

Part 1: Malt Milling Unit

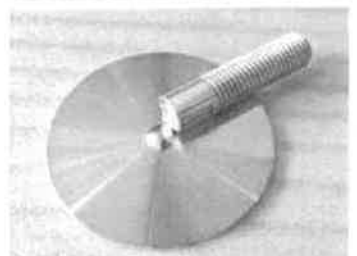
1.1 Malt Miller [500-800kg/hr] x1set

- ◆ Function: Malt crushing
- ◆ Model JMF-3A-30, OEM by Shuangjia
- ◆ Ave. Capacity for Malt: 500-800kg/hr
- ◆ Cover and Frame Material: Painting
- ◆ Drive Power: 3kw motor CE [UL available]
- ◆ Nylon and Chrome gear box for reducing running noise
- ◆ 80L malt hopper for at least 30kg malt
- ◆ Roller Size: $\Phi 155 \times 200$ mm, double
- ◆ Rollers clearance adjustable for various malt particle
- ◆ Roller material: Hardening chrome steel, washable
- ◆ Roller speed differential for higher malt efficiency
- ◆ Faster Roller Speed: 700rpm
- ◆ Strong magnet to remove iron pieces
- ◆ Ratio of Magnetic Metal Material: ≤ 0.003 g/kg
- ◆ Temperature of Rollers after Production: $\leq 56^{\circ}\text{C}$
- ◆ Malt outlet non-open connection avoiding dust
- ◆ Bag collecting/Auger connection available
- ◆ Dimension: 600x780x1365mm
- ◆ Net Weight: 160kg



3.1 2500L Fermentation Tank/Unitank x4sets

- ◆ Function: Wort Fermentation or maturation
- ◆ Tank Capacity: 2500L (+25% Headspace minimum)
- ◆ Dimension: $\Phi 1760 \times 4600$ mm (Customizable)
- ◆ 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; (8K Mirror finish optional)
- ◆ Exterior Finish: Oil brushed finish (2B, 8K Mirror finish optional)
- ◆ Interior full polished to $0.2 \sim 0.4 \mu\text{m}$ without dead corner
- ◆ Insulation: TH=80mm with low thermal conductivity PU
- ◆ Cooling: 35% Glycol liquid -5°C
- ◆ Cooling Jacket: Dimple plate on bottom and side wall, welded without over burning
- ◆ Jacket test by water and gas, 5bar/75psi for 1hour, 3.5bar/52psi for 48 hours
- ◆ Jacket Working Pressure: $< 2\text{bar}/30\text{psi}$
- ◆ Tank leakage test by water and gas, 4bar/60psi for 1hour, 2.5bar/37.5psi for 48 hours
- ◆ Tank Working Pressure: $\leq 2\text{bar}/30\text{psi}$
- ◆ Dished top full polished indoor design (Insulated conical top for outdoor as optional)
- ◆ Conical bottom with 60° cone (customizable)
- ◆ Sanitary side mounted oval manhole with pressured door (Top mounted available)
- ◆ Top mounted double clamp 360° rotary CIP spraying ball and port, 1pcs
- ◆ CIP arm with four-way connection and butterfly valve
- ◆ CO₂ blow-off arm with butterfly valve (Removable)
- ◆ Mechanical safe valve PVRV 2bar/30psi on top (1bar/15psi available)
- ◆ Full sanitary sampling valve with EPDM seal
- ◆ Hydraulic shock pressure gauge on CIP arm (Diaphragm type for optional)
- ◆ Horizontal mounted rotating racking arm and port in cone with butterfly valve
- ◆ Discharge arm with butterfly valve, Removable and easy to clean
- ◆ Sanitary welded thermowell for high accuracy temperature sensor 1pcs
- ◆ **Dry hopping port 4" with solid end cap (Hops pitching tank)**
- ◆ Glycol water in/out port on side wall, Thick wall pipe thread (Top or bottom design available)
- ◆ Glycol water in/out port on cone, Thick wall pipe thread (Top or bottom design available)
- ◆ 4pcs completely SUS304 legs with braces
- ◆ 4 sets heavy duty foot pad with up-down and slop adjustable
- ◆ Complete valves, fittings and all parts, Tri clamp/DIN Union available
- ◆ Pressure adjustable bunging valve 0.2-2.2bar
- ☐ Sanitary level tube and valves for special request
- ◆ Carbonation port with stone



