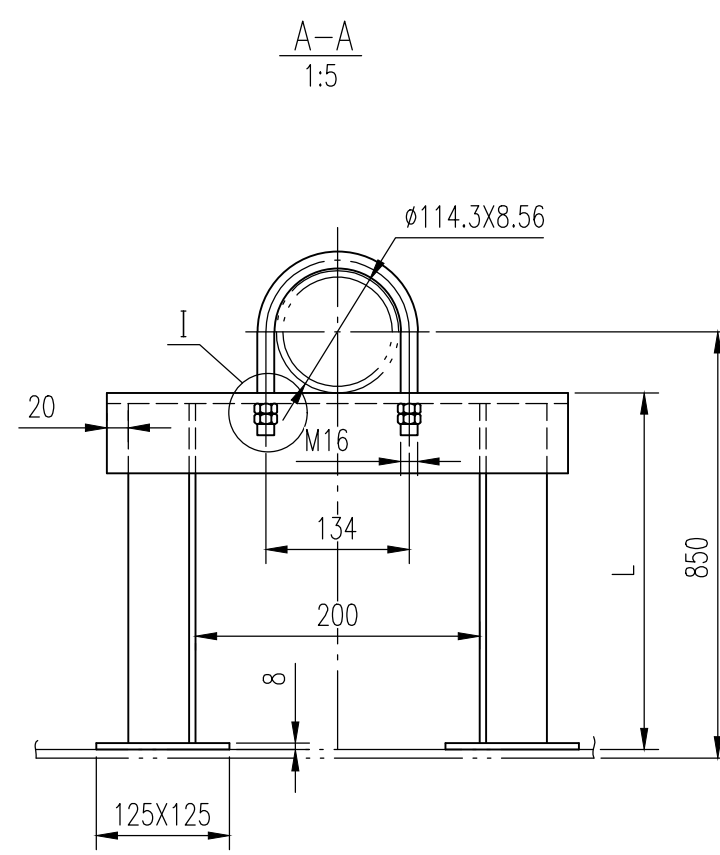
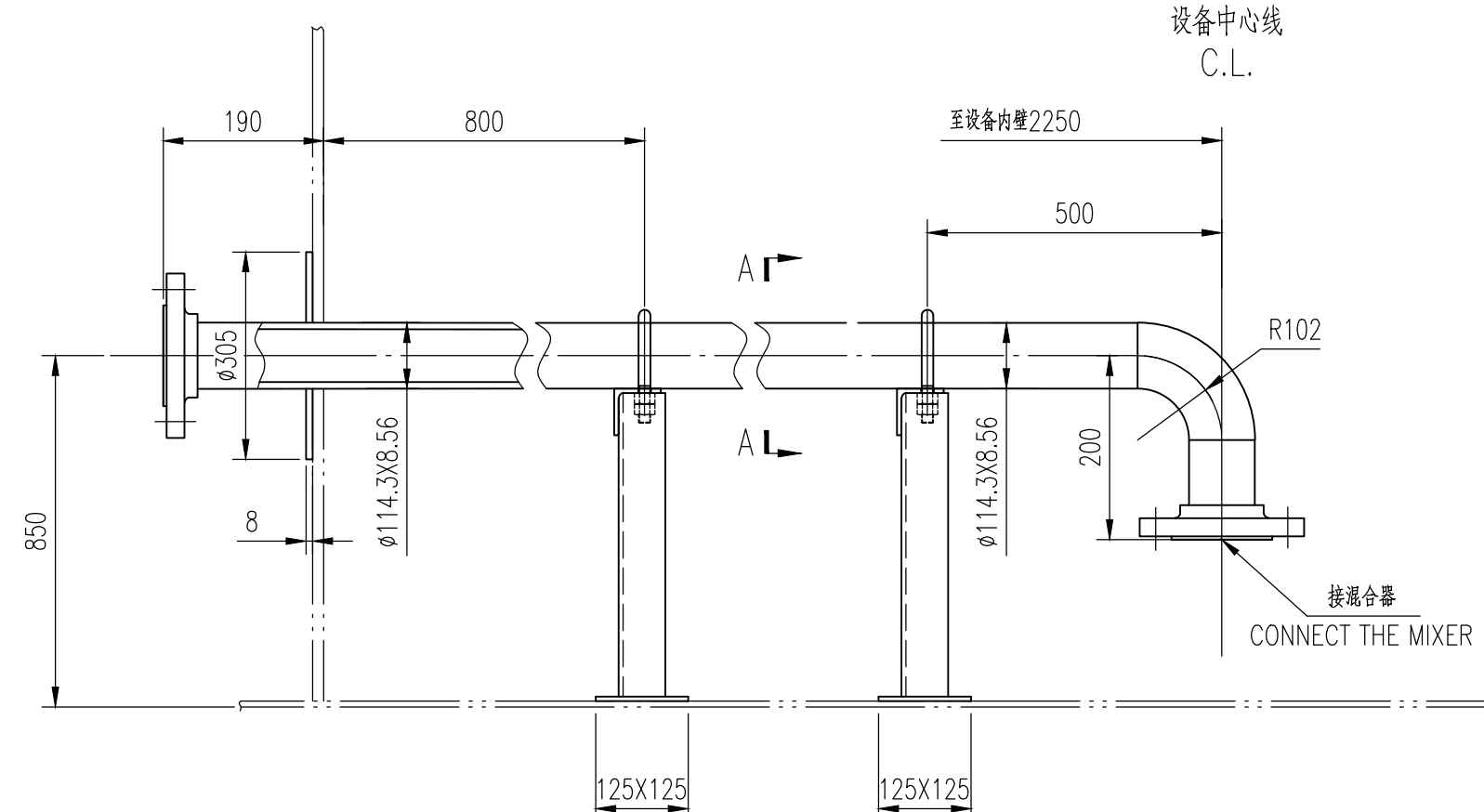
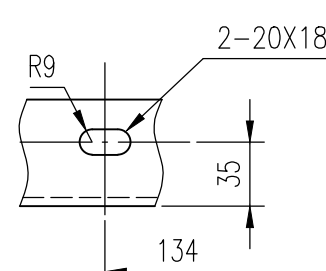
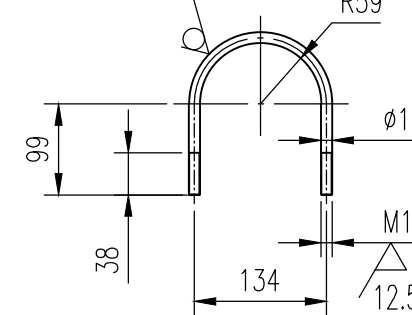
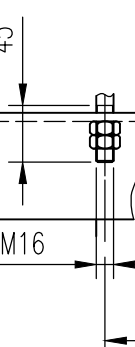
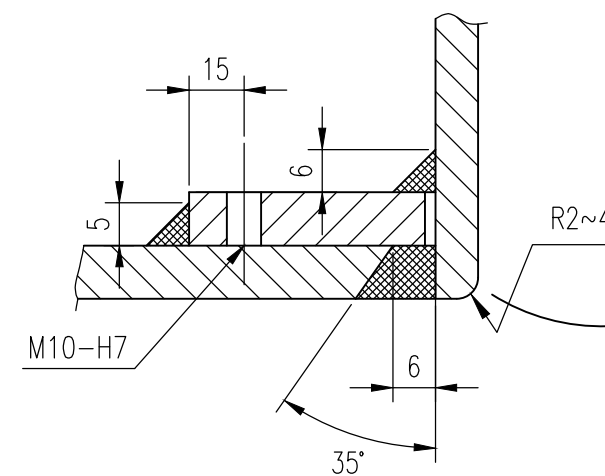
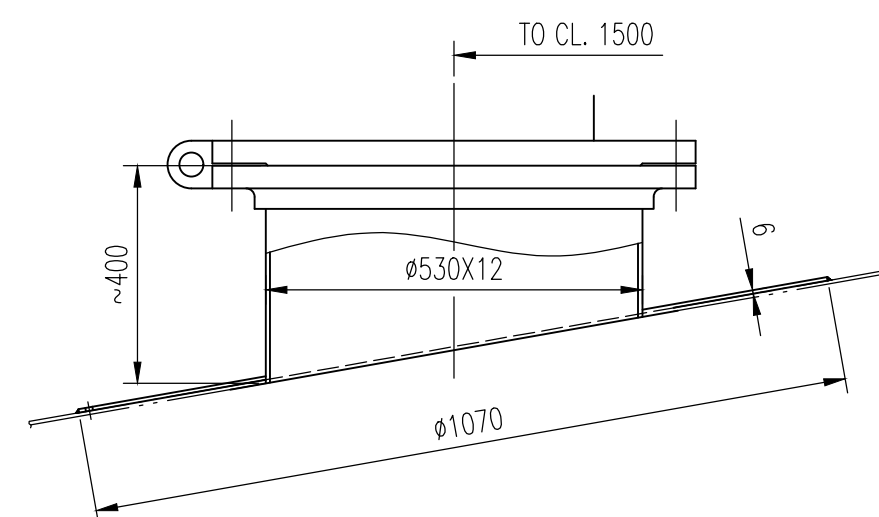
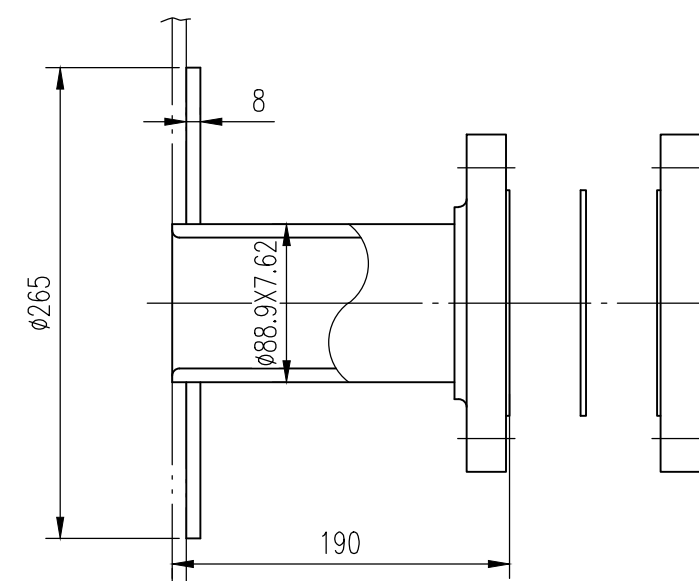
