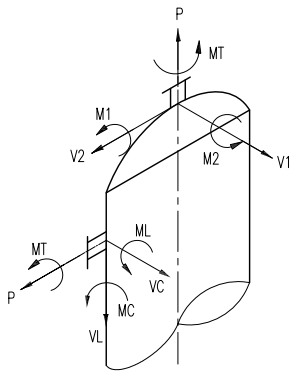


管口载荷表
NOZZLE LOADING TABLE

NOZZLE	NPS (")	DN (mm)	N				N.m		
			P	VL	VC	MT	MC	ML	
A4,B1,S1	2"	50	2300	3100	2300	800	400	500	
V1,A1,L3,P1	3"	80	3500	4100	3000	1800	900	1400	
L2	4"	100	4300	4800	3500	2600	1400	2100	



管号	数量	尺寸	管表号	连接法兰标准及密封面型式	用途或名称	外伸长度 (法兰密封面至设备外表面) PROJ. FROM FLANGE FACE TO OUTSIDE SURFACE
MARK	QTY	SIZE	SCH	RATING AND FACING	SERVICES AND PRESCRIPTION	SEE ENG.
A1	1	3"	Sch40S	ASME B16.5-2009 150# WNRF.	RAW ACA INLET FROM T-3010	见图
A3	1	1 1/2"	Sch40S	ASME B16.5-2009 150# WNRF.	REWORK ACA INLET FROM V-4550	见图
A4	1	2"	Sch40S	ASME B16.5-2009 150# WNRF.	CONNECTION FOR A3 DIP PIPE	见图
B1	1	2"	Sch40S	ASME B16.5-2009 150# WNRF.	PROCESS LIQUID OUTLET W/NOIEX BREAKER	见图
A5	1	1"	Sch40S	ASME B16.5-2009 150# WNRF.	RAW ACA RECIRC INLET	见图
A6	1	1 1/2"	Sch40S	ASME B16.5-2009 150# WNRF.	CONNECTION FOR A5 DIP PIPE	见图
L1	1	3"	Sch40S	ASME B16.5-2009 150# WNRF.	LEVEL TRANSMITTER STILLING WELL	见图
L2	1	4"	Sch40S	ASME B16.5-2009 150# WNRF.	CONNECTION FOR L1	见图
L3	1	3"	Sch40S	ASME B16.5-2009 150# WNRF.	LEVEL SWITCH-HIGH	见图
M1	1	24"	ASME	ASME B16.5-2009 150# WNRF.	MANWAY W/DAVIT ARM	300
P1	1	3"	Sch40S	ASME B16.5-2009 150# WNRF.	PRESSURE TRANSMITTER	见图
S1	1	2"	Sch40S	ASME B16.5-2009 150# WNRF.	SPARE W/BLIND FLANGE	见图
N1	1	1"	Sch40S	ASME B16.5-2009 150# WNRF.	NITROGEN INLET	见图
V1	1	3"	Sch40S	ASME B16.5-2009 150# WNRF.	VENT-VAPOR EQUALIZATION TO FROM T-3010	见图
T1	1	1 1/2"	Sch40S	ASME B16.5-2009 150# WNRF.	TEMPERATURE TRANSMITTER	见图

设计数据与制造技术条件表
DESIGN DATA AND MANUFACTURE SPECIFICATIONS

DESIGN DATA AND MANUFACTURE SPECIFICATIONS		ASME SEC. VIII-DIV.1, 2013	
设计压力 Bar(g)/Psi(g)	3.1/-1.013	ASME 认证标志	YES/U
DESIGN PRESSURE	44.96/-14.69	ASME CERTIFICATION MARK	
最大允许工作压力 Bar(g)/Psi(g)	3.1/-1.013	NB 注册	YES
MAMP	44.96/-14.69	NB REGISTRATION	
操作压力 Bar(a)/Psi(a)	0.18/2.61	壳体	SA-240 316L
OPERATION PRESSURE		HEAD	SA-240 316L
设计温度 (max./min.)C/F	245/-28.9	管法兰/法兰盖	SA-182 F316L
DESIGN TEMP.	473/-20	地脚螺栓	SA-193 B7
操作温度 C/F	91.432/196.577	主要承压元件材料	
OPERATION TEMP.		壳体和管法兰/法兰盖	
最低设计金属温度 C/F	-28.9/-20	锚栓	
M.D.M.T.			
物料名称	RAW ACA	风压设计规范	US IBC 2009
FLUID		WIND DESIGN CODE	
介质特性	有毒, 非致死	地震设计规范	US IBC 2009
FLUID PROPERTY	TOXIC, NONLETHAL	SEISMIC DESIGN CODE	
介质密度 Kg/m³/lb/ft³	1000/62.4	安全阀额定压力 barg	NO
FLUID DENSITY		OPEN. PRESS. OF RD.	
筒体厚度 mm/inch	0	加热面积 m²	NO
CORR. ALLOWANCE		HEATING SURFACE	
焊缝系数	0.85/1.0	保温材料	0 (BY OTHERS)
JOINTS EFF.		MATERIAL OF INSULATION	
水压试验压力 Bar(g)/Psi(g)	4.48(V)/4.88(H)	保温厚度 mm	50.8
HYDRO. TEST PRESSURE	64.97(V)/70.78(H)	THICKNESS OF INSULATION	
气密性试验压力 Bar(g)/Psi(g)	/	搅拌器型式	/
PNEUMATIC TEST PRESSURE		AGITATOR TYPE	
材料应力分析	YES	搅拌器转速 (r/min)	/
STRESS ANALYSIS		AGITATOR SPEED	
总容积 m³/Gal	4.094/1081.5	电机功率 (KW) / 防爆等级	/
TOTAL VOLUME		B.H.P./ENCLOSURE TYPE	
壳体容积 m³/Gal	3.677/971.36	搅拌器重量 Kg/lb	/
SHELL VOLUME		WEIGHT OF AGITATOR	
封头容积 m³/Gal	0.417/110.16	设备净重 DRY WT. Kg/lb	2106/4641
2:1 ELLIPTICAL VOLUME		充水重 FULL OF WATER WT. Kg/lb	6199/13666
AB类焊缝	射线检测 RT	重量 OPERATING WT. Kg/lb	6377/14058
SHELL/HEAD SEAM (A,B)	超声检测 UT	其中不锈钢重量 Kg/lb	2050/4520
C,D类焊缝	磁粉检测 MT	保温层重量 Kg/lb	/
其他焊缝和附件	渗透检测 PT	INSULATION WT.	/
其他要求		热处理要求	见本图
		HEAT TREATMENT (S.R.)	SEE DWG.
		冲击试验	25
		其他要求	

总的说明 GENERAL SPECIFICATION

焊接材料	详见 WPS	ACCORDING TO WPS
WELDING MATERIAL	SEE WPS	ACCORDING TO WPS
焊接型式	所有焊接按焊接工艺, 由制造厂按焊接工艺评定后确定。	
TYPE OF WELDING	ALL WELDING SHALL BE PROVIDED BY MANUFACTURER ACCORDING TO WPS AND PQR.	
焊接规范	W.P.S.	详见 WPS/PQR
WELDING SPEC.	W.P.S.	SEE WPS/PQR
公差 TOLERANCES	客户规范 TS 25-0108(2004-11)	TS 25-0108(2004-11)
其他要求 OTHERS	A,B,C,D类焊缝必须全焊透。	
	JOINTS OF CATEGORY A,B & C,D SHALL BE FULL PENETRATION.	

04 2015-11-03 ISSUED FOR FABRICATION
 03 2015-09-25 FOR APPROVAL
 02 2015-09-08 FOR APPROVAL
 01 2015-08-21 FOR APPROVAL
 00 2015-05-13 FOR APPROVAL

OWNER / DEVELOPER: **EVONIK INDUSTRIES**

昆山市贝色特装备有限公司
 Kunshan Bexceller Special Equipment Co.,Ltd

项目名称: Mobile ACA
 PROJECT NAME:

Evonik Corporation
 Mobile AL USA

General Arrangement For
 Raw ACA Feed Tank

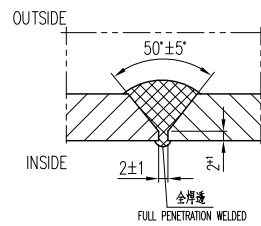
图号: V-3110
 生产号: 15-A3175

04
 04
 BSA15-302-00(1/2)
 第 1 页
 PAGES 1 OF 2

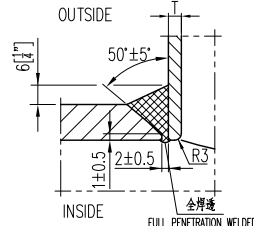
技术要求: TECHNICAL REQUIREMENTS:

- 本设备的设计、制造、试验、检验及验收按ASME Sec. VIII Division 1 要求外, 还应满足下列规范及标准的相关要求:
20.230.013; 20.230.030; 20.230.036
THE DESIGN, FABRICATION, TESTING, INSPECTION AND ACCEPTANCE FOR THIS EQUIPMENTS SHOULD CONFORM TO ASME SEC. VIII DIVISION 1 CODE, AND APPLICABLE DIN STANDARDS, AND SPECIFICATION AS FOLLOWING:
20.230.013; 20.230.030; 20.230.036
- 所有不锈钢材料, 包括板材, 接管, 法兰附件及焊缝应进行PMI检测。
PMI INSPECTION SHALL BE DONE FOR THE MATERIAL OF STAINLESS, WHICH INCLUDES PLATE, NOZZLES, FLANGE AND WELDING SEAM.
- 所有承压元件的焊接须全焊透, 并依据WPS。
WELDING OF ALL PRESSURE PARTS SHALL BE FULL PENETRATION AS PER QUALIFIED WPS.
- 焊接材料由制造厂经焊接工艺评定后确定。
THE WELDING MATERIALS CONSUMABLE SHALL BE PROVIDED BY VESSEL VENDOR ACCORDING TO WPS AND PQR.
- 所有对接焊缝全焊透, 焊缝表面圆滑过渡, 与壳体相切的接管的角度应打磨至R3mm。
ALL BUTT WELD SHALL BE FUSION WELDING, THE SURFACE OF WELD SHALL BE SMOOTH, SHARP OF NOZZLE WELD TO SHELL SHALL BE POLISHED TO R3 mm.
- 法兰螺栓孔应跨设备自然中心线分布。
BOLT HOLES SHALL STRADDLE THE NATURE CENTRE LINES.
- ASME B16.5 法兰密封面宽度为 $\frac{1}{4}$ ~ $\frac{3}{4}$ 。
THE Ra SHALL BE 3.2-6.3 MICRO METERS FOR ALL ASME B16.5 FLANGES.
- 补强圈应成对NPT 1/4 测试孔, 补强圈在设备水压试验前, 以1bar 表压压缩空气进行氦气泄漏试验, 合格后, 试验孔用NPT 1/4 螺塞堵紧。
REINFORCING PAD SHALL PROVIDED A NPT 1/4 TELL TALE HOLE AT LOWEST POINT, AIR LEAK TEST SHALL BE PERFORMED ON REINFORCING PAD ATTACHMENT WELDS AT A PRESSURE OF 1 barg PRIOR TO FINAL HYDROTEST WITH BUBBLE FORMING SOLUTION. TELL TALE HOLE FILLED WITH NPT 1/4 PLUG.
- 吊耳板与吊耳板, 法兰以及垫板与筒体的焊接接头须做100% PT检测, 符合ASME VIII-1 附录8 中规定。
WELDING JOINT OF LIFTING LUG AND PAD, FLANGE WITH SHELL SHALL BE EXAMINED BY 100% PT. AND MEET THE REQUIREMENTS OF ASME VIII-1 (APPENDIX 8).
- 吊耳与垫板以及垫板与筒体的焊接接头须做100% PT检测, 符合ASME VIII-1 附录 8 中规定。
THE WELDS BETWEEN BRACKETS AND SHELL, PAD AND BRACKETS SHALL BE EXAMINED BY 100% PT. MEET THE REQUIREMENTS OF ASME VIII-1 (APPENDIX 8).
- 水压试验时, 应用干净的水, 且控制水的氯离子含量不超过 50ppm; 水压试验后, 设备应保持干燥、清洁。
HYDROSTATIC TESTING SHALL BE DONE WITH CLEAN WATER AND THE MAXIMUM CHLORIDE CONTENT IS NOT MORE THAN 50ppm. AFTER HYDROSTATIC TEST, THE EQUIPMENT SHALL BE DRIED, CLEANED.
- 水压试验时需用工作垫片。
ORIGINAL WORK GASKETS TO BE USED FOR TESTING.
- 设备组装完后, 应对不锈钢进行表面处理, 按照规范 TS 25-0205-2, 所有不锈钢内外表面应做钝化, 钝化所形成的钝化膜用蓝点法检测, 无蓝点为合格。
THE STAINLESS STEEL SURFACE PREPARATION ACCORDING TO TS 25-0205-2. INNER AND OUTER SURFACE OF STAINLESS STEEL SHOULD BE PICKLED AND PASSIVATED, THE PASSIVATED SURFACE SHALL BE EXAMINED USING BLUE-POINTING PENETRATION METHOD, NO BLUE-POINT TO BE ACCEPTED.
- 设备上管法兰用垫片为: 缠绕垫 内外环316SS, 填充物石墨, 厚度4.5mm。
FOR VESSEL GASKET: GRAPHITE WITH INSIDE, AND OUTSIDE RING OF 316SS. GALVANIZED 4.5 MM THK.
- 除了永久法兰盖的法兰以外, 所有的法兰应采用与法兰外径相等的6mm 厚的钢板加以覆盖, 且至少用4个 1/2" 的螺栓和3mm 厚的橡胶垫片固定。
FLANGE FACES OTHER THAN THOSE FURNISHED WITH PERMANENT BLINDS SHALL BE COVERED WITH 6MM STEEL PLATE, WITH AN OUTSIDE DIAMETER IDENTICAL TO THE FLANGE, AND SECURED WITH A MINIMUM OF 4 BOLTS, NOT LESS THAN 1/2" COMPLETE WITH 3mm THICK RUBBER GASKET
- 吊耳限制设备空重。
LIFTING LUG ONLY FOR VESSEL EMPTY WEIGHT.
- 接地表面不得涂漆, 接地电阻值不大于10Ω。
EARTH LUG SHALL NOT BE PAINTED, AND RESISTANCE OF THE EARTH WIRE SHALL NOT EXCEED 10Ω.
- 设备应提供 试车备件: 垫片: 200%; 紧固件: 10% 不少于2套。
COMMISSIONING SPARE PARTS: 200% GASKETS AND 10% STUDS AND NUTS OR MIN. 2 SETS.
- 设备的开孔, 补强圈, 垫板等其他元件不得开在设备的喉, 焊缝上。
LONGITUDINAL AND CIRCUMFERENTIAL WELD SEAMS SHALL NOT INTERFERE WITH NOZZLE OPENING, REINFORCING PLATE ETC.
- 板条接管的对接管应做UW-51 进行100%射线检测。
THE BUTT WELD OF PLATE ROLLED NOZZLE SHALL BE EXAMINED BY 100% RT PER UW-51.
- 设备要求海运包装并充0.2Barg 氮气保护。
SEAWORTHY PACKAGING WITH N2 FILLING(0.2BARG)
- 所有的尺寸单位是毫米, 英制单位要在铭牌上显示。
ALL DIMENSION UNIT IS mm, inch UNIT IS SHOWN IN BRACKET.

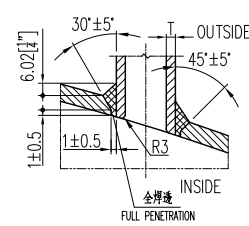
A, B 类焊接接头详图
DETAIL OF A, B WELD
不按比例 NO SCALE



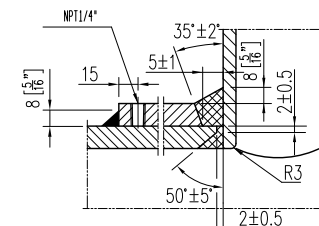
D 类焊接接头
RADIAL CLASS D WELD DETAIL
不按比例 NO SCALE



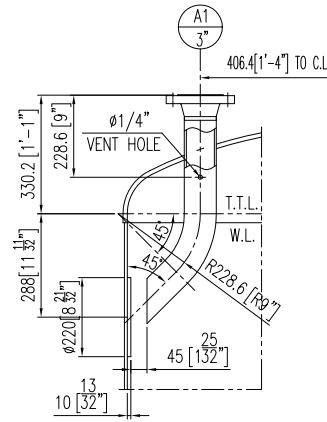
非径向 D 类焊接接头
NOT RADIAL CLASS D WELD DETAIL
不按比例 NO SCALE



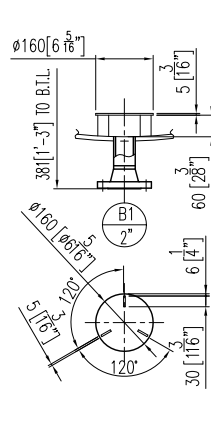
带补强圈 D 类焊接接头
WELD OF NOZZLE, REINFORCING PLATE TO SHELL
不按比例 NO SCALE



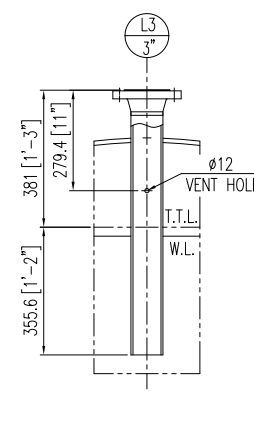
管口 A1 详细
DETAIL OF NOZZLE A1
不按比例 NO SCALE



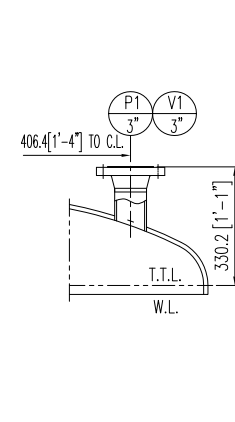
管口 B1 详细
DETAIL OF NOZZLE B1
不按比例 NO SCALE



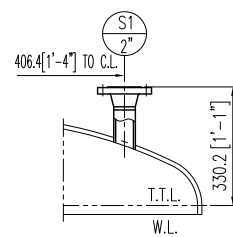
管口 L3 详细
DETAIL OF NOZZLE L3
不按比例 NO SCALE



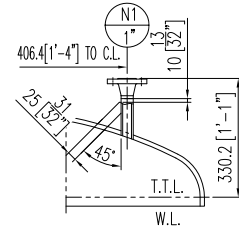
管口 P1, V1 详细
DETAIL OF NOZZLE P1, V1
不按比例 NO SCALE



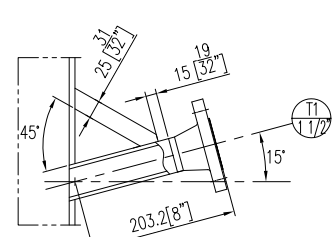
管口 S1 详细
DETAIL OF NOZZLE S1
不按比例 NO SCALE



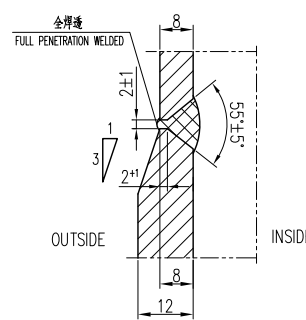
管口 N1 详细
DETAIL OF NOZZLE N1
不按比例 NO SCALE



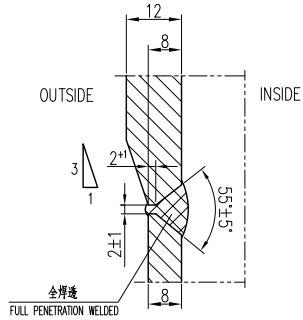
管口 T1 详细
DETAIL OF NOZZLE T1
不按比例 NO SCALE



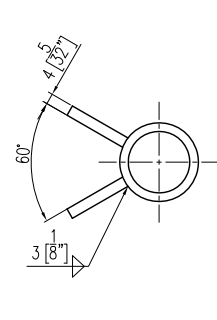
I
不按比例 NO SCALE



II
不按比例 NO SCALE



管口配两根筋板布置详图
ORIENTATION DETAIL OF 2 RIB PLATE FOR NOZZLE
不按比例 NO SCALE



Item	Spec	Qty	Material	Weight	Remarks
T1	ASME B36.19 法兰 FB25x3	2	SA-240 316L	0.2	0.4
	ASME B16.5-2009 接管 1 1/2"-Sch40S	1	SA-312 TP316L	0.6	L=156
N1	ASME B36.19 法兰 FB30x3	2	SA-240 316L	0.2	0.4
	ASME B16.5-2009 接管 1 1/2"-150# RF Sch40S	1	SA-182 F316L	1.8	
S1	ASME B36.19 接管 1"-Sch40S	1	SA-312 TP316L	0.3	L=114
	ASME B18.2.1 螺母 5/8"-11UNC	8+4	SA-194 2H	0.05	0.8
P1	ASME B16.20 螺栓 5/8"-11UNCX90L	4+2	SA-193 B7	0.1	0.8
	ASME B16.5-2009 法兰 BL 2"-150# RF	1	SA-182 F316L	1.82	
V1	ASME B36.19 接管 2"-Sch40S	1	SA-312 TP316L	0.6	L=111
	ASME B16.5-2009 法兰 WN 2"-150# RF Sch40S	1	SA-182 F316L	2.72	
L3	ASME B36.19 接管 3"-Sch40S	2	SA-312 TP316L	1.3	2.6
	ASME B16.5-2009 法兰 WN 3"-150# RF Sch40S	2	SA-182 F316L	5.22	10.44
B1	ASME B36.19 接管 3"-Sch40S L=667	1	SA-182 F316L	7.7	SEAMLESS PIPE
	ASME B16.5-2009 法兰 WN 3"-150# RF Sch40S	1	SA-182 F316L	5.22	
L1, L2	ASME B36.19 接管 2"-Sch40S	1	SA-312 TP316L	0.5	L=82
	ASME B16.5-2009 法兰 WN 2"-150# RF Sch40S	1	SA-182 F316L	2.72	
A5, A6	BSP15-302-02 A5, A6 接管	1	铝铸件	15.9	
A3, A4	BSP15-302-01 A3, A4 接管	1	铝铸件	25.4	
A1	ASME B36.19 接管 3"-Sch40S	1	SA-312 TP316L	6.9	
	ASME B16.5-2009 法兰 WN 3"-150# RF Sch40S	1	SA-182 F316L	5.22	

