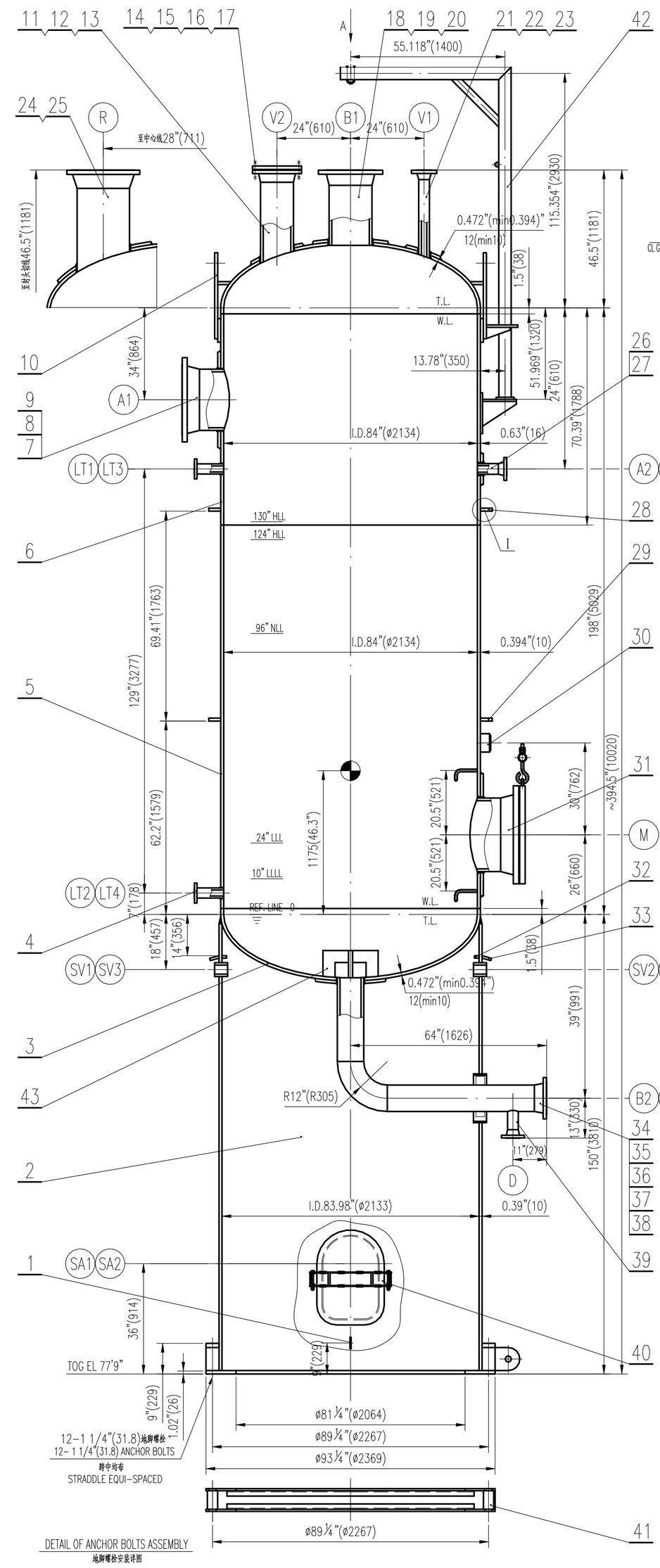
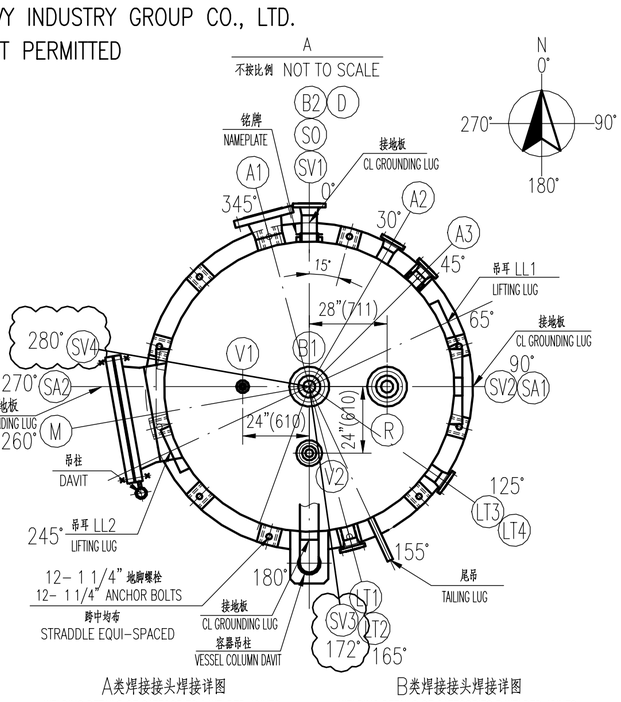
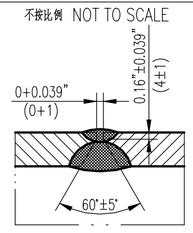
THE DRAWINGS AND DOCUMENTS ARE THE PROPERTY OF JIANGLIAN HEAVY INDUSTRY GROUP CO., LTD.
UNAUTHORIZED DISCLOSURE TO ANY THIRD PART OR DUPLICATION IS NOT PERMITTED

DWG. NO. A2113-R-0

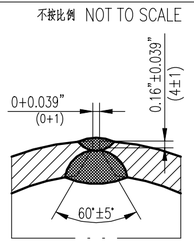




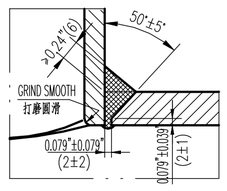
A类焊接接头焊接详图
WELDING DETAILS OF CATEGORIES A WELDED JOINTS
不按比例 NOT TO SCALE



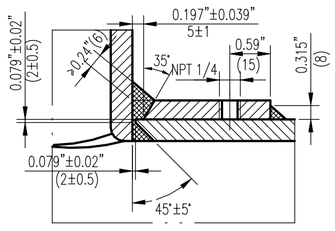
B类焊接接头焊接详图
WELDING DETAILS OF CATEGORIES B WELDED JOINTS
不按比例 NOT TO SCALE