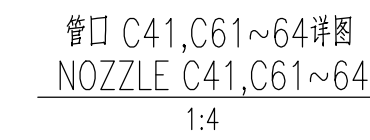
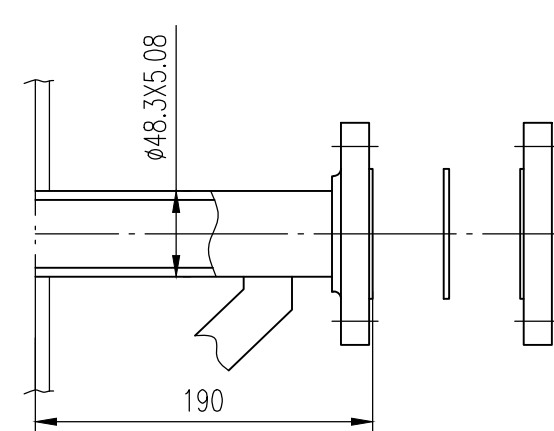
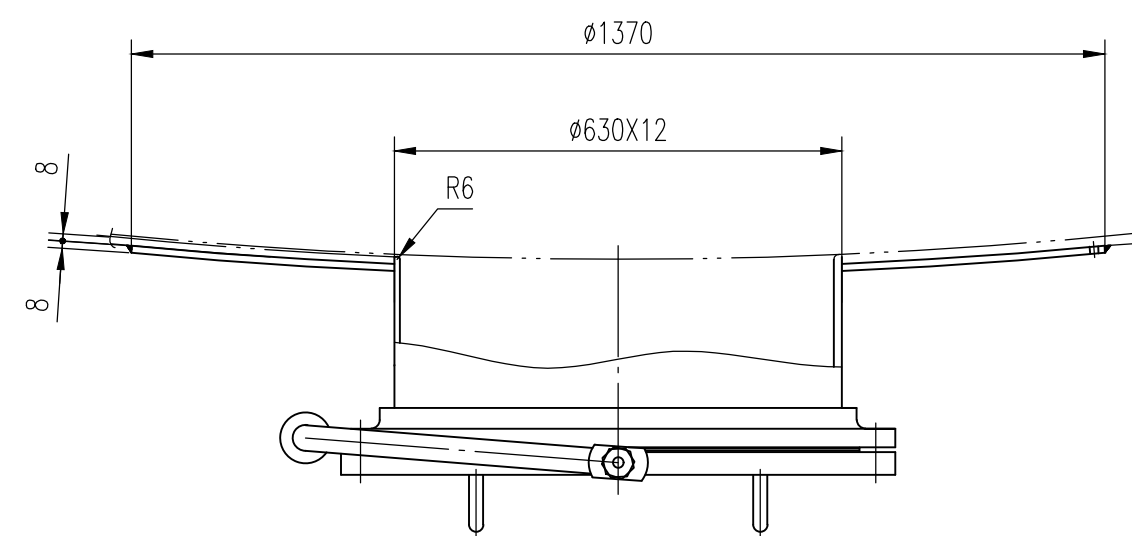
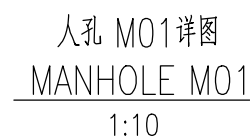
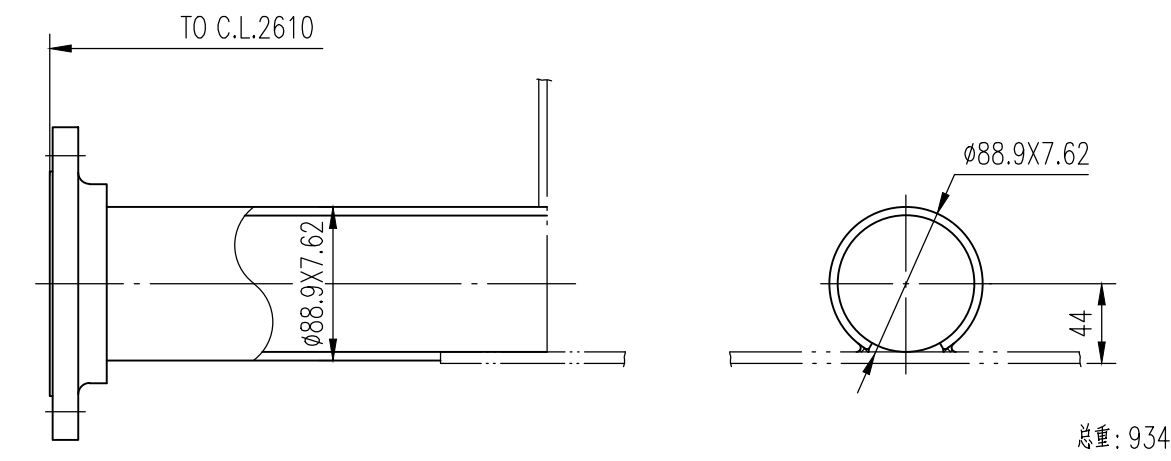
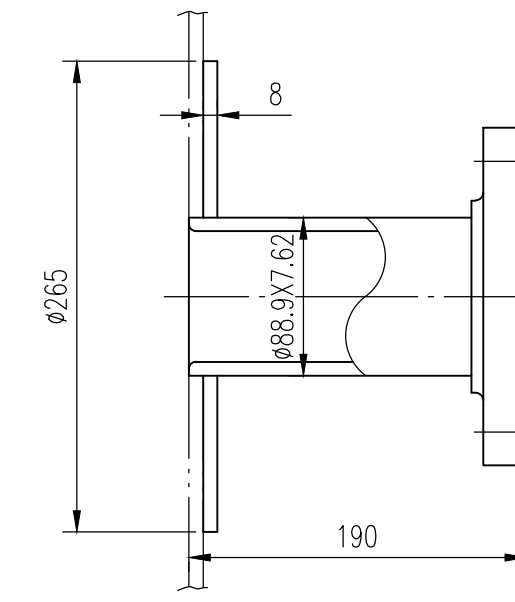
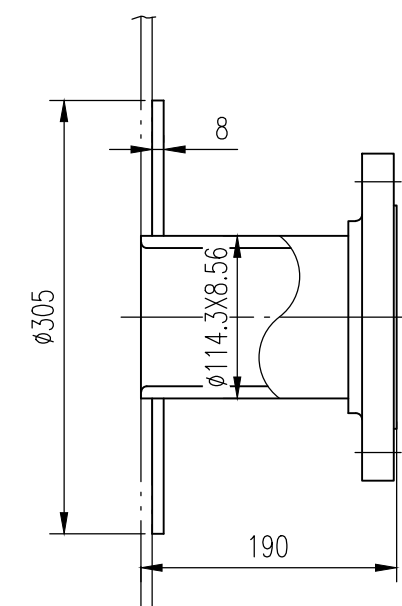
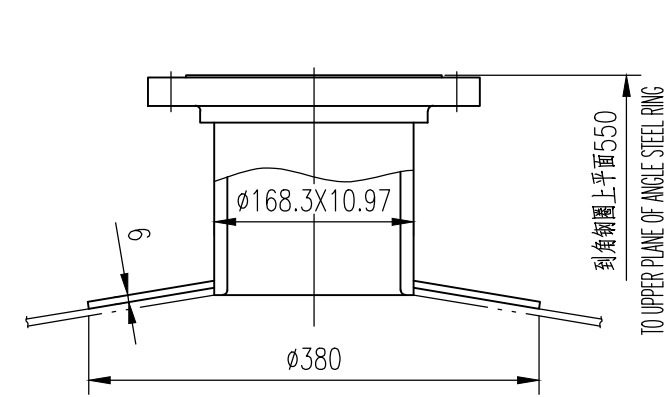


