

Equipment Description and Options

1.1: Malt Rolling Miller

Function: Grain crushing

Crushing Ability:500-800 Kg/h;

Model:5A

Power:3.0KW; Motor brand is Shuangjia

Shell: carbon steel.

Double rollers, material: Alloy

Rollers gap adjustable; Max roller speed: 700RPM

Ratio of magnetic metal material: $\leq 0.003\text{G/KG}$

Temperature of rollers after running: $\leq 56^{\circ}\text{C}$.

Manufacturer: Shandong ShuangJia

New type double rollers malt miller, equipped with motor, belt pulley, belt, hopper,etc.

Automatically remove the iron and dust,Low noise.

Dimensions: 800×800×1600mm

Net weight: 170 KG



1.2: Flexible Auger

Flexible Auger

Function: conveyor the malt from miller to mash tun

Material is stainless steel;

Filling height is based on the brewhouse height

Filling ability:500-1000 kg/hr;

Power: 2.2KW

PVC pipe

ABB Motor

380V/3phase/50HZ

Max length is 8m.

Brand: Xinwei



Auger controller

Control the malt miller on / off

Adjust the rate of auger transfer machine, so with VFD

Malt miller and auger motor on/off and VFD control

Achieve the positive and negative rotation of auger transfer machine

Prevent the grain leave over the auger transfer machine



1.3 Hydrator

Material: SUS304

with CIP spray ball

100% TIG welding with pure argon gas shield

Conical bottom

Tri clamp connection



Equipment Description and Options

1.4 1000L Two Vessel/HLT Brewhouse [LT+MKWT+20HL HLT]

1-1000L Lauter Tun

Function: Grain Lautering and sparging
Tank Capacity: 1000L (+25% Headspace minimum)
Dimension: Φ 1460mmx2600mm
Interior Shell: SUS304 full welded; TH=3mm
Exterior Shell:SUS304 full welded; TH=2mm
Dish head:SUS304 full welded; TH=3mm
100% TIG welding with pure argon gas shield
Interior Finish: Completely acid washing and passivation
Inside polishing to 0.4~0.6 μ m without dead corner
Insulation: Rock wool; TH=80mm
Heating: No (Steam for optional)
Steam Jacket: No (Dimple plate for optional)
Dished top and flat bottom
Grain rake with Danfoss VFD controlled 2.2KW ABB motor and turbine reducer on top of tank
Spent grain dozer manual lifted
Top mounted Glass manhole door, with logo
Side mounted grain out door with grain chute
Top mounted 360° coverage CIP spraying ball and port TC
Easyclean and detachable sparging spray ring and port TC on top
Wort circulation inlet TC on top
With lamp
Stainless steel laser cutting False Bottom/Filter
Wort outlets TC with extended collection rings
Back pressure flushing device under false bottom with nozzels
Wort outlet TC
Thermowell for high accuracy temperature sensor
4pcs completely SUS304 heavy duty legs with leveling pad



2-1000L Mash/Kettle/Whirlpool Tun

Function: Grain mashing, Wort boiling, hopping and whirlpool
Tank Capacity:1000L (+30% Headspace minimum)
Dimension: Φ 1460mmx2720mm
Interior Shell: SUS304 full welded; TH=3mm
Exterior Shell:SUS304 full welded; TH=2mm
Dish head:SUS304 full welded; TH=3mm
100% TIG welding with pure argon gas shield
Interior Finish: Completely acid washing and passivation
Inside polishing to 0.4~0.6 μ m without dead corner
Insulation: Rock wool; TH=80mm
Heating:direct fire heating with firebox
Steam Jacket: No (Dimple plate for optional)
Agitator with Danfoss VFD controlled 1.5KW ABB motor and turbine reducer on top of tank
Dished top and conical bottom
Top mounted Glass manhole door, with logo
Top mounted 360° coverage CIP spraying ball and port TC
Glass liquid level c/w sample valve
Steam condensor with spray nozzles
Thermowell for high accuracy temperature sensor
Wort inlet TC on top
Side tangential whirlpool inlet TC
Wort outlet TC on side of the bottom cone
With lamp
Discharge port TC and arm with butterfly valve
4pcs completely SUS304 heavy duty legs with leveling pad

