

Complete Set HS500L Vacuum Emulsifying Machine



I. The description, appearance and instruction of Emulsifying Machine.

1.1 **The** turbine emulsifying machine is a coaxial and triple type mixer, suitable to stable homogenizing and emulsifying, the finished granular is very small. The quality of emulsifying depends on the disperse of the granular on the preparation stage. The smaller the granular is, the weaker the trend of accumulation to the surface becomes, thus the smaller the opportunity for the emulsifying to be broken becomes. Relying on mixing of reversed impeller, under the condition of homogenizing turbine and vacuum status, you can get the high-quality effect of emulsifying and mixing. . The parts of vacuum emulsifying machine touching with material are all made for high quality stainless steel 316L and non-toxic and non-poison material, mirror polishing inside and outside, meet the requirement of foodstuff sanitation, and can satisfy the emulsification process requirement of detergent, toothpaste, cosmetic and ointment etc under the condition of vacuum. Several types adopt various scale of producing in the valid working range.

1.2 This Emulsifying turbine emulsifying machine has very good performance in the aspect of insuring high quality of the finished material.

1.3 Instruction of machine

The Vacuum Emulsifying Mixer is specially designed by introducing foreign updated technology and on the basis of ointment-making technics for processing cosmetics and ointment. It is composed of pretreatment boiler, vacuum emulsifying mixer boiler, vacuum pump, hydraulic system, tilting system, and electric control system, etc.

2. The basal equipment of machine body and technical parameters

The whole equipment of this system is composed of parts below: pretreatment mixing tank, emulsifying mixer tank, vacuum system, hydraulic system, tilting system, electric control system.

2.1 Emulsifying mixer boiler:

Working volume: 500 L (total 580L), material: SUS316L stainless steel, steam heating and water-cooling

Structure: With 3-layer structure, upper and lower end sockets. The upper end socket is connected to the tank body with flange between them. The internal layer of tank body is made of 6mm thick SUS316L stainless steel and interior polished in 400 MESH (sanitary level). The middle layer of tank body is made of 5mm thick SUS304 stainless steel and can stand max working pressure 0.09 MPa (coil tube). The external layer of tank body is made of 2mm thick SUS304, and exterior polished in 300 MESH (sanitary level). All the welding seams shall be polished after rubdown, and as to the treatment interface, turned over edge arc transition is adopted. The heat preservation layer is made of PU polyurethane foaming.

In the tank, there are 3 mixers:

2.1.1 Cutting and vortex emulsify mixer: 7.5kw, 0-3500 rpm (frequency control)

2.1.2 Low-speed frame type scraping mixer: 2.2kw, 0-40 rpm (frequency control)

2.1.3 The motor of Low-speed converse mixer and low-speed frame type scraping mixer is the same with speed 0-40rpm.

2.1.4 Attached units of the tank: Liquid feed inlet with stainless steel pipe filter, solid material inlet, vacuum inlet, compressed air inlet, breaking vacuum inlet, sight glass, temperature sensor, CIP cleaning head, discharging hole, dustproof asepsis respiratory device.

2.2 Pretreatment Mixing tank:

Oil Mixing tank and water mixing tank one each, material: SUS316L. Structure: open (half-open) type, three feet with mixing. Detailed Technical requirements: Effective volumes: oil boiler of 300L, water boiler of 300L, and material: SUS316L, 3 layers structure. The material of the inner of tank body is made of 5mm thick SUS316L and interior polished in 400MESH (sanitary level). The middle of the tank body is made of 4mm thick SUS304 and can stand max working pressure 0.09 MPa. The external layer of tank body is made of 2mm thick SUS304 and exterior polished in 300MESH (sanitary level). All the welding seams shall be polished after rubdown, and as to the treatment interface, turned over edge arc transition is adopted. The heat preservation layer is made of PU polyurethane foaming. In the tank, there is a turbine mixer, 900 rpm inlet rotary speed. Discharge hole is equipped with butterfly valve of sanitary level and pipeline.

