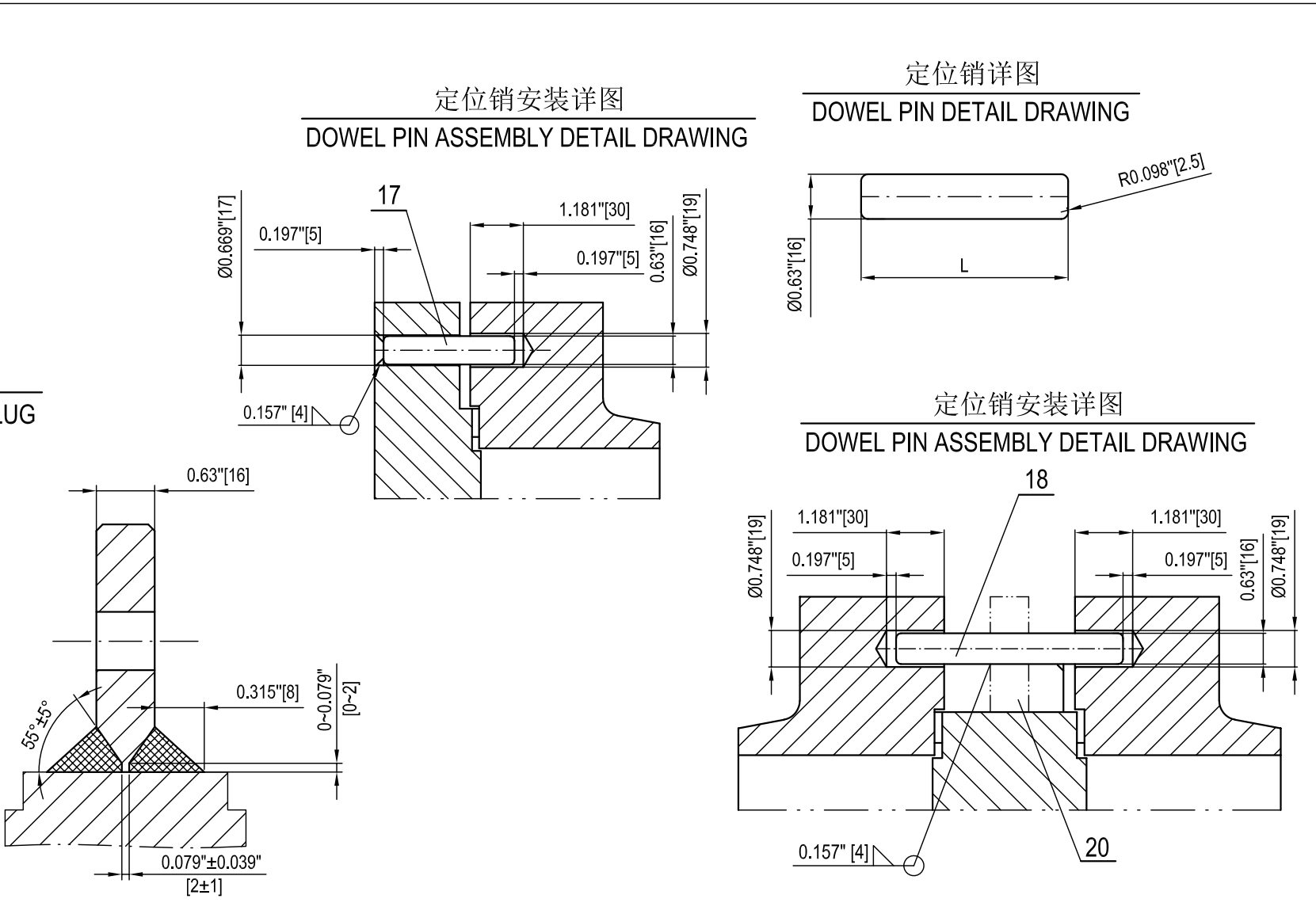
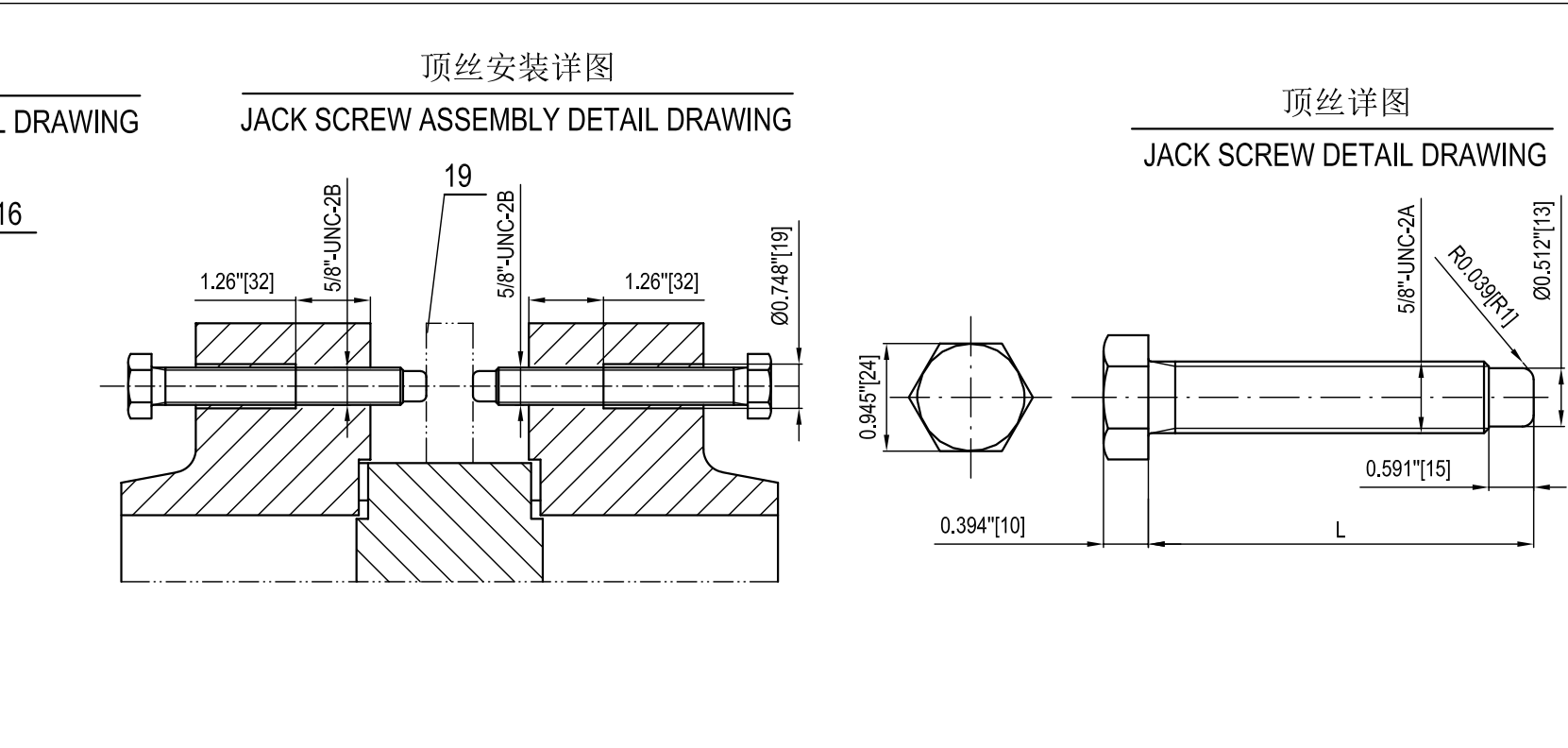
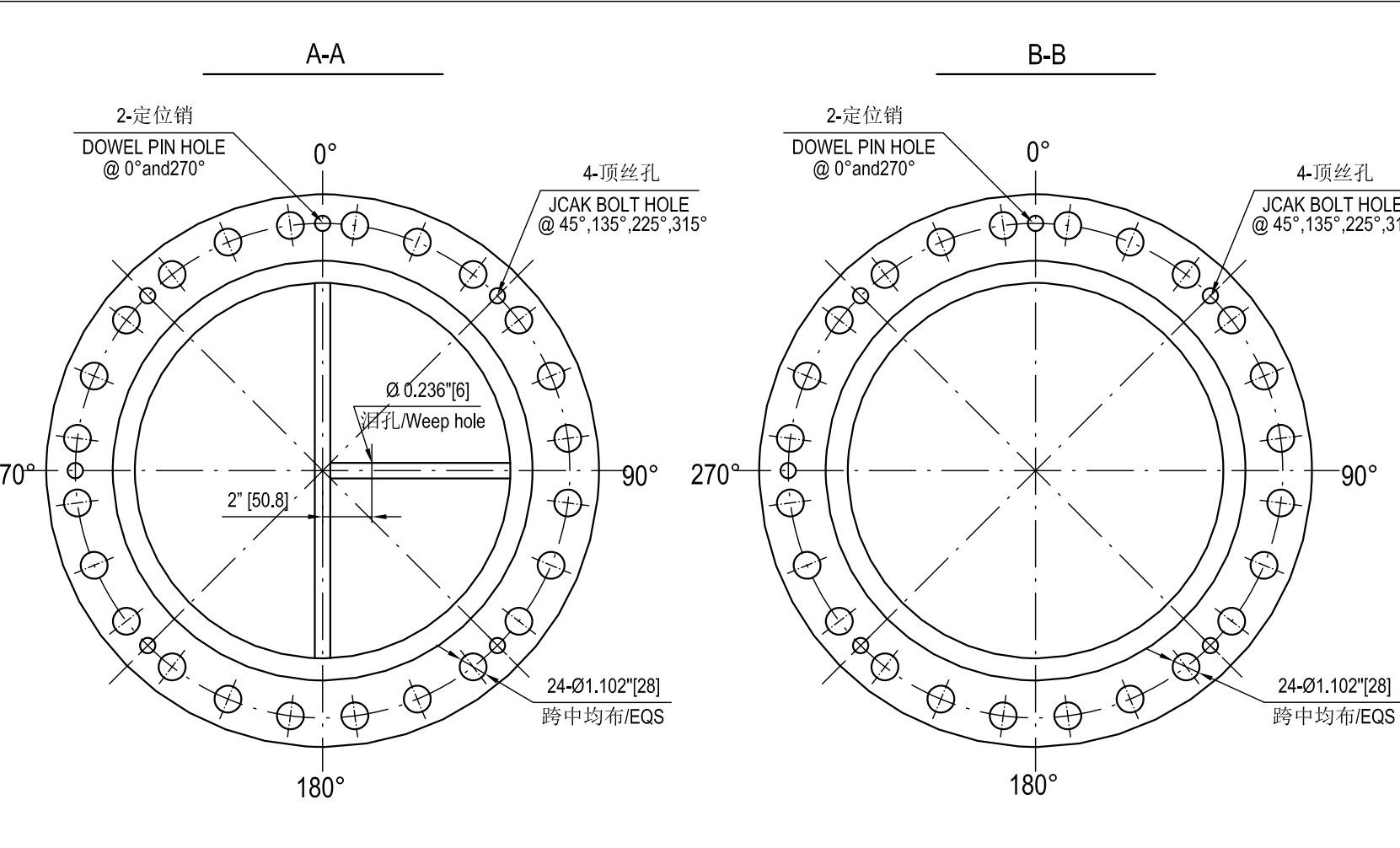
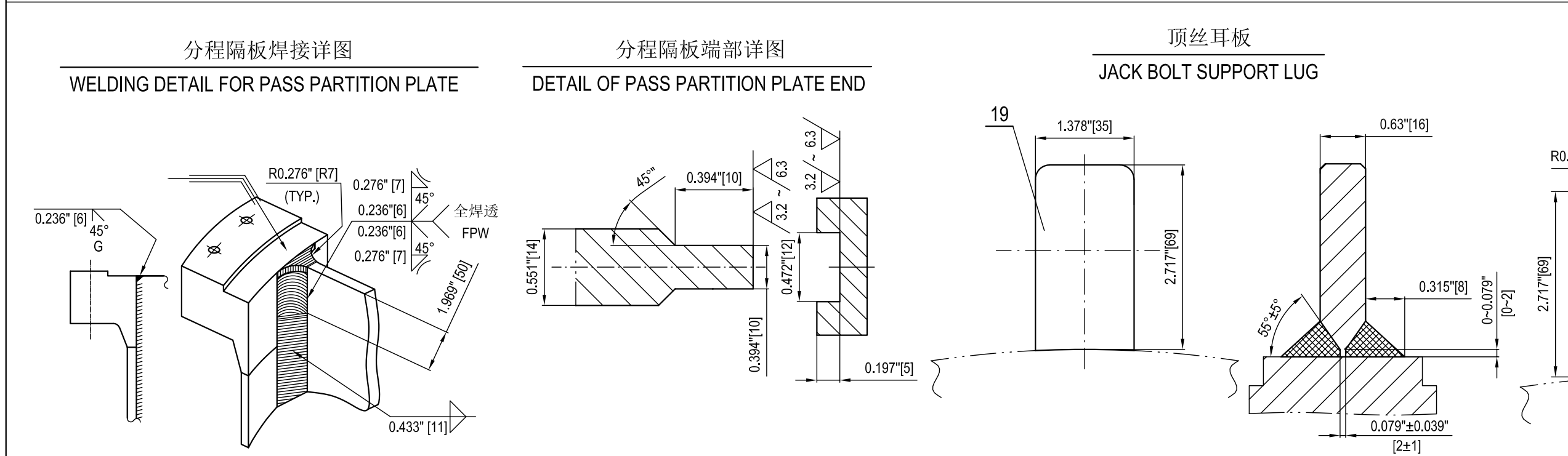
