



Pipe port list

Symbol	Nominal size	Face type	Usage
a	2" (051)	Tri-clamp	Drain port
b ₁₋₂	G1 1/2	Male thread	Bottom cone condensate water outlet
c	G1 1/2	Male thread	Bottom cone steam inlet
d	019		Secondary condensate water port
e	1.5" (038)	Tri-clamp	Whirlpool inlet
f	G1 1/2	Female thread	Body condensate water port
g	G1 1/2	Male thread	Body steam inlet
h	DN500		Manway
i	0273		Steam exhaust port
j	1.5" (038)	Tri-clamp	CIP port
k	DN80		Lamp
L	1.5" (038)	Tri-clamp	Hot water inlet
m ₁₋₂	013	Special joint	Wire port
n	014		Thermometer well
p	G1 1/2	Male thread	Return port
r ₁₋₂	G1/2	Female thread	Safety component port
s	G1/2	Female thread	Liquid level meter port
t	025		Sight lamp wire port
u	2" (051)	Tri-clamp	Material port

Key Size List

Symbol	Name	Key Size
G1	Inner tank diameter	Φ=2000
G2	Cladding body diameter	Φ=2160
G3	Inner tank body height	H=1220
G4	Cladding body height	H=1340
G5	Inner tank bottom cone degree	α = 160°

Pipe ports should keep off from welding line.

37	Liquidometer connection 025x3 L=130	1	06Cr19Ni10	0.2	0.2		
36	Thermometer well 014x2 L=200	1	06Cr19Ni10	0.1	0.1		
35	Tank body dimple plate t1.5	1	06Cr19Ni10	21	21		
34	Body safety component joint 025x3 L=110	1	06Cr19Ni10	0.2	0.2		
33	Insulation material	1.3m ³	Rock wool	63.5	82.55		
32	Sight lamp wire pipe 025x1.5 L=1700	1	201 mirror	1.6	1.6		
31	Return tube 038x2 L=395	1	06Cr19Ni10	0.4	0.4		
30	Hot water inlet 038x1.5 L=50	1	06Cr19Ni10	0.1	0.1		
29	Sight lamp DN80 24V	1	Component	0.5	0.5		
28	CIP pipe 038x1.5 L=1420	1	06Cr19Ni10	2.4	2.4		
27	Support plate width 80 t2	1	06Cr19Ni10	1.3	1.3		
26	Exhaust pipe 0273x2 H=50	1	06Cr19Ni10	0.7	0.7		
25	Ornament tube t1.5	1	06Cr19Ni10	6.5	6.5		
24	Security strip width20 t2	1	06Cr19Ni10	0.2	0.2		
23	Rotary spray ball 063	2	06Cr19Ni10	0.5	1		
22	Manway(with DN200 sight glass)DN500	1	06Cr19Ni10	12.5	12.5		
21	Top dome head THA2000x4	1	06Cr19Ni10	130	130		
20	Cladding top seal t3	1	06Cr19Ni10	20	20		
19	Inner tank body t3	1	06Cr19Ni10	166	166		
18	Cladding body t2	1	06Cr19Ni10	135	135		
17	Secondary condensate water pipe 019x1.5 L=2350	1	201 mirror	1.7	1.7		
16	Body steam inlet 042x3.5 L=85	1	06Cr19Ni10	0.3	0.3		
15	Tank body steam coil 038x2 L=6600	1	06Cr19Ni10	12.6	12.6		
14	Body steam branch inlet 025x2 L=100	4	06Cr19Ni10	0.15	0.6		
13	Whirlpool tangential pipe 032x1.5 L=350	1	06Cr19Ni10	0.4	0.4		
12	Body condensate water outlet 048x4.5 L=110	1	06Cr19Ni10	0.6	0.6		
11	Leg reinforcing plate 280x80x3	4	06Cr19Ni10	0.8	3.2		
10	Whirlpool inlet 038x1.5 L=440	1	06Cr19Ni10	0.7	0.7		
9	Leg reinforcing plate 280x150x4	4	06Cr19Ni10	1.4	5.6		
8	Bottom cone steam branch inlet 025x2 L=50	4	06Cr19Ni10	0.05	0.2		
7	Bottom cone steam coil 038x2 L=4995	1	06Cr19Ni10	9.6	9.6		
6	Bottom cone steam inlet 042x3.5 L=150	1	06Cr19Ni10	0.5	0.5		
5	Broken leg flange	8	06Cr19Ni10	6	48		
4	Leg 0133x3	4	06Cr19Ni10	24	96		
3	Adjustable bolt M24x100	4	06Cr19Ni10	0.5	2		
2	Leg baseplate 0129x5	4	06Cr19Ni10	1.5	6		
1	Leg bottom plate 0135x5	4	06Cr19Ni10	1.2	4.8		
序号代号		名称	数量	材料	单件重量	总计重量	备注
Zhongde Equipment Co., Ltd. Shandong				材料名称	06Cr19Ni10		
				项目名称	2013-149		
				设计阶段			
				30BBL Kettle/whirlpool Tun		1-06-	
负责	设计	校核	审核	批准	重量/kg	1021.150	比例 1:12
				共 页	第 页		

图 (辅) 用件 登记
图底图总号
底图总号
签字
日期
档案员 日期

Technical Requirement

- Nominal volume: 4035L, effective volume: 30BBL, heat exchanging area: 5m²;
- Argon arc welding.
- After finish, fill inner tank with water to test leakage. Do water pressure test on dimple plate and jacket. Testing pressure is 0.4Mpa.

46	Knuckle thread slipknot 051	8 sets	06Cr19Ni10	0.5	4	
45	Leg tension brace 051x2 L=1250	4	06Cr19Ni10	4	16	
44	Material outlet 051x1.5 L=190	1	06Cr19Ni10	0.3	0.3	
43	Bottom cone condensate water outlet 042x4.5 L=225	2	06Cr19Ni10	0.5	1	
42	Drain pipe 051x1.5 L=190	1	06Cr19Ni10	0.3	0.3	
41	Cladding bottom cone t2.5	1	06Cr19Ni10	77	77	
40	Inner tank bottom cone t4	1	06Cr19Ni10	105	105	
39	Bottom cone heating jacket t2.5/t3	1	06Cr19Ni10	42	42	
38	Bottom cone safety component joint 025x3 L=330	1	06Cr19Ni10	0.5	0.5	