2.3 Vacuum system

Adopting vacuum pump with Siemens

2.4 Hydraulic system

Composed of oil cylinder, solenoid valve, over-fall valve, oil box, and pressure- keeping valve.

2.5 Electric control system (A、 button control, B、 PLC touch screen control)

Touch screen control

1. Touch screen adopts Taiwan Wei Lun Company Model: 10.4" – MT510T
2. On the touch screen, it is possible to adjust and vision mixing speed, temperature of each jar, set upper limit and lower limit of temperature, control automatic valve. It is possible to set the time control for slow speed emulsifies mixing and control performance of lift of hydraulic system.

Electric elements: Schneider
Transducer: Panasonic Company
Button/switch: Schneider

No	Name	Producer	Type	Note
1	Transducer	Panasonic	BFVC	PLC
2	Emulsifying motor	ABB Co.	4KW	
3	Reducer motor	WanNan motor Co.	0.55KW	
4	Sight glass	F.H.Papeomeier	DN80	
5	Vacuum pump	Siemens (china)	2BV2-061	
6	Vacuum pressure gauge	Beijing Bulaitong of China and America joint venture	Dissepiment type	
7	Temp. sensor	TJZH	WZP-235H	
8	Solenoid valve	Taiwan yadeke	4V-210	
9	Low-pressure electrics	Siemens		
10	Head switch	Schneider		
11	Button switch	Schneider		
12	Hydraulic pump station	Taiwan Qiyang Co.		
13	Steam angle valve	Shanghai shengyu Co.		

14 Bearing

Made in China

15 Oil seal

Made in China

Spare parts:

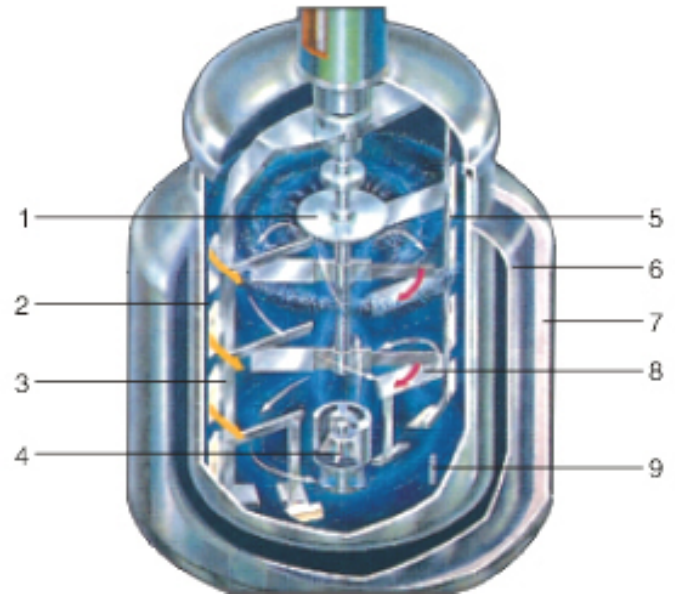
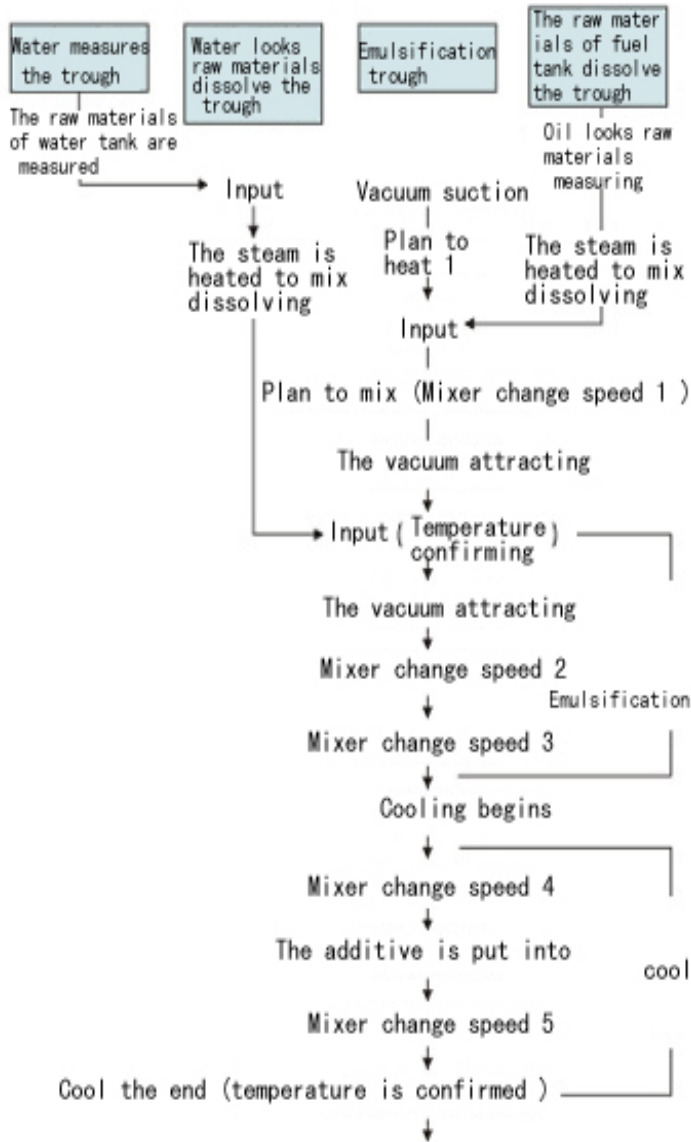
Heating & cooling pipe & valve, Stainless steel Screw-shaped connection