Notes:

- (1). 管口高度以瓶底下表面为基准 (R.L.).  
The height of the nozzles is based on the lower surface of the bottom plate (R.L.).
- (2). 所有焊缝及其加强层应开为外焊缝, 并满足 GB 50341-2014 第 10.1.10.2 节相关要求。  
All nozzles and their reinforcing plates shall avoid the shell welds and comply with the relevant provisions of Sections 10.1 and 10.2 of GB 50341-2014.
- (3). 充水试验必须在设备完成紧固后进行。  
The hydrostatic test must be conducted after the equipment is anchored.
- (4). 射线检测应按 NB/T 47013.2-2015 的规定, 检测技术等级不低于 AB 级, 合格级别不低于标准规定的 II 级; 磁粉检测应按 NB/T 47013.4-2015 的规定, 合格级别不低于标准规定的 I 级; 渗透检测应按 NB/T 47013.5-2015 的规定, 合格级别不低于标准规定的 I 级。  
RT shall comply with NB/T 47013.2-2015, with a testing technology level not lower than AB level and a qualification level not lower than Grade II as specified in the standard; magnetic particle testing shall comply with NB/T 47013.4-2015, with a qualification level not lower than Grade I as specified in the standard; RT shall comply with NB/T 47013.5-2015, with a qualification level not lower than Grade I as specified in the standard.
- (5). NO7 罩头为无盖罩, 内衬距筒筒底高度按后文确定。  
NO7 is equipped with a submerged mixer, and the internal extension distance will be determined after the mixer is returned.



7	22150-V2603-002	接管 NOZZLE PIPE	1	组合件		856	
6	22150-V2603-005	顶板 CEILING	1	组合件		954	
5	22150-V2603-006	底梯及护栏 LIFT AND GUARDRAIL	1	组合件		437	
4	22150-V2603-004	罐壁 TANK WALL	1	组合件		5602	
3	STD-EQ-001.5	立式罐壁爬梯 NAMEPLATE	1	S30408		0.254	
2	STD-EQ-001.20	铭牌托架1-V-110 NAMEPLATE BRACKET	1	Q345R		2.19	
1	22150-V2603-003	底版 BASEBOARD	1	组合件		1067	
件号 No.	图号或标准号 DWS. OR STAND. No.	名称 DESCRIPTION	数量 QTY.	材料 MATERIAL	单重 WEIGHT(kg)	总重 TOTAL WEIGHT(kg)	备注 REMARKS
D00	详细工程设计/DETAILED ENGINEERING DESIGN	向冲	徐淑桢	赵银峰			2025.6.20
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE	
PT PETRO OXO NUSANTARA							
WUHUAN ENGINEERING CO., LTD.		30,000 TPA NEOPENTYL GLYCOL PROJECT					
HOT WATER TANK		Neopentyl Glycol Plant					
ASSEMBLY DRAWING		Detailed Engineering Design					
ITEM NO:V-2603		22150-V2603-001					D00
SPECI	EQUIPMENT	AREA	—	SCALE	1:30	SHT.1	OF 1

