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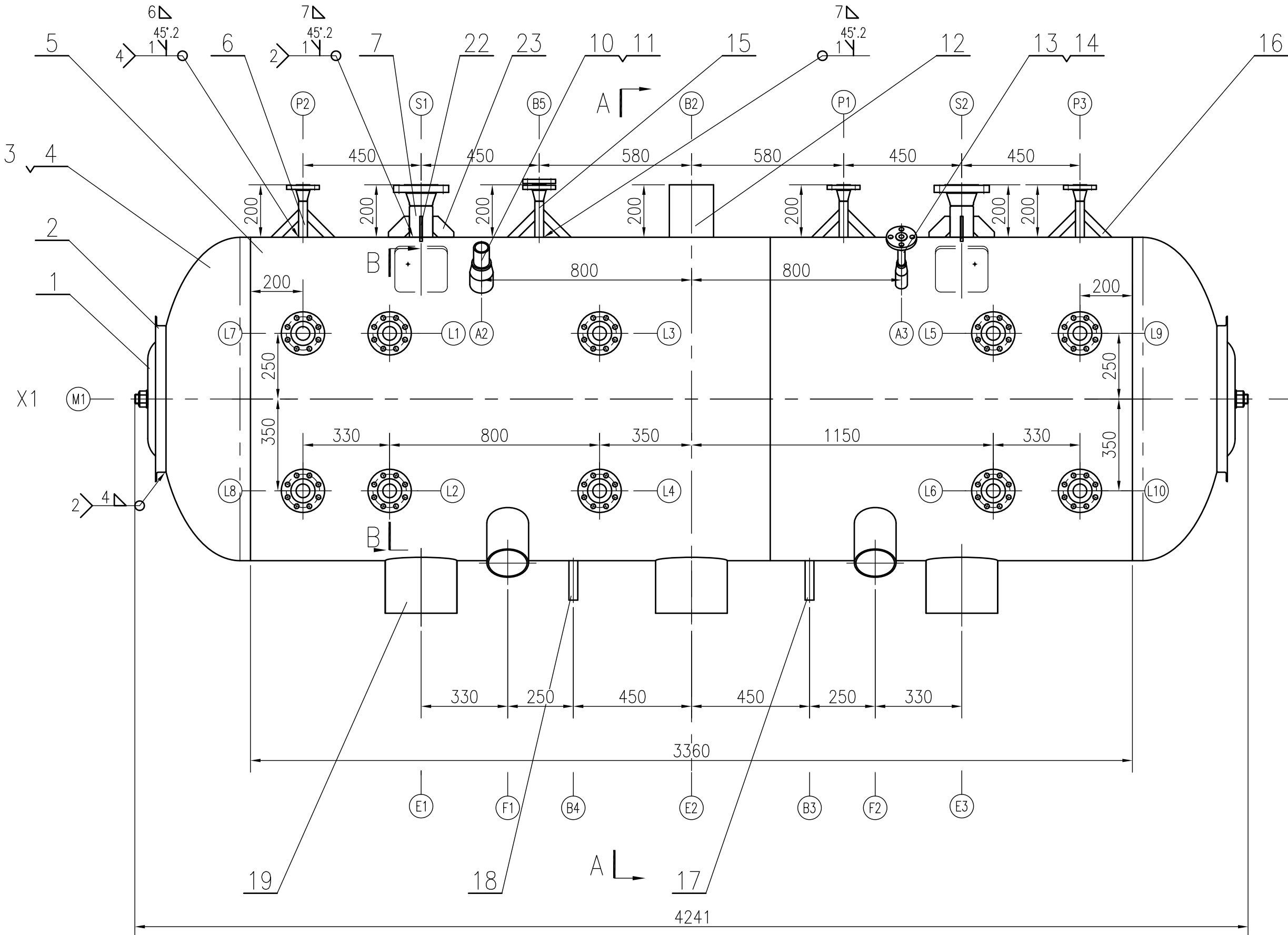
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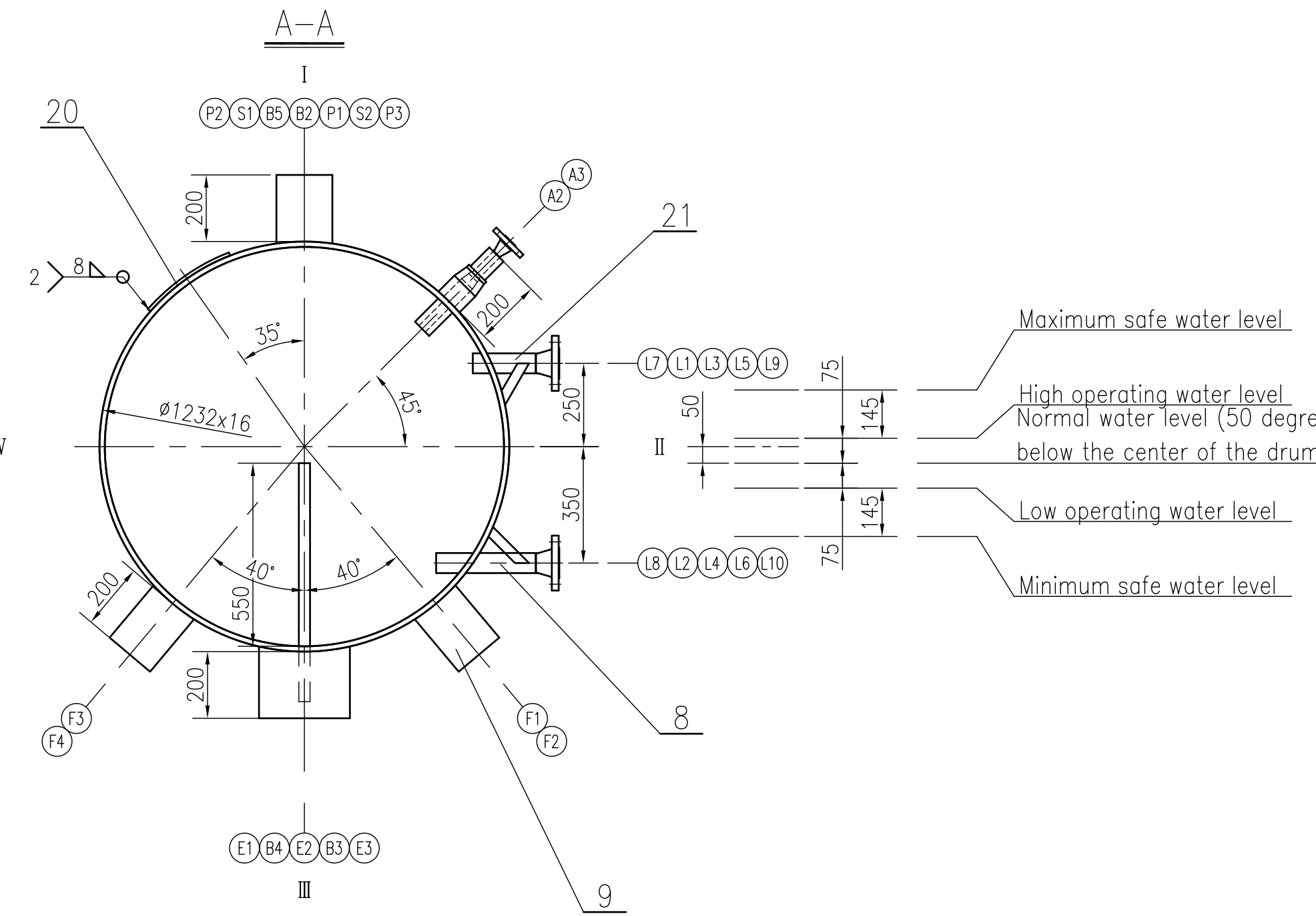