Equipment Description and Options

3-2000L Hot Liquor Tank

Function: Hot water supply for mashing, sparging, cleaning
Tank Capacity:2000L (+15% Headspace minimum)
Dimension: Φ 1460*2900mm
Interior Shell: SUS304 full welded; TH=3mm
Exterior Shell:SUS304 full welded; TH=2mm
100% TIG welding with pure argon gas shield
Interior Finish: Completely acid washing and passivation
Inside polishing to 0.4~0.6 μ m without dead corner
Insulation: Rock wool; TH=80mm
Heating:direct fire heating with firebox
Steam Jacket: No (Dimple plate for optional)
Conical top and conical bottom
Stainless steel top mounted manhole and door
Top mounted 360° coverage CIP spraying ball and port TC
Glass liquid level c/w sample valve
Thermowell for high accuracy temperature sensor
Recovery water inlet TC
Water injection inlet TC with end cap
Overflow port TC
Discharge port TC and arm
4pcs completely SUS304 heavy duty legs with leveling pad



4-Sanitary wort and hot/cold water pump

Model: SFB5-1.5 -140
Flow 5m³/h, lift 24m
Sanitary SUS304
Capacity:5000L/h
Power: 1.5KW, motor Brand is ABB, TEFC Motor (totally enclosed, fan cooled), with CE certification
open impeller
Inlet \varnothing 51, outlet \varnothing 38, tri-clamp quick-installed
Voltage: 380V/3phase/50HZ
With heat dissipation channel
Hard pipings: Sanitary SUS304; Self-draining
Complete valves, fittings and all parts
Brand: Liyang Sifang



5-Sanitary transfer configuration

Inline sight glass for checking wort clarity and color
15 meter sanitary reinforced brewery hose with TC adaptors
Every weld to a smooth sanitary finish
Stainless steel pneumatic valve connect brewhouse pipeline.



Equipment Description and Options

6-Work Platform

Non Slip design
Material is SUS304
Match the brewhouse and HLT structure
Integrated and evenly height stairs or ladder
Platform can be detachable
the leg with adjustable bolt and base plate
The distance between platform and tank is 10mm, and with 50mm height baffle
With controller bracket on the platform, in order to place controller.
Grate platform



7-10M2 Heat Exchanger

Function: Wort cooling
Single stages for cold water
BR0.1/ 10m²
Design Structure: Suspension type
screw material is SUS304, nut material is brass
Stainless steel 304 material
Design pressure:1.0 Mpa;
Working temperature:140°.
Wort inlet and outlet diameter is $\phi 38$
Cold water inlet and outlet diameter is $\phi 38$



8-20L balance tank with level sensor

Function: Buffer tank avoiding negative pressure in lauter tun
Volume: 20L
Material: SUS304 balance tank with sight glass
Wort inlet with butterfly valve at bottom
Wort outlet TC at bottom
Vent port to top of wort balance tank
Included Level sensor



9-Wort Aeration Device

With 4pcs Butterfly valves
Wort thermometer
Venturi
Sight glass
Aeration device
Tri clamp and fitting included



Equipment Description and Options

10-Yeast Feeder

Function: Inline yeast pitching for fermentable wort

Volume: 20L

Material: SUS304

Flange manway, diameter: 250mm

Bottom wort outlet

Adding dry yeast into yeast doser



11-Flowmeter

Position: one is on cold and hot water mix, one is for circulation process of lauter tun, one is on the heat exchanger.

Flow:6M3/h

U:10-30V DC

Out:200mA



1.10 Brewhouse PLC control panel

Function: Brewhouse controlling

Cabinet Material: SUS304

PLC Siemens S7-200 Control System

Siemens touch screen display

Assembling Style: on the brewhouse platform

Electrical Components: World wide brand CE certification

Show and control the temperature of the Brewhouse, hot water tank, cold water tank

Brewhouse pump, hot water pump, cold water pump and valves are actuated from control panel

With 5pcs VFD, one pcs works for raker, one pcs works for agitator, one pcs works for one wort pumps, one pcs works for hot liquor pump, one pcs works for cold liquor pump