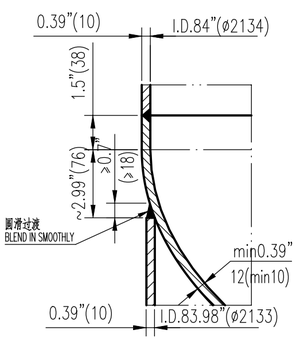
接管与壳体焊接详图
WELDING DETAILS OF PIPE-TO-SHELL
不按比例 NOT TO SCALE



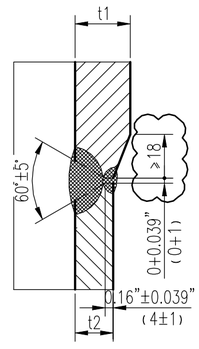
带补强圈接管与壳体焊接详图
WELDING DETAILS OF NOZZLE WITH REINFORCEMENT PAD TO SHELL
不按比例 NOT TO SCALE



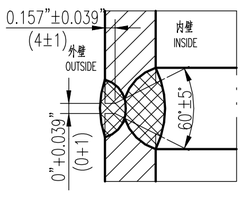
裙座与封头焊接详图
WELDING DETAILS OF SKIRT-TO-HEAD
不按比例 NOT TO SCALE



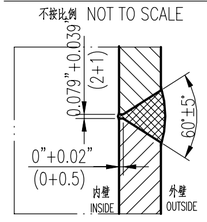
不等壁厚筒体焊接详图
WELDING DETAILS OF DIFFERENT THICKNESS SHELL
不按比例 NOT TO SCALE



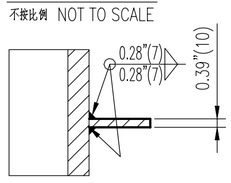
法兰与接管,接管与接管(NPS>12)焊接详图
WELDING DETAILS OF FLANGE-TO-PIPE, PIPE TO PIPE(NPS>12)
不按比例 NOT TO SCALE



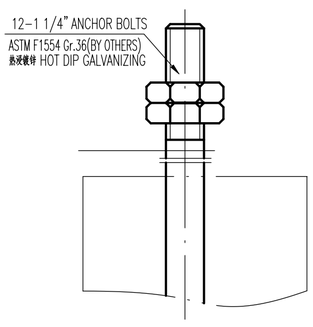
法兰与接管,接管与接管(NPS≤12)焊接详图
WELDING DETAILS OF FLANGE-TO-PIPE, PIPE TO PIPE(NPS≤12)
不按比例 NOT TO SCALE



I
不按比例 NOT TO SCALE



Project Name	WORLD ENERGY RENEWABLES PROJECT, PARAMOUNT, CALIFORNIA
PROJECT NUMBER OF FLUOR	A8KM
PROJECT NUMBER OF AP	EN-20-7123
OPEN TEXT DOCUMENT NUMBER	
PO No.	4505470106
Tag No.	18-D-1802
VDR CODE	HC09



FOUNDATION LOADS (AT BASE)(ASD CASE)				
CONDITION	WIND		SEISMIC	
	FORCE (lb)	MOMENT (ft.lb)	FORCE (lb)	MOMENT (ft.lb)
EMPTY	7669	122091	10108	212016
OPERATING	7669	122091	19190	372053
HYDROTEST	3586	56641	--	--

NOTE: ALTHOUGH FLANGE RATIING FOR FOLLOWING NOZZLES A2、A3、B2、D、V1 HAVE BEEN UPDATED TO 300# THE NOZZLE LOADS USED FOR THE NOZZLES ARE IN LINE WITH 150# OF SPECIFICATION NO.A8KM-PP-000-50801-A.

NOTE:
$FL' = \sqrt{(FL^2 + FC^2)}$
$ML' = \sqrt{(ML^2 + MC^2)}$

管口载荷表
LOADS TABLE FOR NOZZLE

管口 NOZZLE	DN NPS	FR (LBf)	FC (LBf)	FL (LBf)	FL' (LBf)	ML' (FT-LBf)	MC (FT-LBf)	ML (FT-LBf)	MT (FT-LBf)
A1	NPS 20	5400	4000	5400	--	--	18000	23000	27000
A2, A3,D	NPS 3	810	610	810	--	--	400	520	600
B1,R	NPS 14	3800	2800	3800	4720	14025	8700	11000	13000
B2	NPS 8	2200	1600	2200	2720	4640	2800	3700	4200
V1	NPS 3	810	610	810	1014	656	400	520	600
V2	NPS 10	2700	2000	2700	3360	7280	4400	5800	6600
LT1~LT2, LT3~LT4	NPS 2	630	470	630	--	--	210	270	310