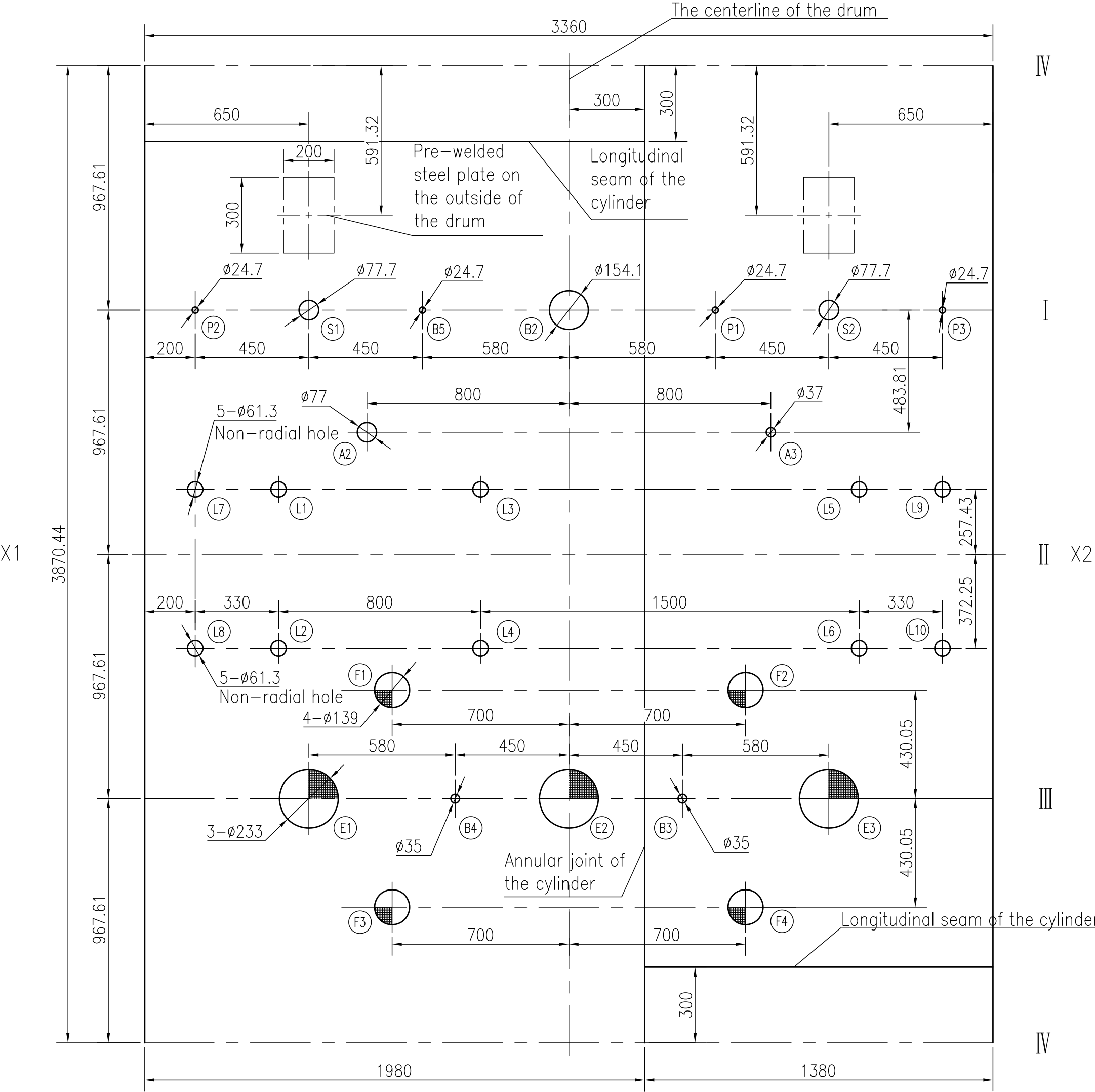
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The cylinder is unfolded according to the outer surface

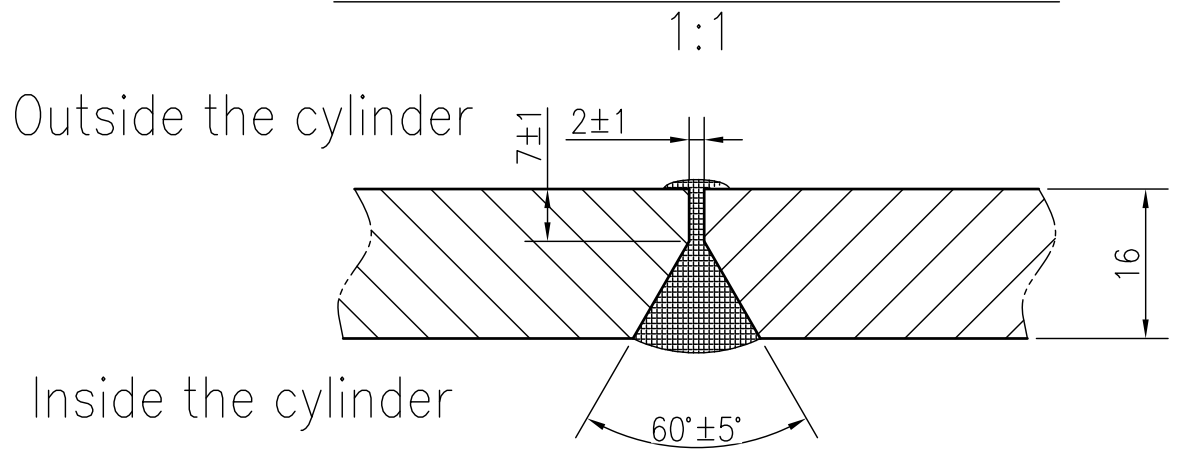


Technical requirement:

- Manufacturing and acceptance shall be carried out in accordance with TSG 11-2020 "Boiler Safety Technical Regulations" and GB/T16507-2022 "Water Tube Boilers".