No automation (recipe) control

VFD brand is Danfoss

Low-voltage electrical brand is Schneider



1.11 Fermentation PID Control panel

Function: Fermentation controlling

Cabinet Material: SUS304

Consecutive arrangement instrument panel

Assembling Style: floor type / wall hanging

Hot water pump and cold water pump on/off and VFD control

Show and control temperature of FVs and BBTs and CLT and GLT

On / off solenoid valve automatically

VFD brand is Danfoss

Low-voltage electrical brand is Schneider

Electric elements with CE certificate



Equipment Description and Options

1.5 1000L Fermentation Tank-Polished dome

Tank Capacity: 1000L (+25% Headspace minimum)
Dimension: Φ 1260*2600mm
Interior Shell: SUS304 full welded; TH=3mm
Exterior Shell:SUS304 full welded; TH=2mm
Dish head: SUS304 full welded; TH=4mm
Inner Cone: SUS304 full welded; TH=3mm
100% TIG welding with pure argon gas shield
Interior Finish: Sanitary 2B finish, Pickled and Passivated; (Mirror finish optional)
Exterior Finish: Oil brushed finish (2B, Mirror finish optional)
Dish head is mirror polished
Interior full polished to 0.4~0.6 μ m without dead corner
Insulated with high density Polyurethane foam; TH=80mm
Glycol Jacket: Dimpled plate on cone and side
Stringent tank leakage test by water and pressured gas
Stringent Jacket leakage test by water and pressured gas
Dished head and 60 degree cone bottom
Sanitary side mounted manway with pressured door
TC connected CIP arm with 360° coverage spraying ball
CO2 blow-off arm with butterfly valve
Full sanitary metallic sealed sampling valve
Spunding valve on CO2 blow-off arm
Hydraulic shock pressure gauge on CO2 blow-off arm
Rotating racking arm and port on cone with butterfly valve
Tri clamp discharge arm with butterfly valve
Thermowell for high accuracy temperature sensor
4pcs completely SUS304 heavy duty legs with leveling pad and legs support
Complete valves, fittings and all parts
Dry hopping port 4" TC with solid end cap
PVRV on the top of tank



1.6: 2000L Fermentation Tank-Polised dome

Function: Wort Fermentation or maturation
Tank Capacity: 2000L (+25% Headspace minimum)
Dimension: Φ 1600*3100mm
Interior Shell: SUS304 full welded; TH=3mm
Exterior Shell:SUS304 full welded; TH=2mm
Dish head:SUS304 full welded; TH=5mm
Inner cone:SUS304 full welded; TH=3mm
100% TIG welding with pure argon gas shield
Interior Finish: Sanitary 2B finish, Pickled and Passivated; (Mirror finish optional)
Exterior Finish: Oil brushed finish (2B, Mirror finish optional)
Dish head is mirror polished
Interior full polished to 0.4~0.6 μ m without dead corner
Insulated with high density Polyurethane foam; TH=100mm
Glycol Jacket: Dimpled plate on cone and side
Stringent tank leakage test by water and pressured gas
Stringent Jacket leakage test by water and pressured gas
Dished head and 60 degree cone bottom
Sanitary side mounted manway with pressured door
TC connected CIP arm with 360° coverage spraying ball
CO2 blow-off arm with butterfly valve
Full sanitary metallic sealed sampling valve
Spunding valve on CO2 blow-off arm
Hydraulic shock pressure gauge on CO2 blow-off arm
Rotating racking arm and port on cone with butterfly valve
Tri clamp discharge arm with butterfly valve
Thermowell for high accuracy temperature sensor
4pcs completely SUS304 heavy duty legs with leveling pad and legs support
Complete valves, fittings and all parts
Dry hopping port 4" TC with solid end cap
PVRV on the top of tank