件号 SERIAL NO.	图号或标准号 DWG. NO. OR STD.	名称 DESCRIPTION	数量 QTY.	材料 MATERIAL		单重 SINGLE WEIGHT (kg)	总重 TOTAL WEIGHT (kg)	备注 REMARK
43	A2113-R-17	防涡流挡板 VORTEX BREAKER	1	组合件 ASSEMBLY PARTS		9.7		
42	A2113-R-16-0	容器吊柱 VESSEL COLUMN DAVIT	1	组合件 ASSEMBLY PARTS		486		
41	A2113-R-15	基础模板 TEMPLATE	1	组合件 ASSEMBLY PARTS		248		
40	A2113-R-14	裙座通道孔盖 COVER OF THE SKIRT ACCESS	2	组合件 ASSEMBLY PARTS	36	72		
39		接管 NPS 3 Sch160 L=137 PIPE	1	SA-106 Gr.B		2.92		
38	ASME B16.5-2013	法兰 NPS 8-CL300 WN/RF Sch80 FLANGE	1	SA-105(正火) SA-105 (NORMALIZED)		31.33		
37		接管 NPS 8 Sch80L=1209 PIPE	1	SA-106 Gr.B		78.2		
36	ASME B16.9-2018	无缝90°长半径弯头 NPS 8-Sch80 SEAMLESS 90° LONG RADIUS ELBOW	1	SA-234 Gr.WPB		30.9		
35	A2113-R-13	补强圈 8" REINFORCING PAD	1	SA-516 Gr.70		7.95		
34		接管 NPS 8 Sch80 L=155 PIPE	1	SA-106 Gr.B		10.1		
33	A2113-R-12	环板 δ=8 CONTINUOUS RING	1	SA-516 Gr.70		34.8		
32		环板 ø2130/ø2054 δ=8 CONTINUOUS RING	1	SA-516 Gr.70		15.7		
31	A2113-R-11	人孔 MANWAY	1	组合件 ASSEMBLY PARTS		465		
30	A2113-R-MP	铭牌 NAMEPLATE	1	组合件 ASSEMBLY PARTS		2.8		
29		环板 ø2357/ø2157×10 STIFFENING RING	1	SA-516 Gr.70		55.6		
28		环板 ø2369/ø2169×10 STIFFENING RING	1	SA-516 Gr.70		55.8		
27	A2113-R-10	补强圈 3" REINFORCING PAD	2	SA-516 Gr.70	1.8	3.6		
26		接管 NPS3 Sch160 L=149 PIPE	2	SA-106 Gr.B	3.2	6.4		
25	A2113-R-9	补强圈 14" REINFORCING PAD	1	SA-516 Gr.70		20.0		
24		接管 NPS14 Sch60 L=759 PIPE	1	SA-106 Gr.B		96.2		
23	A2113-R-8	补强圈 3" REINFORCING PAD	1	SA-516 Gr.70		1.8		
22		接管 NPS3 Sch160 L=680 PIPE	1	SA-106 Gr. B		14.5		
21	ASME B16.5-2013	法兰 NPS 3 -CL300 WN/RF Sch160 FLANGE	4	SA-105(正火) SA-105 (NORMALIZED)	8.17	32.7		
20	A2113-R-7	补强圈 14" REINFORCING PAD	1	SA-516 Gr.70		18.9		
19		接管 NPS14 Sch60 L=528 PIPE	1	SA-106 Gr.B		66.9		
18	ASME B16.5-2013	法兰 NPS 14 -CL150 WN/RF Sch60 FLANGE	2	SA-105(正火) SA-105 (NORMALIZED)	51.76	103.5		
17	ASME B16.20-2017	缠绕垫 10-150-316/F.G. SPIRAL-WOUND GASKET	1+2	组合件 ASSEMBLY PARTS				带内外环，材质为316 WITH INNER & OUTER RING, MATERIAL IS 316
16	ASME B18.2.2-2015	螺母(重型系列) 7/8"-UNC-2B SCREW NUT(HEAVY SERIES)	24+4	SA-194 Gr.2H	0.177	4.956		
15	ASME B18.2.1-2012	全螺纹螺柱 7/8"-UNC-2A-115L FULLY THREADED STUD	12+2	SA-193 Gr.B7	0.414	5.796		
14	ASME B16.5-2013	法兰盖 NPS 10 -CL150 BL/RF BLIND FLANGE	1	SA-105(正火) SA-105 (NORMALIZED)		30.4		
13	A2113-R-6	补强圈 10" REINFORCING PAD	1	SA-516 Gr.70		11.4		
12		接管 NPS10 Sch80 L=698 PIPE	1	SA-106 Gr. B		67.0		
11	ASME B16.5-2013	法兰 NPS 10 -CL150 WN/RF Sch80 FLANGE	1	SA-105(正火) SA-105 (NORMALIZED)		24.5		
10	A2113-R-5-0	吊耳 LIFTING LUG	2	组合件 ASSEMBLY PARTS	102	204		
9	A2113-R-4	补强圈 20" REINFORCING PAD	1	SA-516 Gr.70		43.1		
8		接管 ø508x16 L=216 PIPE	1	SA-516 Gr.70(热轧) SA-516 Gr. 70 (HOT ROLLED)		41.8		
7	ASME B16.5-2013	法兰 NPS 20-CL150 WN/RF B=476 FLANGE	1	SA-105(正火) SA-105 (NORMALIZED)		89.44		
6		筒体 I.D. 2134x16 L=1750 CYLINDRICAL SHELL I.D.84"X0.63" L=68.90"	1	SA-516 Gr.70(热轧) SA-516 Gr.70 ((HOT ROLLED)		1485		
5		筒体 I.D. 2134x10 L=3203 CYLINDRICAL SHELL I.D.84"X0.39" L=126.10"	1	SA-516 Gr.70(热轧) SA-516 Gr.70 ((HOT ROLLED)		1694		
4	ASME B16.5-2013	法兰 NPS 2-CL300 LWN/RF FLANGE	4	SA-105(正火) SA-105 (NORMALIZED)	10.8	43.2		法兰高度Y=229mm FLANGE HEIGHT
3	A2113-R-3	2:1椭圆形封头 I.D. 2134x12(10.0) 2:1 ELLIPSOIDAL HEAD	2	SA-516 Gr.70(热轧) SA-516 Gr. 70 (HOT ROLLED)	480	960		h=38mm
2	A2113-R-2	裙座 SKIRT	1	组合件 ASSEMBLY PARTS		2324		
1	A2113-R-1	接地板 GROUNDING LUG	4	S30408		0.6	2.4	