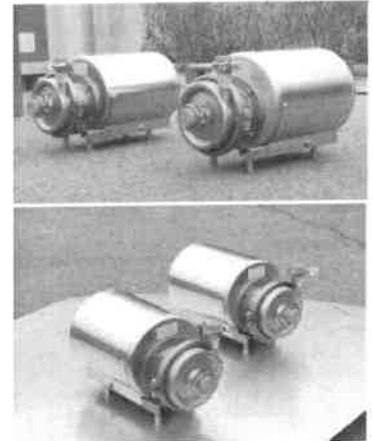
2.5 Work Platform x1set

- ◆ Completely 304 stainless steel setup
- ◆ Non slip metal floor TH=3.0mm
- ◆ Integrated stairs or ladder
- ◆ Solid and ground hand rail
- ◆ Mounting points for controlling panel
- ◆ Full welding to a smooth sanitary finish without deadcorner
- ◆ Design by safty standard



2.6 Sanitary Centrifugal Pump x1set

- ◆ 1pcs Mash Pump from MT to LT: 5M3/Hr, Sanitary 304SS, delivery 24m;
- ◆ 1pcs Wort Pump from LT to KWT, KWT to FV: 5M3/Hr, Sanitary 304SS, delivery 24m;
- ◆ 1pcs Hot Water Pump: 5M3/Hr, Sanitary 304SS, delivery 24m
- ◆ Pump Brand: **LYSF (Alfa Laval holding company)**
- ◆ Motor brand: **ABB** with CE or WEG with UL/CSA/CE
- ◆ All motor with low noise, low vibration
- ◆ Motor protection class: IP55
- ◆ Motor Thermal Insulation Class: F
- ◆ Motor Energy Efficiency Level: IE2/IE3
- ◆ All pump have been strictly tested
- ◆ Shaft seal: Alloyed hard-wearing, **Roplan SWEDEN** (Graphite, Carborundum as economical choice)
- ◆ Auxiliary seal: EPDM with **FDA** certificate
- ◆ Pump liquid connection polishing <0.6um
- ◆ Working Temperature: -10 °C to +140 °C



2.7 Sanitary Piping x1set

- ◆ Complete 304SS with material certificate
- ◆ All pipe inside polished to sanitary grade
- ◆ All pipe machining comply to ISO, DIN, SMS or 3A standard
- ◆ All pipe welding by 100% TIG automatic welding machine without welding slag
- ◆ All welding joint is able to check and touch without dead corner
- ◆ Inside polishing to 0.4~0.8 µm without dead corner



2.8 Valves and Fittings x1set

- ◆ 304SS manually butterfly valve
- ◆ Hygiene grade EPDM gasket [Silicon as economic optional]
- ◆ Adjustable multi position handle [Ball handle as economic optional]
- ◆ High acid proof, alkalia proof and high temperature performance
- ◆ Less permanent compressive deform
- ◆ Precision forging valve core [better than casting]
- ◆ Tri clamp connection, DIN union, welding, flange available
- ◆ Comply to international standard ISO, DIN 11850, SMS etc
- ◆ Inline sight glass for checking wort clarity and color
- ☐ Pneumatic butterfly valve for automatic request