Equipment Description and Options

1.7: 1000L Bright Beer Tank--Polised dome

Function: Beer maturation/conditioning/serving/filtered beer receiving
Tank Capacity: 1000L (+20% Headspace minimum)
Dimension: $\Phi 1260 \times 2300$ mm
Interior Shell: SUS304 full welded; TH=3mm
Exterior Shell: SUS304 full welded; TH=2mm
Double Dish head: SUS304 full welded; TH= 4mm
100% TIG welding with pure argon gas shield
Interior Finish: Sanitary 2B finish, Pickled and Passivated; (Mirror finish optional)
Exterior Finish: Oil brushed finish (2B, Mirror finish optional)
Dish head is mirror polished
Interior full polished to 0.4~0.6 μm without dead corner
Insulated with high density Polyurethane foam; TH=80mm
Glycol Jacket: Dimple plate on side wall and bottom dish head
Stringent tank leakage test by water and pressured gas
Stringent Jacket leakage test by water and pressured gas
Dished head and bottom
Sanitary side mounted manway with pressured door
TC connected CIP arm with 360° coverage spraying ball
Full sanitary metallic sealed sampling valve
Mechanical safe valve PVRV 2 bar on CIP arm
Carbonation port TC with stone
Hydraulic shock pressure gauge on CIP arm
Tri clamp discharge arm with butterfly valve
Thermowell for high accuracy temperature sensor
4pcs completely SUS304 heavy duty legs with leveling pad
With liquid level sight tube
Complete valves, fittings and all parts



1.8: 2000L Bright Beer Tank--Polised dome

Function: Beer maturation/conditioning/serving/filtered beer receiving
Tank Capacity: 2000L (+20% Headspace minimum)
Dimension: $\Phi 1600 \times 2650$ mm
Interior Shell: SUS304 full welded; TH=3mm
Exterior Shell: SUS304 full welded; TH=2mm
Double Dish head: SUS304 full welded; TH=5mm
100% TIG welding with pure argon gas shield
Interior Finish: Sanitary 2B finish, Pickled and Passivated; (Mirror finish optional)
Exterior Finish: Oil brushed finish (2B, Mirror finish optional)
Dish head is mirror polished
Interior full polished to 0.4~0.6 μm without dead corner
Insulated with high density Polyurethane foam; TH=100mm
Glycol Jacket: Dimple plate on side wall and bottom dish head
Stringent tank leakage test by water and pressured gas
Stringent Jacket leakage test by water and pressured gas
Dished head and bottom
Sanitary side mounted manway with pressured door
TC connected CIP arm with 360° coverage spraying ball
Full sanitary metallic sealed sampling valve
Mechanical safe valve PVRV 2 bar on CIP arm
Carbonation port TC with stone
Hydraulic shock pressure gauge on CIP arm
Tri clamp discharge arm with butterfly valve
Thermowell for high accuracy temperature sensor
4pcs completely SUS304 heavy duty legs with leveling pad
With liquid level sight tube
Complete valves, fittings and all parts



Equipment Description and Options

1.9 Glycol Cooling Unit

[1000L GWT +2000L CLT+ 2x5HP Chiller + Pipeline]

1000L Glycol Water Tank

Function: Glycol water supply for wort cooling and fermentation cooling

Tank Capacity: 1000L (+15% Headspace minimum)

Dimension: Φ 1260x2100mm

Interior Shell: SUS304 full welded; TH=3mm

Exterior Shell: SUS304 full welded; TH=2mm

100% TIG welding with pure argon gas shield

Interior Finish: Sanitary 2B finish, Pickled and Passivated; (Mirror finish optional)

Exterior Finish: Oil brushed finish (2B, Mirror finish optional)

Interior full polished to 0.4~0.6 μ m without dead corner

Insulated with high density Polyurethane foam; TH=80mm

Stringent tank leakage test by water

Insulated conical top and bottom

Top mounted stainless steel manway with door

Thermowell for high accuracy temperature sensor

With liquid level sight tube

Discharge arm with butterfly valve

4pcs completely SUS304 heavy duty legs with leveling pad

Glycol water inlet and outlet



2000L Cold Liquor Tank

Function: Cold water supply for wort cooling

Tank Capacity: 2000L (+10% Headspace minimum)

Dimension: Φ 1460*2650mm

Interior Shell: SUS304 full welded; TH=3mm

Exterior Shell: SUS304 full welded; TH=2mm

Interior Finish: Sanitary 2B finish, Pickled and Passivated; (Mirror finish optional)

Exterior Finish: Oil brushed finish (2B, Mirror finish optional)

Interior full polished to 0.4~0.6 μ m without dead corner

Insulated with high density Polyurethane foam; TH=80mm

Glycol Jacket: Dimple plate on bottom and side

Conical top and conical bottom

Stainless steel top mounted manhole and door

Top mounted 360° coverage CIP spraying ball and port TC

Glass liquid level c/w sample valve

Thermowell for high accuracy temperature sensor

Recovery water inlet TC

Water injection inlet TC with end cap

Overflow port TC

Discharge port TC and arm with butterfly valve

4pcs completely SUS304 heavy duty legs with leveling pad



Equipment Description and Options

5P Glycol Water Chiller

Model: CA-5L

Refrigerating capacity: 6364Kcal/h,(7.4KW)