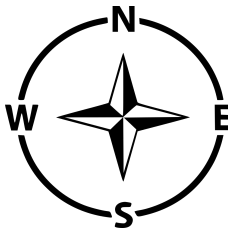




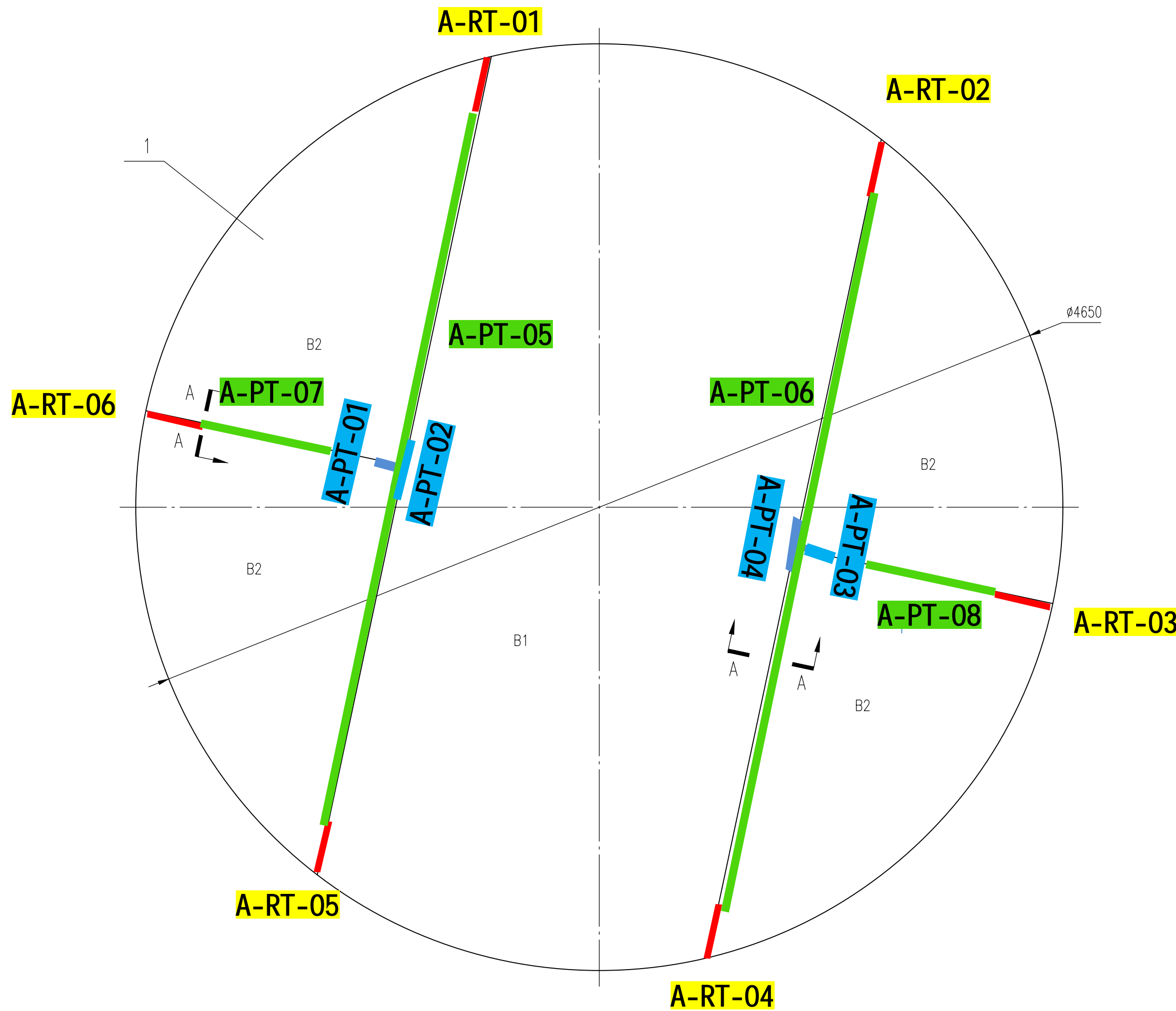
D01		接管 Ø88.9X7.62 PIPE 法兰 3"-150# SO/RF	1	Q345D	5.38	
	ASME B16.5	法兰 3"-150# BL/RF BLIND FLANGE	1	16MnII	4.01	
	ASME B16.5	法兰 3"-150# BL/RF BLIND FLANGE	2	16MnII	4.09	8.18
	HG/T 20634-2009	专用螺栓 M16	16	30CrMoA	0.05	0.8
C51~52	HG/T 20634-2009	全螺栓螺栓 M16X85	8	35CrMoA	0.152	2.16
	HG/T 20627-2009	垫环 RF 80-150 Ø3 GASKET	2	PTFE	--	
		接管 Ø265/Ø92 Ø8 REINFORCING PAD	2	Q345R	3.05	6.1
		接管 Ø88.9X7.62 PIPE	2	Q345D	2.75	5.5
C41	ASME B16.5	法兰 3"-150# SO/RF FLANGE	2	16MnII	4.01	8.02
	ASME B16.5	法兰 2"-150# BL/RF BLIND FLANGE	5	16MnII	1.82	9.1
	HG/T 20634-2009	专用螺栓 M16	40	30CrMoA	0.05	2.0
	HG/T 20634-2009	全螺栓螺栓 M16X85	20	35CrMoA	0.136	2.72
C61~64	HG/T 20627-2009	垫环 RF 50-150 Ø3 GASKET	5	PTFE	--	
		接管 Ø60.3X5.54 PIPE	5	Q345D	1.4	7.0
	ASME B16.5	法兰 2"-150# SO/RF FLANGE	5	16MnII	2.18	10.9
		垫环 30X6 REINFORCING PAD	4	Q345R	0.2	0.8
C11,C21	ASME B16.5	法兰 1 1/2"-150# BL/RF BLIND FLANGE	2	16MnII	1.36	2.72
	HG/T 20634-2009	专用螺栓 M14	16	30CrMoA	--	
	HG/T 20634-2009	全螺栓螺栓 M14X80	8	35CrMoA	0.096	0.768
	HG/T 20627-2009	垫环 RF 40-150 Ø3 GASKET	2	PTFE	--	
M02		接管 Ø48.3X5.08 PIPE	2	Q345D	2.66	5.32
	ASME B16.5	法兰 1-1/2"-150# SO/RF FLANGE	2	16MnII	1.36	2.72
		衬垫圈 Ø1070/Ø534 Ø6 REINFORCING PAD	1	Q345R		31.8
	HG/T 21517-2014	人孔 RF 口(NM-PTFE)A500-10 Manhole	1	组合件		162
M01		衬垫圈 Ø1370/Ø633 Ø8 REINFORCING PAD	1	Q345R		72.8
	HG/T 21520-2014	人孔 RF 口(NM-PTFE)600-10 Manhole	1	组合件		247
N08		接管 Ø60.3X5.54 PIPE	1	Q345D		1.4
	ASME B16.5	法兰 2"-150# SO/RF FLANGE	1	16MnII		2.18
N07		垫环 125X125 Ø8 PAD	4	Q345R	1.1	4.4
		角钢 L75X75X6 ANGLE STEEL	4	Q235B	2.74	10.96
		角钢 L75X75X6 ANGLE STEEL	2	Q235B	5.41	10.82
		螺母 M16 NUT	8	S30408	0.05	0.4
N09		U型螺栓 M16 U-BOLT	2	S30408	0.65	1.3
		接管 Ø114.3X8.56 PIPE	1	Q345D		1.96
	GB/T 12459-2017	带头 90ES 100-Sch80 HEAD	1	Q345D		4.8
		衬垫圈 Ø305/Ø117 Ø8 REINFORCING PAD	1	Q345R		3.92
N05,N06		接管 Ø114.3X8.56 PIPE	1	Q345D		52
	ASME B16.5	法兰 4"-150# SO/RF FLANGE	2	16MnII	5.63	11.26
		衬垫圈 Ø265/Ø92 Ø8 REINFORCING PAD	2	Q345R	3.05	6.1
		接管 Ø88.9X7.62 PIPE	2	Q345D	2.75	5.5
N04	ASME B16.5	法兰 3"-150# SO/RF FLANGE	2	16MnII	4.01	8.02
		衬垫圈 Ø850/Ø409 Ø8 REINFORCING PAD	1	Q345R		27.4
N03		接管 Ø406.4X12.7 PIPE	1	Q345D		33.4
	ASME B16.5	法兰 16"-150# SO/RF FLANGE	1	16MnII		48.12
		衬垫圈 Ø305/Ø117 Ø8 REINFORCING PAD	1	Q345R		3.92
		接管 Ø114.3X8.56 PIPE	1	Q345D		4.1
N02	ASME B16.5	法兰 4"-150# SO/RF FLANGE	1	16MnII		5.63
		衬垫圈 Ø685/Ø327 Ø8 REINFORCING PAD	1	Q345R		17.9
N01		接管 Ø323.8X12.7 PIPE	1	Q345D		24.6
	ASME B16.5	法兰 12"-150# SO/RF FLANGE	1	16MnII		27.69
		衬垫圈 Ø380/Ø171 Ø6 REINFORCING PAD	1	Q345R		4.3
		接管 Ø168.3X10.97 PIPE	1	Q345D		7.7
	ASME B16.5	法兰 6"-150# SO/RF FLANGE	1	16MnII		7.9

D00	详细工程设计/DETAILED ENGINEERING DESIGN	向冲	徐淑桢	赵银峰		2025.6.20
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE

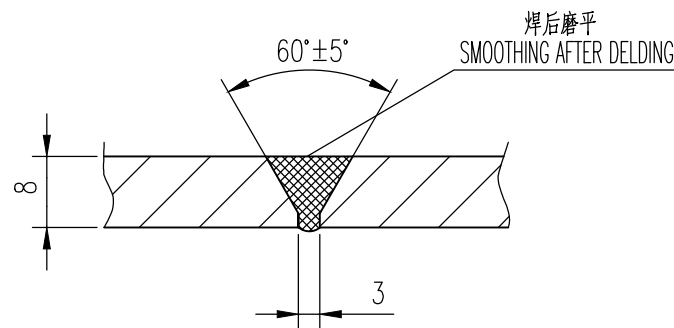
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		WUHUAN ENGINEERING CO., LTD.				30,000 TPA NEOPENTYL GLYCOL PROJECT			
MAY NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.									
HOT WATER TANK  DETAIL DRAWING OF NOZZLE  ITEM NO: V-2603				Neopentyl Glycol Plant					
				Detailed Engineering Design					
				22150 - V2603-002		000			
SPECI	EQUIPMENT	AREA	—	SCALE	1:30	SHT.1	OF 1		