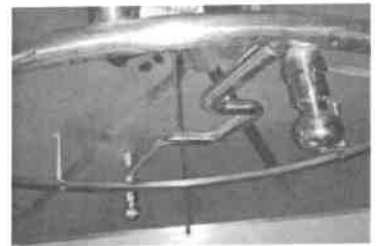
2.3 2500L Kettle/Whirlpool Tun x1set

- ◆ Function: Wort boiling, hopping and whirlpool
- ◆ Tank Capacity: 2500L (+35% Headspace minimum)
- ◆ Dimension: $\Phi 1960 \times 2800$ mm
- ◆ Interior Shell: 304SS full welded; TH=3mm
- ◆ Exterior Shell: 304SS full welded; TH=2mm
- ◆ 100% TIG welding with pure argon gas shield
- ◆ Interior Finish: Completely acid washing and passivation
- ◆ Inside polishing to $0.2 \sim 0.4 \mu\text{m}$ without dead corner
- ◆ Insulation: TH=80mm with environmental protection rock wool
- ◆ Heating: Steam (Electric, Direct fire for optional)
- ◆ Steam Jacket: Dimple plate on bottom and side wall
- ◆ Jacket test by water and gas, 5bar (75psi) for 1hour, 3.5bar (52psi) for 48 hours
- ◆ Jacket Working Pressure: < 2bar
- ◆ Tank leakage test by full water for 72 hours
- ◆ Tank Working Pressure: Atmosphere
- ◆ Conical top full polished
- ◆ Conical bottom
- ◆ Top mounted glass manhole (Logo printing available)
- ◆ Top mounted 360° rotary CIP spraying ball and port, 1pcs
- ◆ Sanitary liquid level indicator with valves
- ◆ Steam chimney stack on top with backflow pipe
- ◆ Sanitary welded thermowell for high accuracy temperature sensor
- ◆ Wort inlet at side wall bottom with check valve
- ◆ CIP inlet on top
- ◆ Tangential whirlpool inlet with reducing port
- ◆ Wort outlet on slope of the bottom
- ◆ Discharging port at center of the bottom
- ◆ Trub dam at bottom full welded
- ◆ Steam inlet on side wall and bottom allow separately heating
- ◆ Steam trap port on side wall and bottom
- ◆ Steam jacket safty port on side wall and bottom
- ◆ 4pcs completely 304SS legs with braces
- ◆ 4 sets heavy duty foot pad with up-down and slop adjustable
- ◆ Empty level switch as optional, Economic Brand (IFM)
- ☐ Pressure transmitter for level control as optional, Economic Brand (IFM or E+H for optional!)
- ☐ Foam electrode sensor for boiling monitor as optional
- ◆ Lamp on the top of Tank
- ◆ Chimney according to design



2.2 2500L Lauter Tun x1set

- ◆ Function: Wort Lautering and sparging
- ◆ Tank Capacity: 2500L (+25% Headspace minimum)
- ◆ Dimension: $\Phi 2160 \times 2800$ mm (Width on base of 20-22 plato)
- ◆ Interior Shell: 304SS full welded; TH=3mm
- ◆ Exterior Shell: 304SS full welded; TH=2mm
- ◆ 100% TIG welding with pure argon gas shield
- ◆ Interior Finish: Completely acid washing and passivation
- ◆ Inside polishing to 0.2~0.4 μm without dead corner
- ◆ Insulation: TH=80mm with environmental protection rock wool
- ◆ Heating: Steam
- ◆ Steam Jacket: Dimple plate on side wall
- ◆ Jacket test by water and gas, 5bar (75psi) for 1hour, 3.5bar (52psi) for 48 hours
- ◆ Jacket Working Pressure: < 2bar
- ◆ Tank leakage test by full water for 72 hours
- ◆ Tank Working Pressure: Atmosphere
- ◆ Conical top full polished
- ◆ 304SS Flat bottom TH=8mm
- ◆ Top mounted glass manhole (Logo printing available)
- ◆ Top mounted 360° rotary CIP spraying ball and port, 2pcs
- ◆ Sparging spray ring on top Easyclean and detachable
- ◆ Bottom mounted rotation motor with VFD speed adjust
- ◆ High torque, low power consumption gear box
- ◆ Grain bed rake with positive inversion control
- ◆ Automatic lifted spent grain dozer for spent grain out
- ◆ Side mounted enlarged spent grain manhole with glass and grain chute
- ◆ 304SS wedge shape milling cut False Bottom/Filter plate with 0.7mm gap on top and 1.5mm bottom
- ◆ False bottom easy taken out from spent grain door
- ◆ Easy clean support at bottom for False bottom/Filter plate
- ◆ Sanitary welded thermowell for high accuracy temperature sensor
- ◆ CIP inlet on top
- ◆ Sparging water inlet on top
- ◆ Wort circulation inlet on top with wort check sight glass
- ◆ Mash inlet upon false bottom on side wall
- ◆ Equally distributed Circular mouth wort outlet with extended collection ring at bottom
- ◆ Back pressure flushing device under false bottom with nozzels
- ◆ Steam inlet on side wall
- ◆ Steam trap port on side wall
- ◆ Steam jacket safty port on side wall
- ◆ 4pcs completely 304SS legs with braces
- ◆ 4 sets heavy duty foot pad with up-down and slop adjustable
- ☐ Bottom mounted spent grain discharge port for special request
- ◆ Automatic rising-lowering rake
- ◆ Empty level switch as optional, Economic Brand (IFM)
- ◆ Pressure transmitter for level control (IFM)
- ◆ Lamp on the top of Tank
- ◆ Chimney according to design



