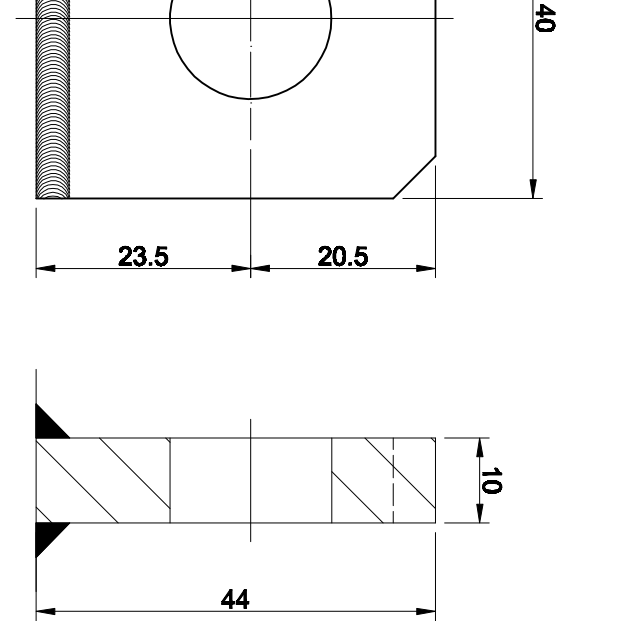
TUBES EXPENDER DETAIL



SLIDING STRIP DETAIL



DOWEL PIN DETAIL



OIL & GAS DEVELOPMENT COMPANY LTD.
PLANTS & PROCESS DEPARTMENT
Dakini Gas Processing Plant

TITLE: TUBE BUNDLE OF AMINE REBOILER EA-402 A/B TYPE (AKU)