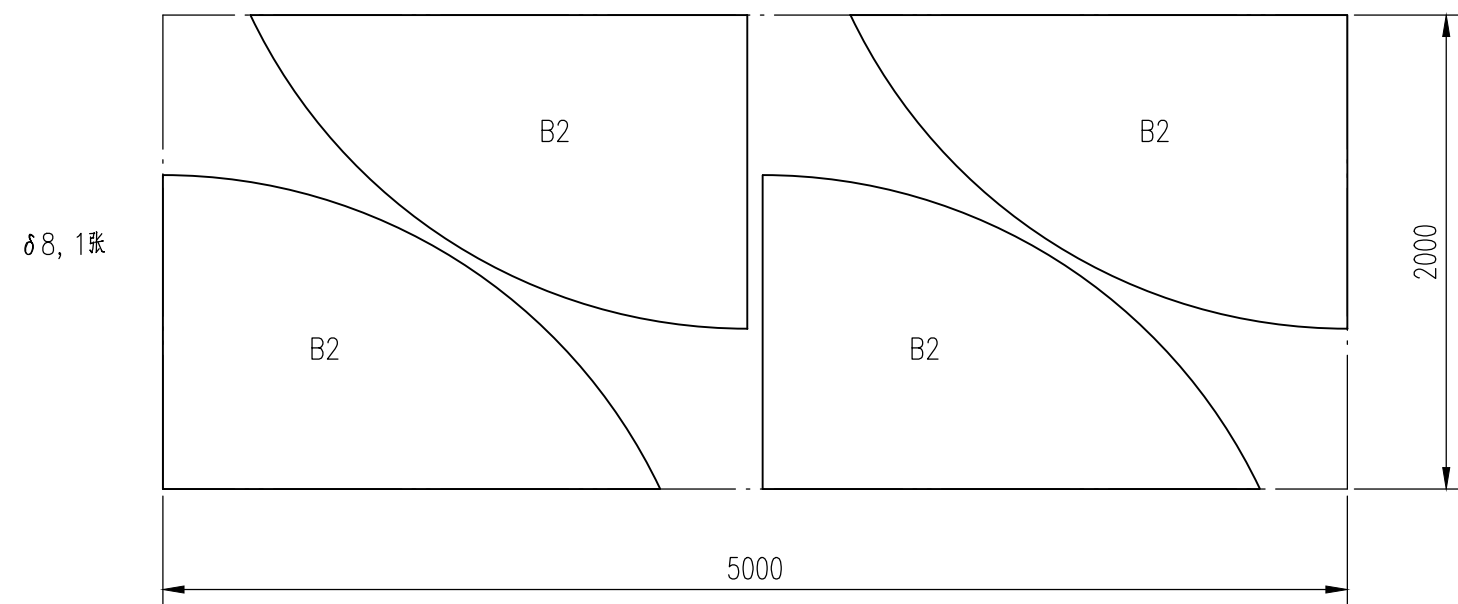
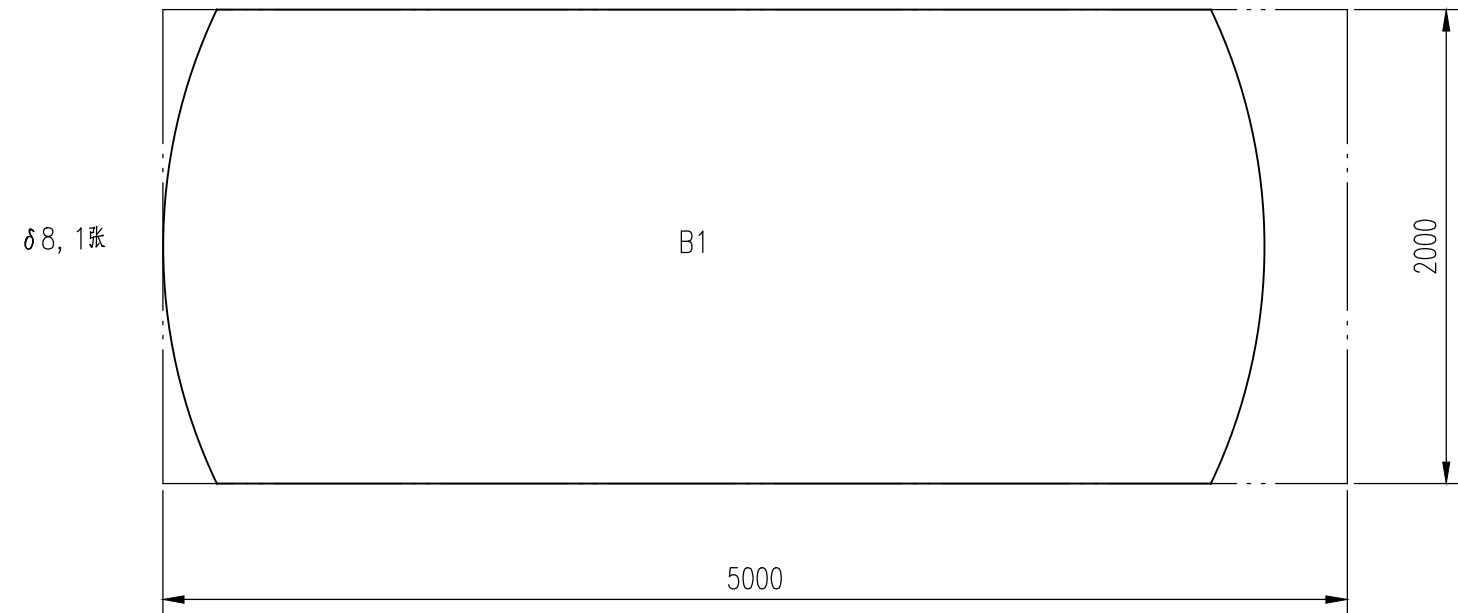
底板详图  
FLOOR DETAIL DRAWING  
1:18