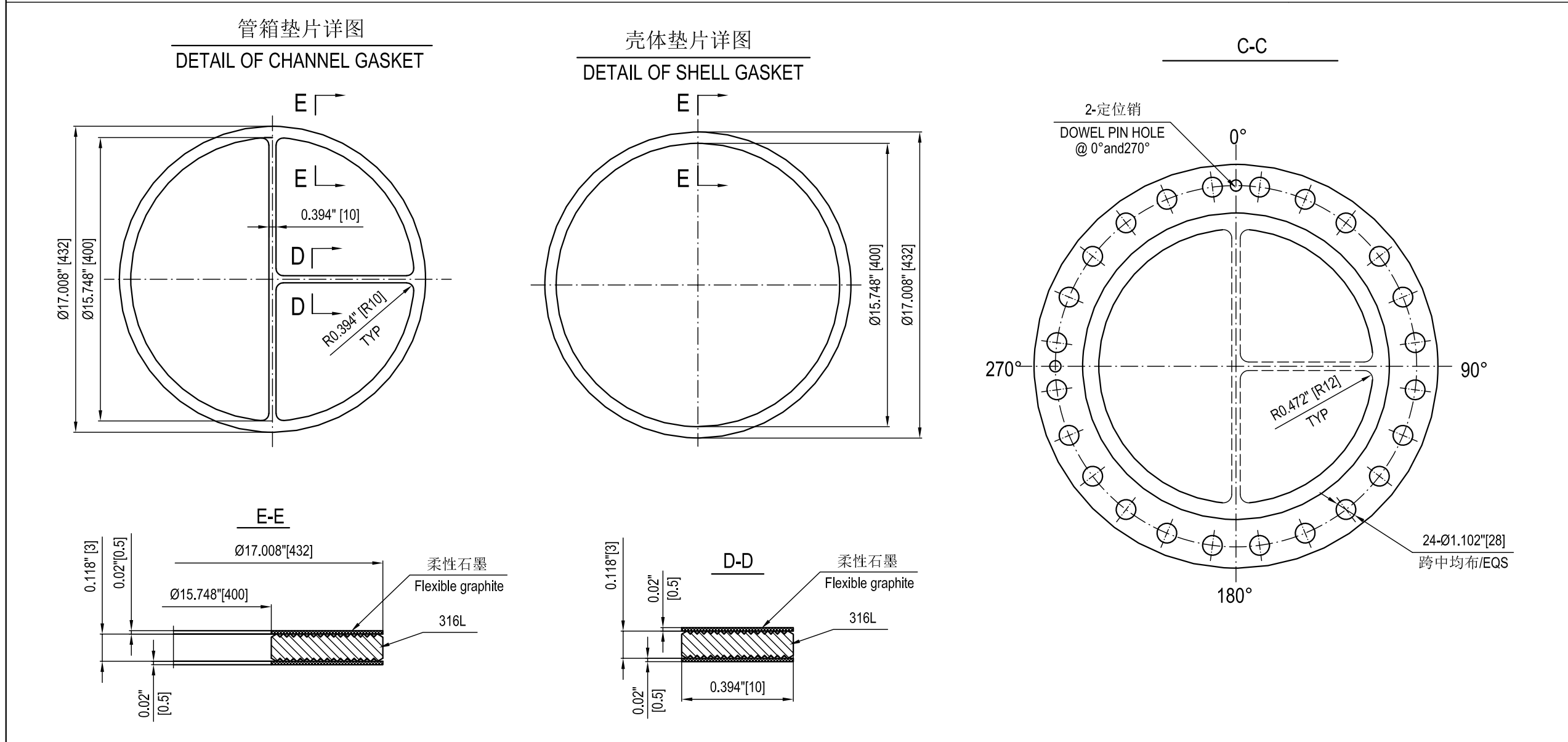
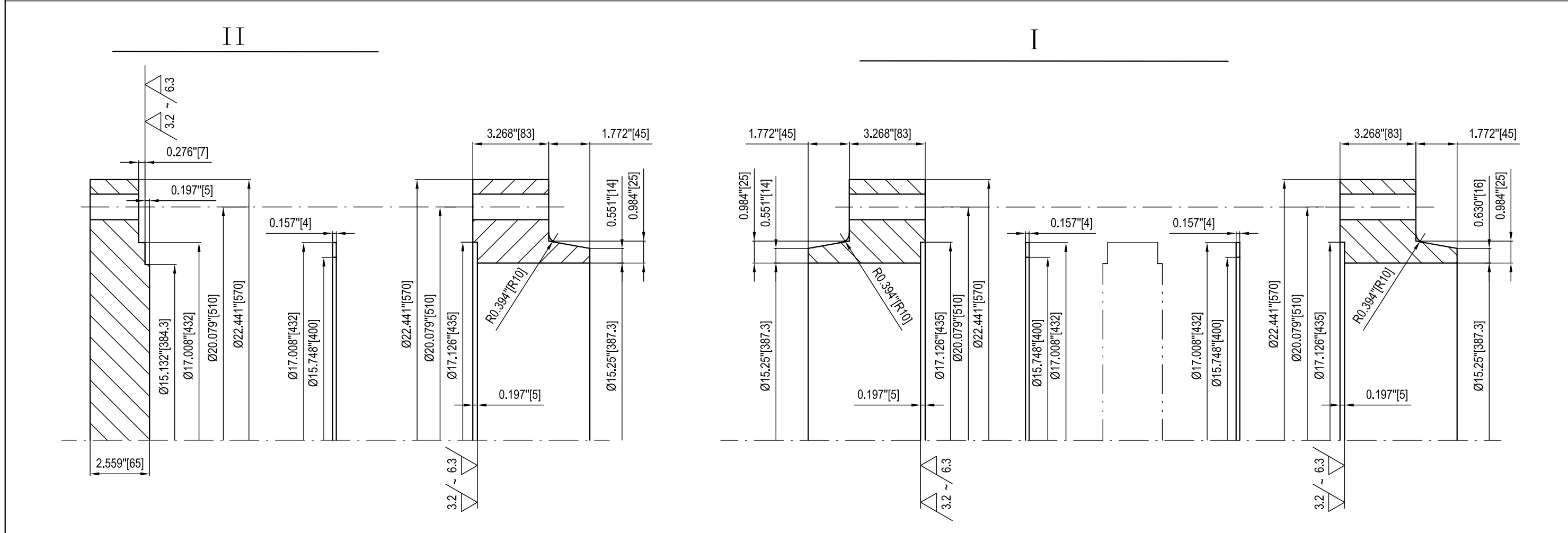
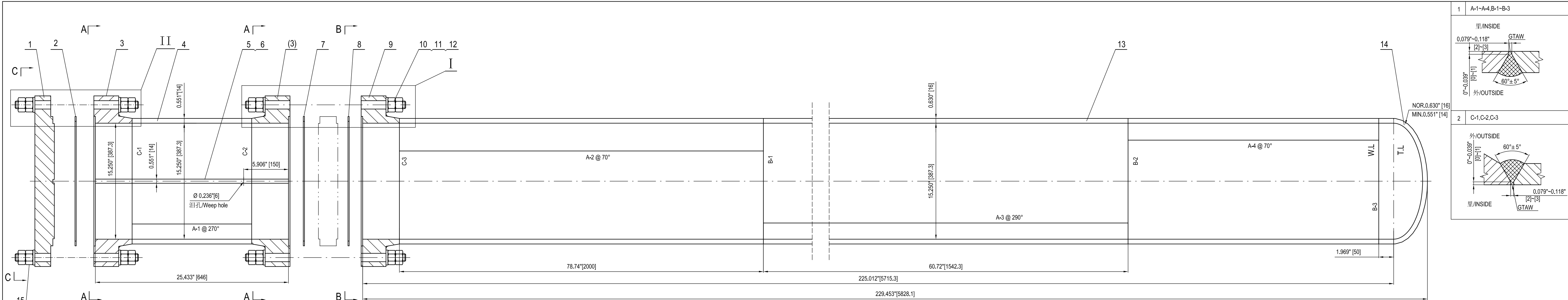
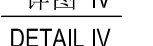