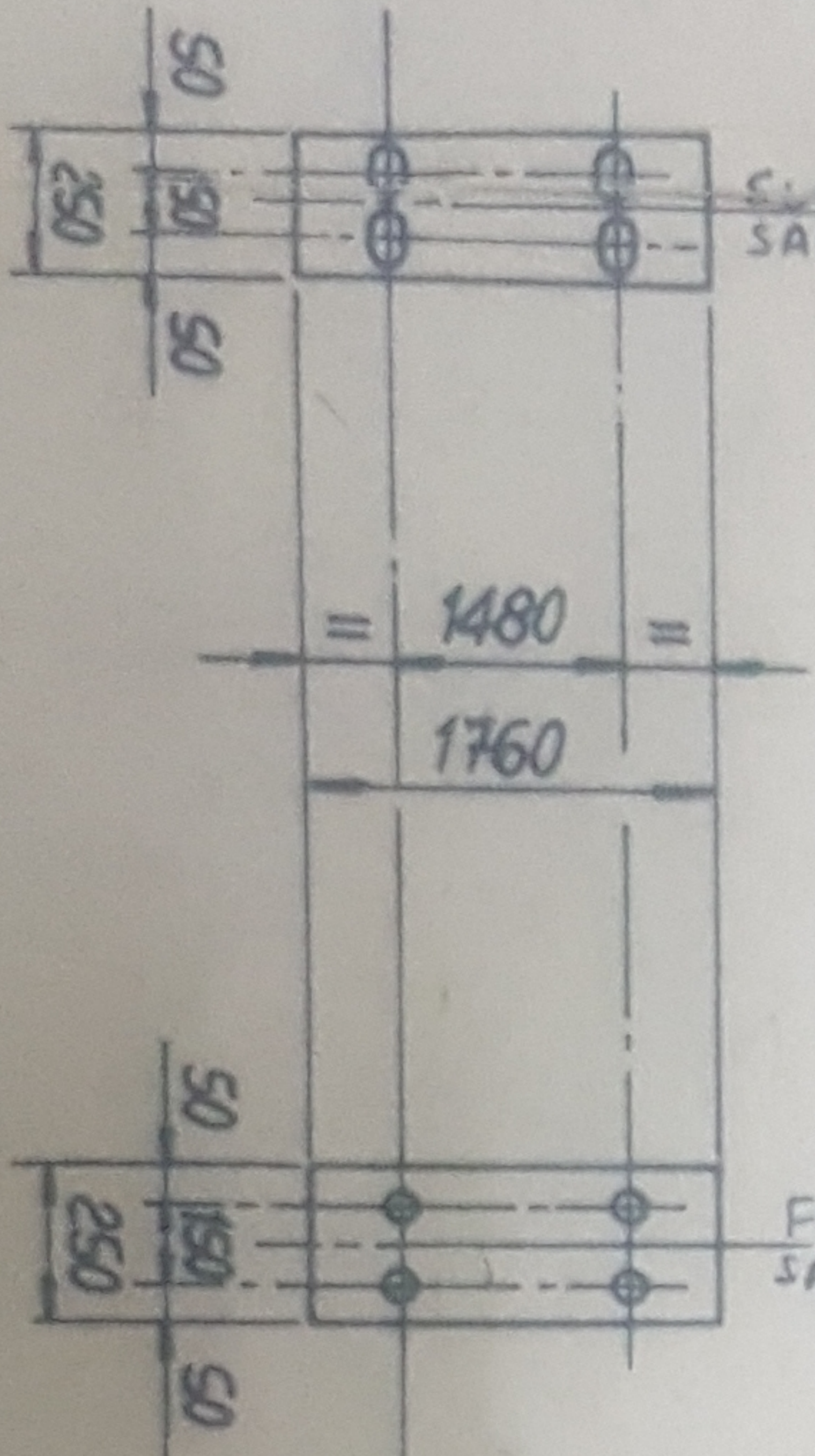
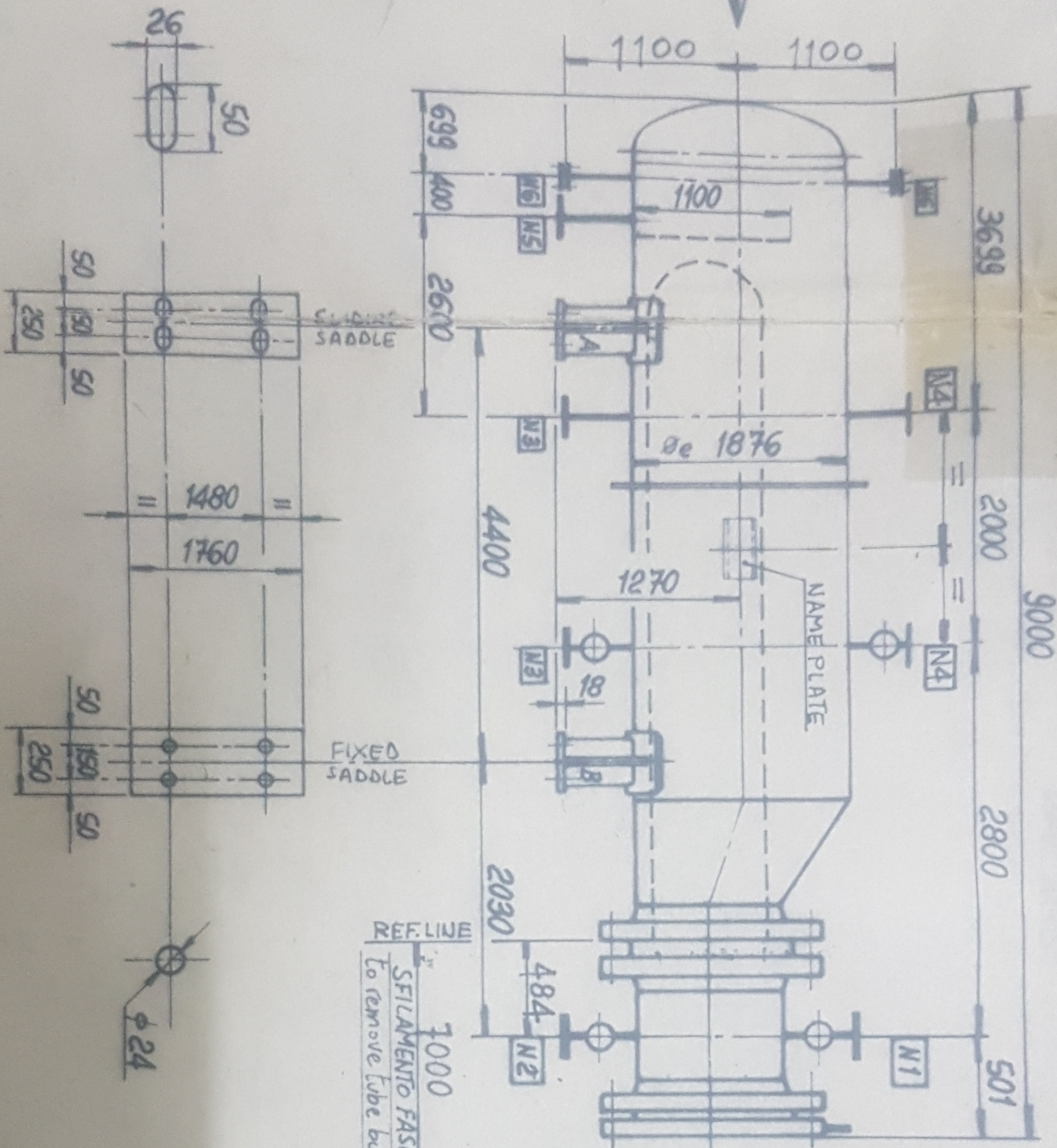
CAD BY: J.S.M/A.Z. (03.4.20)
CHECKED BY: Quid Ahmed
Tech. Officer (Designing)