2.1 2500L Mash Tun x1set

- ◆ Function: Grain mashing
- ◆ Tank Capacity: 2500L (+25% Headspace minimum)
- ◆ Dimension: $\Phi 1960 \times 2800 \text{mm}$
- ◆ Interior Shell: 304SS full welded; TH=3mm
- ◆ Exterior Shell: 304SS full welded; TH=2mm
- ◆ 100% TIG welding with pure argon gas shield
- ◆ Interior Finish: Completely acid washing and passivation
- ◆ Inside polishing to $0.2 \sim 0.4 \mu\text{m}$ without dead corner
- ◆ Insulation: TH=80mm with environmental protection rock wool
- ◆ Heating: Steam (Electric, Direct fire for optional)
- ◆ Steam Jacket: Dimple plate on bottom and side wall
- ◆ Jacket test by water and gas, 5bar (75psi) for 1hour, 3.5bar (52psi) for 48 hours
- ◆ Jacket Working Pressure: < 2bar
- ◆ Tank leakage test by full water for 72 hours
- ◆ Tank Working Pressure: Atmosphere
- ◆ Conical top full polished
- ◆ Conical bottom
- ◆ Top mounted glass manhole (Logo printing available)
- ◆ Top mounted 360° rotary CIP spraying ball and port, 2pcs
- ◆ Bottom mounted rotation motor with VFD speed adjust
- ◆ High torque, low power consumption gear box
- ◆ Agitator with positive inversion control
- ◆ Sanitary welded thermowell for high accuracy temperature sensor
- ◆ CIP inlet on top
- ◆ Mash outlet in center of the bottom
- ◆ Steam inlet on side wall and bottom allow separately heating
- ◆ Steam trap port on side wall and bottom
- ◆ Steam jacket safety port on side wall and bottom
- ◆ 4pcs completely 304SS legs with braces
- ◆ 4 sets heavy duty foot pad with up-down and slop adjustable
- ◆ Grist hydrator with elbow
- ☐ Empty level switch as optional, Economic Brand (IFM or NEGEL for optional)
- ☐ Pressure transmitter for level control as optional, Economic Brand (IFM or E+H for optional)
- ◆ Lamp on the top of Tank
- ◆ Chimney according to design



4.2 5000L Cold Water Tank x1set

- ◆ Function: Cold water supply for wort cooling
- ◆ Tank Capacity: 5000L (+15% Headspace minimum)
- ◆ Dimension: $\Phi 1960 \times 3100$ mm (customized)
- ◆ 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 $0.2 \sim 0.4 \mu\text{m}$ without dead corner
- ◆ Insulation: TH=80mm with low thermal conductivity PU
- ◆ Cooling: 35% Glycol liquid -5°C
- ◆ Cooling Jacket: Dimple plate on bottom and side wall, welded without over burning
- ◆ Jacket test by water and gas, 5bar (75psi) for 1hour, 3.5bar (52psi) for 48 hours
- ◆ Jacket Working Pressure: < 2bar
- ◆ Tank leakage test by full water for 72 hours
- ◆ Tank Working Pressure: Atmosphere
- ◆ Conical top full polished
- ◆ Conical bottom
- ◆ Top mounted stainless steel manhole
- ◆ Top mounted 360° rotary CIP spraying ball and port, 1pcs
- ◆ Sanitary liquid level indicator with valves
- ◆ Sanitary welded thermowell for high accuracy temperature sensor
- ◆ Floating ball low level sensor with alarm
- ◆ Breath port on top
- ◆ CIP inlet on top
- ◆ Water injection inlet with end cap
- ◆ Overflow port with extend pipe to floor
- ◆ Water outlet on side wall avoiding vortex and sediment
- ◆ Drainage port at center of bottom with anti-vortex dam
- ◆ Discharge arm with butterfly valve
- ◆ 4pcs completely SUS304 legs with braces
- ◆ 4 sets heavy duty foot pad with up-down and slop adjustable
- ☐ Empty level switch as optional, Economic Brand (IFM or NEGEL for optional)
- ☐ Pressure transmitter for level control as optional, Economic Brand (IFM or E+H for optional)