A-A  
1:1



底板排版图  
FLOOR TYPESETTING DIAGRAM  
1:30



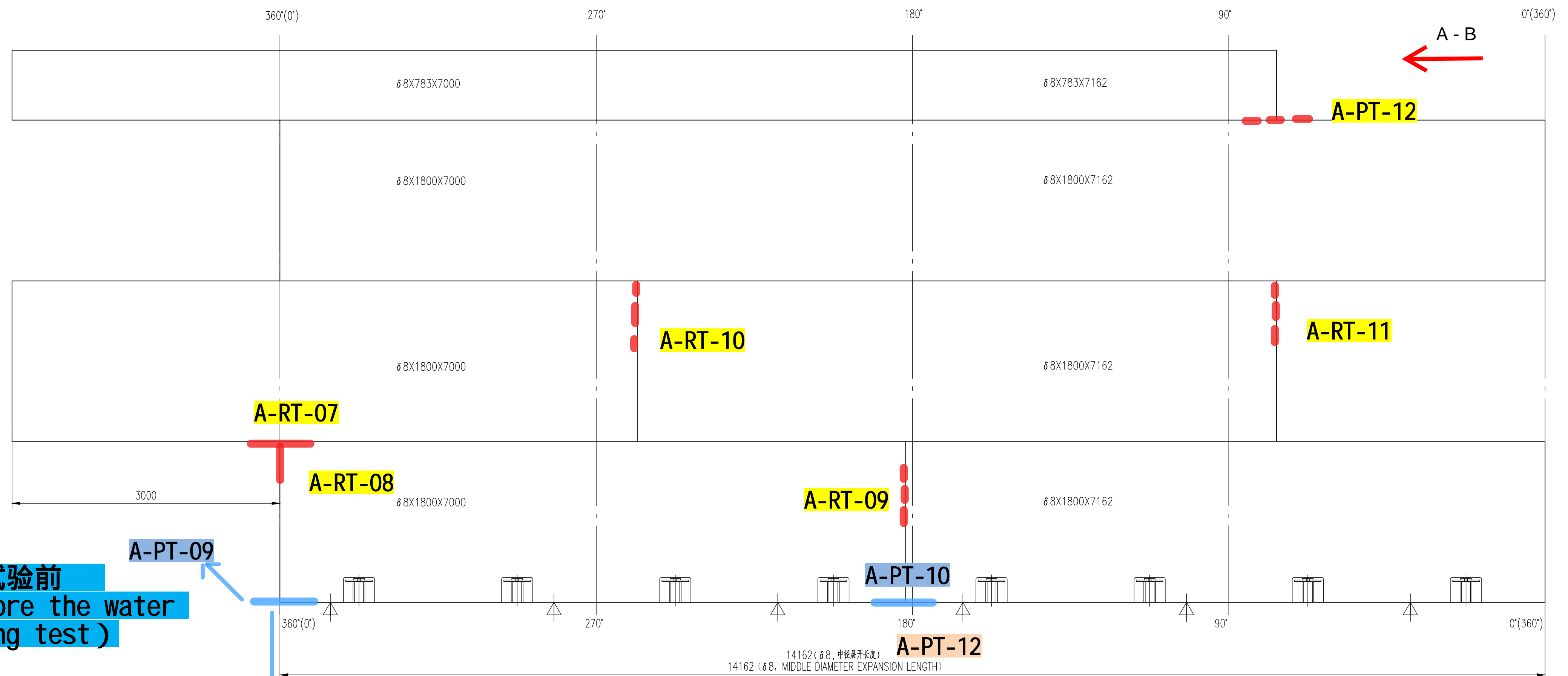
A - B

#### 技术要求 TECHNICAL REQUIREMENTS

- 罐底应按GB50128-2014《立式圆筒形钢制焊接储罐施工规范》进行制造、检验和验收。  
The tank bottom shall be manufactured, inspected, and accepted in accordance with GB50128-2014 "Code for Construction of Vertical Cylindrical Steel Welded Storage Tanks."
- 技术要求按装配图及相关标准规范的规定。  
The technical requirements shall comply with the assembly drawing and relevant standards and specifications.
- 该图为准板示意图, 仅供施工单位参考。  
This drawing is a schematic layout for reference only by the construction unit.
- 该图尺寸仅为理论计算值, 施工单位在下料时应考虑焊缝间隙与焊接收缩。  
The dimensions in this drawing are theoretical values only. The construction unit shall consider weld gaps and welding shrinkage during material cutting.

总重: 1067 kg

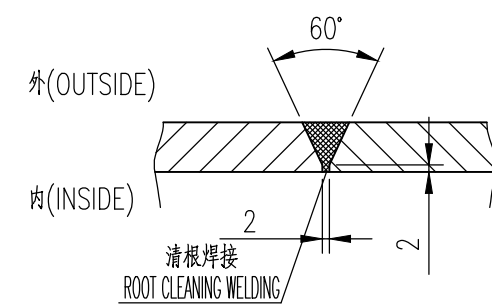
1	底板 δ8 BASEBOARD		1	Q345R	1067	
件号 No.	图号或标准号 DWG. OR STAND. No.	名 称 DESCRIPTION	数量 QTY.	材 料 MATERIAL	单UNIT 总TOTAL 重重量 WEIGHT(kg)	备 注 REMARKS
DOO	详细工程设计/DETAILED ENGINEERING DESIGN		向冲	徐淑松	赵银峰	2025.6.20
REV.	DESCRIPTION		DEGNO	CHEKD	APPRD	AUTHD DATE
 PT PETRO OXO NUSANTARA						
 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>			30,000 TPA NEOPENTYL GLYCOL PROJECT			
HOT WATER TANK BASEBOARD DETAIL DRAWING ITEM NO:V-2603			Neopentyl Glycol Plant			
			Detailed Engineering Design			
			22150-V2603-003			DOO
SPECI	EQUIPMENT	AREA	—	SCALE	1:18	SHT.1 OF 1



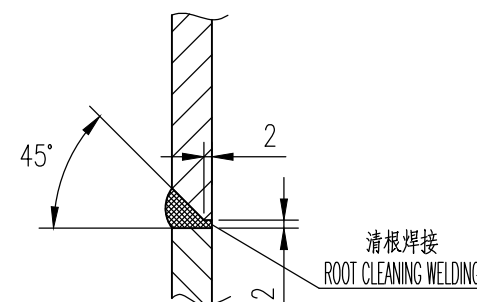
充水试验前  
(Before the water  
filling test)

充水试验后 (After the water filling test)

罐壁纵向焊接接头  
LONGITUDINAL WELDED JOINT OF TANK WALL  
1:1

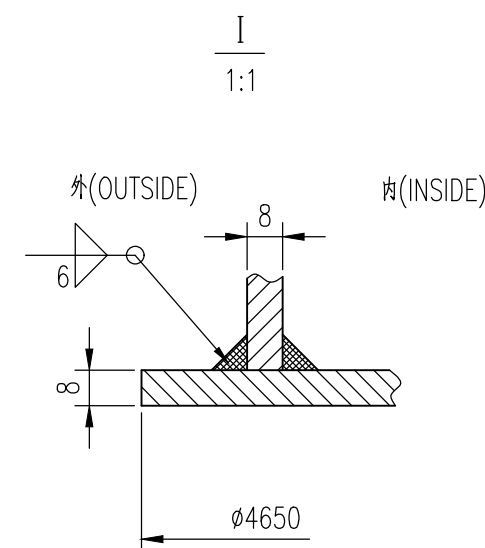
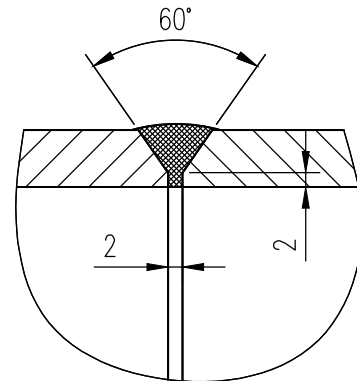


罐壁环向焊接接头  
CIRCUMFERENTIAL WELDED JOINT OF TANK WALL  
1:1





包边角钢对接接头  
BUTT JOINT OF WRAPPED ANGLE STEEL

1:1



## 技术要求 TECHNICAL REQUIREMENTS

1. 罐壁应按GB50128—2014《立式圆筒形钢制焊接储罐施工及验收规范》进行制造、检验和验收。  
The tank wall shall be manufactured, inspected, and accepted in accordance with GB50128—2014 "Code for Construction and Acceptance of Vertical Cylindrical Steel Welded Storage Tanks."
2. 所有开孔、接管和衬套上的切割表面应光滑平整,并将坡角倒圆。  
All cutting surfaces on openings, nozzles, and reinforcing plates shall be smooth and flat, with rounded edges.
3. 角钢加强圈焊接应全焊透,其焊接接头应无开裂现象,且不得小于300mm。  
The splice welds of the angle steel reinforcing rings shall be fully penetrated, and the splice welds shall avoid the longitudinal seams of the wall plates and shall not be less than 300mm apart.
4. 排版仅供参考,排版排版时应避免开孔处体的损坏焊缝。  
The layout is for reference only. When arranging the wall plates, the nozzles shall avoid the longitudinal and circumferential welds of the shell.
5. 排版尺寸应为最终成形尺寸,未考虑焊接收缩等因素。  
The dimensions of the plate assembly are the final formed dimensions and do not account for factors such as welding shrinkage.