设计、制造与检验主要数据表
MAIN DATA SHEET OF DESIGN, FABRICATION, INSPECTION

设计参数 DESIGN DATA		设计、制造与检验规范及标准 DESIGN, FABRICATION, INSPECTION CODES AND STANDARDS
ASME认证标记 ASME CERTIFICATION MARK	U标识符 U DESIGNATOR	• ASME规范第Ⅷ卷第一分册2019版 ASME CODE SECTION VIII, DIVISION 1, 2019 EDITION
NB注册 NATIONAL BOARD REGISTRATION	需要 REQUIRED	
设计使用年限 年 DESIGN SERVICE LIFE YEAR	20	制造与检验要求 FABRICATION AND INSPECTION REQUIREMENTS
工作压力 OPERATING PRESSURE psig(MPag)	3(0.021)	壳体用钢板超声检测要求 THE REQUIREMENTS OF UT FOR THE STEEL PLATES USED FOR SHELLS: --
设计压力 DESIGN PRESSURE psig(MPag)	50(0.35) AT 500°F(260°C) -15(-0.103) AT 350°F(176.7°C)	无损检测 N.D.T.: 焊接接头类别 CATEGORY OF WELDED JOINT: A B C; 检测方法及比例 METHOD AND PERCENTAGE: 局部射线检测 SPOT RT(RT-4); 检测标准 EXAMINATION STANDARD: ASME CODE SEC. V; 验收准则 ACCEPTANCE CRITERIA: UW-52 OF ASME CODE SEC. VIII, DIV. 1
最高允许工作压力(控制部件) MAWP (GOVERNING PART) psig(MPag)	97.9(0.675) AT 500°F(260°C) LIMITED BY:SHELL	
最高允许压力(控制部件) MAP (GOVERNING PART) psig(MPag)	153(1.055)AT 500°F(260°C) LIMITED BY: SHELL	
最高允许外压 MAWP(EXTERNAL) psig(MPag)	15(0.103)AT 350°F(176.7°C)	试验 TEST: 车间水压试验压力(UG-99(C)) PRESSURE OF SHOP HYDROSTATIC TEST: 195.8psig (H) at 62~118.4°F (洁净水) 1.35MPag(表) at 17~48°C (CLEAN WATER)
工作温度 OPERATING TEMPERATURE °F(°C)	222(105.6)	现场水压试验压力(UG-99(b)) PRESSURE OF FIELD HYDROSTATIC TEST IN CORRODED CONDITION: 127.2psig (V) at 62~118.4°F (洁净水) 0.88MPag(±) at 17~48°C (CLEAN WATER)
设计温度 DESIGN TEMPERATURE °F(°C)	32(0)/500(260)	气密性试验压力 PRESSURE OF GAS TIGHTNESS TEST
最低设计金属温度 MIN. DESIGN METAL TEMPERATURE °F(°C)	32(0) at 97.9psig(0.675MPag)	冲击试验要求 IMPACT TEST: ASME规范第Ⅷ卷1-2019版, UG-20(f), UCS-66(a)(1)(-20°F(-29°C)) and UCS-66 (General Note) (-20°F (-29°C) FOR P-NO.1 GROUP NO.1 MATERIALS), UCS-66(b)(1)(-20°F(-29°C)) and UCS-66 (General Note)(-55°F FOR CODE SEC. II, DIV. 1
介质名称 MEDIUM NAME	醛胺缩合物 STEAM CONDENSATE	热处理 HEAT TREATMENT: 不需要 NOT REQUIRED
介质特性 MEDIUM CHARACTERISTIC	非致死、非易燃 NO LETHAL,NON FLAMMABLE	保温厚度(材料) THK. (MATERIAL) OF INSULATION: 1 1/2"(HC,用户自理) 1 1/2"(HC,BY OTHERS)
介质密度 MEDIUM DENSITY lb/ft³	62 lb/ft³@100°F 993 kg/m³@37.8°C	防火厚度(材料) THK. (MATERIAL) OF FIREPROOFING: 裙座外壁：PFT-INT(需涂底漆) OUTSIDE SKIRT: PFT-INT(PRIMER REQUIRED)
主要受压元件材料 MATERIAL OF MAIN PRESSURE COMPONENTS	SA-516 Gr. 70(热轧) SA-516 Gr. 70 (HOT ROLLED)	安全阀整定压力 SET PRESSURE OF SAFETY VALVE MPa: --
腐蚀裕量(内) CORROSION ALLOWANCE(INTERNAL)	VESSEL:1/8"(3.2 mm) SKIRT:1/8"(3.2mm)	制造重量 FABRICATION WEIGHT lbs(kg): 18569(8423)
焊接接头系数(筒体/封头) JOINT EFFICIENCY (SHELL/HEAD)	0.85/1.0	空重 EMPTY WEIGHT lbs(kg): 32178(14596)
容积 VOLUME ft³ (m³)	723.95(20.5)	正常操作重量 OPERATING (NORMAL) WEIGHT lbs(kg): 61091(27710)
装量系数 FILLING RATIO	--	运输重量 SHIPPING WEIGHT lbs(kg): 32178(14596)
风载荷 WIND LOADS	ASCE/SEI 7-16: RISK CATEGORY III, EXPOSURE CATEGORY C, WIND SPEED 101mph(45.2m/s), Kzt=1.0	安装重量 ERECTION WEIGHT lbs(kg): 32178(14596)
地震载荷 EARTHQUAKE LOADS	ASCE/SEI 7-16: RISK CATEGORY III, SITE CLASS D, Ss=1.616, S1=0.579	设备充水质量 FULL WATER WEIGHT OF EQUIPMENT lbs(kg): 78004(35382)