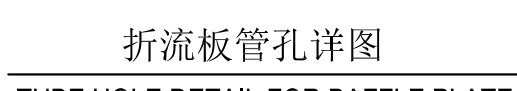
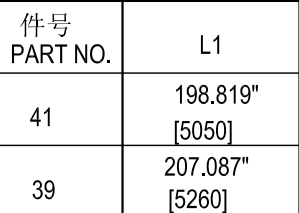
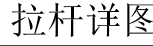
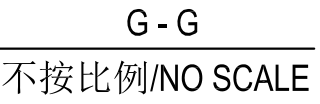


注/NOTE									
1.垫片为KAMMPROFILE(或FLEXITALLIC 或LAMONS制作)垫片, 由3mm厚SS316L金属板和上下两层0.5mm厚的石墨组成;									
THE GASKET IS KAMMPROFILE(EITHER FLEXITALLIC OR LAMONS MAKE); THICKNESS OF PERIPHERAL GASKETS SHALL BE 3mm+0.5mm+0.5mm GRAPHITE LAYERS IN BOTH SIDES. SERRATED METAL MATERIAL IS SS316L.									
2.计算用垫片系数:									
GASKET FACTORY FOR CALCAUTION IS m=4.25,y=10100 psi.									
20		定位销耳板 DOWEL PIN SUPPORT LUG	2	SA-516 Gr.70N	0.3	0.6			
19		顶丝耳板 JACK BOLT SUPPORT LUG	4	SA-516 Gr.70N	0.3	1.2			
18		定位销 L=103 DOWEL PIN	2	SA-479 304	1.0	2.0			
17		定位销 L=79 DOWEL PIN	2	SA-479 304	0.7	1.4			
16		顶丝 L=120 JACK BOLT	12	SA-479 304	1.1	13.2			
15	ASME B18.2.1-2012 (R2021)	全螺纹螺栓 1"-8UN-2A LE280 FULL THREAD STUD BOLT	24+3	SA-193 B7	1.1	29.7			
14		2:1椭圆封头 2:1ELLIPTICAL HEAD	1	SA-516 Gr.70N		29.8			
13		筒体ID 387.35X16 L=5542.3 SHELL	1	SA-516 Gr.70N		882.1			
12	ASME PCC 1-2019 APPENDIX M	垫圈 1" WASHER	96+12	TYPE 4	0.08	8.64			
11	ASME B18.2.2-2022	重型六角螺母 1"-8UN-2B HEAVY HEAVY HEX NUT	192+24	SA-194 2H	0.3	64.8			
10	ASME B18.2.1-2012 (R2021)	全螺纹螺栓 1"-8UN-2A LE360 FULL THREAD STUD BOLT	24+3	SA-193 B7	1.4	37.8			
9		壳体法兰 SHELL FLANGE	1	SA-266 Gr.2N		98.5			
8		壳体垫片 SHELL GASKET	1+2	316L+柔性石墨 FLEXIBLE GRAPHITE	/			Note 1.2	
7		管箱垫片II CHANNEL GASKET	1+2	316L+柔性石墨 FLEXIBLE GRAPHITE	/			Note 1.2	
6		分程隔板 t=14 PASSPARTION PLATE	1	SA-516 Gr.70N		15.7			
5		分程隔板 t=14 PASSPARTION PLATE	1	SA-516 Gr.70N		31.4			
4		管箱筒体 ID 387.35X14 L=400 CHANNEL SHELL	1	SA-516 Gr.70N		63.7			
3		管箱法兰 CHANNEL FLANGE	2	SA-266 Gr.2N	98.5	197			
2		管箱垫片I CHANNEL GASKET	1+2	316L+柔性石墨 FLEXIBLE GRAPHITE	/	/		Note 1.2	
1		平盖 FLAT COVER	1	SA-266 Gr.2N		123.9			
件 号 PART NO	图号或标准号 DWG.NO.OR STD.NO.	名 称 DESIGNATION	数量 QTY.	材 料 MATERIAL	单 重 WEIGHT	EACH TOTAL 重量 (kg) WEIGHT	备 注 REMARKS		
AIR PRODUCTS FLUOR									
Air Projects Project Number		EN207123	Fluor Project Number		A8KM				
Project Name		World Energy Renew Utilities USLT	RFQ No.		A8KM-4-414				
Purchase Order Number		SM00001099	PO/Contract No		A8KM-4-414-PO				
Air Products Open Text document number		EN207123-WUXI-9V3-00173	Project Area		Utilities				
Client		WORLD ENERGY PARAMOUNT	Client Doc No:						
02	供批准/ ISSUED FOR APPROVAL		Hu Wenchao	Shengfang Zhao	Kevin Yang	17-Feb-23			
01	供批准/ ISSUED FOR APPROVAL		Hu Wenchao	Shengfang Zhao	Kevin Yang	14-Jan-23			
00	供批准/ ISSUED FOR APPROVAL		Hu Wenchao	Shengfang Zhao	Kevin Yang	3-Nov-22			
版次	REV	版次说明/DESCRIPTION	设计/PREPARED	审核/REVIEWED	批准/APPROVED	日期/DATE			
WCE 无锡化工装备股份有限公司 WUXI CHEMICAL EQUIPMENT CO., LTD.					设计项目 DESIGN ITEM		World Energy Renewables Project		
					设计阶段 DESIGN PHASE		详细设计 Detail Design		
设 计 PREPARED			HGU CONDENSATE TRIM COOLER		设备位号 ITEM NO.		18-X-1816		
审 核 REVIEWED			SHELL DETAIL DRAWING		图 号 DWG. NO.		WXCE7069-01		
批 准 APPROVED			比 例: SCALE	1:6	版 次: REV.	02	第 1 页 共 1 页 PAGE 1 OF 1		



U型换热管数据表/DATA TABLES OF U TUBES

序号	直管段L(mm)	弯曲半径R(mm)	换热管展开长度 TUBE LENGTH	管数	单重(Kg)	总重(Kg)	消应力
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件 号 PART NO.	图号或标准号 DWG.NO.OR STD.NO.	名 称 DESIGNATION	数量 QTY.	材 料 MATERIAL	单 总	备 注 REMARKS
					EACH TOTAL	
					重量 (kg) WEIGHT	

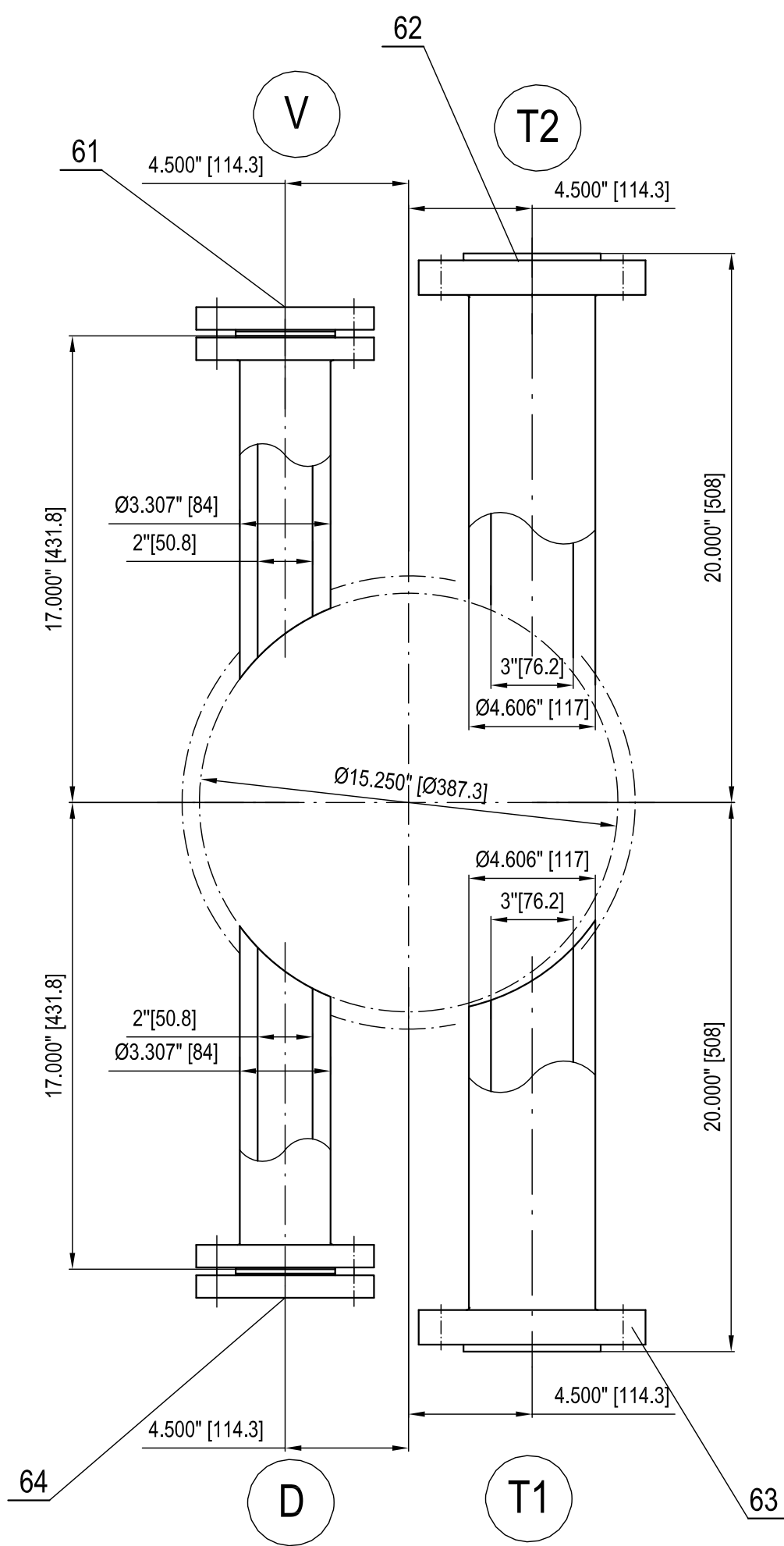
AIR
PRODUCTS  **FLUOR**

02	供批准/ ISSUED FOR APPROVAL	Hu Wenchao	Shengfang Zhao	Kevin Yang	17-Feb-23
01	供批准/ ISSUED FOR APPROVAL	Hu Wenchao	Shengfang Zhao	Kevin Yang	14-Jan-23

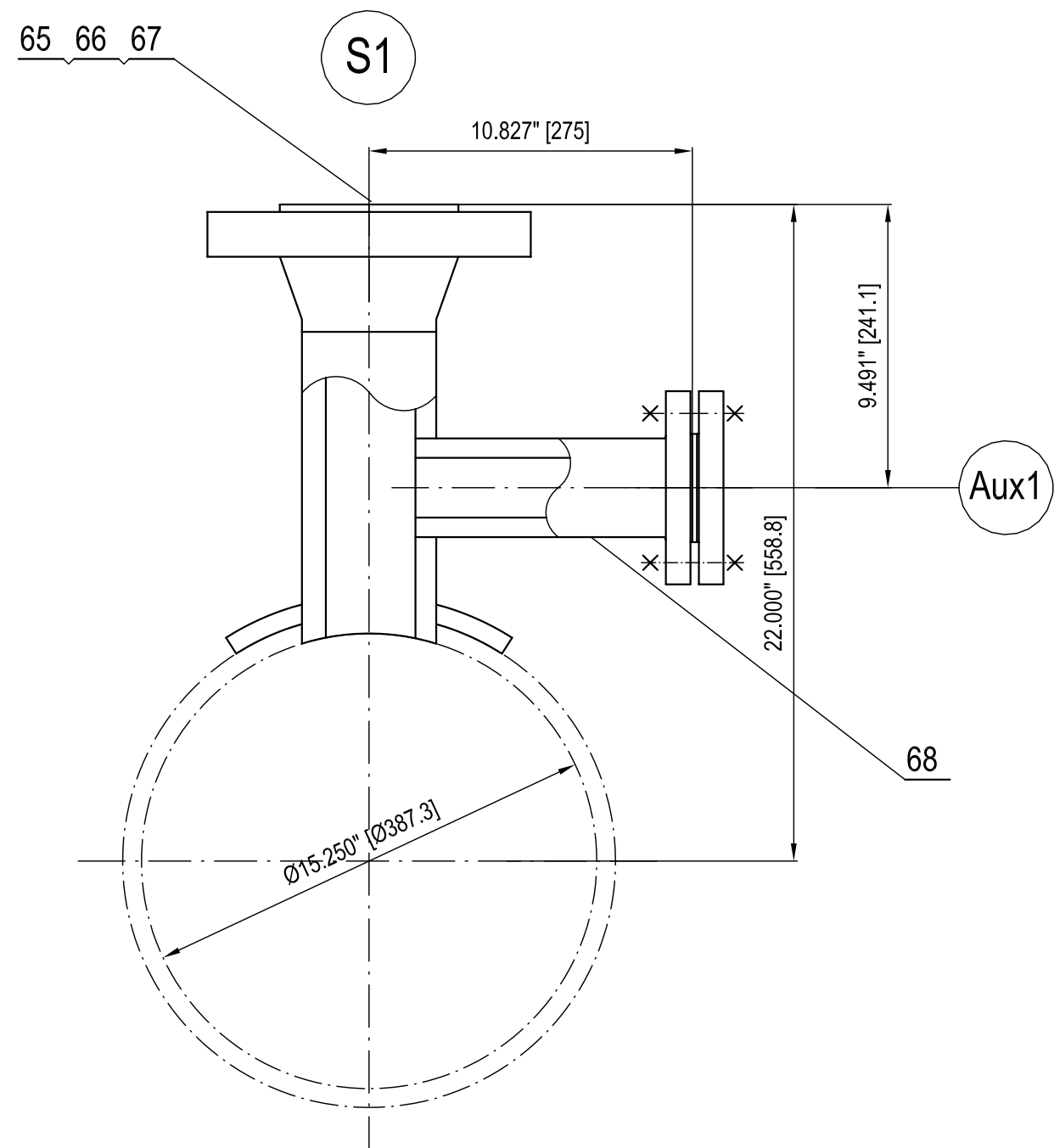
 无锡化工装备股份有限公司 WUXI CHEMICAL EQUIPMENT CO., LTD.	DESIGN ITEM	Renewables Project
	设计阶段	详细设计

