### **BREWERY EQUIPMENT INCLUDED IN PACKAGE**

### **GRIST MILLING SYSTEM**

- 01. Malt Miller 800-1000kg/h Double rollers; With motor, belt and pulley etc; stainless steel, alloy rollers, Rollers distance adjustable,3KW,UL motor.
- 02. Grist case 1500L 1 Installed on the ground with legs Bottom cone with material valve, load 570kg milled malt

## **15BBL BREWHOUSE (STEAM HEATING, 3 VESSELS)**

- 01. Mash lauter tun 15BBL 1. Food grade Stainless steel 304, 2. Effective volume: 15 bbl, total: 19.5 bbl; 3. With plough and rake, motor with reducer, variable frequency driver. 4. TIG excellent welding with argon shield; 5. Weld joint 0.4um polished.Tank interior is treated with acid passivation for keeping the best sanitation; 6. Dimple Steam Jacket heating; 7. Side spent grain door, with guide plate; 8. Rockwool insulation, thickness: 100mm; 9. The inner tank thickness is 3mm; cladding thickness: 2mm; 10. Laser cutting milled false bottom; 11. Back-flush water spraying valves to clean the back of the false bottom(lauter screen); 12. Liquid level sight tube; 13. Top full glass manway; 14. Sparging coil pipes; 15. Rotary CIP spray ball; 16. Wort return pipes and port; 17. Adjustable bolt installed on legs; 18. With sight light; 19. PT100 temperature sensor; 20. Cold and hot water mixing adjustable valve with Temperature display; Hydrator
- 02. **Boiling kettle 15BBL** 1.Food grade Stainless steel 304; 2.Work volume: 15BBL; total: 21BBL; 3.TIG excellent welding with argon shield; 4.Weld joint 0.4um polished. Tank interior is treated with acid passivation for keeping the best sanitation; 5.Dimple Steam Jacket heating on body and bottom of the tank; 6.Rockwool insulation, thickness: 100mm; 7.Inner body thickness 3mm, cladding thickness 2mm; 8.Rotary CIP spray balls; 9.Liquid level sight tube; 10.PT100 temperature probe; 11.Top glass manway door, with sight light; 12.Side wort outlet port and bottom wort inlet port design; 13.Kettle steam drain outdoor design; 14.Four stainless steel legs, with screw assembly to adjust leg height.
- 03. Whirlpool Tun 15BBL 1.Food grade Stainless steel 304; 2.Work volume: 15BBL; total: 19.5BBL; 3.TIG excellent welding with argon shield; 4.Weld joint 0.4um polished. Tank interior is treated with acid passivation for keeping the best sanitation; 5. Single wall, without jacket and insulation; 7. body thickness 3mm; 8.Rotary CIP spray balls; 9.Liquid level sight tube; 10.Temperature gauge; 11.Top glass manway door, with sight light; 12.Tangential whirlpool entry; 13.Side wort outlet port and bottom drain port design; 15.Four stainless steel legs, with screw assembly to adjust leg height.
- 04. (2) Wort Pumps with UL certificate motor Flow Rate: 5m 3 /h Pump Lift: 24m 2 Sanitary stainless steel grade pump, power 0.75kw, variable frequency control, Flow Rate: 5m3/h; Pump Lift: 24m, UL motor

- 05. (2) Flow meters (Germany IFM) Digital display 2 Mounted after the water mixing valve to measure how many liters water is flowed for mashing;
- 06. Wort grant 30L SS304, open top with cover, with sight glass
- 07. Heat Exchanger 15m 2 1 Stainless steel 304, two stages, six flows Wort inlet& outlet, Cold water inlet & outlet, Glycol inlet & outlet
- 08. Work Platform Assorted Complete SS304.Non-slip hole design. with stairs, handrails. For 3 vessels: Mash tun, lauter tun, kettle whirlpool tun. 3mm thickness SS304 plate, very strong. And Laser cutting to guarantee each hole and edge smoothly, no skin needling.
- 09. **Brewhouse Pipeline** Sanitary grade Stainless steel 304 hard pipes and butterfly valves with SS304 handle. All the hard pipe connection are sanitary TIG welding, very smooth inside, no cleaning dead corner.
- 10. **10 Wort Oxygenate device** 1 Stainless steel 304 pipe, used in wort outlet of heat exchanger, with titanium stick, sight glass, oxygenating port, temperature gauge
- 11. Rake L=2000 1 Stainless steel 30