技术要求 TECHNICAL REQUIREMENTS

1. 除特殊注明外，所有尺寸单位均采用英寸，部分尺寸括号里单位为mm.
2. 壳体用SA-516 Gr.70热轧钢板应符合ASME规范第Ⅱ卷A篇2019版SA-516的规定.
3. 设备承压部件用SA-105锻件应符合ASME规范第Ⅱ卷A篇2019版SA-105的规定,并进行细晶粒化加正火处理.
4. 设备承压部件用SA-106 Gr.B接管应符合ASME规范第Ⅱ卷A篇2019版SA-106的规定.
5. 设备上所有的法兰在安装时螺栓孔的位置应跨中均布，法兰密封面粗糙度应在125~250 μin.(3.2~6.3μm)之间.
6. 除图中注明外，角焊缝的焊脚高度按较薄板的厚度.
7. 设备的A、B、C(NPS>10")类焊接接头应按UW-11(b)进行局部射线检测，并且筒体和封头的对接焊接接头应按UW-11(a)5(-b)进行局部射线检测，射线检测按ASME规范第Ⅷ卷第一分册UW-52的要求进行(RT-4).
8. 设备制造完毕后，吊耳垫板与筒体、吊耳筋板与封头及裙座与封头的焊接接头均应进行100%磁粉检测，检测结果应符合ASME规范第Ⅷ卷第一分册强制性附录6中的规定.
9. 设备制造完毕后，内表面清理干净，清除浮锈、水垢、杂物等;外表面应进行喷砂除锈，除锈等级达到SSPC-SP 10级。油漆按照FLUOR公司技术文件A8KM-PP-000-500520要求。设备外表面及裙座内表面涂INTERBOND 2340UPC底漆，油漆干膜厚度为4~5mils(101.6~127μm);INTERBOND 2340UPC中间漆(灰色)，油漆干膜厚度为4~5mils(101.6~127μm)。裙座外表面涂INTERGARD 269底漆，油漆干膜厚度为2~3mils (50.8~76.2μm)(制造厂供); 500mils(12.7mm)CHARTEK 1709防火涂料(用户自理)，Devthane 379H面漆，油漆干膜厚度为2~3mils(50.8~76.2μm)(用户自理)，面漆颜色浅灰色，色标为Ral 7035。油漆品牌为国际牌.
10. 设备运输包装应按AP公司技术文件4WGN-10001及4WEQ-1016中9.3条"加压运输"的规定。容器运输前，应充0.34BarG的干燥含氮气(-40°C露点)，在每个盲板(厚度≥12mm)连接处用警示牌注明"THIS EQUIPMENT HAS BEEN FILLING THE NITROGEN"带法兰的管口运输时应使用工作垫片全螺栓连接。运输时，提供一个带截止阀的压力表来监测内部压力。压力表型号为Y-100，测量范围为0~0.1MPa，精度为2.5级.
11. 管口、铭牌、吊耳、接地板、吊柱及裙座方位按本图.
12. 在筒体或裙座上的显眼位置喷涂订单编号和容器设备位号，以便识别.
13. 容器应在底座和裙座的第一个一英尺处，标记北、南、东和西坐标。应根据买方容器图纸上显示的方向，用油漆线和字母表示坐标.
14. 在容器上喷涂连续的3英寸宽的环向条纹来标记设备重心。字母"CG"和运输重量(吨)应涂在与条纹完全相反和相邻的两个位置.
15. 用于标记和字体的油漆颜色应与容器表面形成明显对比.
16. 设备的制造公差应符合A8KM-PP-000-50801-A的规定.
17. 吊耳按照ASME BTH-1和设计类别B-工况等级O进行设计。吊装使用的卸扣应为Crosby型G-2140,尺寸为1.5".

1. ALL DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE. CERTAIN DIMENSIONS SHALL BE IN BOTH INCHES AND (mm).
2. SA-516 Gr.70 HOT-ROLLED PLATES USED FOR SHELLS SHALL CONFORM TO THE PROVISIONS ASME CODE SECTION II PART A, 2019 EDITION.
3. SA-105 FORGINGS USED FOR PRESSURE PARTS SHALL CONFORM TO THE PROVISIONS OF ASME CODE SECTION II PART A, 2019 EDITION.AND SHALL BE PRODUCED TO FINE GRAIN PRACTICE AND NORMALIZED.
4. SA-106 Gr.B PIPE USED FOR PRESSURE PARTS SHALL CONFORM TO THE PROVISIONS OF ASME CODE SECTION II PART A, 2019 EDITION.
5. THE BOLT HOLES OF ALL FLANGES SHALL STRADDLE THE NATURAL CENTERLINES EQUI-SPACED WHEN INSTALLING. FLANGE FACE FINISH TO BE IN THE RANGE OF 125 TO 250 μ INCH.
6. UNLESS OTHERWISE SPECIFIED, THE LEG HEIGHT OF FILLET WELD SHALL BE TAKEN AS THE THICKNESS OF THE THINNER OF THE TWO PARTS JOINED.
7. CATEGORY A ,B ,C(>NPS 10) WELDED JOINTS SHALL BE EXAMINED BY SPOT RADIOGRAPHY IN ACCORDANCE WITH UW-11(b), AND THE WELD JOINTS OF CYLINDER WITH ELLIPTICAL HEAD SHALL ALSO BE EXAMINED BY SPOT RADIOGRAPHY IN ACCORDANCE WITH UW-11(a)(5)(-b).RADIOGRAPHY SHALL BE COMFORM TO UW-52 OF ASME CODE SECTION Ⅷ, DIVISION 1 (RT-4).
8. THE WELDED JOINTS INCLUDE LIFTING LUG TO SHELL AND HEAD、SKIRT-TO-HEAD SHALL BE EXAMINED BY 100% MT AFTER THE EQUIPMENT FINISHED. THEACCEPTABLE QUALITY CRITERION SHALL CONFORM TO APPENDIX 6 OF ASME CODE SECTION VIII, DIVISION 1.
9. AFTER THE EQUIPMENT FABRICATED, THE VESSEL SHALL BE THOROUGHLY CLEANED INSIDE. RUST, SCALE AND ALL OTHER FOREING MATERIAL SHALL BE REMOVED FROM THE VESSEL ;THE OUTSIDE SURFACE SHALL BE ABRASIVE BLAST CLEANED IN ACCORDANCE WITH SSPC-SP 10. PAINTING SHALL BE IN ACCORDANCE WITH FLUOR SPECIFICATION A8KM-PP-000-500520.THE OUTER SURFACE OF SHELL AND THE INNER SURFACE OF SKIRT SHALL BE PAINTED FIRST COAT OF INTERBOND 2340UPC, DRY FILM THICKNESS IS 4~5 mils) SECOND COAT OF INTERMEDIATE OF INTERBOND 2340UPC(COLOUR IS GRAY) ,DRY FILM THICKNESS IS 4~5 mils. THE OUTSIDE SURFACE OF SKIRT SHALL BE PAINTED FIRST COAT OF INTERGARD 269 DRY FILM THICKNESS IS 2~3 mils (BY MANUFACTURER) ; SECOND COAT OF INTERMEDIATE OF CHARTEK 1709 PFT-INT , DRY FILM THICKNESS IS 500 mils (BY OTHERS),AND THIRD COAT OF Devthane 379H,DRY FILM THICKNESS IS 2~3 mils(BY OTHERS),THE FINISH COLOUR IS LIGHT GRAY (Ral 7035).THE PAINT SYSTEM IS INTERNATIONAL.
10. COATING AND PACKING FOR TANK TRANSPORT SHALL BE ACCORDING TO AP SPECIFICATIONS 4WGN-10001 AND CLAUSE 9.3 " PRESSURIZED SHIPPING" OF 4WEQ-1016. THE TANK SHALL BE PRESSURIZED TO 0.34BarG DRY NITROGEN (-40°C DEW POINT). AT EVERY CONNECTION OF BLIND FLANGE (δ≥12mm) SHALL MARK"THIS EQUIPMENT HAS BEEN FILLING THE NITROGEN" USING GUARDING CARD. FLANGED OPENINGS SHALL BE SEALED USING A TEMPORARY METAL PLATE SHIPPING BLIND THAT SHALL BE FULLY BOLTED IN CONJUNCTION WITH SERVICE GASKETS. AND SHALL SUPPLY A PRESSURE GAUGE Y-100 THAT THE RULER IS 0~0.1MPa.THE RATIO OF PRECISION IS GRADE 2.5.
11. THE ORIENTATION OF NOZZLES, NAMEPLATE, TAILING LUGS, GROUNDING LUG、DAVIT AND SKIRT SHALL BE IN ACCORDANCE WITH GAW.
12. VESSEL OR SECTION OF VESSEL SHALL BE CLEARLY IDENTIFIED BY PAINTING OR DYE STENCILING THE PO NUMBER AND THE VESSEL EQUIPMENT NUMBER IN A CONSPICUOUS LOCATION ON THE SHELL HEAD OR SUPPORT.
13. THE VESSEL IS TO BE MARKED ON THE BASE AND FIRST ONE FOOT OF SKIRT, INDICATING THE NORTH, SOUTH, EAST, AND WEST COORDINATES. THE COORDINATES SHALL BE INDICATED WITH A PAINTED LINE AND LETTER FOR EACH, ACCORDING TO THE ORIENTATION SHOWN ON THE BUYER VESSEL DRAWINGS.
14. THE CENTER OF GRAVITY SHALL BE MARKED ON THE VESSEL BY PAINTING A CONTINUOUS 3 INCH WIDE CIRCUMFERENTIAL STRIPE. THE LETTERS CG AND SHIPPING WEIGHT IN TONS SHALL BE PAINTED AT 2 LOCATIONS DIAMETRICALLY OPPOSITE AND ADJACENT TO THE STRIPE.
15. THE COLOR OF PAINT FOR MARKING AND LETTERING SHALL CONSPICUOUSLY CONTRAST WITH THE VESSEL SURFACE.
16. VESSEL TOLERANCES SHALL BE AS PER A8KM-PP-000-50801-A.
17. LIFTING LUGS ARE DESIGNED AS PER ASME BTH-1 AND DESIGN CATEGORY B - SERVICE CLASS 0. THE TAILING LUG SHALL USE A CROSBY SHACKLE TYPE G-2140 SIZE 1.5" TO BE USED FOR THE LIFTING OF VESSEL.