设计	校核	审核	批准	HGU CONDENSATE TRIM COOLER	设计号与	18-X-1816
				BUNDLE DETAIL DRAWING	图号	WXCE7060.02

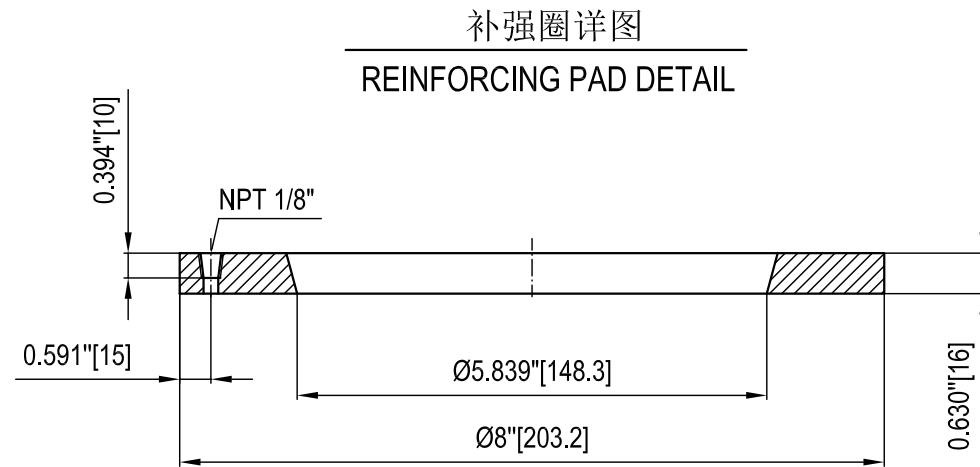
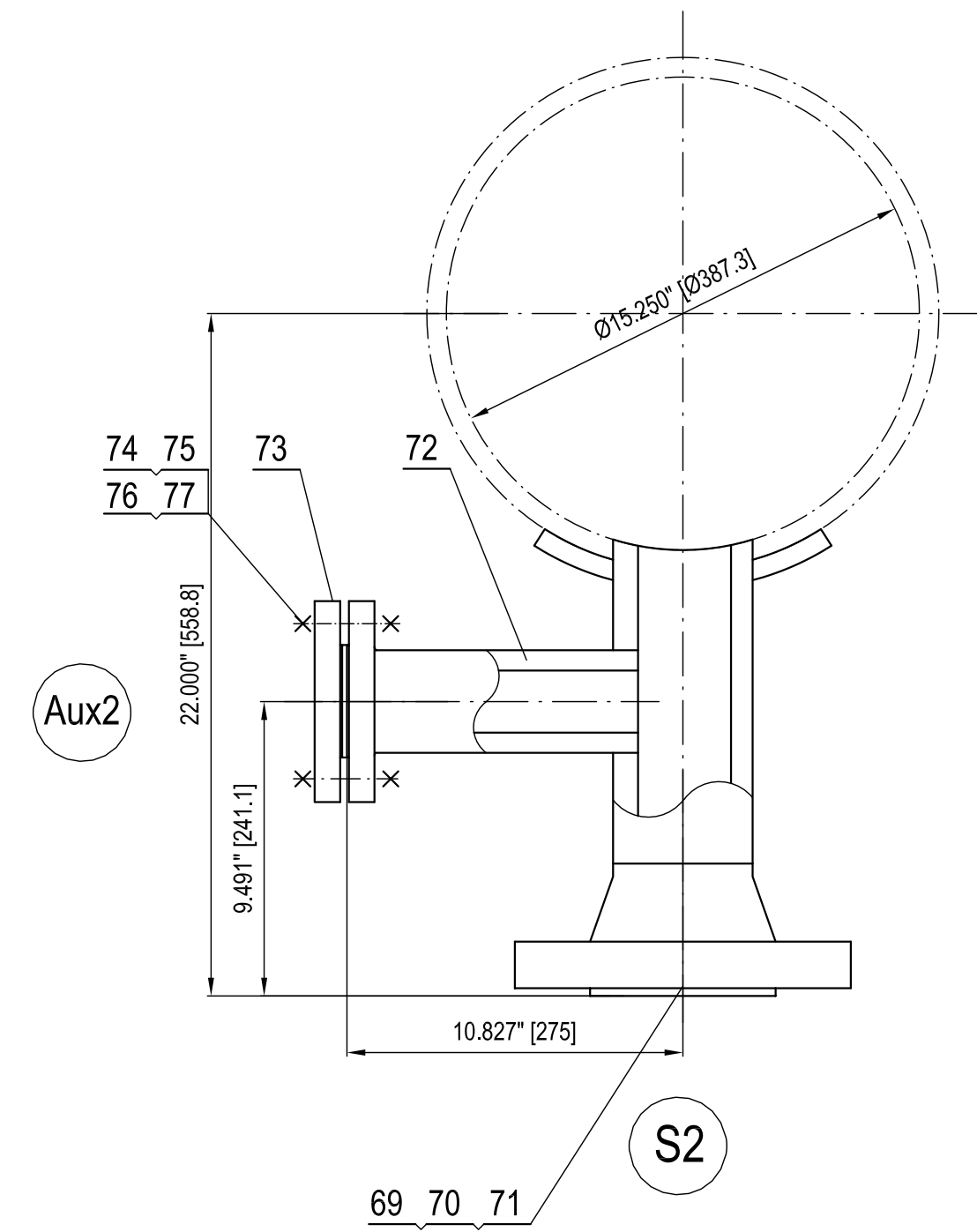
管口T1,T2,V,D详图
DETAIL OF NOZZLE T1,T2,V,D



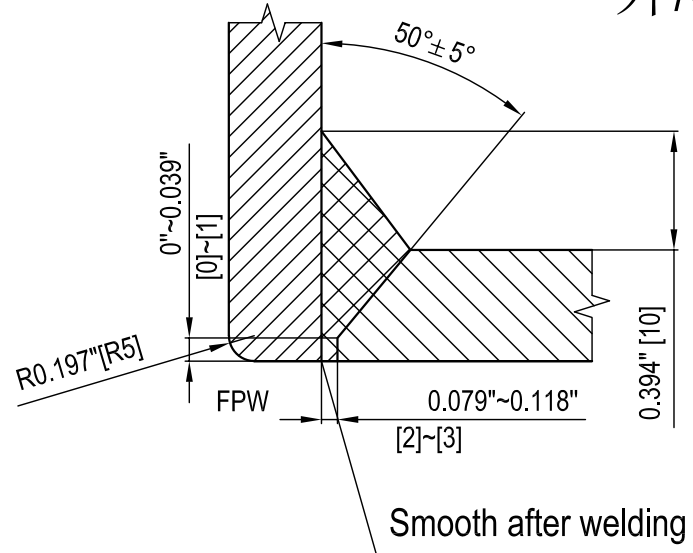
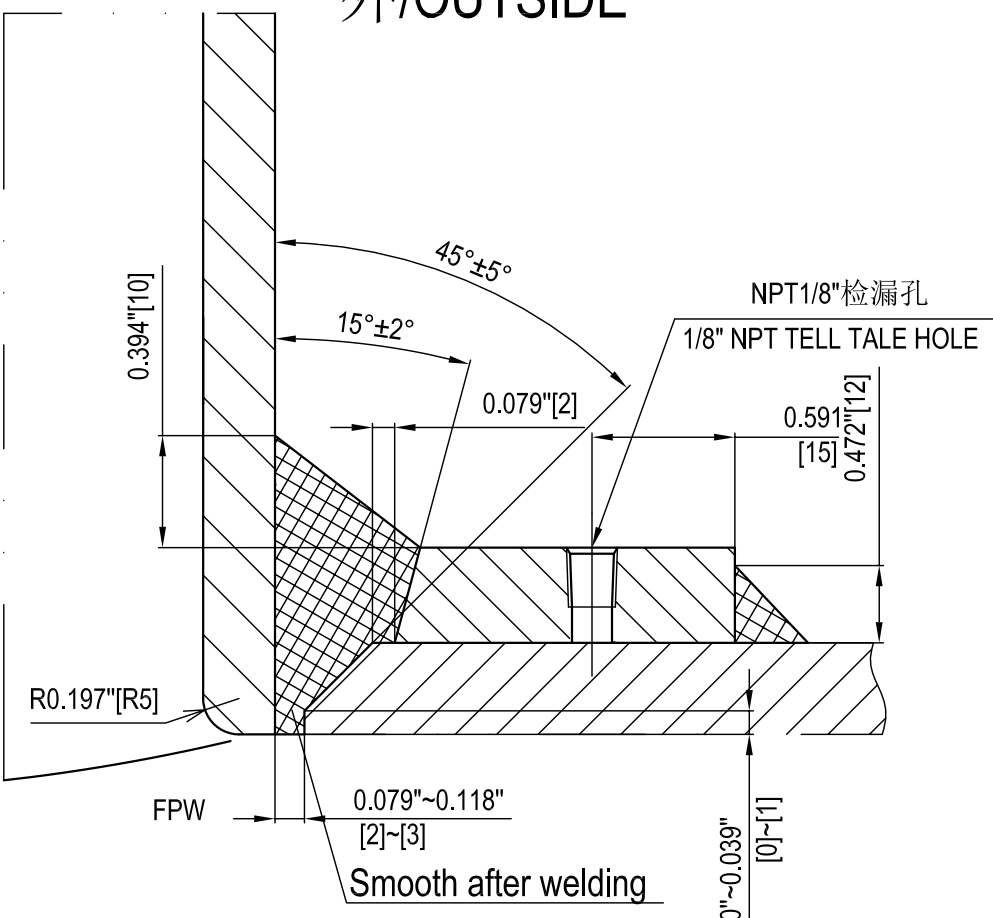
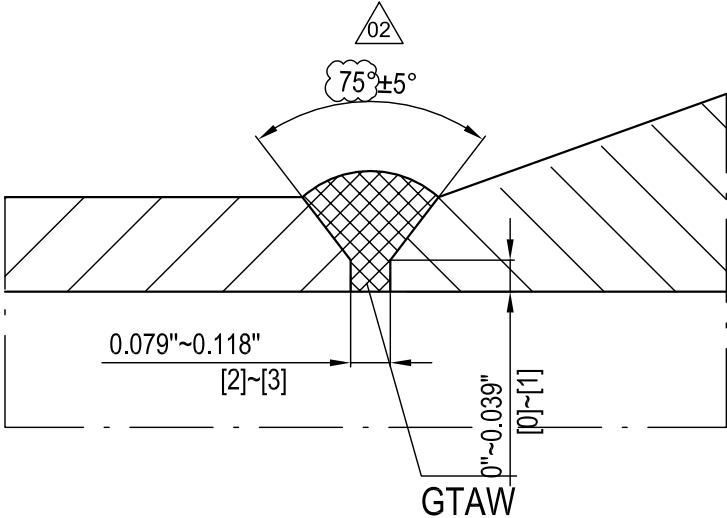
管口S1,Aux-1详图
DETAIL OF NOZZLE S1,Aux-1