APPROVED BY: Hamed Alireza
Plant Manager (Dakini)

DRAWING NO.: PP-DN-400

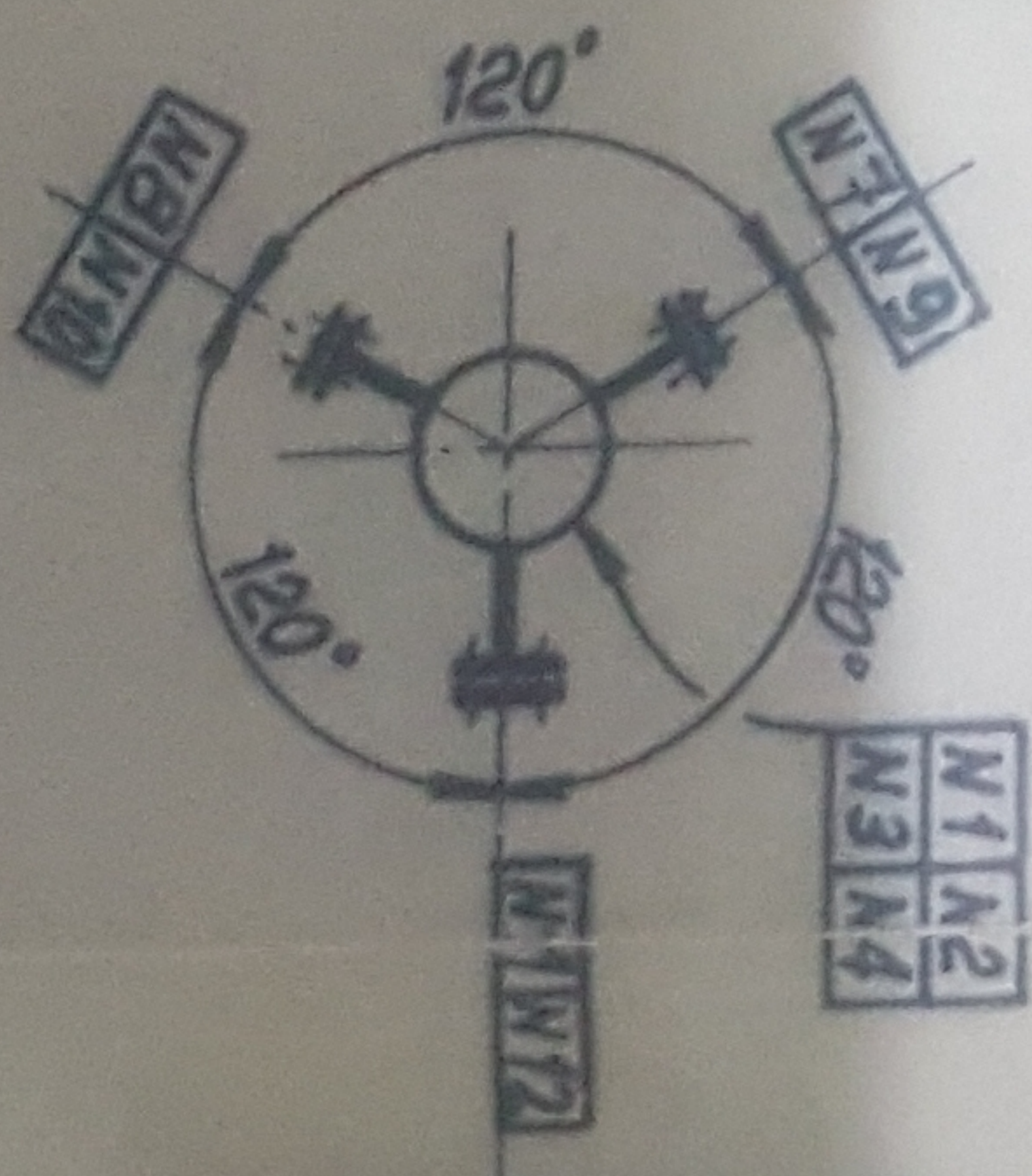
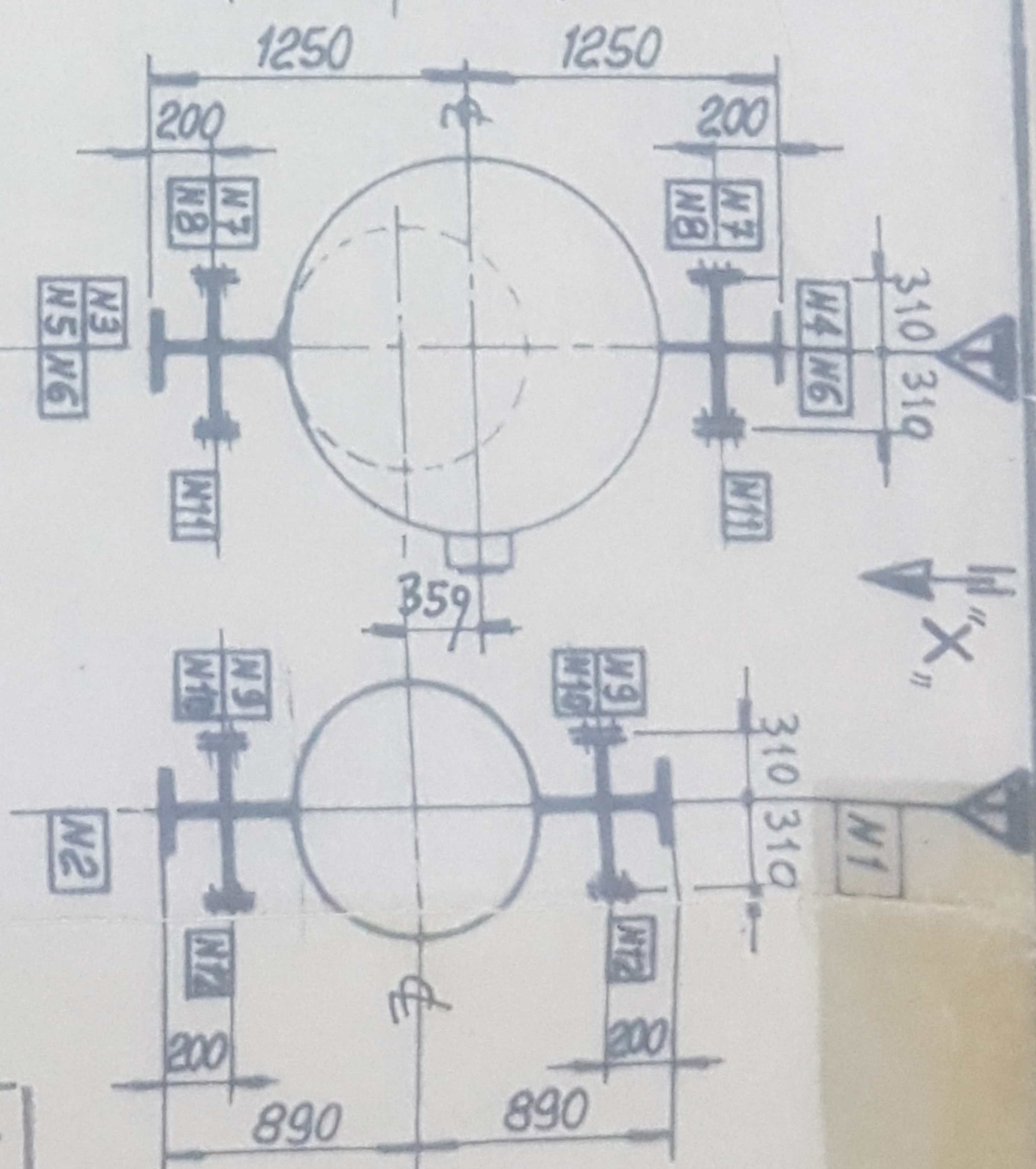
Scale: NTS
Computer Code: PN_01
Rev: 1
Date: 26-12-2020

Rev.	Date	Description	Checked By	Approved By
Rev. 1	26-12-2020	RECHECKED ON		
Rev. 0		ISSUE FOR CONSTRUCTION		



REF. LINE
 SEILAMENTO FASCIO - MANTELLO-shell -
 To remove tube bundle

- VISTA DA "Y" - View from "Y"
 - CASSA - channel



VIEW FROM "X"

ENAR PETROTECH SERVICES (Pvt) LTD.
 FINAL VENDOR PRINT
 BY *S. S. S.* DATE *4 SEP 1986*

CERTIFIED FINAL