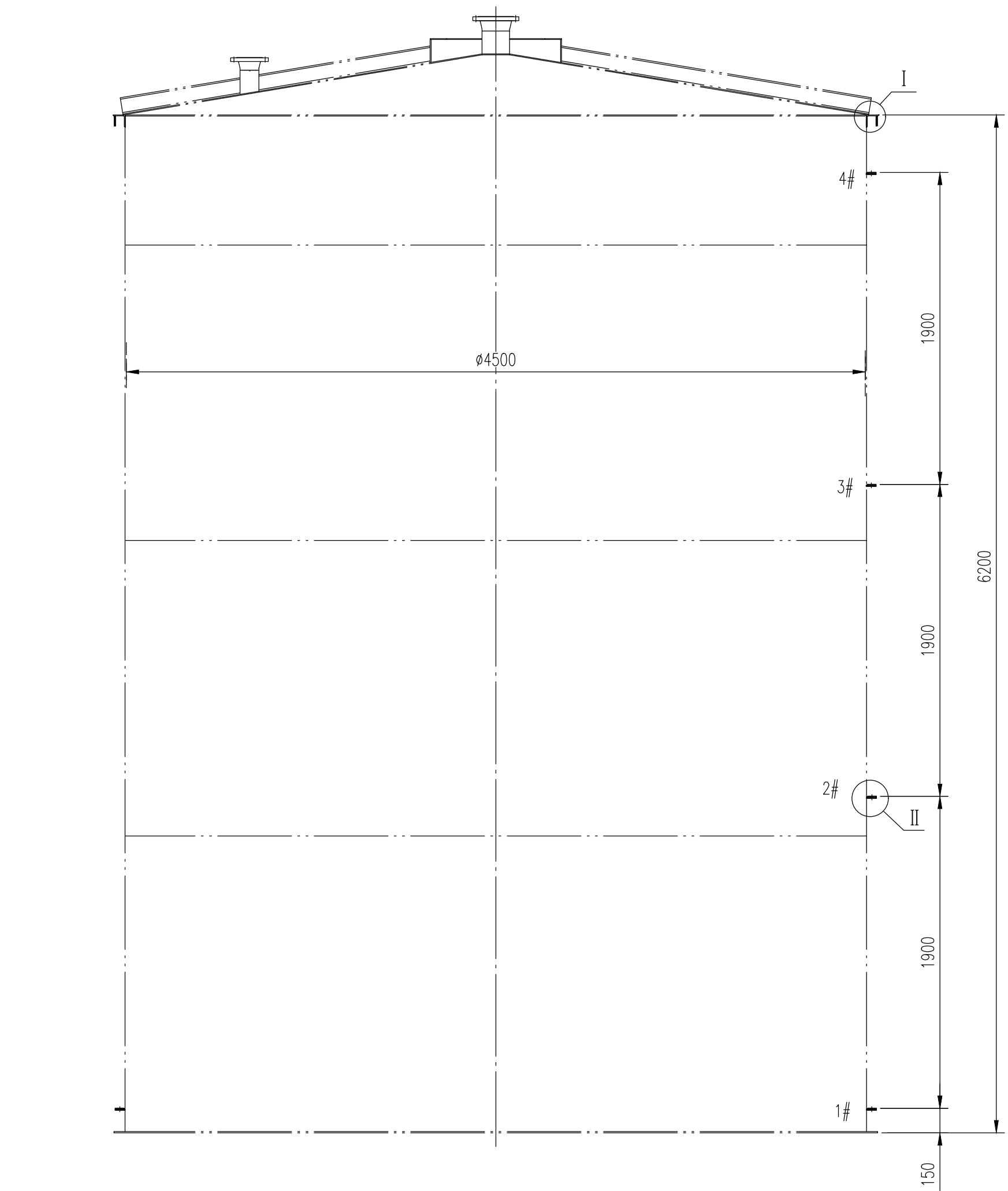
总 重: 5602 kg									
3	罐底 68 TANK WALL		3	Q345R	1601	4803	H=1800		
2	罐壁 68 TANK WALL		1	Q345R		699	H=783		
1	角钢 175X75X6 ANGLE STEEL		1	Q235B		99.4	L=14400		
件号 No.	图号或标准号 DWG. OR STAND. No.	名 称 DESCRIPTION	数量 QTY.	材 料 MATERIAL	单UNIT 重量WEIGHT(kg)	总TOTAL	备 注 REMARKS		
D00	详细工程详图/DETAILED ENGINEERING DESIGN			向冲	徐淑松	赵银峰	2025. 6. 20		
REV.	DESCRIPTION			DEGND	CHEKD	APPRD	AUTHD	DATE	
 PT PETRO OXO NUSANTARA									
 WUHUAN ENGINEERING CO., LTD. <small>NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>				30,000 TPA NEOPENTYL GLYCOL PROJECT					
HOT WATER TANK  WALL DETAIL DRAWING  ITEM NO:V-2803				Neopenlyl Glycol Plant					
				Detailed Engineering Design					
				22150-V2603-004					D00
SPECI	EQUIPMENT	AREA	—	SCALE	1:30	SHT.1	OF 1		



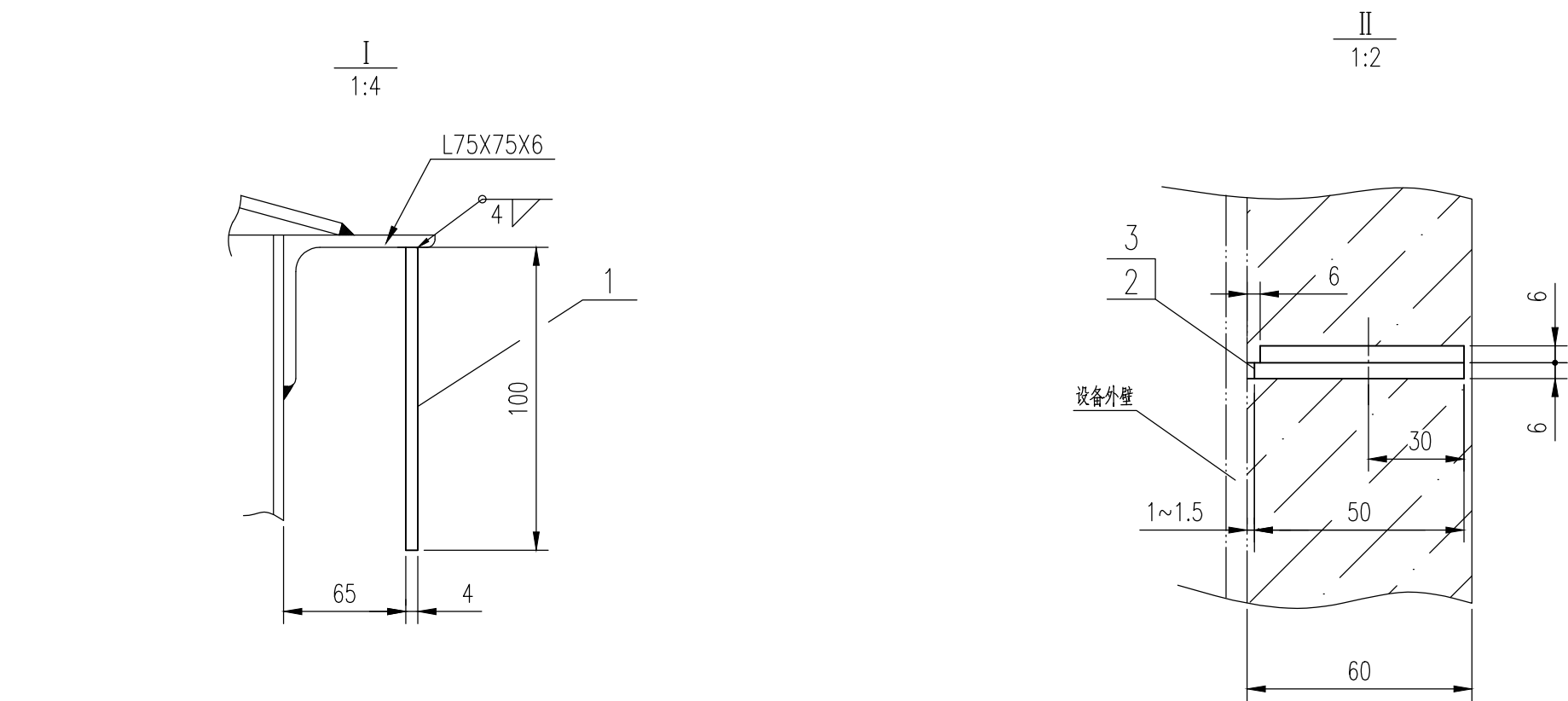
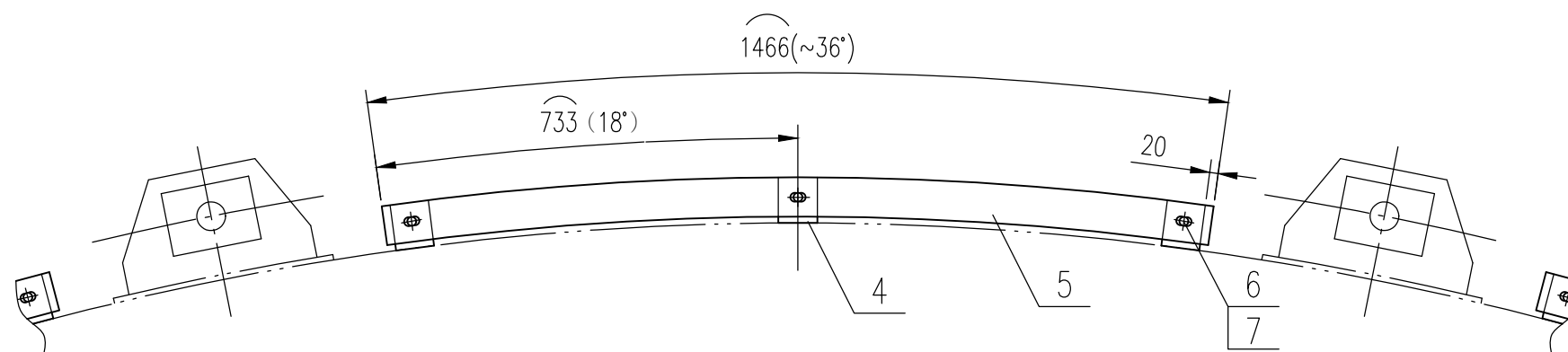