NOTE: THE FOLLOWING SPECIFICATIONS SHALL APPLY: A8KM-PP-000-200001-A PLANT SITE DATA SHEET.
A8KM-PP-000-400002-A STRUCTURAL DATA FOR MECHANICAL EQUIPMENT.
A8KM-PP-000-500005-A DESIGN OF LIFTING COMPONENTS FOR MECHANICAL EQUIPMENT.
A8KM-PP-000-500510-A HOT INSULATION.
A8KM-PP-000-500520-A PAINTING.
A8KM-PP-000-500550-A WELDING/NDE REQUIREMENTS FOR EQUIPMENT.
A8KM-PP-000-50801-A DESIGN AND FABRICATION SPECIFICATION FOR VESSELS ASME CODE SECTION VIII, DIVISIONS 1 AND 2.

管口表
NOZZLE TABLE

符号 SYMBOL	用途或名称 SERVICE	数量 QTY.	公称尺寸 NPS inch	接管壁厚规格 NOZZLE SCHEDULE THK	连接标准及型式 STANDARD AND TYPE	密封面型式 FACE TYPE	法兰面到设备中心线距离 DIST. FROM FL. FACE TO C.L. OF TANK inch(mm)
A1	闪蒸汽冷凝进口 INLET FLASHING STEAM CONDENSATE	1	NPS 20	0.63"	ASME B16.5-2013 NPS20-CL150 WN	RF	55"(1397)
A2	冷凝蒸汽冷凝回流口 CONDENSED STEAM CONDENSATE RETURN	1	NPS 3	Sch160	ASME B16.5-2013 NPS3-CL300 WN	RF	51"(1295)
A3	最小回流口 MIMIMUM SPILLBACK RETURN	1	NPS 3	Sch160	ASME B16.5-2013 NPS3-CL300 WN	RF	51"(1295)
B1	蒸汽出口 VAPOR STEAM OUTLET	1	NPS 14	Sch60	ASME B16.5-2013 NPS14-CL150 WN	RF	见本图 SEE THIS DRAWING
B2	冷凝液出口 LIQUID CONDENSATE OUTLET	1	NPS 8	Sch80	ASME B16.5-2013 NPS8-CL300 WN	RF	见本图 SEE THIS DRAWING
D	排污口 DRAIN	1	NPS 3	Sch160	ASME B16.5-2013 NPS3-CL300 WN	RF	见本图 SEE THIS DRAWING
M	人孔带法兰盖及吊柱 MANWAY W/BLIND &DAVIT	1	NPS 24	0.472"	ASME B16.5-2013 NPS24-CL150 WN	RF	55"(1397)
V1	放空口 VENT	1	NPS 3	Sch160	ASME B16.5-2013 NPS3-CL300 WN	RF	见本图 SEE THIS DRAWING
V2	检风口带法兰盖 VENTILATION W/BLIND	1	NPS 10	Sch80	ASME B16.5-2013 NPS10-CL150 WN	RF	见本图 SEE THIS DRAWING
LT1-LT2	远传液位计口 LEVEL TRANSMITTER	2	NPS 2	0.63"	ASME B16.5-2013 NPS2-CL300 LWN	RF	51"(1295)
LT3-LT4	就地液位计口 LEVEL TRANSMITTER	2	NPS 2	0.63"	ASME B16.5-2013 NPS2-CL300 LWN	RF	51"(1295)
R	安全泄放口 PSV	1	NPS 14	Sch60	ASME B16.5-2013 NPS14-CL150 WN	RF	见本图 SEE THIS DRAWING
SO	"B2"通道孔 SKIRT OPENING FOR -B2-	1	NPS 14	Sch60	--	--	--
SA1~SA2	裙座检查孔 SKIRT ACCESS	2	--	--	按标准(PER STD)	--	--
SV1~SV4	裙座排气口 SKIRT VENT	4	NPS 4	Sch120	--	--	--