- The welding on the cylinder shall be carried out in accordance with GB/T16507.5-2022 "Water tube boilers - Part 5: Manufacturing"; Unless otherwise specified in the drawing, the size of other fillet welds shall be based on the thickness of the thinner part and shall be continuous welding; The butt weld between the flange and the connecting pipe adopts argon arc welding as the base.
- The longitudinal and circumferential butt joints of the cylinder should undergo 100% radiographic testing; The circumferential butt joints of connecting pipes and flanges with an outer diameter greater than $\phi 159\text{mm}$ should undergo 100% radiographic testing; The circumferential joint between the safety valve connection and the flange should undergo 100% radiographic testing; Other pipes and flange circumferential butt joints should undergo 10% radiographic testing. Radiographic testing shall comply with NB/T 47013.2, with a technical level not lower than AB level and a welding quality level not lower than II level.
- The corner joints of the tube joints on the cylinder shall be subject to 100% ultrasonic testing in accordance with the requirements of TSG 11-2020 "Boiler Safety Technical Regulations". Corner joints with an outer diameter greater than $\phi 108\text{mm}$ shall be subject to NB/T47013.3, with a technical level not lower than Grade B and a welding joint quality level not lower than Grade I; The surface non-destructive testing of corner joints of other pipe joints shall be carried out according to not less than 20% of the number of joints, and the quality grade of welded joints shall not be lower than Grade I.
- The following parts should undergo 100% magnetic particle testing: pre welded plate fillet welds; The surface of the weld seam after grinding. Magnetic particle testing meets the requirements of NB/T 47013.4 and is qualified as Level I.
- Unless otherwise specified, the roughness of machined surfaces such as openings, longitudinal and circumferential grooves, and pipe joint grooves on the drum body is $Ra 2.5$.
- Q345R steel plates shall be delivered in a normalized state, and the cylinder and head steel plates shall be subjected to ultrasonic testing one by one in accordance with NB/T47013.3. The quality level of ultrasonic testing shall not be lower than Grade I.
- According to TSG 11-2020 "Boiler Safety Technical Regulations", the hydrostatic test shall be conducted with a working pressure of 2.2MPa for the drum and a hydrostatic test pressure of 2.75MPa.
- The allowance for water pressure test at the pipe end is determined by the process, and after the water pressure test, the groove is processed according to the corresponding standards and drawings of the pipe joint.
- The selection of welding materials should comply with the requirements of NB/T47018 "Technical Conditions for Ordering Welding Materials for Pressure Equipment".
- The spare port socket, pressure measuring port socket, upper socket of the liquid level gauge port, and lower socket of the liquid level gauge port are reinforced with two flat steel bars respectively.
- The rust removal grade of the surface of the drum body is Sa2.5, and one layer of inorganic zinc rich primer is sprayed with a minimum dry film thickness of $50\mu\text{m}$; Apply another layer of 400°C silicone heat-resistant paint, with a minimum dry film thickness of $25\mu\text{m}$ and a total dry film thickness of $\geq 75\mu\text{m}$; The packaging should comply with the relevant provisions of NB/T47055-2017 "General Technical Conditions for Boiler Coating and Packaging".