Item	Spec	Qty	Material	Weight	Remarks
8	BSA15-302-04 人孔 MAN HOLE	1	铝铸件	415	
7	BSA15-302-03 保温夹板 INSULATION CLIP	32	SA-240 316L	0.03	0.96
6	BSA15-302-02 耳式支脚 SUPPORT BRACKET	4	铝铸件	25.2	100.8
5	BSA15-302-05 裙脚支脚 PLATE AND BRACKET	1	铝铸件	2.7	
4	BSA15-302-03 吊耳 LUG	2	铝铸件	11.1	22.2
3	BSA15-302-03 吊钩 HOOK	1	SA-240 316L	778	
2	BSA15-302-03 吊钩 HOOK	1	铝铸件	3.6	
1	10磅锤形头 LD 1219.2x12(10)	2	SA-240 316L	150	300 h=25

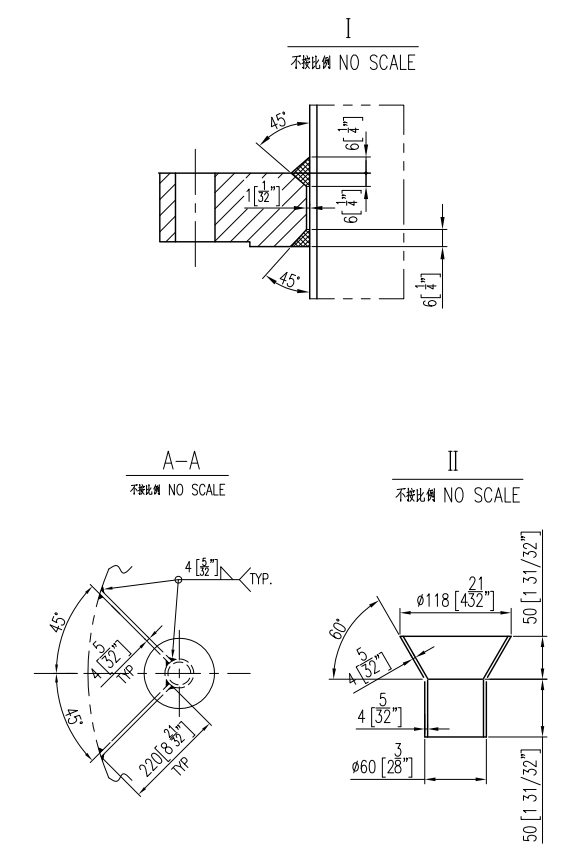
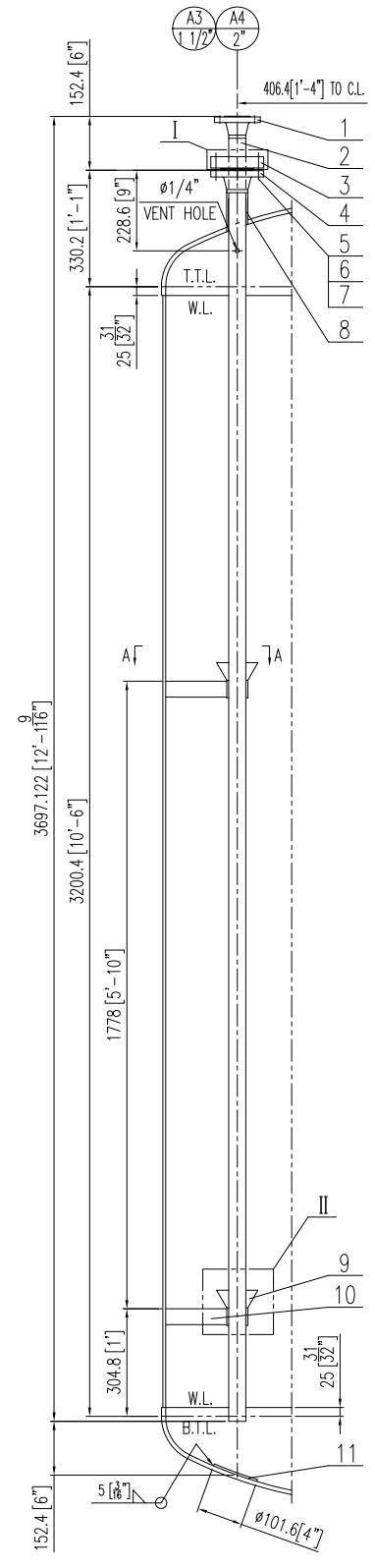
Rev	Date	Description	Drawn	Chk	Appr
04	2015-11-03	ISSUED FOR FABRICATION			
03	2015-09-25	FOR APPROVAL			
02	2015-09-08	FOR APPROVAL			
01	2015-08-21	FOR APPROVAL			
00	2015-05-13	FOR APPROVAL			

OWNER / DEVELOPER:

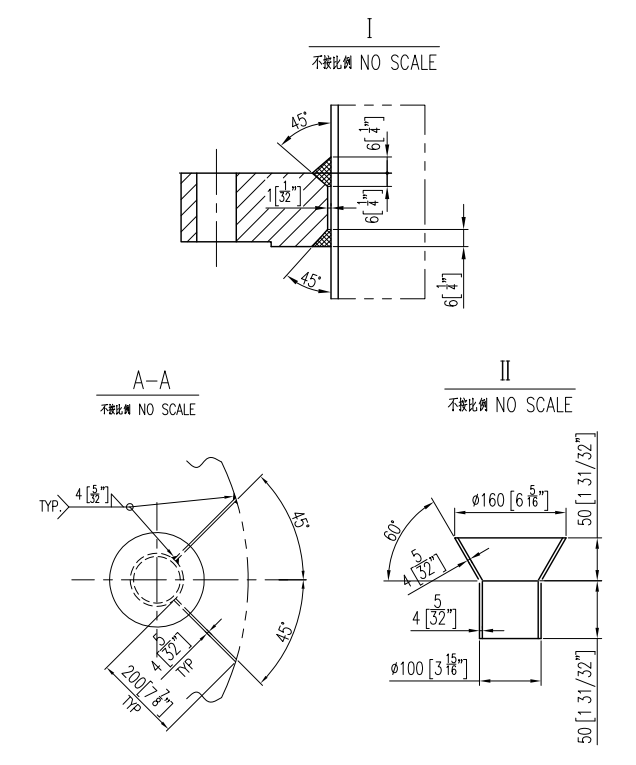
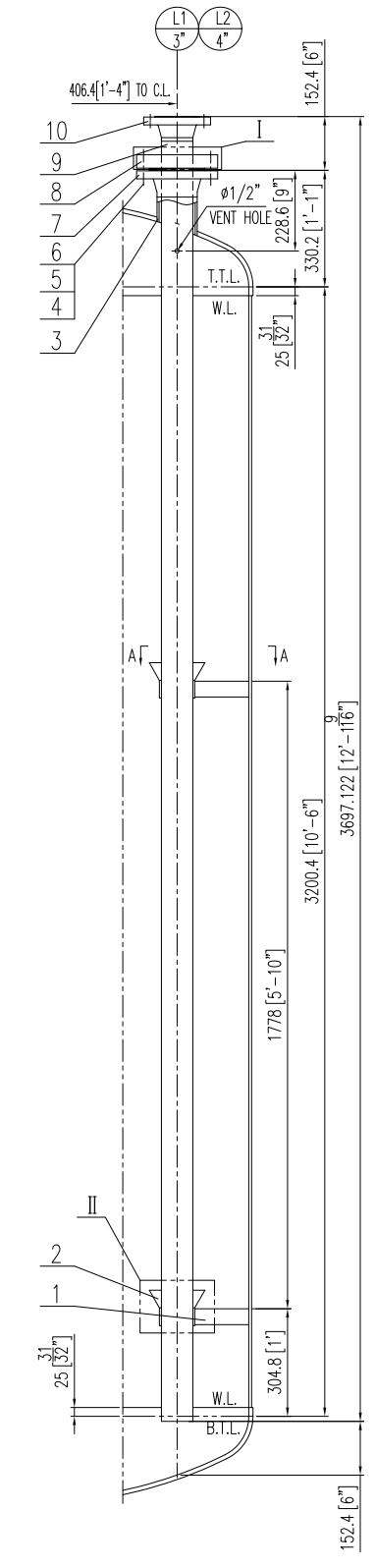
Evonik Corporation
Mobile AL USA

昆山市贝色特材装备有限公司 Kunshan Bexceller Special Equipment Co., Ltd	项目名称: Mobile ACA PROJECT NAME:
设计: [Blank] 设计: [Blank] 审核: [Blank] 批准: [Blank]	图号: 04 DWG NO.: BSA15-302-00(2/2) 标题: 通用布置图 第 2 页 共 2 页 SCALE: [Blank] DATE: [Blank]
图号: V-3110 生产号: [Blank]	图号: 15-A3175 生产号: [Blank]

ANSI D



序号	图号及标准号	名称	数量	材料	重量	备注
11		垫板 101.6x6t WEAR PLATE	1	SA-240 316L	0.4	
10		螺栓 l=4 BOLT	2	SA-240 316L	0.2 0.4	
9		板 t=4 PLATE	1	SA-240 316L	0.8	
8		衬套 2"-Sch40S SLEEVE	1	SA-312 TP316L	0.6	L=111
7	ASME B18.2.2	螺母 5/8"-11UNC NUT	8+4	SA-194 2H	0.05 0.4	热镀锌 HOT GALVANIZED
6	ASME B18.2.1	全螺纹螺栓 5/8"-11UNCx115L ALL SCREW THREAD BOLTS	4+2	SA-193 B7	0.15 0.6	热镀锌 HOT GALVANIZED
5	ASME B16.20	缠绕垫 2"-150# RF Spiral Wound Gasket	1+2	SEE TECN.14 缠绕垫表.14		
4	ASME B16.5-2009	法兰 WN 2"-150# RF Sch40S FLANGE	1	SA-182 F316L	2.7	
3		法兰盖 BL 2"-150# RF lf=32 FLANGE COVER	1	SA-182 F316L	3.2	中心开孔φ5.1 HOLE AT CENTER
2		衬套 1 1/2"-Sch40S SLEEVE	1	SA-312 TP316L	14.5	L=3636
1	ASME B16.5-2009	法兰 WN 1 1/2"-150# RF Sch40S FLANGE	1	SA-182 F316L	1.81	
序号	图号及标准号	名称	数量	材料	重量	备注
10		A3,A4 衬套 A3,A4 SLEEVE	1	BSA15-302-01	25.4	BSA15-302-00(2/2)
序号	名称	材料	数量	重量 (Kg)	所在图号	装配图号
11	垫板 101.6x6t	SA-240 316L	1	0.4		
10	螺栓 l=4	SA-240 316L	2	0.2 0.4		
9	板 t=4	SA-240 316L	1	0.8		
8	衬套 2"-Sch40S	SA-312 TP316L	1	0.6		
7	螺母 5/8"-11UNC	SA-194 2H	8+4	0.05 0.4		
6	全螺纹螺栓 5/8"-11UNCx115L	SA-193 B7	4+2	0.15 0.6		
5	缠绕垫 2"-150# RF	SEE TECN.14	1+2			
4	法兰 WN 2"-150# RF Sch40S	SA-182 F316L	1	2.7		
3	法兰盖 BL 2"-150# RF lf=32	SA-182 F316L	1	3.2		
2	衬套 1 1/2"-Sch40S	SA-312 TP316L	1	14.5		
1	法兰 WN 1 1/2"-150# RF Sch40S	SA-182 F316L	1	1.81		



序号	图号及标准号	名称	数量	材料	重量	备注
10	ASME B16.5-2009	法兰 WN 3"-150# RF Sch40S FLANGE	1	SA-182 F316L	5.2	
9		衬套 3"-Sch40S L=3628 SLEEVE	1	SA-312 TP316L	41.8	SEAMLESS PIPE
8		法兰盖 BL 4"-150# RF lf=38 FLANGE COVER	1	SA-182 F316L	9.0	中心开孔φ9.1 HOLE AT CENTER
7	ASME B16.5-2009	法兰 WN 4"-150# RF Sch40S FLANGE	1	SA-182 F316L	7.5	
6	ASME B16.20	缠绕垫 4"-150# RF Spiral Wound Gasket	1+2	SEE TECN.14 缠绕垫表.14		
5	ASME B18.2.2	螺母 5/8"-11UNC NUT	16+4	SA-194 2H	0.05 0.8	热镀锌 HOT GALVANIZED
4	ASME B18.2.1	全螺纹螺栓 5/8"-11UNCx125L ALL SCREW THREAD BOLTS	8+2	SA-193 B7	0.2 1.6	热镀锌 HOT GALVANIZED
3		衬套 4"-Sch40S L=110 SLEEVE	1	SA-312 TP316L	1.9	SEAMLESS PIPE
2		板 t=4 PLATE	1	SA-240 316L	1.2	
1		衬套 l=4 SLEEVE	2	SA-240 316L	0.2 0.4	
序号	图号及标准号	名称	数量	材料	重量	备注
10		L1,L2 衬套 L1,L2 SLEEVE	1	70.1	BSA15-302-01	BSA15-302-00(2/2)
序号	名称	材料	数量	重量 (Kg)	所在图号	装配图号
11	垫板 101.6x6t	SA-240 316L	1	0.4		
10	螺栓 l=4	SA-240 316L	2	0.2 0.4		
9	板 t=4	SA-240 316L	1	0.8		
8	衬套 2"-Sch40S	SA-312 TP316L	1	0.6		
7	螺母 5/8"-11UNC	SA-194 2H	8+4	0.05 0.4		
6	全螺纹螺栓 5/8"-11UNCx115L	SA-193 B7	4+2	0.15 0.6		
5	缠绕垫 2"-150# RF	SEE TECN.14	1+2			
4	法兰 WN 2"-150# RF Sch40S	SA-182 F316L	1	2.7		
3	法兰盖 BL 2"-150# RF lf=32	SA-182 F316L	1	3.2		
2	衬套 1 1/2"-Sch40S	SA-312 TP316L	1	14.5		
1	法兰 WN 1 1/2"-150# RF Sch40S	SA-182 F316L	1	1.81		

OWNER / DEVELOPER:

EVONIK
INDUSTRIES

昆山市贝色特材装备有限公司
Kunshan Bexceller Special Equipment Co.,Ltd

项目名称: Mobile ACA
PROJECT NAME:

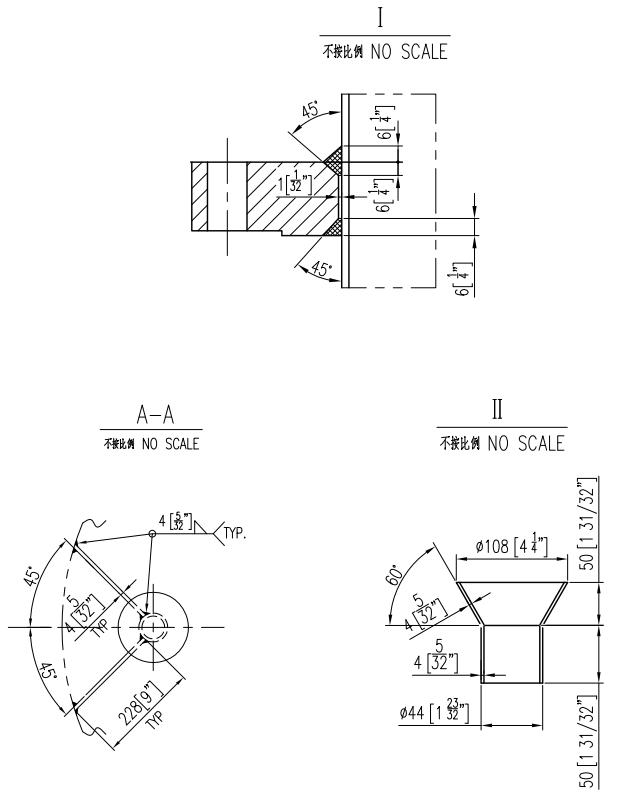
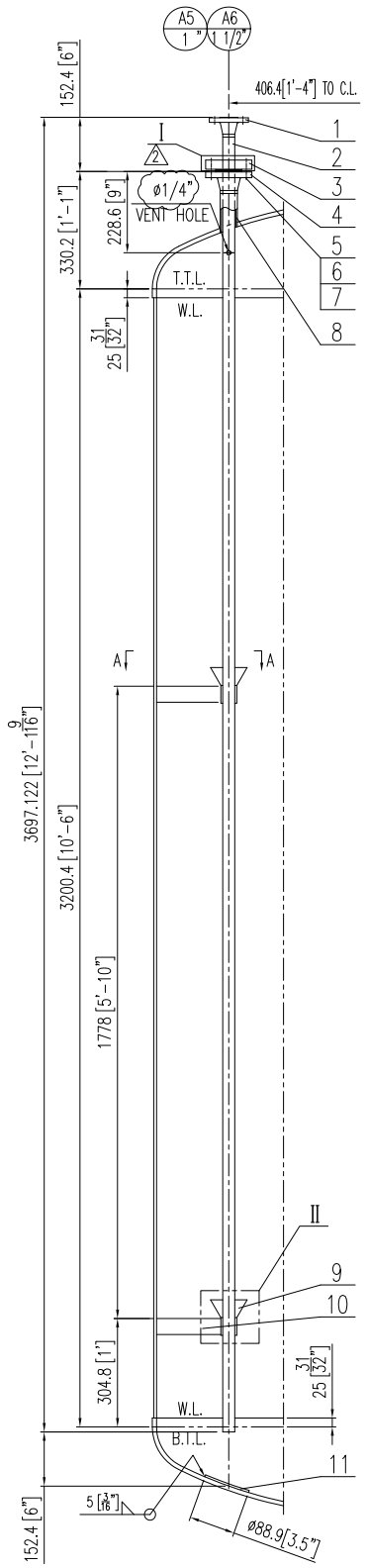
Evonik Corporation
Mobile AL USA

Details For
Raw ACA Feed Tank

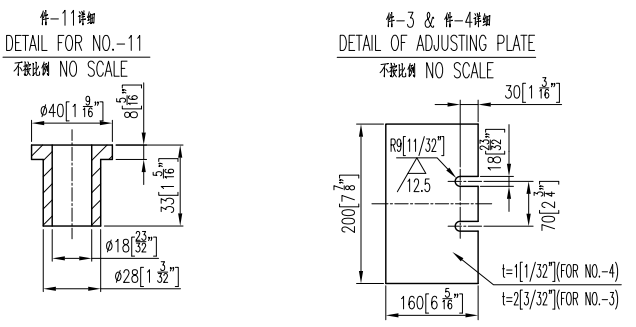
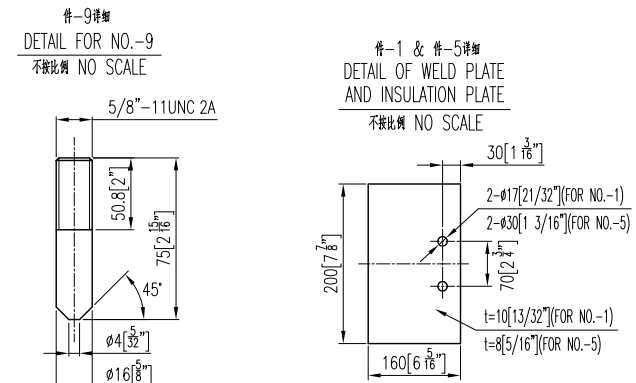
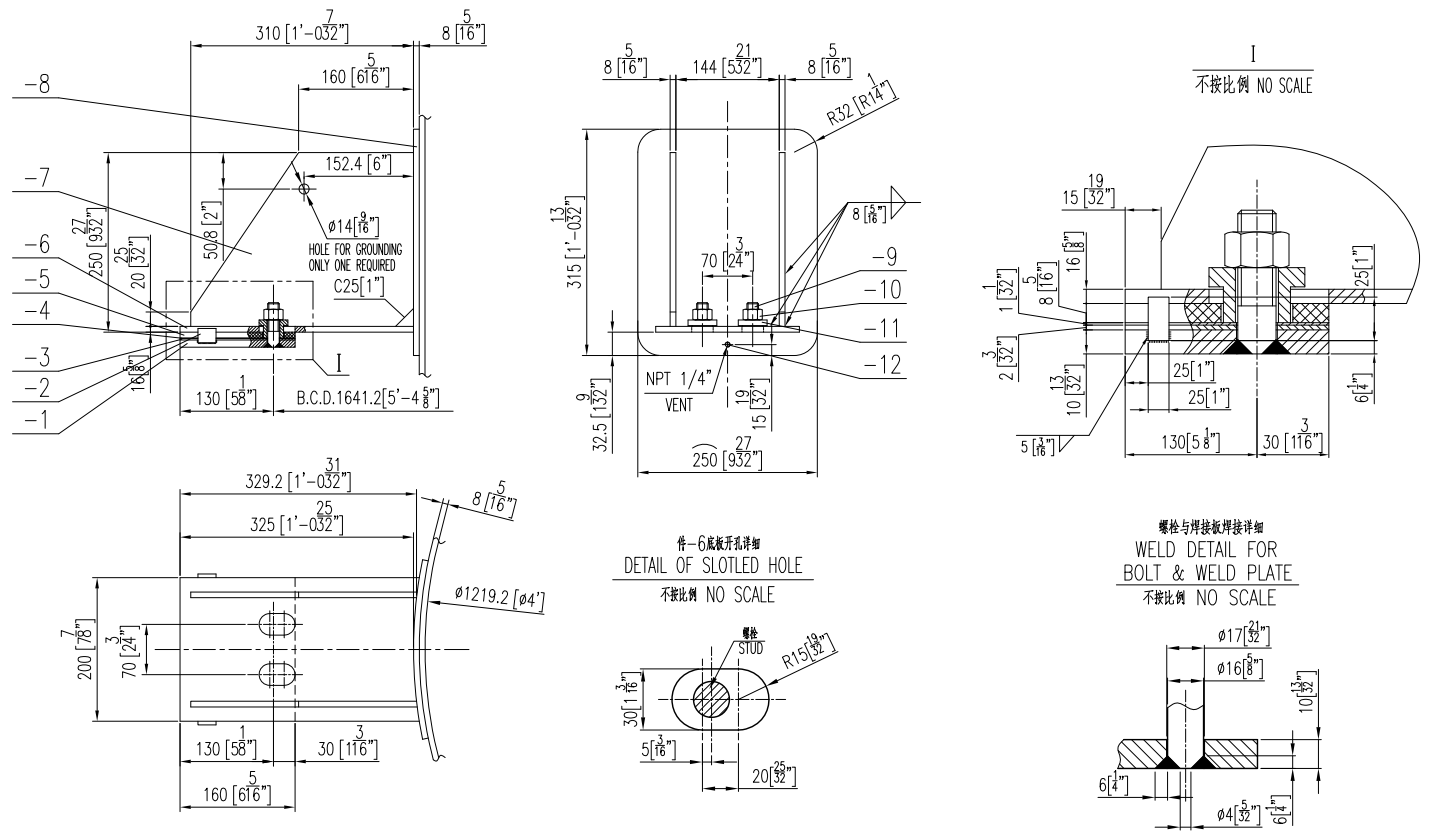
图号: V-3110
生产号: 15-A3175

图号: 04
DWG NO.: BSA15-302-01

共 3 页
第 3 页
PAGES 3 OF 7



件号 NO.	图号及标准号 DRAWING NO. OR STANDARD NO.	名称 TITLE	数量 QUANT.	材料 MATERIAL	重量 (Kg) WEIGHT	所在图号 DWG. NO.	装配图号 ASSM. DWG. NO.	备注 REMARKS
11		轴径 $\phi 88.9 \times 61$	1	SA-240 316L	0.2			
10		轴径 $t=4$	2	SA-240 316L	0.2	0.4		
9		轴径 $t=4$	1	SA-240 316L	0.8			
8		轴径 $1\ 1/2$ -Sch40S	1	SA-312 TP316L	0.44		L=111	
7	ASME B18.2.2	螺母 $1/2$ -13UNC	8+4	SA-194 2H	0.035	0.28		镀锌 HOT GALVANIZED
6	ASME B18.2.1	螺栓 $1/2$ -13UNCx100L	4+2	SA-193 B7	0.1	0.4		镀锌 HOT GALVANIZED
5	ASME B16.20	螺旋软管 $RF\ 1\ 1/2$ -150	1+2	SEE TECH.14				螺旋软管长度 1.4
4	ASME B16.5-2009	法兰 $WN\ 1\ 1/2$ -150	RF Sch40S	1	SA-182 F316L	1.81		
3		法兰盖 $BL\ 1\ 1/2$ -150	RF Fl=26	1	SA-182 F316L	1.6		中心开孔 $\phi 35$ HOLE AT CENTER
2		轴径 1 -Sch40S	1	SA-312 TP316L	8.8		L=3642	
1	ASME B16.5-2009	法兰 $WN\ 1$ -150	RF Sch40S	1	SA-182 F316L	1.2		



- 技术要求:
TECHNICAL REQUIREMENT:
- 焊接采用电焊, 焊接按照 WPS 的规定。
WHEN WELDING, WELDING PROCEDURE SPECIFICATION TO BE PER WPS.
 - 焊接接头形式及尺寸除图中注明外, 按 ASME VIII-1 中规定, 角焊缝的焊角尺寸按被焊板的厚度。
TYPES AND DIMENSION FOR WELDING JOINT SHALL MEET THE REQUIREMENTS OF ASME VIII-1. THE SIZE OF FILLETS PER THICKNESS OF THINNER PLATE WELDED.
 - 焊缝中所有焊喉厚度 100% PT 检测, 符合 ASME VIII-1 附录 8 中规定。
WELDING JOINT OF BRACKET SHOULD BE 100% PT. AND MEET THE REQUIREMENTS OF ASME VIII-1 (APPENDIX 8).
 - 其他按装配图中规定。
OTHER REQUIREMENTS SHALL BE INDICATED IN ASSEMBLY DRAWING.

件号 NO.	图号及标准号 DRAWING NO. OR STANDARD NO.	名称 TITLE	数量 QUANT.	材料 MATERIAL	重量 (Kg) WEIGHT	所在图号 DWG. NO.	装配图号 ASSM. DWG. NO.	备注 REMARKS
-12	ASME B16.11	六角大螺母 $NPT\ 1/4$ -3000#	1	SS304	/			
-11		轴径 $t=4$	2	SA-240 304	0.1	0.2		
-10	ASME B18.2.2	螺母 $5/8$ -11UNC 2B	2	SS304	0.02	0.04		
-9		轴径 $t=8$	2	SS304	0.09	0.18		
-8		轴径 $t=8$	1	SA-240 316L	5.0			
-7		轴径 $t=8$	2	SA-240 304	3.7	7.4		
-6		轴径 $t=16$	1	SA-240 304	8.4			
-5		轴径 $t=8$	1	ARAMID	0.7			
-4		轴径 $t=1$	1	SA-240 304	0.25			
-3		轴径 $t=2$	1	SA-240 304	0.50			
-2		轴径 $t=5$	2	SA-240 304	0.02	0.04		
-1		轴径 $t=10$	1	SA-240 304	2.5			

件号 NO.	图号及标准号 DRAWING NO. OR STANDARD NO.	名称 TITLE	数量 QUANT.	材料 MATERIAL	重量 (Kg) WEIGHT	所在图号 DWG. NO.	装配图号 ASSM. DWG. NO.	备注 REMARKS
6	图号及标准号	名称	数量	材料	重量	所在图号	装配图号	备注
6	图号及标准号	名称	数量	材料	重量	所在图号	装配图号	备注

REV	DATE	DESCRIPTION	DRAWN	CHK	APPR.
04	2015-11-03	ISSUED FOR FABRICATION			
03	2015-09-25	FOR APPROVAL			
02	2015-09-08	FOR APPROVAL			
01	2015-08-21	FOR APPROVAL			
00	2015-05-13	FOR APPROVAL			

OWNER / DEVELOPER: **EVONIK INDUSTRIES**

昆山市贝色器材装备有限公司
Kunshan Bexceller Special Equipment Co., Ltd

项目名称: Mobile ACA
PROJECT NAME: Mobile ACA

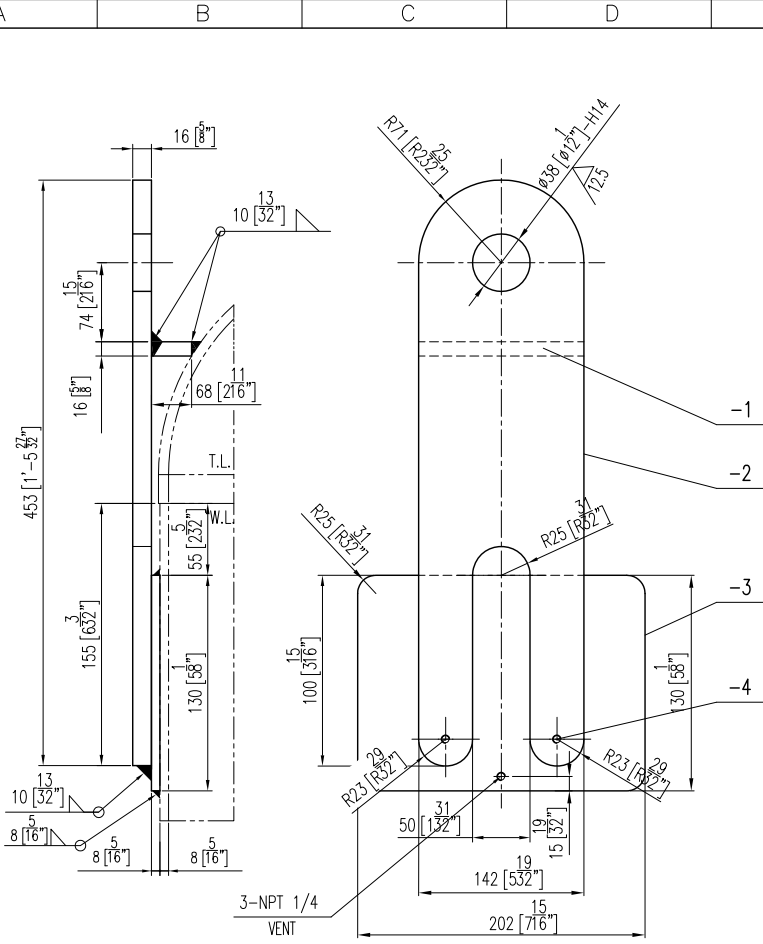
Evonik Corporation
Mobile AL USA

Details For
Raw ACA Feed Tank

图号: V-3110
生产号: 15-A3175

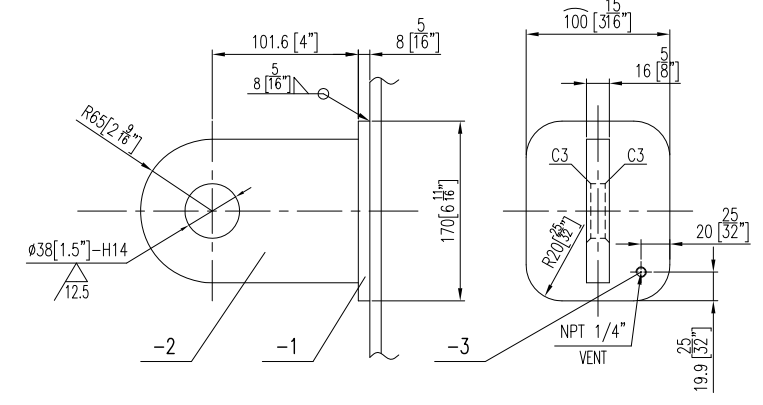
图号: 04
图号: BSA15-302-02

共 4 页
第 4 页



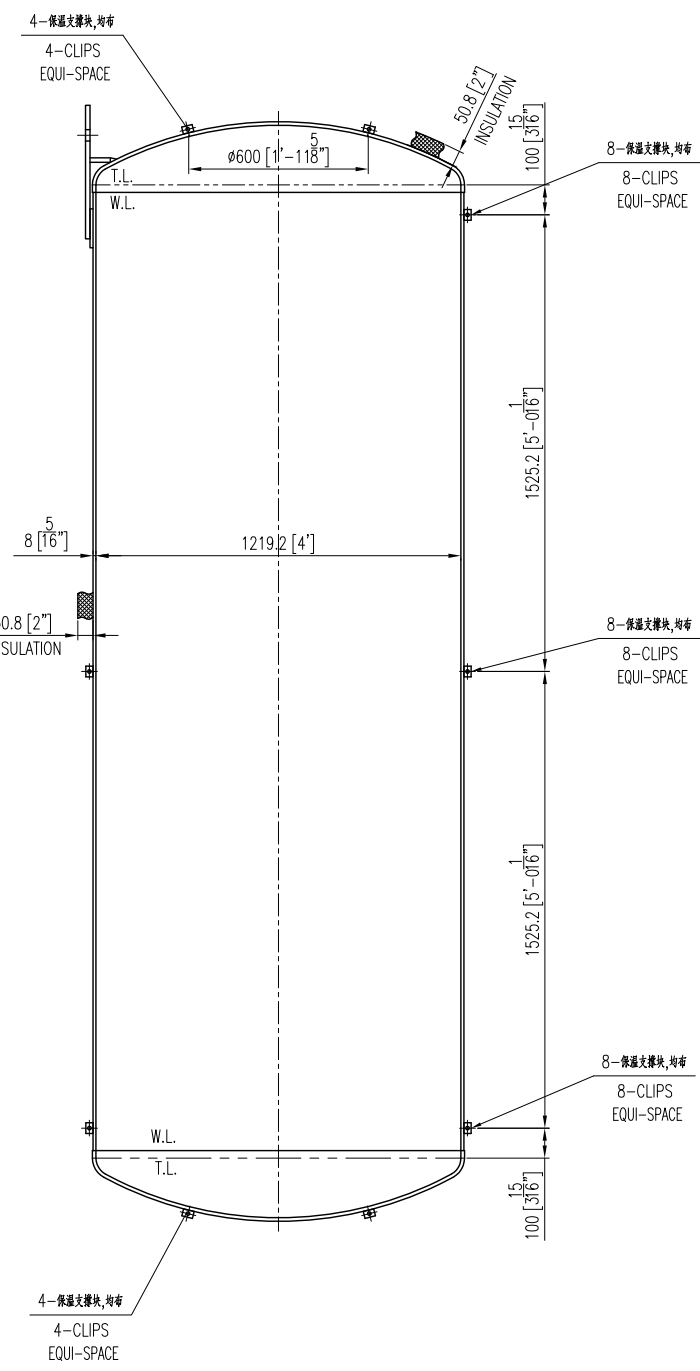
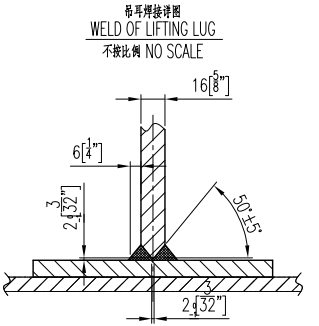
技术要求 :
 TECHNICAL REQUIREMENT:
 1. 焊接采用电焊, 焊接按照 WPS 的规定.
 WHEN WELDING, WELDING PROCEDURE SPECIFICATION TO BE PER WPS.
 2. 焊接接头形式及尺寸按图中注明, 按 ASME VIII-1 中规定. 角焊缝的焊角尺寸按被焊件的厚度.
 TYPES AND DIMENSION FOR WELDING JOINT SHALL MEET THE REQUIREMENTS OF ASME VIII-1. THE SIZE OF FILLETS PER THICKNESS OF THINNER PLATE WELDED.
 3. 吊耳中所有焊缝按 100% PT 检测, 符合 ASME VIII-1 附录 8 中规定.
 WELDING JOINT OF LIFTING LUG SHOULD BE 100% PT. AND MEET THE REQUIREMENTS OF ASME VIII-1 (APPENDIX 8).
 4. 其余按装配图中规定.
 OTHER REQUIREMENTS SHALL BE INDICATED IN ASSEMBLY DRAWING.

件号 NO.	图号及标准号 DRAWING NO. OR STANDARD NO.	名称 TITLE	数量 QUANT.	材料 MATERIAL	重量 (Kg) WEIGHT	所在图号 DWG. NO.	备注 REMARKS
-4	ASME B16.11	六角头管塞 NPT 1/4 HEX HEAD PLUG	3	SS304	0.1	0.3	
-3		垫板 202x130x8 PAD	1	SA-240 316L	2.1		
-2		吊耳板 t=16 LIFTING LUG	1	SA-240 316L	7.5		
-1		垫板 t=16 RB PLATE	1	SA-240 316L	1.2		
4		吊耳 LIFTING LUG	1:5 2	11.1	BSA15-302-03	BSA15-302-00(2/2)	



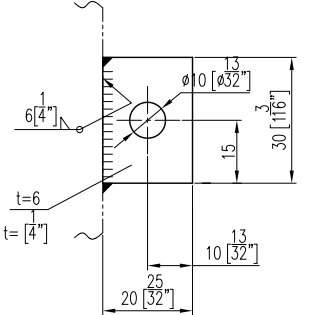
技术要求 :
 TECHNICAL REQUIREMENT:
 1. 焊接采用电焊, 焊接按照 WPS 的规定.
 WHEN WELDING, WELDING PROCEDURE SPECIFICATION TO BE PER WPS.
 2. 焊接接头形式及尺寸按图中注明, 按 ASME VIII-1 中规定. 角焊缝的焊角尺寸按被焊件的厚度.
 TYPES AND DIMENSION FOR WELDING JOINT SHALL MEET THE REQUIREMENTS OF ASME VIII-1. THE SIZE OF FILLETS PER THICKNESS OF THINNER PLATE WELDED.
 3. 吊耳中所有焊缝按 100% PT 检测, 符合 ASME VIII-1 附录 8 中规定.
 WELDING JOINT OF LIFTING LUG SHOULD BE 100% PT. AND MEET THE REQUIREMENTS OF ASME VIII-1 (APPENDIX 8).
 4. 其余按装配图中规定.
 OTHER REQUIREMENTS SHALL BE INDICATED IN ASSEMBLY DRAWING.

件号 NO.	图号及标准号 DRAWING NO. OR STANDARD NO.	名称 TITLE	数量 QUANT.	材料 MATERIAL	重量 (Kg) WEIGHT	所在图号 DWG. NO.	备注 REMARKS
-3	ASME B16.11	六角头管塞 NPT 1/4 HEX HEAD PLUG	1	SS304	0.1		
-2		垫板 170x100x8 PAD	1	SA-240 316L	1.1		
-1		吊耳板 t=16 LIFTING LUG	1	SA-240 316L	2.4		
2		吊耳 LIFTING LUG	1:2.5 1	3.6	BSA15-302-03	BSA15-302-00(2/2)	



注 :
 NOTE :
 保温支撑块与其它元件干涉时, 适当移动保温支撑块.
 MOVE THE INSULATION CLIP SUITABLE WHEN INTERVENE WITH OTHER PART.

保温支撑块焊接详图
 WELD OF INSULATION CLIP
 不按比例 NO SCALE



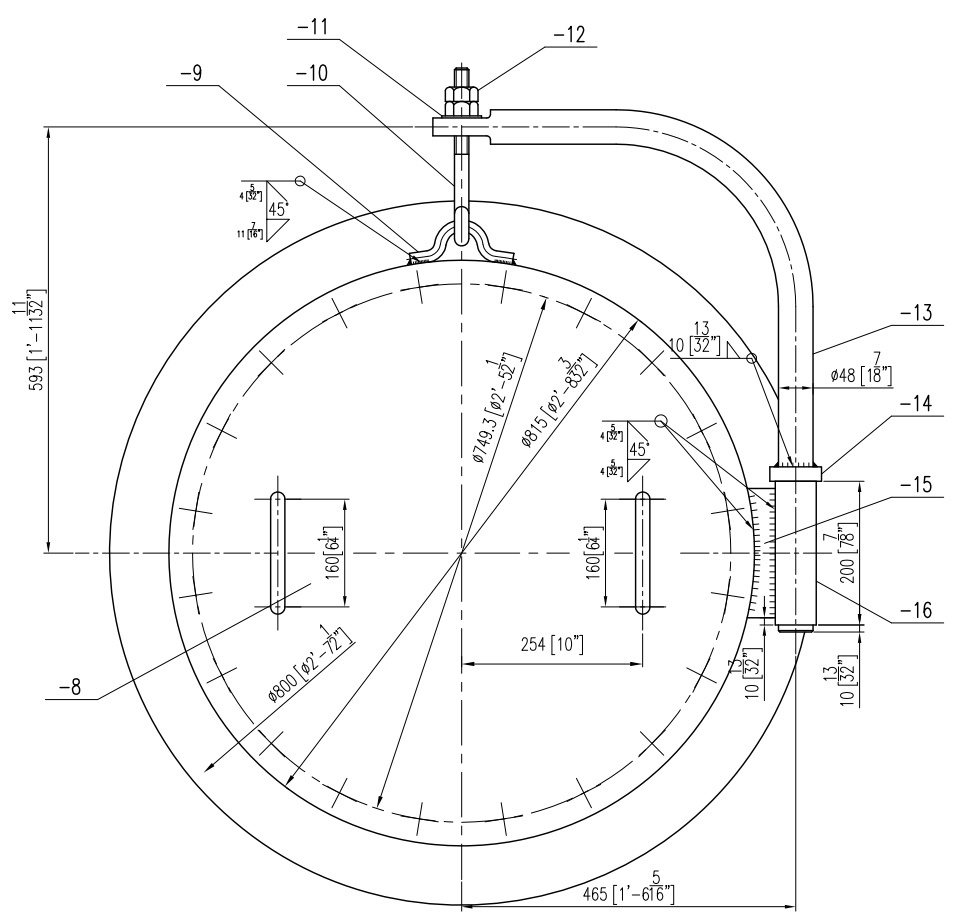
件号 NO.	名称 PART NAME	材料 MATERIAL	比例 SCALE	数量 QUANT.	重量 (Kg) WEIGHT	所在图号 DWG. NO.	装配图号 ASSM. DWG. NO.
7	保温支撑块 INSULATION CLIP	SA-240 316L	1:12	32	0.03	BSA15-302-03	BSA15-302-00(2/2)