管口S2,Aux-2详图
DETAIL OF NOZZLE S2,Aux-2



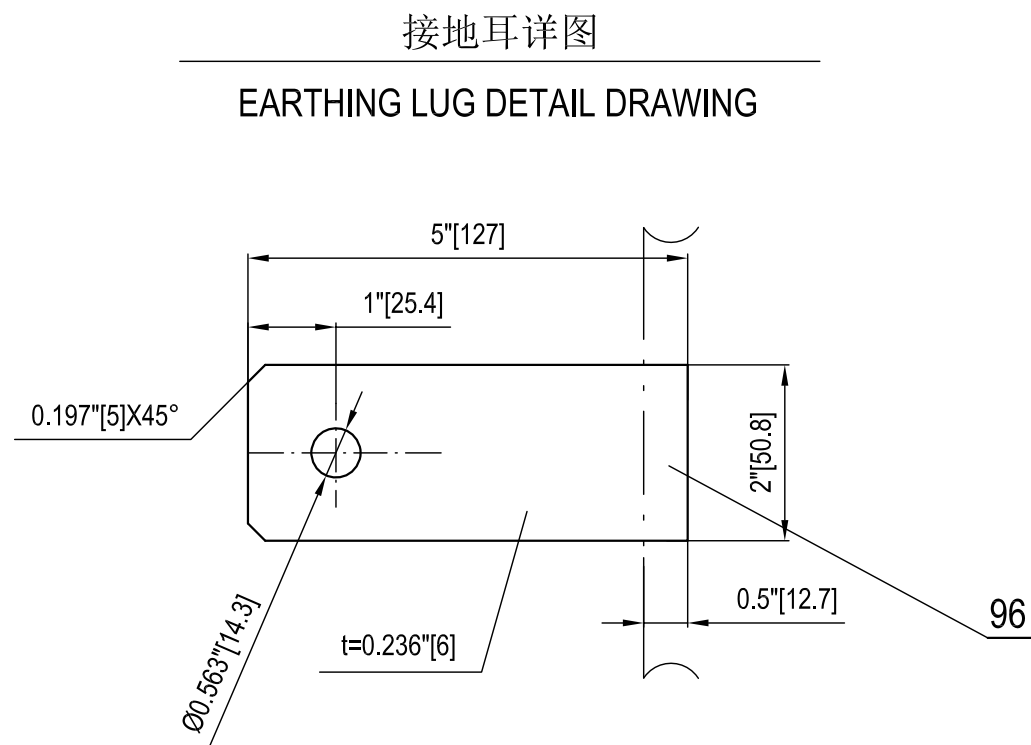
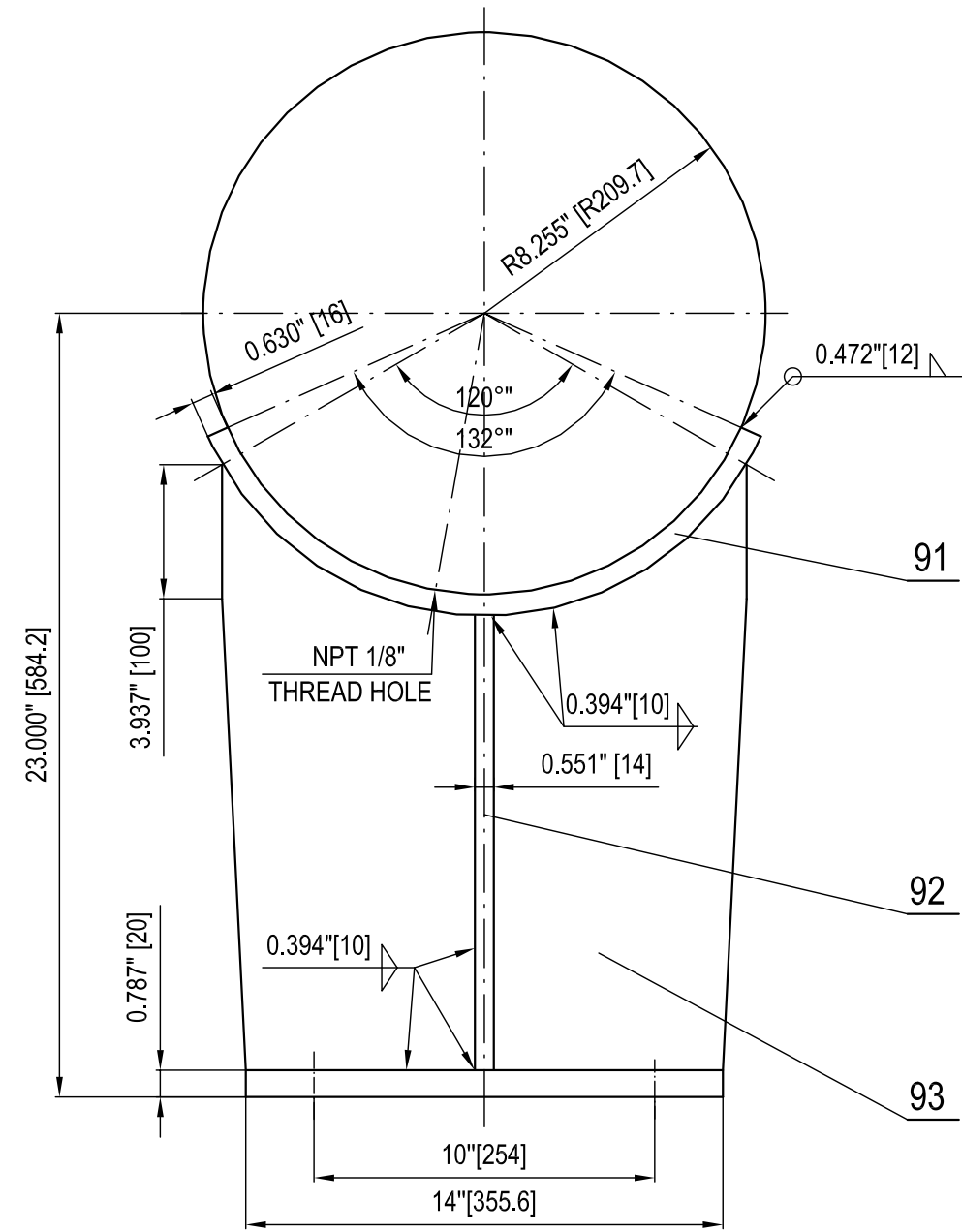
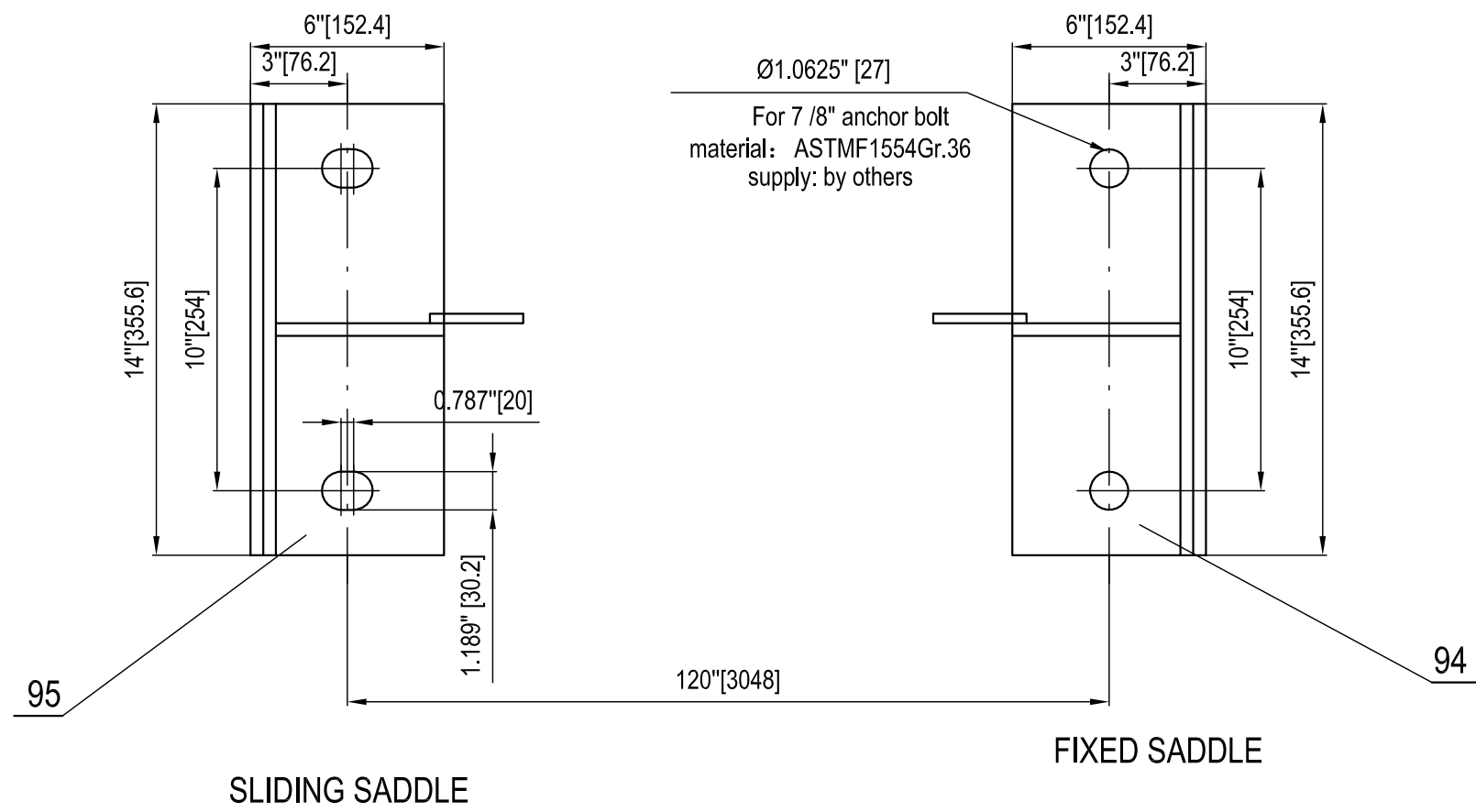
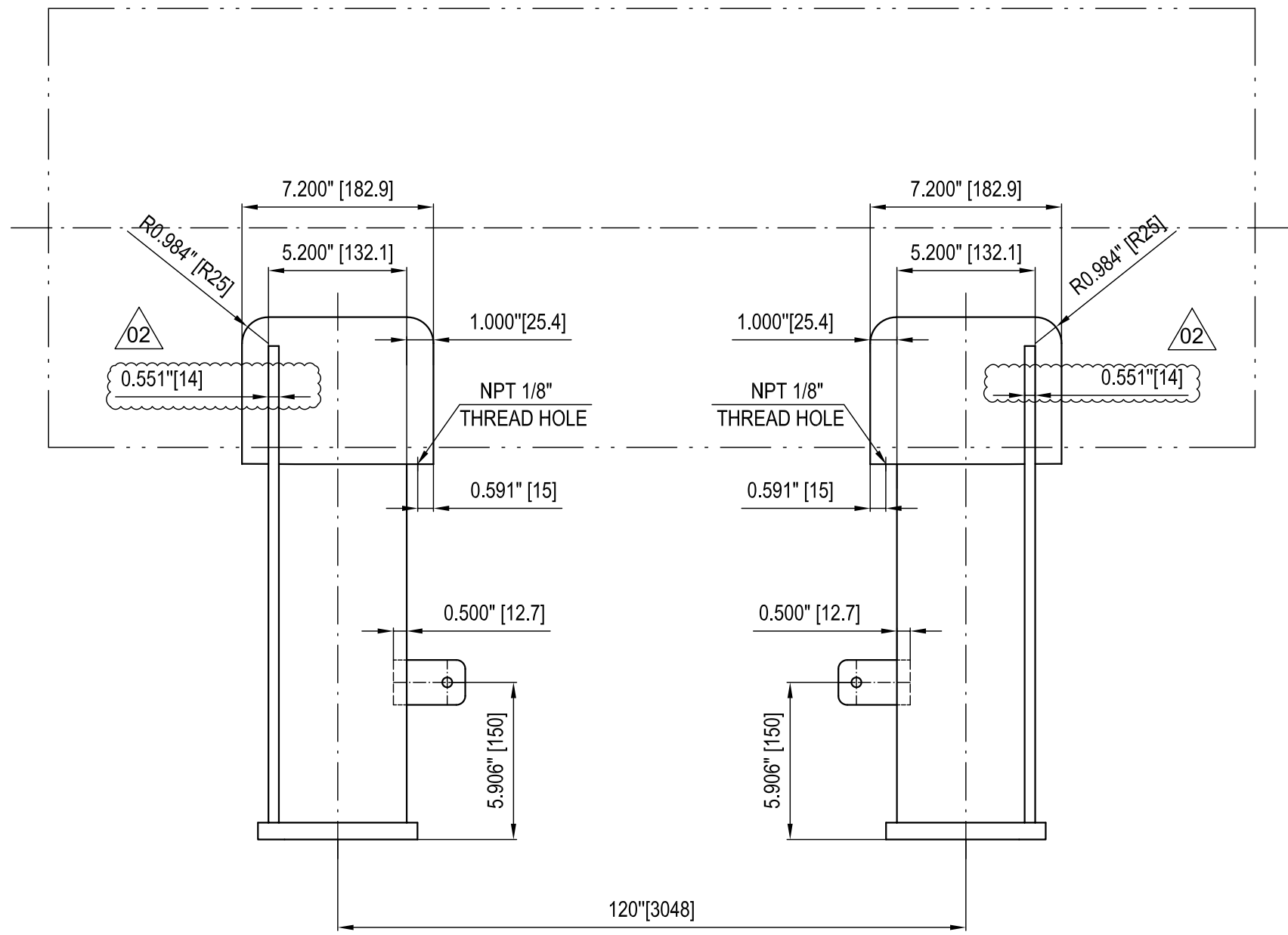
注/Note:
1.缠绕垫材料:金属带为SS316L;填充带为柔性石墨;外环为SS316L;内环为SS316L.
SPIRAL WOUND GRAPHITE FILLER SS316L WINDINGS, WITH SS316L INNER RING AND SS316L CENTRING RING