Input power: 4.86KW

Voltage: 380V/3Phases/50HZ;

Refrigerant: R407;

Controlling way: External balance thermostatic expansion valve;

Compressor type: Hermetic Scroll type (Piston);

Power: 3.75KW;

Condenser type: High efficient finned copper tube+ low noise outer rotor fan;

Air flow rate of condenser: 5000m³/h;

Evaporator: Plate heat exchanger;

Chilled fluid flow: 2.22m³/h;

Inlet/outlet pipe caliber: 1";

Water pump power: 0.75KW; Lift: 20m;

Protection: Compressor overheating, over current, high and low pressure, over temperature, flow switch, phase sequence, phase-missing, exhaust overheating, anti-freezing;

Compressor with CE certification

Weight: 175KG;

Dimension: 1140×560×1040mm;

Brand: COOLSOON brand



Glycol Water Transfer

Function: Glycol water and cold water circulation

Flow 3m³/h, lift 18m

Sanitary SUS304

Capacity:3000L/h

Power: 0.75KW, motor Brand is Fangli

open impeller

Inlet \varnothing 38, outlet \varnothing 38, tri-clamp quick-installed

Voltage: 380V/3phase/50HZ

With heat dissipation channel



Pipeline connection

PPR pipes and fittings for glycol water pipeline (stainless steel for optional)

Matched connection piping fittings as design

Insulation foam for supply and return loops

Stainless steel solenoid valves for glycol water inlet

Customerized piping design available



Equipment Description and Options

1.12: 100L Portable CIP Cart [Two Tanks]

100L Caustic Tank

Function: Caustic liquid heating and mixing
Tank Capacity: 100L
Dimension: $\Phi 1400 \times 600 \times 1320$ mm
Shell: SUS304 full welded; TH=2.0mm
Single wall without insulation
Exterior Finish: Oil brushed finish
Interior full polished to 0.4~0.6 μm without dead corner
Heating: electric heating with 4KW heating elements
Cone top and bottom
Top mounted stainless steel manhole with end cap
IFM level sensor, in order prevent heating without water
temperature probe (PT100) on side wall



100L Sterilization Tank

Function: Sterilization liquid mixing
Tank Capacity: 100L
Dimension: $\Phi 1400 \times 600 \times 1320$ mm
Shell: SUS304 full welded; TH=2.0mm
Exterior Finish: Oil brushed finish
Interior full polished to 0.4~0.6 μm without dead corner
Single wall without insulation
Cone top and bottom
Top mounted stainless steel manhole with end cap

Liquid Transfer

Flow 5m³/h, lift is 24m
Inlet $\phi 38$, outlet $\phi 38$
Stainless steel; power is 1.5kW
Complete circulation piping and fittings
semi-open impeller
Brand: Liyang Sifang



CIP Controlling Cabinet

Function: CIP controlling
Cabinet Material: stainless steel
Assembling Style: hanging
Electrical Components: World wide brand CE certified
CIP pump on/off
Temperature can be showed on controller
IFM level sensor for anti dry-burner



Equipment Description and Options

Keg Washer-Semi Auto-Two tanks-NDLKWS-II

Function: Keg rinsing

Water Tanks: 2 Tanks (water tank+caustic tank)

Washing capacity : 40-60 Kegs/Hour

Applicable kegs: 5L-60L(Keg with Diameter 250-500mm Height 360-600mm)

Available Spear: A, G, S ,D , (when order, customer need advise)

Power Supply voltage:

Customized, for example: 3 Phase, 415V, 50Hz (When order, customer need advise)

Heating mode: Electrical heating or Steam heating (When order, customer need advise)

Power: Steam heating: 3Kw

Washing Method: Invert Washing

Automatically Washing, Sterilizing(steam heating), and CO2 pressure preparation

Working process:

Start(pressing)→ Water washing→ Caustic washing → Hot water washing→Hot water washing→ Steam sterilization(if steam heating)→ CO2 pressurization→Stop

Weight: 450kg

Dimensions: 1220*1640*2220mm

The below electrical components in control box are certified with CE:

