



DESIGN DATA TABLE			
DESIGN PARAMETER		DESIGN - FABRICATION AND INSPECTION STANDARD	
CERTIFICATION MARK WITH THE DESIGNATOR	YES/NO	YES	
NB REGISTRATION REQUIRED	YES/NO	YES	
PARAMETER NAME	SHELL	JACKET	
DESIGN PRESSURE	bar	2	6
WORK PRESSURE	bar	2	3
MAWP	bar	2 AT 40°C	6 AT 40°C
DESIGN TEMPERATURE	°C	-10/40	-10/40
WORK TEMPERATURE	°C	-4/40	-4/40
MDMT	°C	-10 AT 2bar	-10 AT 6bar
MEDIUM NAME	BEER	GLYCOL WATER	
MEDIUM CHARACTERISTIC	NON-LETHAL	NON-LETHAL	
MEDIUM GROUP	/	/	
MEDIUM DENSITY	kg/m <sup>3</sup>	1040	950
MAIN PRESSURE PART MATERIAL	SA-240M 304	SA-240M 304	
CORROSION ALLOWANCE	mm	0	0
JOINT EFFICIENCY	SHELL/HEAD	0.85	0.8
CAPACITY	m <sup>3</sup>	2.23	0.009
HEAT TRANSFER AREA	m <sup>2</sup>	4.1	
INSULATION MATERIAL	PU 40-50kg/m <sup>3</sup>		
INSULATION THICKNESS	mm	90	
EQUIPMENT NET WEIGHT	kg	800	
WEIGHT FULL OF WATER	kg	3030	
OPERATION WEIGHT	kg	/	
TEST TYPE		SHELL	JACKET
HYDRAULIC TESTING PRESSURE (V)		bar	2.6 7.8
LEAKAGE TESTING PRESSURE		bar	/ /
IMPACT TEST		YES/NO	EXEMPT ACCORDING TO UHA-51
HEAT TREATMENT		YES/NO	EXEMPT ACCORDING TO UHA-32

**TECHNIQUE REQUIRED;**

1. THE EQUIPMENT MANUFACTURING HAS BEEN COMPLETED, THE INNER SURFACE HAS NO WELDING GAP AND THE OUTER SURFACE HAS NO SCRATCHES.
2. BOLT HOLES IN FLANGES SHALL BE STRADDLE THE PRINCIPAL CENTER LINES OF VESSEL.
3. UNLESS OTHERWISE SPECIFIED DIMENSIONS SHOULD BE IN MILLIMETER AND THE FABRICATION TOLERANCE SHALL BE AS GRADE C OF GB/T 18004-2005.
4. AFTER FULL WATER TEST, THE WATER SHOULD BE CLEANED IF CAN NOT MEET THE REQUIREMENTS, THE CHLORIDE OF WATER SHOULD BE NO MORE THAN 25MG/L.
5. WHEN ONLY ONE SIDE OF FILLET WELD LEG IS SPECIFIED THE OTHER SIDE SHALL BE CONSIDERED EQUAL, HOWEVER, WHEN THE FILLET WELD IS BUILT UP ON GROOVE WELD, THE LEG SIZE OF THIS SIDE MAY BE EQUAL TO GROOVE OPENING WHEN THE GROOVE OPENING IS NOT LESS THAN THE LEG SIZE.
6. THE INNER SURFACE OF EQUIPMENT INCLUDING ATTACHMENTS ARE POLISHED TO RA<0.8μm EXCEPT 2B PLATE. THE OUTER SURFACE OF EQUIPMENT ARE POLISHED TO RA<0.8μm EXCEPT DRAWING PLATE.
7. ALL RIGHT ANGLES OF INTERIOR EQUIPMENT SHOULD BE ROUNDED REQUIRED.
8. HOUSING WELD INSPECTION AFTER PASSING THE PACKAGE HOUSING.
9. STAINLESS STEEL OUTER SURFACE FOR THE INSULATION LAYER BEFORE COATED WITH EPOXY S22 PAINT TO (KUNSHAN SECRETARY SIGMAKALON PRODUCTION).
10. PAINT TO 1:7420 SIGMACOVER S22, A TOTAL OF PAINTED TWO-STORY, EACH LAYER THICKNESS OF 80μm.
11. THE ORIENTATION OF THE NOZZLES IS ACCORDING TO TOP VIEW.
12. INSIDE OF JACKET HAS TAKEN TO PREVENT SHORT-CIRCUITING.
13. ALL WELDS IN PRESSURE RETAINING PARTS SHALL BE FULL PENETRATION WELDS.