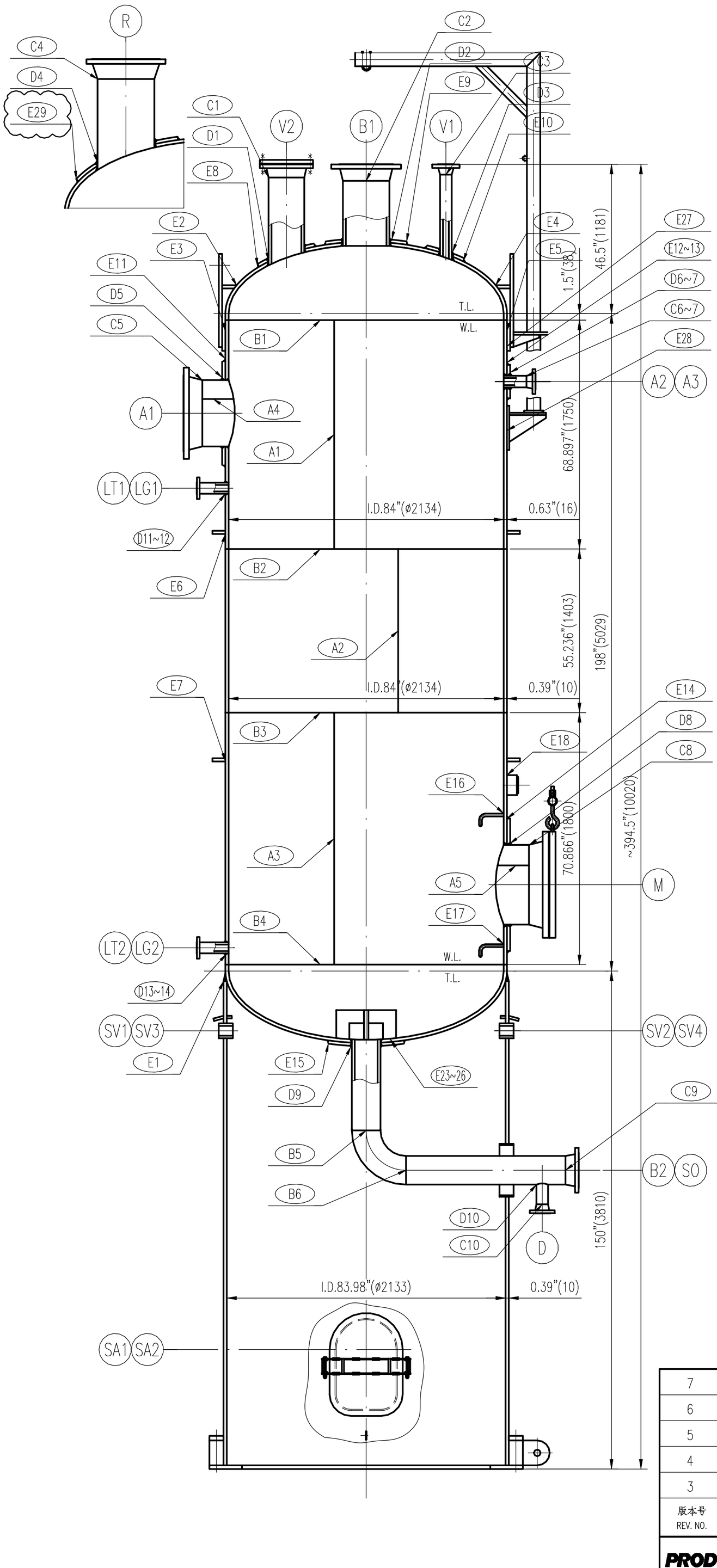
版本号 REV. NO.	日期 DATE	说明 DESCRIPTION	设计 DESIGNED	审核 REVIEWED	批准 APPROVED	授权检验师 AI
7	2023.8.29	供审查 FOR APPROVAL	于国帅 Yu Guoshuai	戴雪峰 Dai Xuefeng	戴雪峰 Dai Xuefeng	
6	2022.9.6	供审查 FOR APPROVAL	于国帅 Yu Guoshuai	戴雪峰 Dai Xuefeng	戴雪峰 Dai Xuefeng	
5	2022.7.21	供审查 FOR APPROVAL	于国帅 Yu Guoshuai	戴雪峰 Dai Xuefeng	戴雪峰 Dai Xuefeng	
4	2022.6.18	供审查 FOR APPROVAL	于国帅 Yu Guoshuai	戴雪峰 Dai Xuefeng	戴雪峰 Dai Xuefeng	

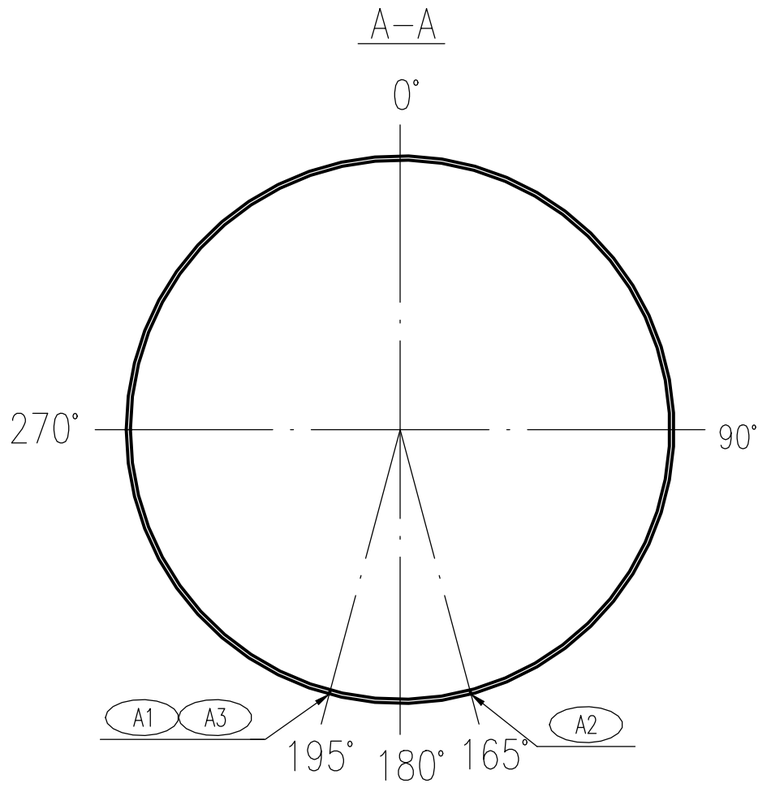
Air Products Manufacturing LLC
江联集团 JIANGLIAN HEAVY INDUSTRY GROUP CO., LTD.

借(通)用件登记
图形输出
底图校对
旧底图总号
底图总号

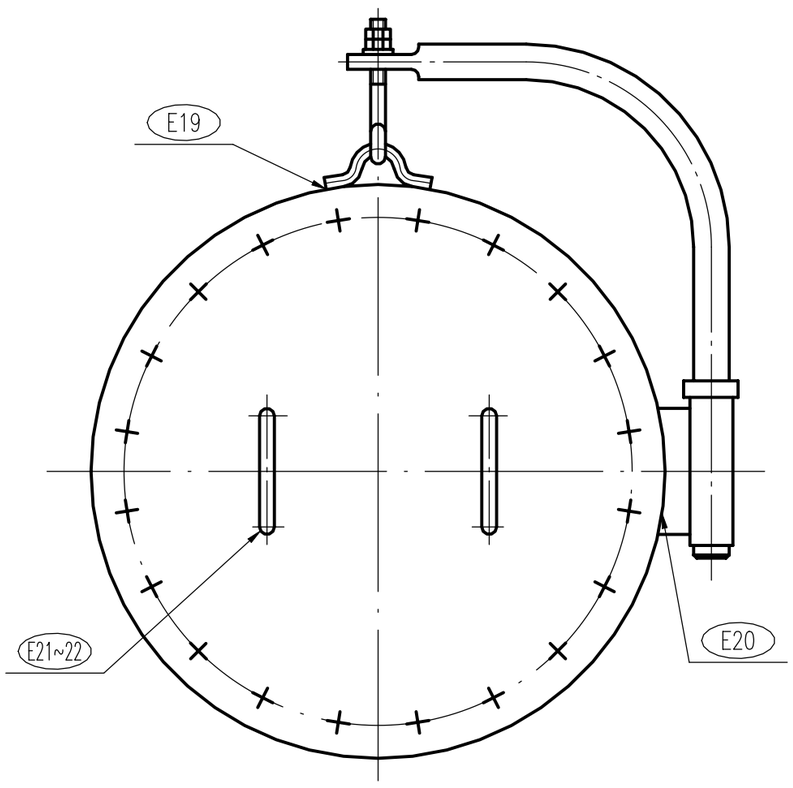
DWG. NO. A2113-R-0

THE DRAWINGS AND DOCUMENTS ARE THE PROPERTY OF JIANGLIAN HEAVY INDUSTRY GROUP CO., LTD.
UNAUTHORIZED DISCLOSURE TO ANY THIRD PART OR DUPLICATION IS NOT PERMITTED





人孔C向
VIEW C FOR MANHOLE
不按比例 NOT TO SCALE



REV. NO.	DATE	DESCRIPTION	DESIGNED	REVIEWED	APPROVED	AI
7	2023.8.29	供审查 FOR APPROVAL	于国帅 Yu Guoshuai	戴雪峰 Dai Xuefeng	戴雪峰 Dai Xuefeng	
6	2022.9.6	供审查 FOR APPROVAL	于国帅 Yu Guoshuai	戴雪峰 Dai Xuefeng	戴雪峰 Dai Xuefeng	
5	2022.7.21	供审查 FOR APPROVAL	于国帅 Yu Guoshuai	戴雪峰 Dai Xuefeng	戴雪峰 Dai Xuefeng	
4	2022.6.18	供审查 FOR APPROVAL	于国帅 Yu Guoshuai	戴雪峰 Dai Xuefeng	戴雪峰 Dai Xuefeng	
3	2022.4.13	供审查 FOR APPROVAL	于国帅 Yu Guoshuai	戴雪峰 Dai Xuefeng	戴雪峰 Dai Xuefeng	

Project Name	WORLD ENERGY RENEWABLES PROJECT, PARAMOUNT, CALIFORNIA
PROJECT NUMBER OF FLUOR	A8KM
PROJECT NUMBER OF AP	EN-20-7123
OPEN TEXT DOCUMENT NUMBER	
PO No.	4505470106
Tag No.	18-D-1802
VDR CODE	HC09

借(通)用件登记
图形输出
底图校对
旧底图总号
底图总号
签 字
日 期

Air Products Manufacturing LLC

JIANGLIAN HEAVY INDUSTRY GROUP CO., LTD.

胺/SWS区域冷凝闪蒸罐
GENERAL ARRANGEMENT DRAWING FOR AMINE/SWS AREA CONDENSATE FLASH DRUM 18-D-1802

WORLD ENERGY RENEWABLES PROJECT,
PARAMOUNT, CALIFORNIA

DWG. NO. A2113-R-0

JOB NO.	21-080R
SERIAL NO.	
WEIGHT (kg)	
SCALE	
SHT. NO. 2	TOTAL 2