W1	不带补强圈的接管与壳体焊接详图 NO REINFORCED NOZZLE TO SHELL	W2	带补强圈接管与壳体连接 REINFORCED NOZZLE TO SHELL	W3	对接焊缝连接 BUTTED WELDING SEAM
外/OUTSIDE 		外/OUTSIDE 			

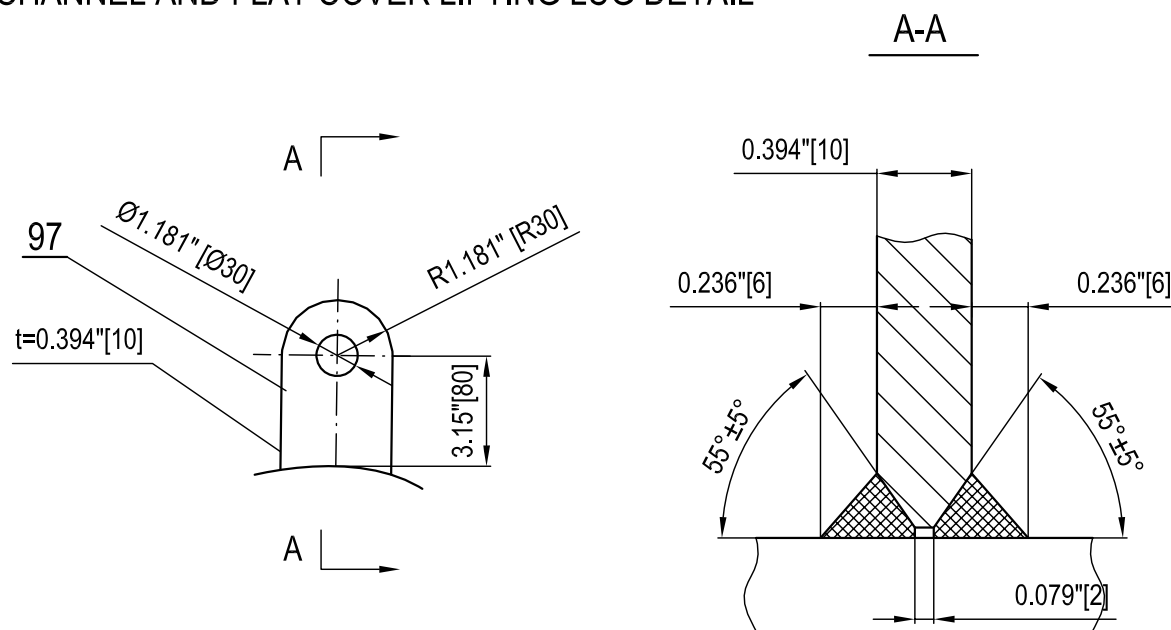
77	ASME PCC 1-2019 APPENDIX M	垫圈 5/8" WASHER	64+8	TYP 4	0.08	3.2	Aux 1,Aux2,V,D
76	ASME B16.20-2017	缠绕垫 2"-300# RF SPIRAL WOUND GASKET	4+8	见注1 SEE NOTE 1	/	/	Aux 1,Aux2,V,D
75	ASME B18.2.2-2022	重型六角螺母 5/8"-11UNC-2B HEAVY HEX NUT	128+16	SA-194 Gr.2H	0.1	6.4	Aux 1,Aux2,V,D
74	ASME B18.2.1-2012 (R2021)	全螺纹螺栓 5/8"-11UNC-2A L=150 FULL THREAD STUD BOLT	32+4	SA-193 Gr.B7	0.2	3.2	Aux 1,Aux2,V,D
73	ASME B16.5-2017	法兰盖 BL 2"-300# RF BLIND FLANGE	4	SA-105N	3.2	6.4	Aux 1,Aux2,V,D
72	ASME B16.5-2017	法兰 LWN 2"-300# RF B=50.8 FLANGE	1	SA-105N		8.4	Aux 2
71		补强圈 t=16 REINFORCING PAD	1	SA-516 Gr.70N		7.5	S2
70	ASME B16.5-2017	法兰 WN 4"-600# RF Sch160 FLANGE	1	SA-105N		49.03	S2
69		接管 Ø114.3×13.49 PIPE	1	SA-266 Gr.2N		17	S2
68	ASME B16.5-2017	法兰 LWN 2"-300# RF B=50.8 FLANGE	1	SA-105N		8.4	Aux 1
67		补强圈 t=16 REINFORCING PAD	1	SA-516 Gr.70N		7.5	S1
66	ASME B16.5-2017	法兰 WN 4"-600# RF Sch160 FLANGE	1	SA-105N		49.03	S1
65		接管 Ø114.3×13.49 PIPE	1	SA-266 Gr.2N		17	S1
64	ASME B16.5-2017	法兰 LWN 2"-300# RF B=50.8 FLANGE	1	SA-105N		8.4	D
63	ASME B16.5-2017	法兰 LWN 3"-600# RF B=76.2 FLANGE	1	SA-105N		9.08	T1
62	ASME B16.5-2017	法兰 LWN 3"-600# RF B=76.2 FLANGE	1	SA-105N		9.08	T2
61	ASME B16.5-2017	法兰 LWN 2"-300# RF B=50.8 FLANGE	1	SA-105N		8.4	V
件 号 PART NO.	图号或标准号 DWG.NO.OR STD.NO.	名 称 DESIGNATION	数量 QTY.	材 料 MATERIAL	单 重 EACH WEIGHT	总 重 TOTAL WEIGHT	备 注 REMARKS

Air Products Project Number	EN207123	Fluor Project Number	A8KM			
Project Name	World Energy Renew Utilities US7L	RFQ No.	A8KM-4-414			
Purchase Order Number	SM00001099	PO/Contract No	A8KM-4-414-PO			
Air Products Open Text document number	EN207123-WUXI-9V3-00173	Project Area	Utilities			
Client	WORLD ENERGY PARAMOUNT	Client Doc No:				
02	供批准/ ISSUED FOR APPROVAL	Hu Wenchao	Shengfang Zhao	Kevin Yang	17-Feb-23	
01	供批准/ ISSUED FOR APPROVAL	Hu Wenchao	Shengfang Zhao	Kevin Yang	14-Jan-23	
00	供批准/ ISSUED FOR APPROVAL	Hu Wenchao	Shengfang Zhao	Kevin Yang	3-Nov-22	
版次 REV.	版次说明/DESCRIPTION	设计/PREPARED	审核/REVIEWED	批准/APPROVED	日期/DATE	