## HOT WATER SYSTEM

- 01. Hot Liquor tank 30BBL Food grade Stainless steel 304; 2.Effective volume: 30bbl; total: 36bbl; 3.TIG excellent welding with argon shield; 4.Weld joint 0.4um polished. Tank interior is treated with acid passivation for keeping the best sanitation; 5.Dimple Steam Jacket heating on body and bottom of the tank; 6.Rockwool insulation, thickness: 100mm; 7.Inner body thickness 3mm, cladding thickness 2mm; 8.Rotary CIP spray balls; 9.Liquid level sight tube; 10.PT100 temperature probe; 11.Manhole inspection and entry point; 12.Four stainless steel legs, with screw assembly to adjust leg height.
- 02. Hot water Pump with UL certificate motor Flow Rate: 5m 3 /h Pump Lift: 24m 1 Sanitary stainless steel grade pump, power 0.75kw, variable frequency control, Flow Rate: 5m3/h; Pump Lift: 24m, UL motor.
- 03. Hot water pipes and valves Matched Sanitary gradeSS304 hard pipes and butterfly valves from hot liquor tank to brewhouse as a loop

# FERMENTATION SYSTEM (8 FERMENTATION TANKS & 6 BRITE TANKS)

01. (4) **Fermenters are 30BBL** 1. Sanitary Stainless steel 304, 2.Working capacity:30BBL; total volume: 37.5BBL, 25% top space; 3.Dome top head, 60 degree conical bottom; 4.TIG excellent welding with argon shield; 5.Weld joint 0.4um polished. Tank interior is treated with acid passivation for keeping the best sanitation; 6.Polyurethane insulation, thickness: 100mm; inner body thickness 3mm, cladding 2mm; 7.Double dimple plate cooling jackets, on body and cone;

8.Top manhole; 9.With 360 degree rotary CIP spray balls and arm; 10.PT100 temperature sensor; 11.4" dry hops port on top dish head; 12.Sample valve in the body; 13.separate outlets for yeast and clear beer, beer racking arm located in the conical part of the tank; 14.Pressure relief valve; 15.Pressure gauge; 16.Temperature gauge; 17. 2 ladder hooks, four stainless steel legs with screw assembly to adjust leg height

- 02. (4) Fermenters are 15BBL 1. Sanitary Stainless steel 304, 2.Working capacity:15BBL; total volume: 20BBL, 25% top space; 3.Dome top head, 60 degree conical bottom; 4.TIG excellent welding with argon shield; 5.Weld joint 0.4um polished. Tank interior is treated with acid passivation for keeping the best sanitation; 6.Polyurethane insulation, thickness: 100mm; inner body thickness 3mm, cladding 2mm; 7.Double dimple plate cooling jackets, on body and cone; 8.Top manhole; 9.With 360 degree rotary CIP spray balls and arm; 10.PT100 temperature sensor; 11.4" dry hops port on top dish head; 12.Sample valve in the body; 13.separate outlets for yeast and clear beer, beer racking arm located in the conical part of the tank; 14.Pressure relief valve; 15.Pressure gauge; 16.Temperature gauge; 17. 2 ladder hooks, four stainless steel legs with screw assembly to adjust leg height
- 03. (2) Bright tank 30BBL 1.Sanitary Stainless steel 304, 2.Effective capacity:30bbl; total volume: 36bbl, 20% top space; 3.Dome top head,dome bottom; 4.TIG excellent welding with argon shield; 5.Weld joint 0.4um polished. Tank interior is treated with acid passivation for keeping the best sanitation; 6.Polyurethane insulation, thickness: 100mm; inner body thickness 3mm, cladding 2mm; 7.Double dimple plate cooling jackets, on body and bottom; 8.Side manhole; 9.With 360 degree rotary CIP spray balls and arm; 10.PT100 temperature sensor; 12.Sample valve in the body; 13.CO2 carbonation stone; 14.Pressure relief valve; 15.Pressure gauge; 16.Temperature gauge; 17.2 ladder hooks, four stainless steel legs with screw assembly to adjust leg height
- 04. (4) Bright tanks 15BBL 1. Sanitary Stainless steel 304, 2.Effective capacity: 15bbl; total volume: 18bbl, 20% top space; 3.Dome top head, dome bottom; 4.TIG excellent welding with argon shield; 5.Weld joint 0.4um polished. Tank interior is treated with acid passivation for keeping the best sanitation; 6.Polyurethane insulation, thickness: 100mm; inner body thickness 3mm, cladding 2mm; 7.Double dimple plate cooling jackets, on body and bottom; 8.Side manhole; 9.With 360 degree rotary CIP spray balls and arm; 10.PT100 temperature sensor; 12.Sample valve in the body; 13.CO2 carbonation stone; 14.Pressure relief valve; 15.Pressure gauge; 16.Temperature gauge; 17.2 ladder hooks, four stainless steel legs with screw assembly to adjust leg height
- 05. Beer Hose Sanitary food hose, with hose connectors
  - (6) L=1.5m
  - (8) L= 5m
  - (4) L=15m