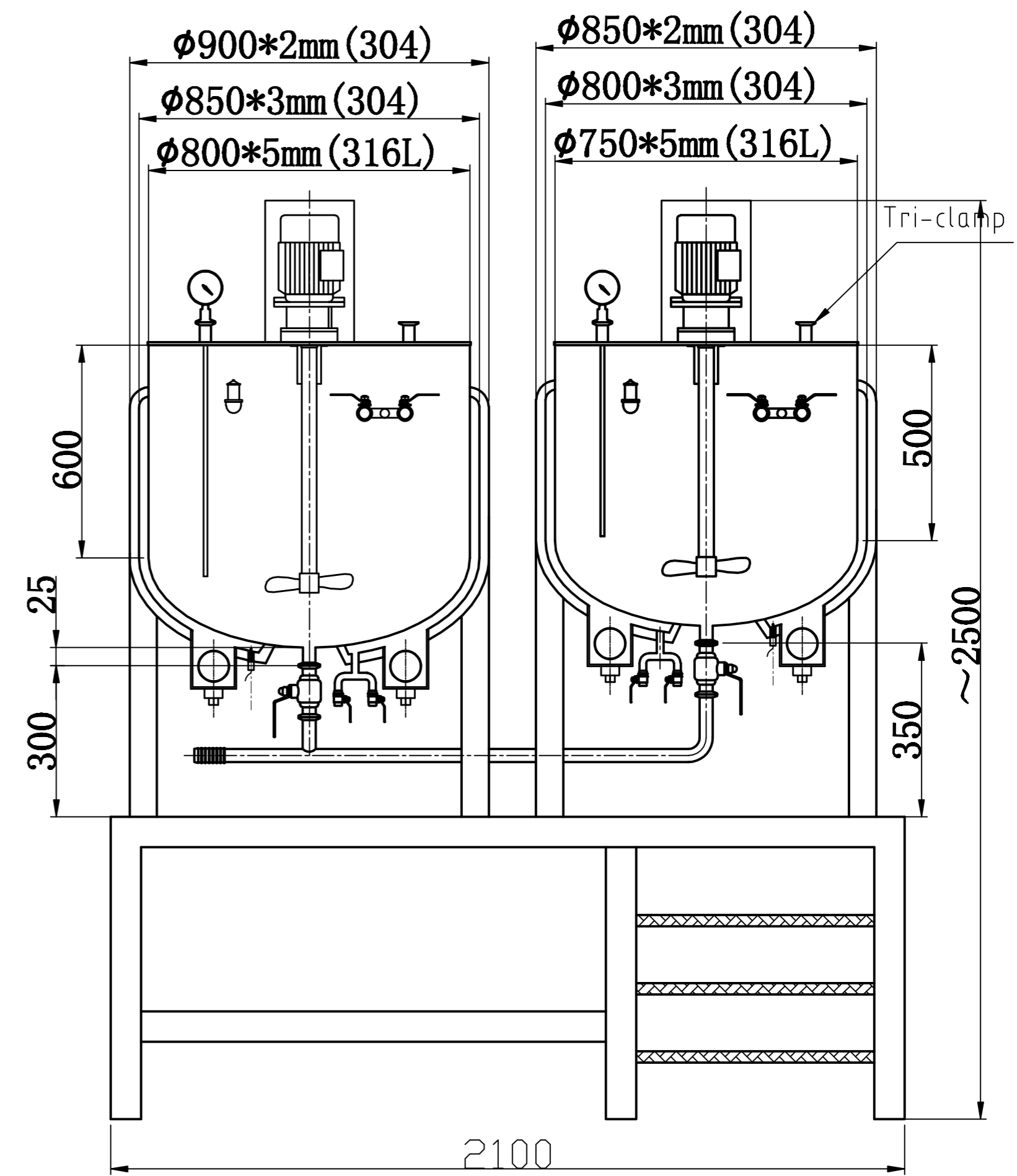
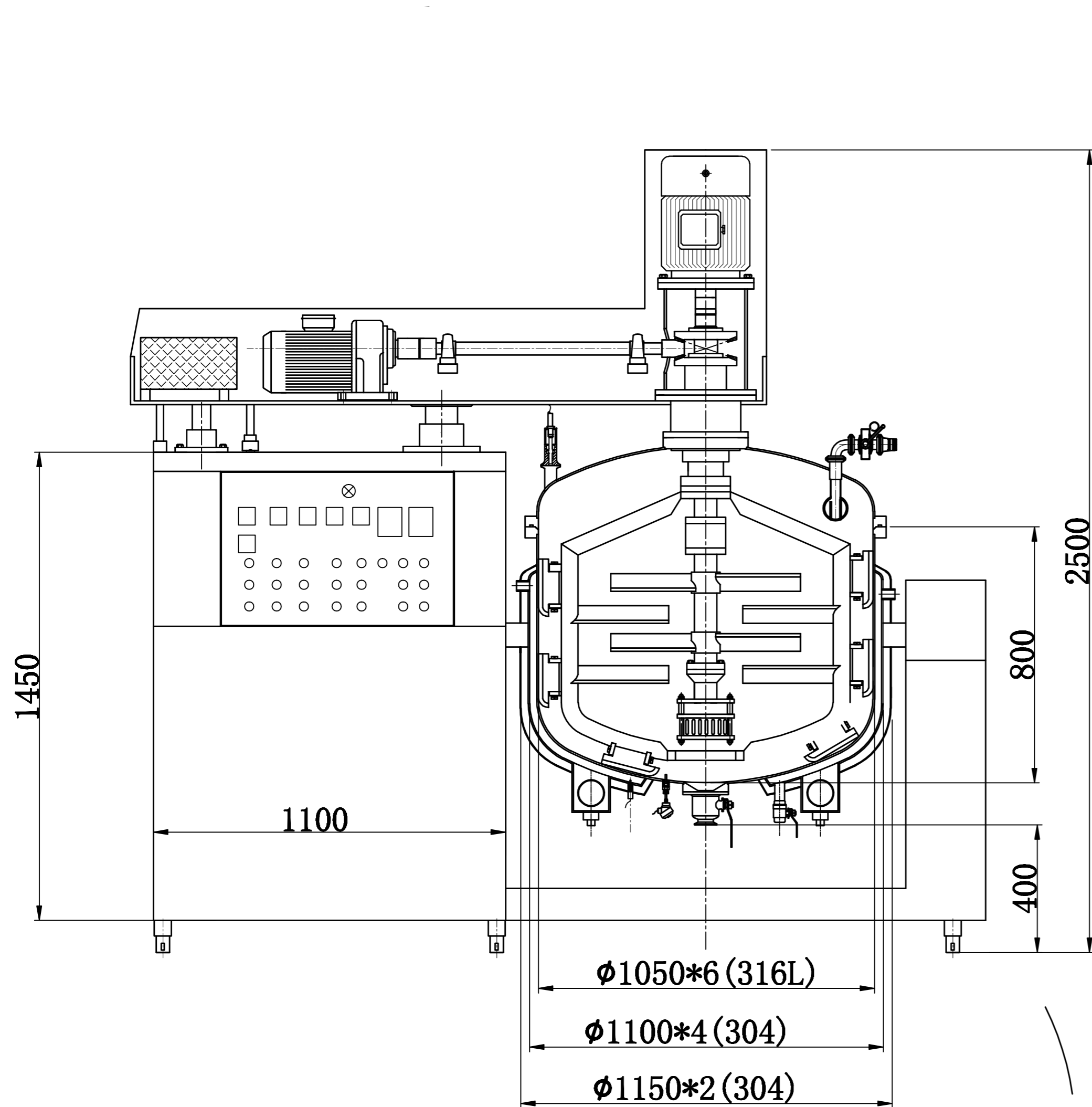
Gage, relief valve, etc. on main vessel lid