Table of Pipe Connection						
No	Name	Number	PN Class	DN mm	Type of connection surface	Notes
A2	Water supply port	1		50	Weld $\phi 60.3 \times 5.6$	
A3	Dosing port	1	300	20	Flange WN 20-300 RF	HG/T 20615-2009
B2	Saturated steam outlet	1		150	Weld $\phi 168.3 \times 7.1$	
B4	Continuous sewage outlet	1		25	Weld $\phi 33.7 \times 4.5$	
B3	Emergency water outlet	1		25	Weld $\phi 33.7 \times 4.5$	
B5	Backup port	1	300	25	Flange WN 25-300 RF	HG/T 20615-2009
S1,S2	Safety valve port	2	300	80	Flange WN 80-300 RF	HG/T 20615-2009
P2,P3	Local pressure gauge port	2	300	25	Flange WN 25-300 RF	HG/T 20615-2009
P1	Remote transmission pressure gauge port	1	300	25	Flange WN 25-300 RF	HG/T 20615-2009
L1~L6	Remote transmission liquid level gauge port	6	300	50	Flange WN 50-300 RF	HG/T 20615-2009
L7~L10	Local level gauge port	4	300	50	Flange WN 50-300 RF	HG/T 20615-2009
E1~E3	Ascending pipe interface	3		250	Weld $\phi 273 \times 20$	
F1~F4	Downpipe interface	4		150	Weld $\phi 159 \times 10/6$	
M1,M2	Drum manhole	2			Factory standard 300x400	

Detail Drawing of Welding Grooves for Cylinder Longitudinal Seams, Circumferential Seams, and Cylinder-Head Circumferential Seams



24	RDZ02WH7-11-24-0	Internal device of drum	1	Assembly	497	497	
23	RDZ02WH7-11-23	Reinforcement board II	4	Q235B-GB/T700	0.35	1.4	
22	RDZ02WH7-11-22	Reinforcement board I	4	Q235B-GB/T700	0.32	1.28	
21	RDZ02WH7-11-21-0	Pipe socket on the upper pipe of the liquid level gauge (DN80-CL300)	5	Assembly	5.07	25.4	
20	RDZ02WH7-11-20	Pre welded plate t=10	2	Q235B-GB/T700	4.71	9.42	
19	RDZ02WH7-11-19	Upward pipe joint	3	20G-GB/T5310	25	75	
18	According to this diagram	Continuous sewage outlet connection $\phi 33.7 \times 4.5$, L=300	1	20-GB/T3087	0.98	0.98	External slope of both ends 1:5
17	RDZ02WH7-11-17-0	Emergency water outlet connection	1	Assembly	2.36	2.36	
16	According to this diagram	Strengthen flat steel -30x6	5m	Q235B-GB/T700	1.41	7.05	Cutting and welding as needed
15	RDZ02WH7-11-15-0	Spare port socket DN25-CL300	1	Assembly	4.08	4.08	
14	RDG1140	Dosing port sleeve $\phi 26.9$	1	20-GB/T3087	0.49	0.49	
13	RDZ02WH7-11-13-0	Dosing port socket DN20-CL300	1	Assembly	2.08	2.08	
12	RDZ02WH7-11-12	Saturated steam outlet pipe joint	1	20G-GB/T5310	5.65	5.65	
11	RDG1140	Water inlet sleeve $\phi 60.3$	1	20-GB/T3087	1.47	1.47	
10	According to this diagram	Water inlet connection $\phi 60.3 \times 5.6$, L=316	1	20-GB/T3087	2.39	2.39	External slope of both ends 1:5
9	RDZ02WH7-11-9	Downward pipe joint	4	20G-GB/T5310	7.35	29.4	
8	RDZ02WH7-11-8-0	Bottom pipe socket of liquid level gauge (DN80-CL300)	5	Assembly	5.9	29.5	
7	RDZ02WH7-11-7-0	Safety valve socket DN80-CL300	2	Assembly	9.54	19.1	
6	RDZ02WH7-11-6-0	Pressure tap socket DN25-CL300	3	Assembly	2.26	6.78	
5	According to this diagram	Cylinder $\phi 1200 \times 16$, L=3360	1	Q345R-GB/T713	1613	1613	
4	RDG1110	Manhole reinforcement circle 432×332	2	Q345R-GB/T713	2.89	5.78	
3	RDG1100	Perforated head DN1200x16	1	Q345R-GB/T713	211	422	
2	RDZ02WH7-11-2	Insulation ring Angle steel L40x40x4	2	Q235B-GB/T706	4.5	9	
1	RDG1114	Manhole device 300x400	2	Assembly	99.5	199	1 piece/1 piece and 1/1 piece
件号 NO.	图号 或 标准号 DWG. NO. OR STANDARD	名称 及 规格 DESCRIPTION	数量 QTY.	材料 MATERIAL	#UNIT 重量 WT.(kg)	#TOTAL 重量 WT.(kg)	备 注 REMARK

版次 REV.NO.		说 明 DESCRIPTION		设计 DRAWN	校核 CHKD.	审核 APPR.	审定 FINAL APPR.	日期 ISSUE DATE
PT PETRO OXO NUSANTARA		江苏瑞鼎环境工程有限公司		WUHUAN ENGINEERING CO., LTD.				
用户 OWNER		PT PETRO OXO NUSANTARA		阶段 PHASE				
项目 PROJ.		30000 TPA NPG PROJECT		比例 SCALE				
装置/工区 UNIT		Waste Gas & Waste Liquid Incineration		项目号 PROJ. NO.				
图名 DWG. NAME		Drum		图号 DWG. NO.				
				合同号 CONTRACT NO.				
				详细设计 Detailed design				
				比例 SCALE				
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				共 2 张 OF				
				专业 SPECIAL				
				Device				
				RDZ02WH7-11-0				

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