06. **Portable beer transfer pump** 5000L/h, Pump, Lift: 24m, Stainless steel 304, mounted on a cart, with VFD for adjusting speed and control box UL motor and electric parts

# **CHILLING SYSTEM**

- Glycol Tank 1000L 1.Food grade Stainless steel 304; 2.Effective volume: 1000l; total:1200L; 3.TIG excellent welding with argon shield; 4.Weld joint 0.4um polished. Tank interior is treated with acid passivation for keeping the best sanitation; 5.Polyurethane insulation, thickness: 80mm; 6.Inner body thickness 3mm, cladding thickness 2mm; 7.Rotary CIP spray balls; 8.Liquid level sight tube; 9.PT100 temperature probe; 10.Manhole inspection and entry point, 11.Four stainless steel legs, with screw assembly to adjust leg height
- 02. Chiller 20HP 1 Assembly unit, air cooling type Environment friendly Freon R410/404A
- 03. Glycol Pump 5,000L/h 1 Stainless steel 304, 5000L/h Pump Lift: 24m

## **CONTROL SYSTEM & SPARE PARTS**

- 01. (2) Control Cabinets 700 x 400 x 2000
- 02. Electronic Parts
- 03. Temperature Controller
- 04. Inside Power Cable

01 – 04 Described as follows: Display degree together; Button type control panel; Lauter tun plough motor control with VFD; Lauter tun, Kettle, HLT temperature automatic control with Temp controller; Fermenters, bright tanks, glycol tank, chiller temperature control automatically with Temp controller; Wort pump, HLT pump, glycol pump, variable speed controlled by VFD; Manual butterfly valves; An emergency stop switch at the bottom of the staircase; A small control panel specially for pump open, close and speed adjust on side of stair; All electrical components and control panels meet UL certified.

SPARE PARTS

- 05. (2) Manway Gaskets For Brewhouse
- 06. (2) Manway Gaskets for HLT & GT
- 07. (5) Manway Gasket for Fermenters
- 08. (1) PT 100
- 09. (1) BiMetal Thermometer
- 10. (1) Pressure Gauge
- 11. (5) Tri Clamp Clamps
- 12. (20) Tri Clamp Gaskets
- 13. (1) Relay
- 14. 5 Piece Ball Float Steam Trap
- 15. 5 Piece Steam Solenoid Valve
- 16. 14 Piece Glycol Solenoid Valve
- 17. Wire Tray

# TWO HEAD KEG WASHER

**Keg washer** two head washing 1. Capacity: 80-100 kegs/h 2. Two washing heads 3. Power: 2.2KW 4. Suitable kegs: 5L-1/2bbl 5. With two water tanks and two pumps 6. Siemens controller