Stainless steel Clamp connection

Dimensions (LxWxH): 3970x2800x2700 (Lifting height 1000-1200) ~mm

Total power: 19kw 415V, 50Hz, Ph3





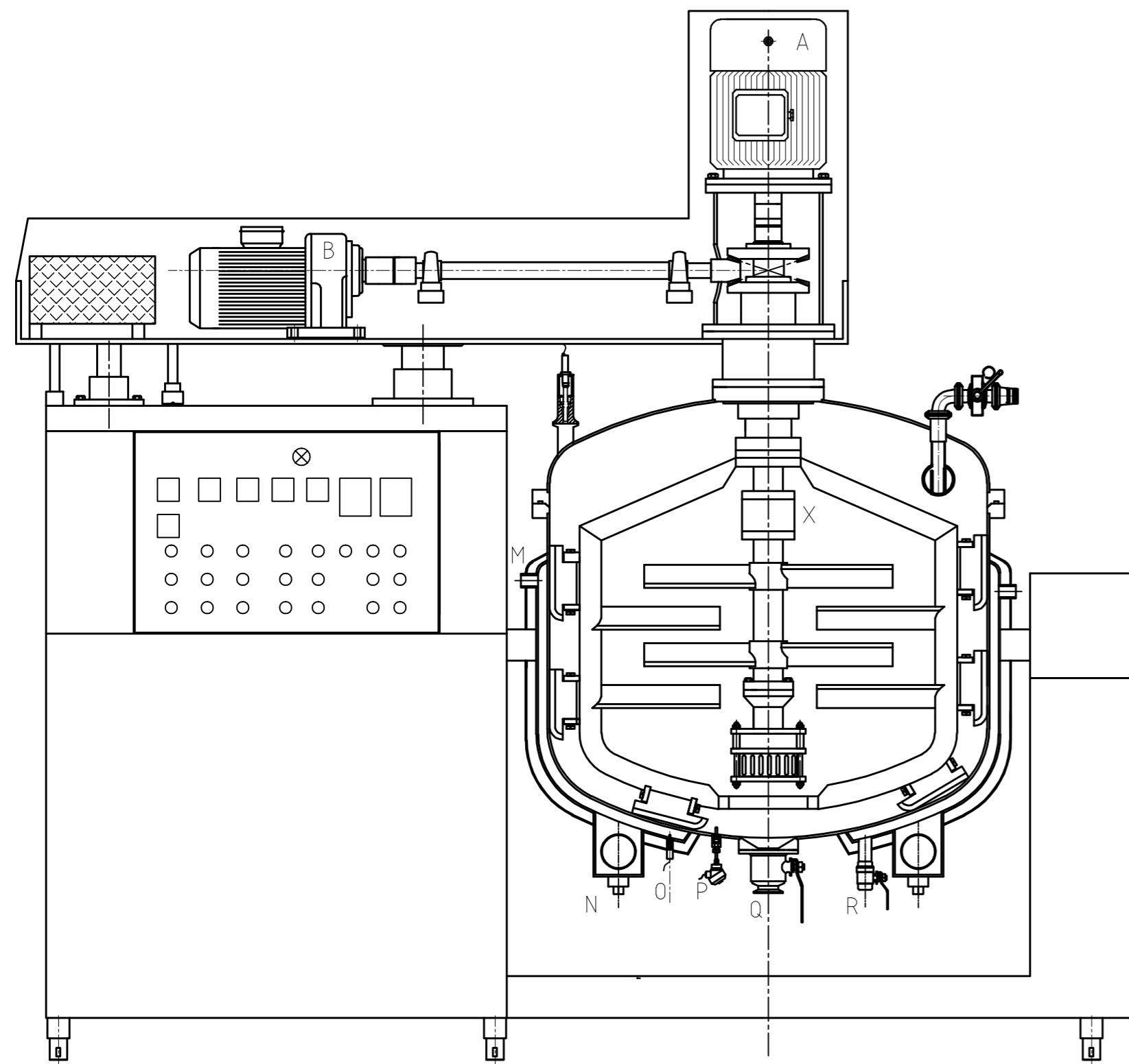
Oil phase Tank

1. Total volume:300L
2. Contacting part: SS 316L ; Jacket: SS304;
3. Output: Bottom outlet valve
4. Agitator Motor: 1.5KW, 960Rpm
380V , 50HZ
5. Connection type: by flange

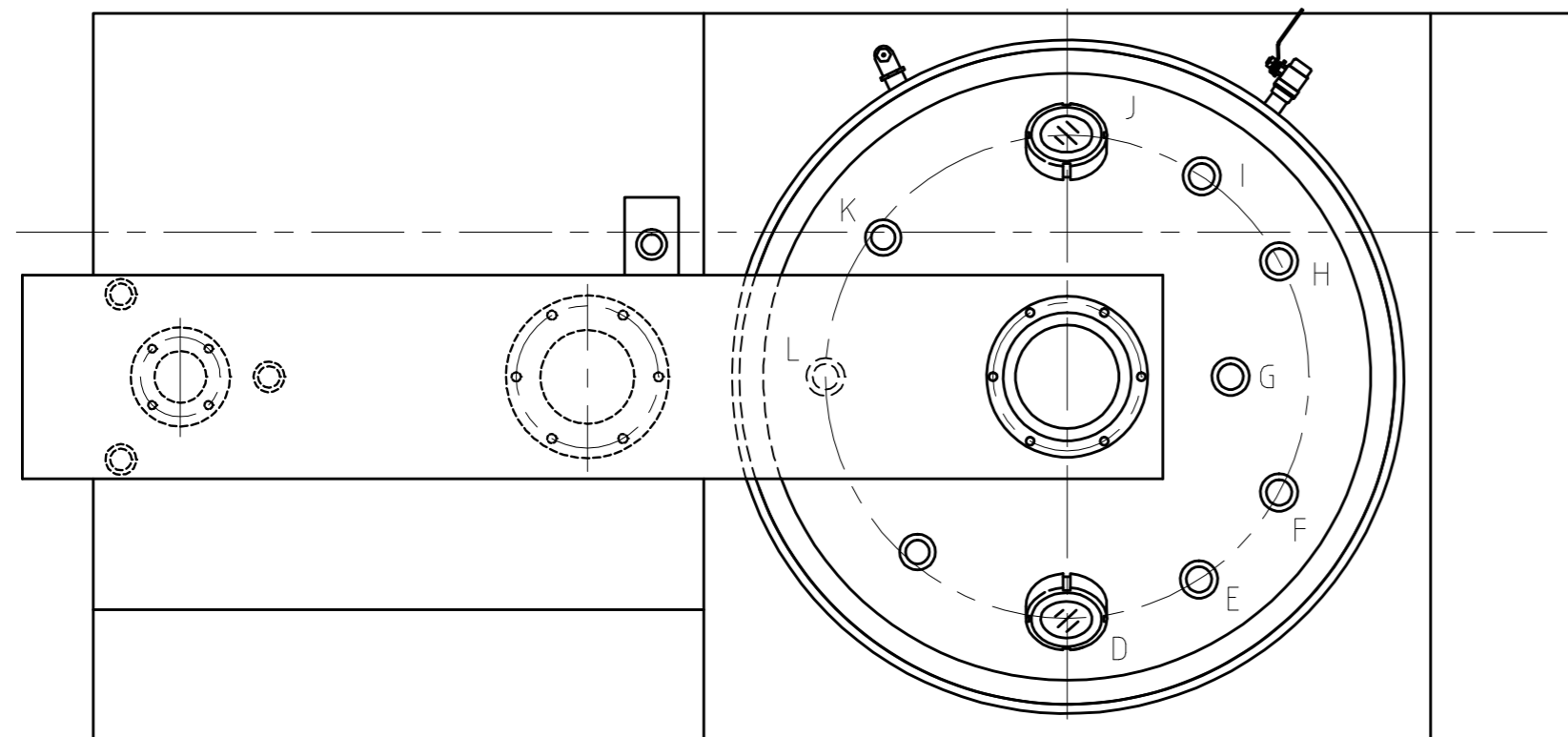