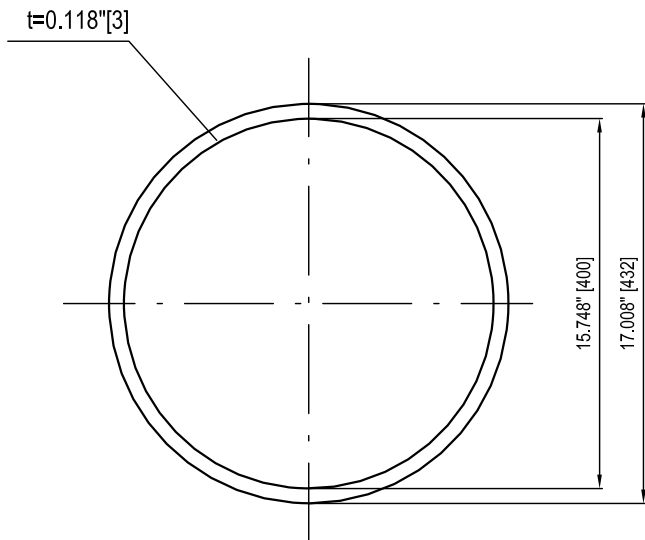
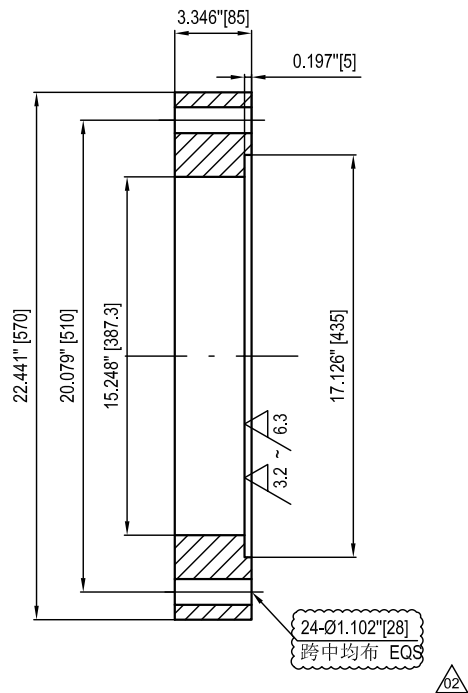
				无锡化工装备股份有限公司 WUXI CHEMICAL EQUIPMENT CO., LTD.		设计项目 DESIGN ITEM	World Energy Renewables Project
						设计阶段 DESIGN PHASE	详细设计 Detail Design
设 计 PREPARED				HGU CONDENSATE TRIM COOLER NOZZLE DETAIL DRAWING		设备位号 ITEM NO.	18-X-1816
审 核 REVIEWED						图 号 DWG. NO.	WXCE7069-03
批 准 APPROVED				比 例: SCALE	1:6	版 次: REV.	02
				第 1 页 共 1 页 PAGE 1 OF 1			



管箱及平盖吊耳详图
CHANNEL AND FLAT COVER LIFTING LUG DETAIL



97		管箱及平盖吊耳吊耳 CHANNEL AND FLAT COVER LIFTING LUG	3	SA-516 Gr.70N	1.0	3.0	
96		接地耳 t=6 EARTHING LUG	2	SA-240 304	0.3	0.6	
95		底板 t=20 BASE PLATE	1	SA-516 Gr.70N		9.1	
94		底板 t=20 BASE PLATE	1	SA-516 Gr.70N		9.1	
93		腹板 t=14 WEB PLATE	2	SA-516 Gr.70N	11.8	23.6	
92		筋板 t=14 RIB RLATE	2	SA-516 Gr.70N	6.5	13	
91		垫板 t=16 WEAR PLATE	2	SA-516 Gr.70N	16.5	33.0	
件 号 PART NO.	图号或标准号 DWG.NO.OR STD.NO.	名 称 DESIGNATION	数量 QTY.	材 料 MATERIAL	单 重 EACH WEIGHT	总 重 TOTAL WEIGHT	备 注 REMARKS
AIR PRODUCTS				FLUOR			
Air Products Project Number		EN207123	Fluor Project Number		A8KM		
Project Name		World Energy Renew Utilities US7L	RFQ No.		A8KM-4-414		
Purchase Order Number		SM00001099	PO/Contract No		A8KM-4-414-PO		
Air Products Open Text document number		EN207123-WUXI-9V3-00173	Project Area		Utilities		
Client		WORLD ENERGY PARAMOUNT	Client Doc No:				
02	供批准/ISSUED FOR APPROVAL		Hu Wenchao	Shengfang Zhao	Kevin Yang	17-Feb-23	
01	供批准/ISSUED FOR APPROVAL		Hu Wenchao	Shengfang Zhao	Kevin Yang	14-Jan-23	
00	供批准/ISSUED FOR APPROVAL		Hu Wenchao	Shengfang Zhao	Kevin Yang	3-Nov-22	
版次 REV.	版次说明/DESCRIPTION		设计/PREPARED	审核/REVIEWED	批准/APPROVED	日期/DATE	
WCE 无锡化工装备股份有限公司 WUXI CHEMICAL EQUIPMENT CO., LTD.					设计项目 DESIGN ITEM	World Energy Renewables Project	
					设计阶段 DESIGN PHASE	详细设计 Detail Design	
设 计 PREPARED			HGU CONDENSATE TRIM COOLER		设备位号 ITEM NO.	18-X-1816	
审 核 REVIEWED			SADDLE AND LIFTING LUG DETAIL DRAWING		图 号 DWG. NO.	WXCE7069-04	
批 准 APPROVED			比 例: SCALE	1:6	版 次: REV.	02	第 1 页 共 1 页 PAGE 1 OF 1



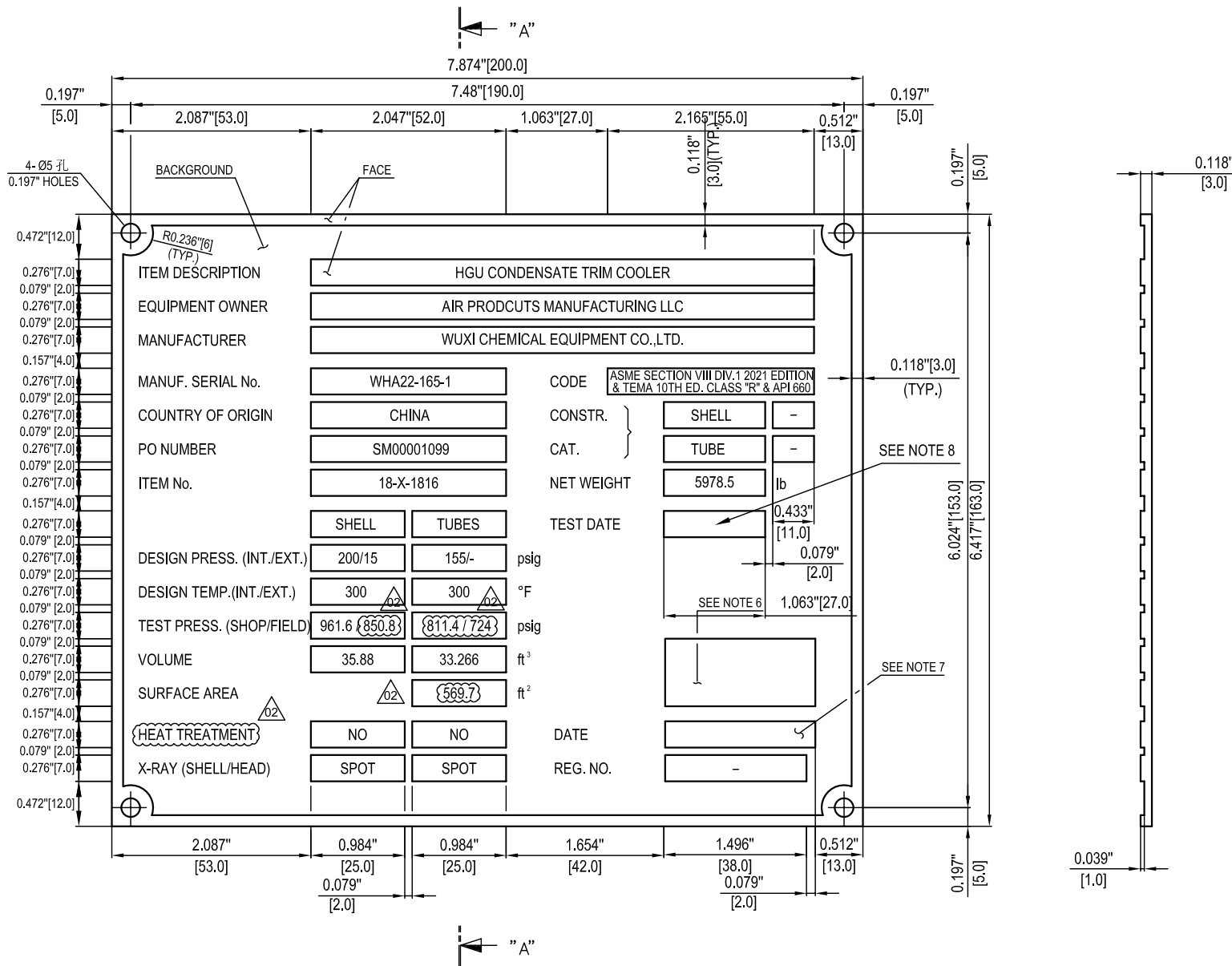
112		试压垫片 TEST GASKET	1	PTFE		/	
111		试压法兰 TEST RING	1	SA-266 Gr.2N		79.8	
件 号 PART NO.	图号或标准号 DWG.NO.OR STD.NO.	名 称 DESIGNATION	数量 QTY.	材 料 MATERIAL	单 重 EACH WEIGHT	总 重 TOTAL (kg)	备 注 REMARKS

						
Air Products Project Number		EN207123	Fluor Project Number		A8KM	
Project Name		World Energy Renew Utilities US7L	RFQ No.		A8KM-4-414	
Purchase Order Number		SM00001099	PO/Contract No		A8KM-4-414-PO	
Air Products Open Text document number		EN207123-WUXI-9V3-00173	Project Area		Utilities	
Client		WORLD ENERGY PARAMOUNT	Client Doc No:			
02	供批准/ ISSUED FOR APPROVAL		Hu Wenchao	Shengfang Zhao	Kevin Yang	17-Feb-23
01	供批准/ ISSUED FOR APPROVAL		Hu Wenchao	Shengfang Zhao	Kevin Yang	14-Jan-23
00	供批准/ ISSUED FOR APPROVAL		Hu Wenchao	Shengfang Zhao	Kevin Yang	3-Nov-22
版次 REV.		版次说明/DESCRIPTION	设计/PREPARED 审核/REVIEWED		批准/APPROVED	日期/DATE

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无锡化工装备股份有限公司 WUXI CHEMICAL EQUIPMENT CO., LTD.				设计项目 DESIGN ITEM	World Energy Renewables Project
				设计阶段 DESIGN PHASE	详细设计 Detail Design
设 计 PREPARED			HGU CONDENSATE TRIM COOLER TEST RING DETAIL DRAWING	设备位号 ITEM NO.	18-X-1816
审 核 REVIEWED				图 号 DWG. NO.	WXCE7069-06
批 准 APPROVED			比 例: SCALE 1:4	版 次: REV. 02	第 1 页 共 1 页 PAGE 1 OF 1