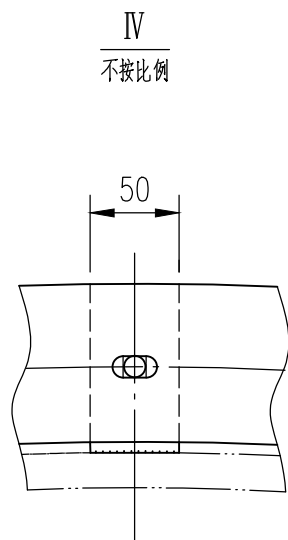
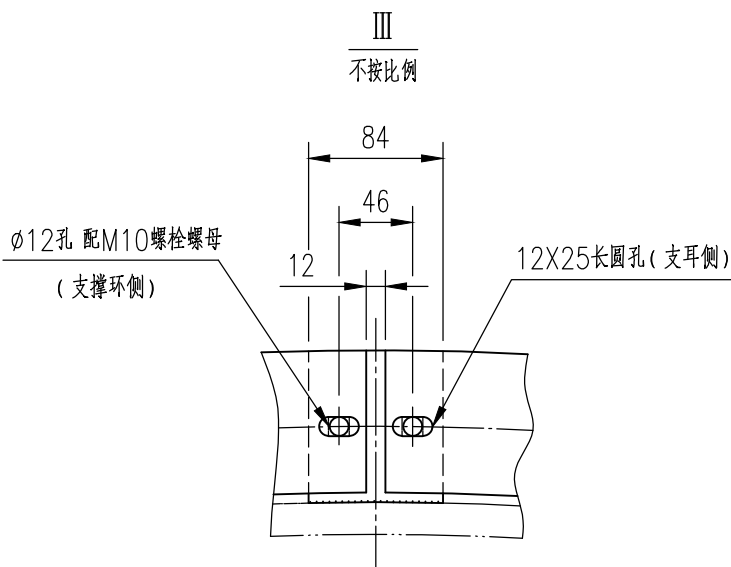
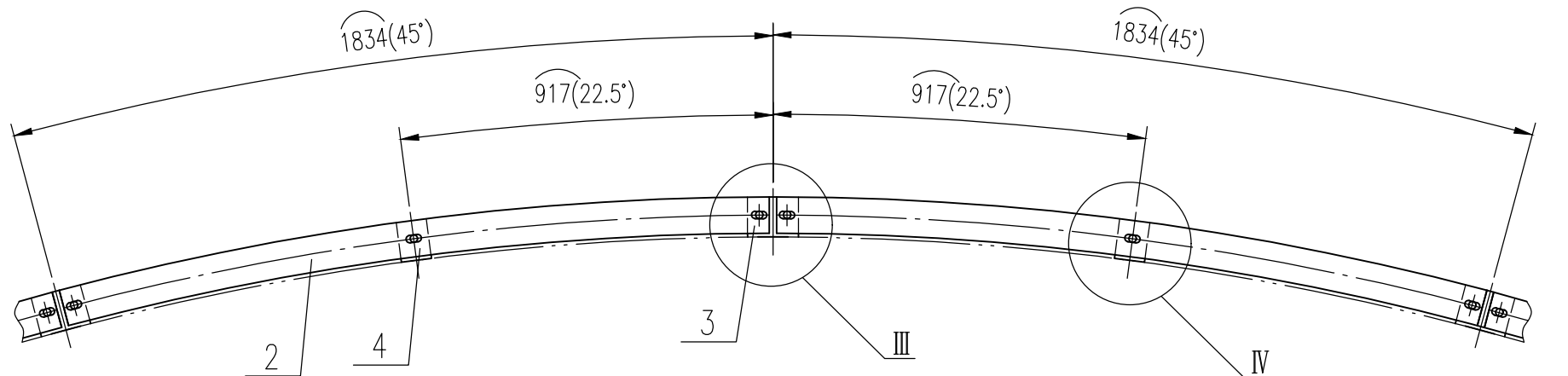
A1 sheets  
 SPEC  
 SIGNATURE



1#保温圈详图  
 DETAILED DRAWING OF 1# INSULATION RING  
 1:10



2#~4#保温圈详图  
 DETAILED DRAWING OF 2#~4# INSULATION RING  
 1:10



技术要求  
 TECHNICAL REQUIREMENTS  
 1. 除注明外, 焊缝的厚度尺寸按两零件中较薄板的厚度。  
 Unless otherwise specified, the weld leg size shall be based on the thickness of the thinner plate between the two components.  
 2. 焊接采用电弧焊, 焊材: E4315  
 Welding shall be performed using arc welding, with welding material: E4315.  
 3. 保温支撑与接管相碰, 可不开保温支撑。  
 If the insulation support interferes with the nozzle, the insulation support may be cut off.  
 4. 罐顶保温支撑根据保温施工单位需要现场焊接, 与罐体直接焊接材料按Q235B。  
 The insulation supports on the tank roof shall be field-welded as required by the insulation construction unit. Materials for components directly welded to the tank body shall be Q235B.

总重: 178kg									
7	GB/T 41-2016	螺母 M10	96	5.6级	0.008	0.77			
6	GB/T 5782-2016	螺栓 M10X30	96	5.6级	0.03	2.88			
5		扁钢 45X6	8	Q235B	3.11	24.88	L=1466		
4		支耳 50X50X6	48	Q235B	0.12	5.76			
3		支耳 84X50X6	24	Q235B	0.2	4.8			
2		扁钢 45X6	24	Q235B	3.87	92.88	L=1822		
1		挡圈 100X6 4	1	Q235B	45.8	L=14600			
件号 No.	图号或标准号 DWG. OR STAND. No.	名称 DESCRIPTION	数量 QTY.	材料 MATERIAL	单重 WEIGHT(kg)	总重 TOTAL	备注 REMARKS		
DOO	详细工程设计/DETAILED ENGINEERING DESIGN	向冲	徐淑松	赵银峰				2025. 6. 20	
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE			
PT PETRO OXO NUSANTARA									
WUHUAN ENGINEERING CO., LTD.									
HOT WATER TANK									
THERMAL INSULATION SUPPORT DETAIL DRAWING									
ITEM NO: V-2603									
SPECI	EQUIPMENT	AREA	—	SCALE	1:25	SHT.1	OF 1		