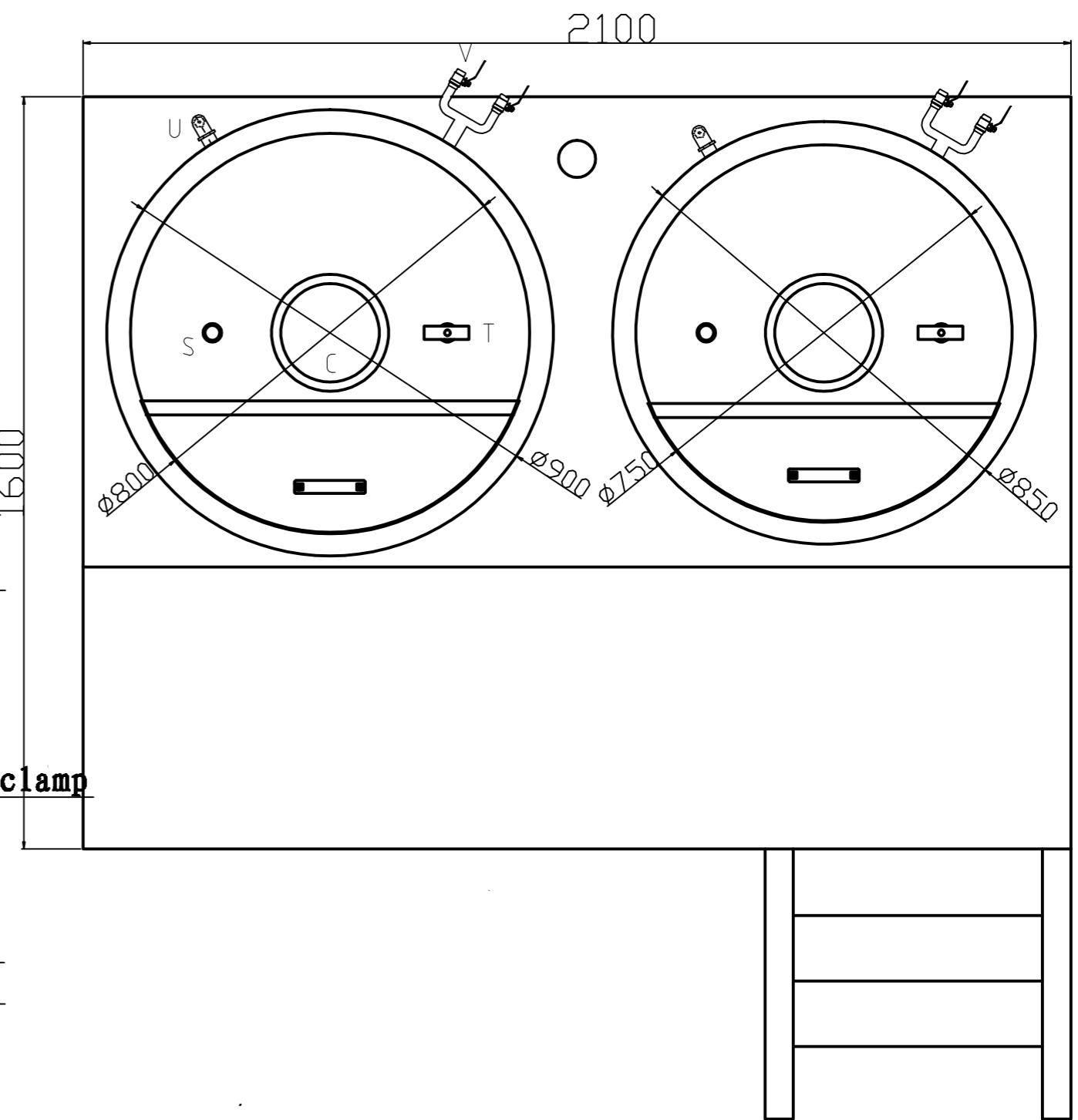
Water phase Tank