REV	DATE	DESCRIPTION	DRAWN	CHK	APPR.
04	2015-11-03	ISSUED FOR FABRICATION		MaJia	HongTang
03	2015-09-25	FOR APPROVAL		MaJia	HongTang
02	2015-09-08	FOR APPROVAL		MaJia	HongTang
01	2015-08-21	FOR APPROVAL		MaJia	HongTang
00	2015-05-13	FOR APPROVAL		MaJia	HongTang

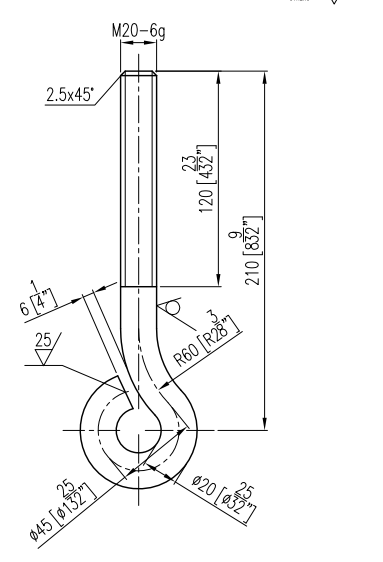


昆山市贝色特材装备有限公司 Kunshan Bexceller Special Equipment Co.,Ltd		项目名称: Mobile ACA PROJECT NAME:	
Evonik Corporation Mobile AL USA		图号: 04 DWG. NO.	
Details For Raw ACA Feed Tank		比例: BSA15-302-03 SCALE:	
图号: V-3110 ITEM NO.		生产号: 15-A3175 SERIAL NO.	

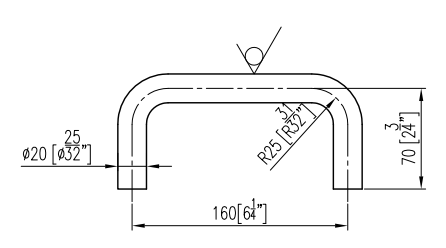
ANSI D



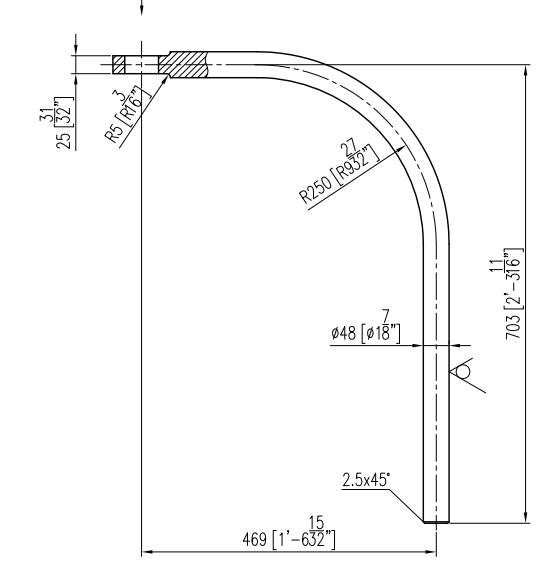
件-10 吊钩详图
DETAIL OF NO.-10
不按比例 NO SCALE



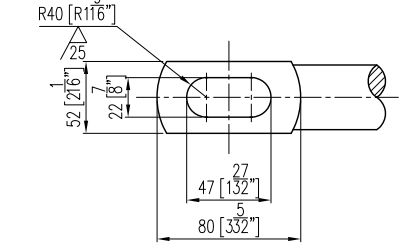
件-8 把手详图
DETAIL OF NO.-8
不按比例 NO SCALE



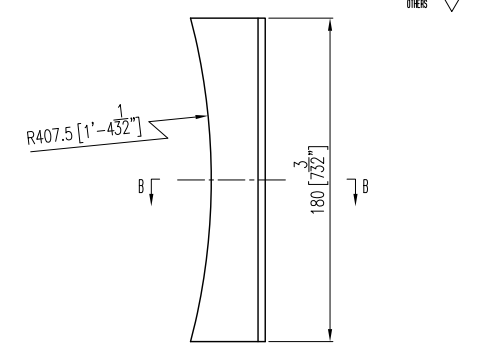
件-13 转臂接管详图
DETAIL OF NO.-13
不按比例 NO SCALE



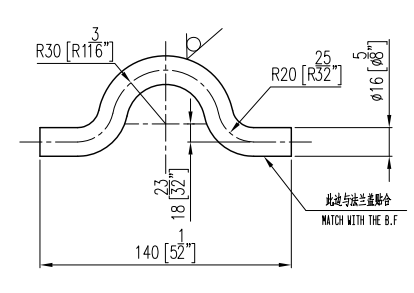
VIEW A
不按比例 NO SCALE



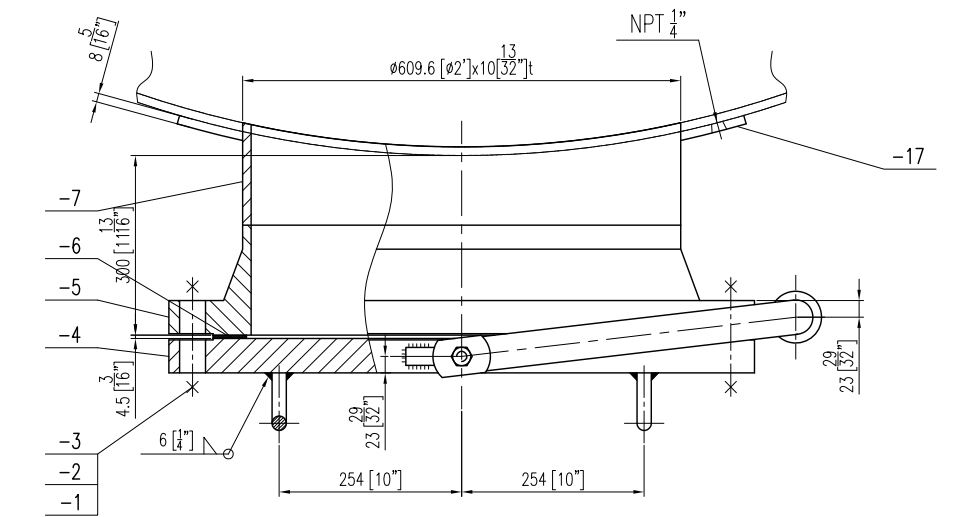
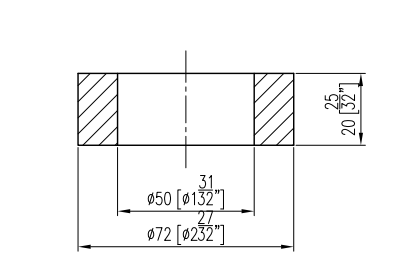
件-15 支撑板详图
DETAIL OF NO.-14
不按比例 NO SCALE



件-9 吊环详图
DETAIL OF NO.-9
不按比例 NO SCALE



件-14 吊环详图
DETAIL OF NO.-14
不按比例 NO SCALE



技术要求：
TECHNICAL REQUIREMENT:
1. 焊接采用电焊，焊接规范按 WPS 的规定。
WHEN WELDING, WELDING PROCEDURE SPECIFICATION TO BE PER WPS.
2. 焊接接头形式及尺寸除图中注明外，按 ASME VIII-1 号规范。受焊接的厚度尺寸按被焊板的厚度。
TYPES AND DIMENSION FOR WELDING JOINT SHALL MEET THE REQUIREMENTS OF ASME VIII-1. THE SIZE OF FILLETS PER THICKNESS OF THINNER PLATE WELDED.
3. 其余按装配图中规定。
OTHER REQUIREMENTS SHALL BE INDICATED IN ASSEMBLY DRAWING.

件号 NO.	图号及标准号 DRAWING NO. OR STANDARD NO.	名称 TITLE	数量 QUANT.	材料 MATERIAL	重量 (Kg) WEIGHT	所在图号 DWG. NO.	备注 REMARKS
-17		补强圈 REINFORCING PAD	1	SA-240 316L	12.8		
-16		无缝钢管 PIPE	1	SA-312 TP 304	0.92		
-15	见本图(SEE THIS DWG)	支板板 PLATE	1	SA-240 304	1.1		
-14	见本图(SEE THIS DWG)	吊钩 HOOK	1	SA-240 304	0.4		
-13	见本图(SEE THIS DWG)	接管 ROUND BAR	1	SA-479 304	15.3		
-12	ASME B18.2.2	螺母 NUT	2	SS304	/		
-11		垫圈 WASHER	1	SS304	/		
-10	见本图(SEE THIS DWG)	吊钩 ROUND BAR	1	SA-479 304	0.8		
-9	见本图(SEE THIS DWG)	吊钩 ROUND BAR	1	SA-479 304	0.3		
-8	见本图(SEE THIS DWG)	把手 HANDLE	2	SA-479 304	0.7 1.4		
-7		筒节 SHELL	1	SA-240 316L	35.9		
-6	REFER TO ASME B16.20	密封垫 GASKET	1+2	见技术要求 SEE TECHNICAL REQUIREMENTS	/		
-5	ASME B16.5	法兰 FLANGE	1	SA-182 F316L	121.7		
-4	ASME B16.5	法兰 FLANGE	1	SA-182 F316L	188.4		
-3		垫圈 WASHER	40+4	SS304	0.03 1.2		
-2	ASME B18.2.2	螺母 NUTS	40+4	SA-194 2H	0.1 4		热浸镀锌 HOT DIP GALVANIZED
-1	ASME B18.2.1	全螺纹螺栓 TOTAL SCREW STUD	20+2	SA-193 B7	1.5 30		热浸镀锌 HOT DIP GALVANIZED
8	人孔 24\"/>						

OWNER / DEVELOPER:

昆山市贝色特材装备有限公司
Kunshan Bexceller Special Equipment Co., Ltd

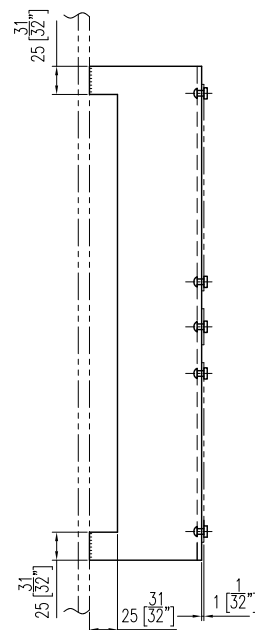
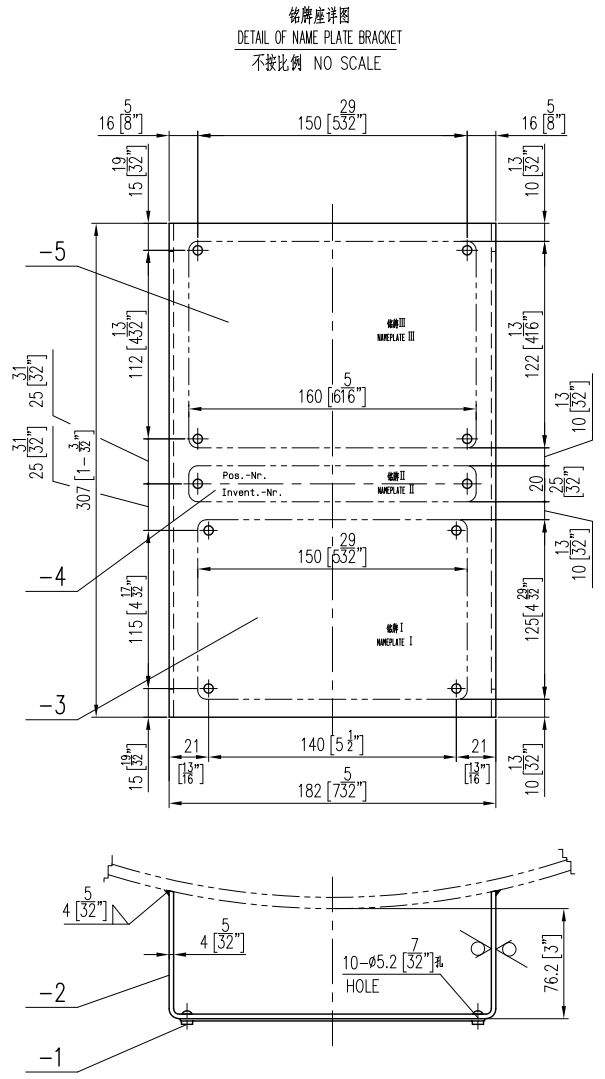
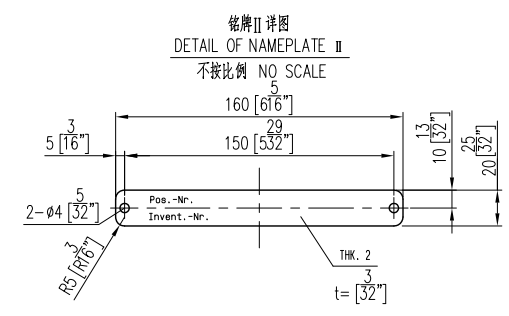
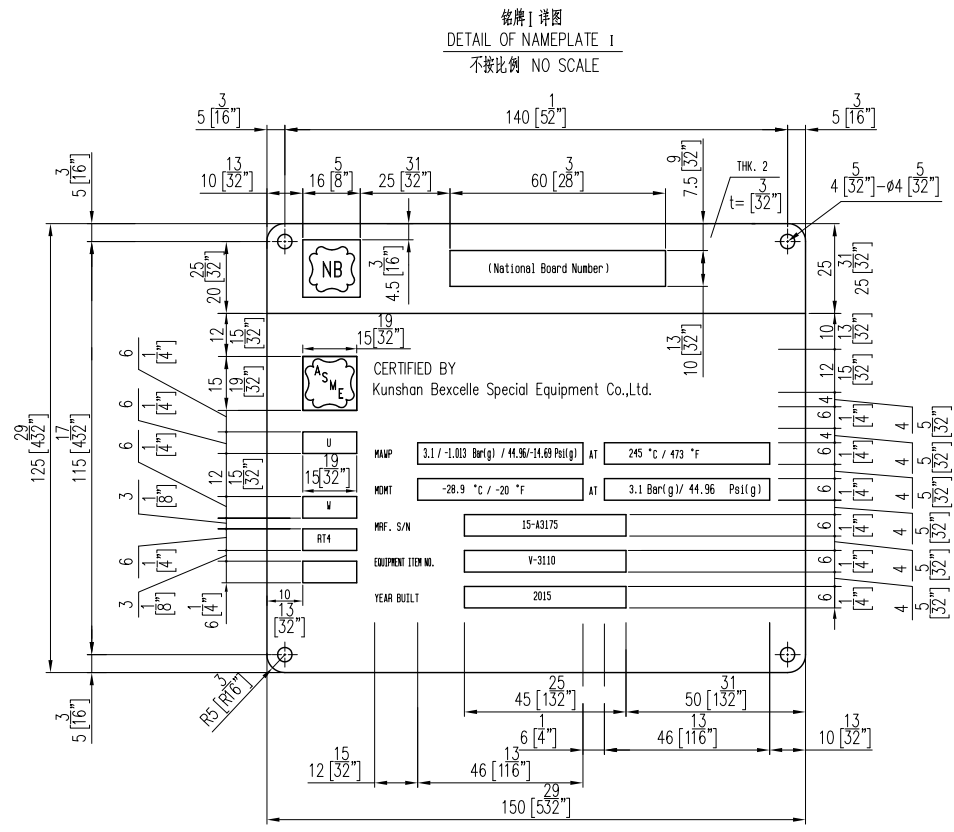
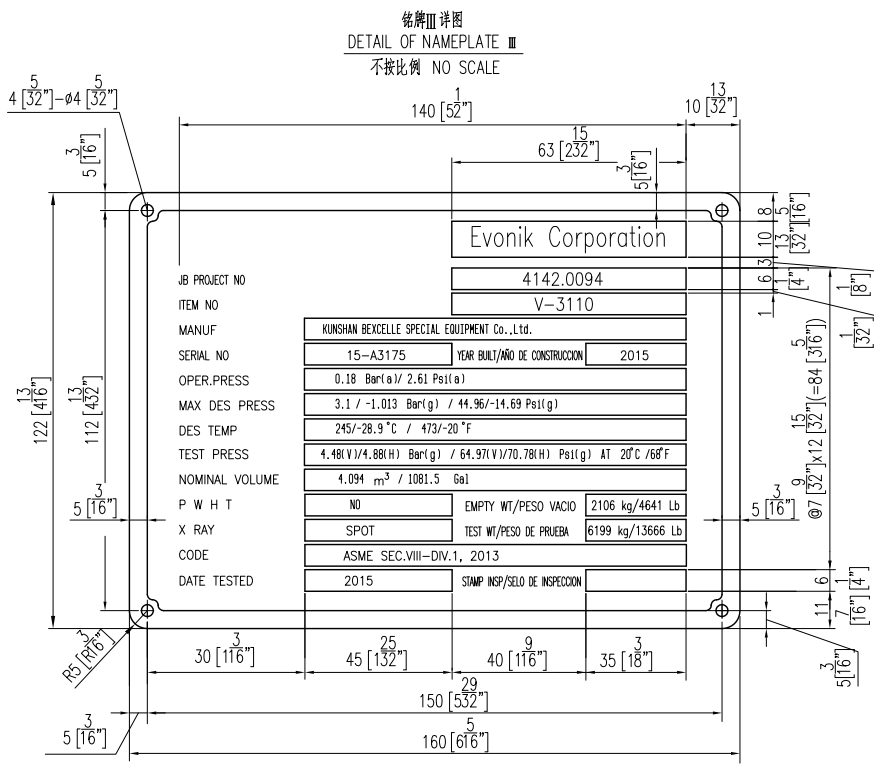
项目名称: Mobile ACA Project
PROJECT NAME: Mobile ACA Project

Evonik Corporation
Mobile AL USA

Details For
Raw ACA Feed Tank

图号: V-3110
生产号: 15-A3175

Rev: 04
Dwg No: BSA15-302-04
Scale: 1:1
Page: 6 OF 7



- 技术要求:
- 铭牌表面不允许有明显的凹凸变形, 表面翘曲度在100mm范围内不得超过1mm。
ANY DISTINCT DEFORMATION OR WARPAGE ON THE NAMEPLATE IS NOT PERMITTED AND SHALL BE LESS THAN 1 mm PER 100mm.
 - 铭牌表面应平整光滑, 色彩均匀, 不得有裂纹、锈迹、反色和明显的擦伤丝纹。
THE SURFACE OF THE NAMEPLATE SHALL BE FLAT, SMOOTH AND UNIFORM COLOR AND FREE OF ANY CRACK, RUST AND SCRATCH.
 - 铭牌上的文字、符号、线条应清晰、完整, 不得有缺角和模糊, 不允许有影响其清晰度的斑点和暗纹。
LETTERS SYMBOLS AND LINES IN THE NAMEPLATE SHALL BE CLEAR AND COMPLETE AND SHALL NOT BE ANY STAIN AND SHADOW. THE HEIGHT OF THE LETTERING MUST BE NOT LESS THAN 4 mm.
 - 涂膜在铭牌上的附着必须牢固, 涂膜上不得有裂纹、脱落和明显的颗粒杂质。
THE FILM OF PAINTING ON THE NAMEPLATE SHALL BE FIRM AND FREE OF ANY WRINKLES, SHEDDING AND IMPURITY.
 - 铭牌II上的位号和系列号用冲压或雕刻的方法清晰表示, 字高5mm。
THE ITEM AND THE INVENTORY-NUMBER OF NAMEPLATE II SHALL BE DONE IN GOOD LEGIBLE MANNER IN CHARACTERS OF 5mm HEIGHT BY PUNCHMARKING OR ENGRAVING.
 - 本零件按照规范 TS.25-0902设计。
THIS PART IS DESIGNED ACCORDING TO TS.25-0902.

REV	DATE	DESCRIPTION	DRAWN	CHK	APPR
04	2015-11-03	ISSUED FOR FABRICATION	MaJia	HongTang	MaxChengng
03	2015-09-25	FOR APPROVAL	MaJia	HongTang	MaxChengng
02	2015-09-08	FOR APPROVAL	MaJia	HongTang	MaxChengng
01	2015-08-29	FOR APPROVAL	MaJia	HongTang	MaxChengng
00	2015-05-13	FOR APPROVAL	MaJia	HongTang	MaxChengng

OWNER / DEVELOPER:

昆山市贝色特材装备有限公司
Kunshan Bexelle Special Equipment Co.,Ltd

项目名称: Mobile ACA
PROJECT NAME:

设计 DESIGN	审核 CHECK	批准 APPROVE	数量 QUANT.	重量 WEIGHT	所在料号 DWG. NO	装配料号 ASSM. DWG. NO	备注 REMARKS
			1	3.9	BSA15-302-05	BSA15-302-00(2/2)	

Evonik Corporation
Mobile AL USA

Details For
Raw ACA Feed Tank

料号 ITEM NO.	V-3110	生产料号 SERIAL NO.	15-A3175
----------------	--------	--------------------	----------