标准铭牌详图
DETAIL OF STANDARD NAME PLATE

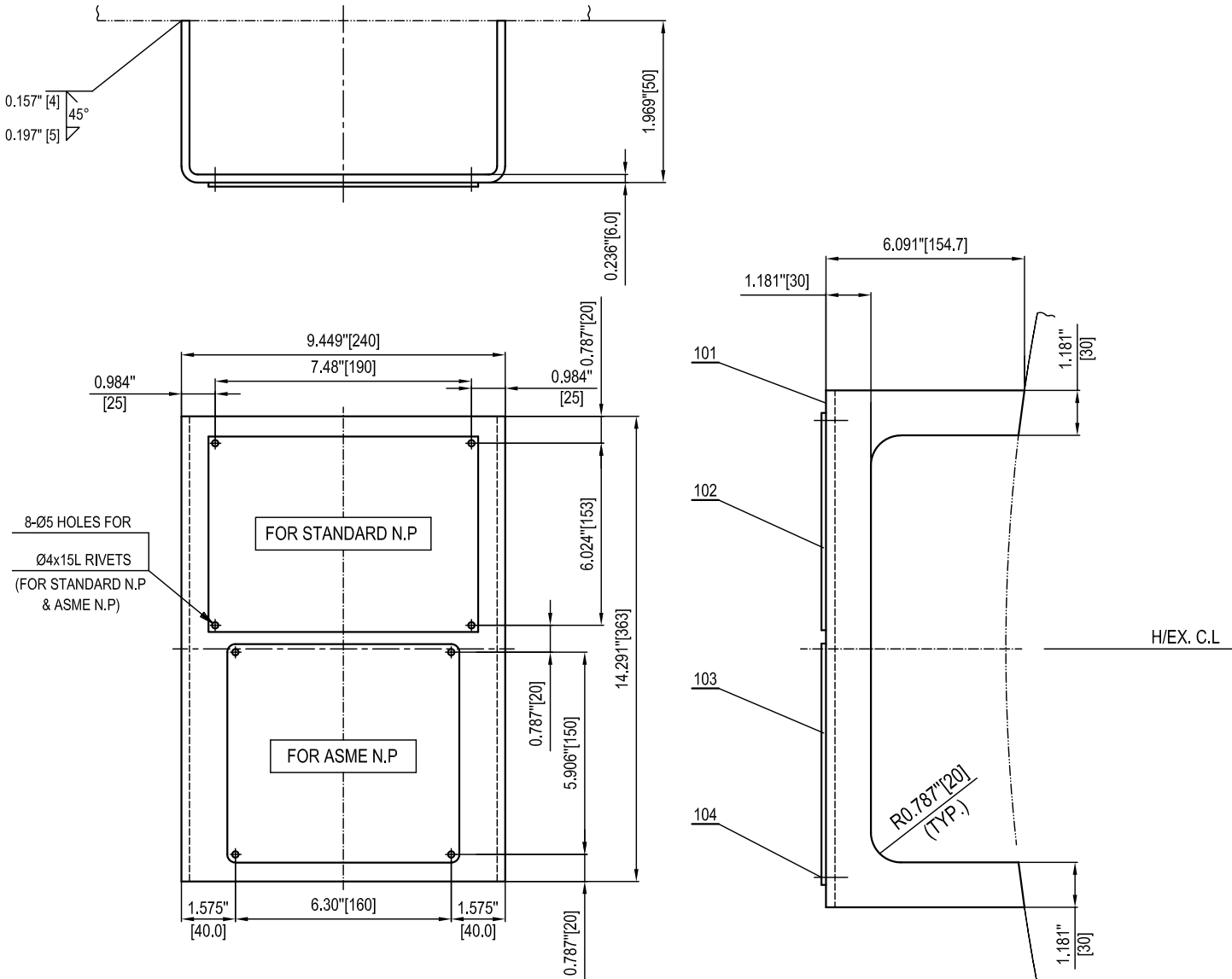
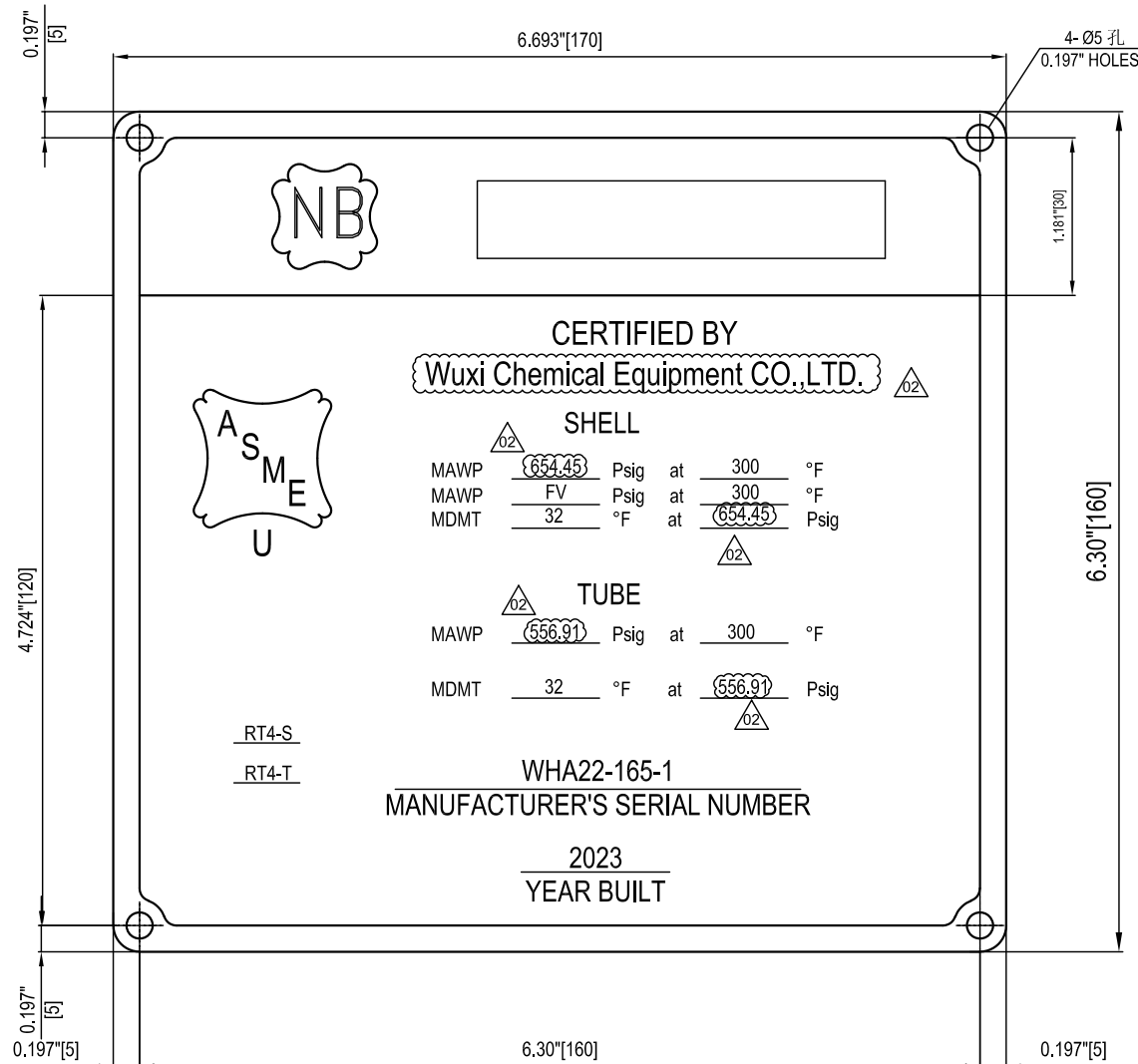


- 注:
- 除注明外, 所有尺寸均以英制为准, 括号外为英制尺寸, 括号内为米制尺寸。
 - 完成后: 铭牌表面抛光处理包括采用铸印字, 背影凸起, 并涂上黑色油漆。
 - 日期: 抛光表面要插入的日期 (英文)。标志可用蚀刻或模压方法标在铭牌上, 标志字符高度不小于0.157" [4mm], 字符深度不少于0.004" [0.1mm]。
 - 铭牌位置见设备装配图。
 - 水压试验后由AI和质量控制检验员一起进行钢印。
- *1: *2:
- 批准钢印空间。
 - 批准日期。 (示例: 2019年3月1日)
 - 试验日期指压力试验日期。
 - REG. NO.: 注册号。

- NOTES
- ALL DIMENSIONS SHALL BE IN US CUSTOMARY UNIT AS PRIMARY UNIT AND METRIC UNIT SHOWN IN BRACKET, UNLESS OTHERWISE SPECIFIED.
 - FINISH : "FACE" MACHINED AND POLISHED INCLUDING CAST LETTERING. BACKGROUND KNURLED AND PAINTED BLACK.
 - DATE : DATE ON POLISHED SURFACE IS TO BE INSERTED (IN THE ENGLISH LANGUAGE) BY MEANS OF ENGRAVING OR HARD STAMPING AND MUST BE CLEARLY LEGIBLE. THE HEIGHT OF THE LETTERING SHOULD BE APPROX. 0.157" [4mm]. THE DEPTH OF THE LETTERING SHOULD BE APPROX. 0.004" [0.1mm].
 - FOR NAME PLATE LOCATION, SEE ASSY DWG. OF EQUIPMENT
 - STAMPING SHALL BE MADE BY Q.C INSPECTOR AFTER HYDROSTATIC TEST WITH CONCURRENCE OF A.I
- *1: *2:
- SPACE FOR AUTHORITY APPROVAL STAMP.
 - DATE OF AUTHORITY APPROVAL, (EXAMPLE : 01 MAR 2019)
 - TEST DATE MEANS DATE OF PRESSURE TEST.
 - REG. NO.: REGISTRATION NUMBER.
 - LETTERS AND FIGURES ON ASME NAME PLATES SHALL NOT BE LESS THAN 0.157" (4 MM) HIGH.

SECTION "A"-"A"

ASME铭牌详图
DETAIL OF ASME NAME PLATE



104		铆钉 Ø4X14 RIVET	8	SS304		/	
103		ASME铭牌 t=3 ASME NAMEPLATE	1	SS304		0.4	
102		标准铭牌 t=3 STANDARD NAMEPLATE	1	SS304		0.7	
101		支架 t=6 BRACKET	1	SA-516 Gr.70N		3.9	

件号 PART NO.		图号或标准号 DWG. OR STD. NO.	名 称 DESCRIPTION	数量 QTY.	材 料 MATERIAL	单件EACH 重量 WT. (kg)	总计SUM	备 注 REMARK
								
Air Products Project Number			EN207123	Fluor Project Number		A8KM		
Project Name			World Energy Renew Utilities US7L	RFQ No.		A8KM-4-414		
Purchase Order Number			SM00001099	PO/Contract No		A8KM-4-414-PO		
Air Products Open Text document number			EN207123-WUXI-9V3-00173	Project Area		Utilities		
Client			WORLD ENERGY PARAMOUNT		Client Doc No:			
02	供批准/ ISSUED FOR APPROVAL		WenChao Hu	Shengfang Zhao	Kevin Yang	17-Feb-23		
01	供批准/ ISSUED FOR APPROVAL		WenChao Hu	Shengfang Zhao	Kevin Yang	14-Jan-23		
00	供批准/ ISSUED FOR APPROVAL		WenChao Hu	Shengfang Zhao	Kevin Yang	3-Nov-22		
版次 REV	版次说明/DESCRIPTION		设计/PREPARED	审核/REVIEWED	批准/APPROVED		日期/DATE	

		无锡化工装备股份有限公司 WUXI CHEMICAL EQUIPMENT CO., LTD.		设计项目 DESIGN ITEM	World Energy Renewables Project
设计 PREPARED		HGU CONDENSATE TRIM COOLER		设计阶段 DESIGN PHASE	详细设计 Detail Design
审核 REVIEWED		NAMEPLATE DETAIL DRAWING		设备位号 ITEM NO.	18-X-1816
批准 APPROVED		比例: 1:6 SCALE		图号 DWG. NO.	WXCE7069-05
		版次: 02 REV.		第 1 页 共 1 页 PAGE 1 OF 1	