1. Total volume:350L
2. Contacting part: SS 316L ; Jacket: SS304;
3. Output: Bottom outlet valve
4. Agitator Motor: 1.5KW, 960Rpm
380V , 50HZ
5. Connection type: by flange

更改标记	更改单号	更改姓名	校对姓名	日期	更改标记	更改单号	更改姓名	校对姓名	日期
设计					装配				
校对					材料				
审核					名称	500LEmulsifying Machine	所属型号	BXZRJ500-00	
审定					数量		数量	比例	
会签					第 版		共 页	第 页	
批准					材料				



- A. 7.5KW Emulsifier Motor
 - B. 3.7KW Mixer Motor
 - C. 1.5KW Mixer Motor
 - D. Sight glass - Union
 - E. Air Vent - triclamp
 - F. Adding Hole - triclamp
 - G. CIP Spraying Ball - triclamp
 - H. Inlet -triclamp
 - I. Spare Hole - triclamp
 - J. Sight light - Union
 - K. Vacuum hole - triclamp
 - L. Vacuum protection hole- triclamp
 - M. Outlet of Conduct oil & water - BSP
 - N. Heating
 - O. Temp. probe in the jacket - BSP
 - P. Temp. probe in the Tank - BSP
 - Q. T-type output valve - reiclamp
 - R. Outlet of Conduct oil & water - triclamp
 - S. Inlet of Oil/water tank - triclamp
 - T. Thermometer - BSP
 - U. Safety Valve - triclamp
 - V. Outlet of Conduct oil & water - BSP
 - W. Outlet of Conduct oil & water - BSP
 - X. Shaft of Emulsifying Mixing
- Connect together



1. Hydraulic lift System: Adopts hydraulic lift to lift up the dish cover together with frame agitator and emulsifier. Easy for cleaning the tank.
2. Heating and cooling control system (Achieve the temp. display and control)
 Heating way: Steam Heating (self supply) or electric Heating
 Cooling way: water or cooling water (Get from outside)
3. Vacuum system
 Water-ring vacuum pump (Nashelmo, 0.75Kw)
 Filter and buffer vessel
 Check valve, Vacuum gauge, Air filter
 Circulate water tank
4. Electric control system
 Airbreak switch and button: Schneider (France)

更改标记	更改单号	更改姓名	校对姓名	日期	更改标记	更改单号	更改姓名	校对姓名	日期	
设计					装配					
校对					代					
审核					号				BXZRJ500-00	
标注					名	500L Emulsifying Machine	所属型号	数量	质量	比例
审定					称		第 版	共 页	第 页	
会签					材					
批准					料					