NOZZLE SCHEDULE					
MARK	NPS	CONNECTIONS SIZES STANDARDS	TYPE & FACE	SERVICE	REMARK
N1	1.5"	3A φ38.1x165	CLAMP	OUTLET	/
N2	1.5"	3A φ38.1x165	CLAMP	OUTLET	/
N3	1.5"/3"	3A φ38.1x165	CLAMP	CIP	/
N6	1"	3A φ25.4x165	CLAMP	JACKET INLET	/
N7	1"	3A φ25.4x165	CLAMP	JACKET OUTLET	/
N8	1"	3A φ25.4x165	CLAMP	JACKET INLET	/
N9	2"	3A φ50.8x165	CLAMP	VACUUM/PRESSURE COMBINED VALVE	/
N10	165	/	FLANGE	SIGHT GLASS	/
TT	G3/4"	/	SCREW	TEMPERATURE TRANSMITTER	/
V	25	/	WELDING	SAMPLING VALVE	/
M	1D.400	/	/	MAN HOLE	/

7		INSULATION CONE ID:1388xH:246x21 ±0.35°R:25	304	1	68	68
6		PLATE φ246/φ39x31	304-2B	1	1	1
5	3A	PIPE φ38.1x165 L=57	SA-312M TP304	1	2	2
4	3A	CLAMP FERRULE 15°(φ38.1) L=12.7	SA-182M F304	1	0.1	0.1
3		PIPE φ114x4 L=1389	304	4	17.6	70.4
2		PIPE φ38x3 L=741	304	4	2.2	8.8
1	XTQB01-02	ADJUST FEET D=φ114	304	4	10	40

NO.	DRAWING NO. OR STANDARD	TITLE	MATERIAL	QUANT.	UNIT	TOTAL	REMARK
					MASS (kg)		
				0.76m <sup>3</sup>			

**Cedarstone Industry, LLC**  
 7432 Fairbanks North Houston Road  
 Houston, Texas 77040

DRAW				VER. No.	1
DESIGN				ITEM No.	
CHKD					
APPD					
SER.No.	XT17-025-034				
DWG.No.	XT17009R-00	SCALE	1:8	DRAW	

41		PLATE 3t	304-2B	4	0.2	0.8
40		PLATE 4t	SA-240M 304	4	1	4
39		ROTARY SPARY HEAD φ45(1")	304	1	0.5	0.5
38	3A	PIPE φ25.4x165 L=48	SA-312M TP304	1	0.1	0.1
37	3A	CONCENTRIC REDUCER 1.5"/1" L=60.3	SA-403M WP304	1	0.2	0.2
36	3A	PIPE φ38.1x165 L=94	SA-312M TP304	1	0.1	0.1
35	3A	45° ELBOW φ38.1x165 R57	SA-403M WP304	2	0.2	0.4
34	3A	PIPE φ38.1x165 L=50	SA-312M TP304	1	0.1	0.1
33	3A	CLAMP FERRULE 3"(φ81.9) L=46	SA-182M F304/EPDM	1	0.42	0.4
32	3A	CLAMP FERRULE 1.5"(φ38.1) L=12.7	SA-182M F304	1	0.1	0.1
31	3A	CLAMP FERRULE 2"(φ51.7) L=44.5	SA-182M F304/EPDM	1	0.42	0.4
30	(LYSFD)QW-03	CLAMP ASEPTIC SAMPLE VALVE DN25 ASSEMBLY	ASSEMBLY	1	0.5	0.5
29	DIN11851	FERRULE UNION φ29	SA-182M F304/EPDM	1	0.42	0.4
28		BOWL 3t	304-2B	1	0.5	0.5
27	3A	PIPE φ63.5x165 L=173	SA-312M TP304	1	0.2	0.2
26	3A	CLAMP FERRULE 2.5"	SA-182M F304	1	0.6	0.6
25		PLATE 80x230x5t	SA-240M 304	2	0.5	1
24		LUG 12t	304	2	1	2
23	0900579250	TET G3/4"	SA-182M F316L	1	0.5	0.5
22		BOWL 3t	304-2B	1	0.5	0.5
21	XTQB02-03	PLUG	304	1	0.5	0.5
20	XT17009R-05	NAMEPLATE ASSEMBLY	304-2B	1	0.5	0.5
19		VACUUM/PRESSURE COMBINED VALVE 2"	ASSEMBLY	1		
18		ROUND MANWAY WITH SIGHT GLASS ID:400xH:125	SA-240M 304/EPDM	1	20	20
17	XT17009R-04	DISHED HEAD ID:200x(35) R:120 H:120 H:40	SA-240M 304	1	50	50
16		INSULATION PLATE ID:1388xID:1210x3 ±0.1°	304	1	10	10
15		ROUND STEEL φ20 L=800	304	1	2	2
14		PLATE φ60x2t	304-2B	2	0.1	0.2
13	XT17009R-03	SHELL & JACKET	SA-240M 304	1	156	156
12		INSULATION 90t	PU	1	4.8	4.8
11		INSULATION SHELL ID:1388xH:1500	304	1	83.6	83.6
10	XT17009R-02	CONE HEAD ID:1200/ID:868	SA-240M 304	1	50	50
9		ROTARY VALVE DN:4-0-180°	304/EPDM	1	3	3
8	XT17009R-01	CONE & JACKET	SA-240M 304	1	83.4	83.4