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山东天泰啤酒设备有限公司

Shandong Tiantai Beer Equipment Co.,Ltd

Add: No.2668 Jichang Road Innovation Zone Jinan City China Tel & Fax::+86-(0)531-88161066 Email: info@cnbrewery.com www.craftbrewery.equipment.com

		Part I:	Quotation	Sheet		
Project:	1000L/Brew Beer Brewing S	ystem	Serial No.:	TTHL20230731	01	
Offer Valid:	60 days		Date:	2023-7-31		
Seller:	Shandong Tiantai Beer Equi	oment Co., Ltd	Buyer:	Scott Taylor		
Address:	No.2668 Jichang Road, Jina	n City, China	Address:	UK		
Tel:	86 531 88161066		Tel:			
Website	http://www.craftbreweryeq	uipment.com	Website:			
		• Fully con Complete pr	nfigurated project delivery		 Reliable quality 8 years continuous lean improvement, strict QC 	
Engineers	iient service available 150+ days per jor markets	Reasonal We care abo than cost on	ut cost perforn	nance	Transaction Sec Verified by 1100+ u countries	
Goods	Equipment Components		Q'ty	Unit Price	Amount	Discount Amount
art 1: 1000	L Two Vessel/HLT Brewhouse [MLT+KWT+20HI	HLT]			Anount
	1.1 10HL Mash/Lauter Tun		1set			
	1.2 10HL Kettle/Whirlpool T	un	1set			
	1.3 20HL Hot Water Tank		1set			
	2.4 Non-slip Work Plateform		1set			
	1.5 Sanitary Centrifugal Pur	np [LYSF]	2sets			
	1.6 Sanitary Piping		1set			
	1.7 Valves and Fittings		1set			
	1.8 Manual Water Mixing St	ation	1set	US\$21,950	US\$21,950	US\$20,410
	1.9 Manual Wort Cooling Sta	ition	1set			
	1.10 Pipeline Instrument Se	nsor	Ounit			
	1.11 25L Glass Wort Grant		1set			
	1.12 10M2 Heat Exchanger	[304SS	1set			
	NANHUA1 1.13 Pipe Filter		1set			
	1.14 Wort Aeration Station		1set			
	1.15 20L Yeast Feeder		1set			
art 2: Ferm	entation Unit					
	2.1 1000L Fermentation Tar include carbonation stone	k/Unitank	5sets	US\$3,950	US\$19,750	US\$18,750
art 3: Glyco	I Cooling Unit					
	3.1 2000L Glycol Water Tan	<	1set	US\$5,450	US\$5,450	US\$5,120
	3.2 5HP Glycol Water Chiller		2sets	US\$3,400	US\$6,800	US\$6,600

	3.3 Glycol Water Pipeline	1unit	US\$1,850	US\$1,850	US\$1,800
Part 4: Ele	ctric Control Unit				
	4.1 Brewery Instrumental Control Cabinet	1set	US\$5,230	US\$5,230	US\$5,070
Part 5: 100	OL Portable CIP Cart [Two Tanks]				
	5.1 100L Single Wall Caustic Tank	1set			
	5.2 100L Single Wall Acid Tank	1set			
	5.3 Sanitary Centrifugal Pump	1set			
	5.4 Sanitary Piping	1set	US\$2,500	US\$2,500	US\$2,250
	5.5 Valves and Fittings	1set			
	5.6 Portable Trolly	1set			
	5.7 CIP Controling Cabinet	1set			
Part 6: Sp	pare Parts & Tools				
	6.1 Spare Parts for brewhouse	1set	Free	Free	Free
	6.2 Spare Parts for fermentation	1set	Free	Free	Free
	6.3 Spare Parts for control	1set	Free	Free	Free
	6.4 Spare Parts for CIP	1set	Free	Free	Free
	6.5 Standard Installation Tools	1set	Free	Free	Free
Part 7: Keg	g Filling Unit				
	7.1 Semi-auto Keg Filler and washer	1set	US\$8,800	US\$8,800	US\$8,650
	Total Price, EXW China			US\$72,330	US\$68,650
	Packing, Inland Freight, Port Charge			US\$1,200	
	Total Price, FOB Qingdao Port, 1x40'HQ			US\$73,530	US\$69,850
	Sea Freight, xx40'HQ, Qingdao Port to		Pending		
	Total Price, CFR		Pending		

Budget limited? Some items can be changed into economic model to save money as below:

1. Hot Liquor Tank can be changed from 20HL to 10HL to save USD1300;

2. Heat Exchanger can be changed to economic model to save USD1300;

3. Glycol chiller can be changed to economic model to save USD2220 for two sets;

4. CIP can be changed into economic model to save USD400;

5. Other economic configuration is available to meet your budget by further communication.

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Part II: Equipments Specification

Capacity: 1000L/Brew

Electric Supply: 3 Phase 380V 50Hz or customized

Part 1: 1000L Two Vessel/HLT Brewhouse [MLT+KWT+20HL HLT]

1.1 1000L Mash/Lauter Tun x1set

- Function: Grain mashing, Lautering and sparging
- Tank Capacity: 1000L (+25% Headspace minimum)
- Dimension: Φ1460x2500mm (Width on base of 14plato)
- 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 0.2~0.4 µm without dead corner
- Insulation: TH=80mm with environmental protection rock wool
- Heating: No
- Steam Jacket: No
- Tank leakage test by full water for 72 hours
- Tank Working Pressure: Atmosphere
- Dished top full polished
- Conical bottom
- 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
- Top mounted rotation motor with VFD speed adjust
- High torque, low power consumption gear box
- Grain bed rake with positive inversion control
- Manually lifted spent grain dozer for spent grain out
- Side mounted enlarged spent grain manhole with glass with grain chute
- SUS304 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



- Wort outlet in center of the bottom
- 4pcs completely SUS304 legs with braces
- 4 sets heavy duty foot pad with up-down and slop adjustable
- Second Second

1.2 1000L Kettle/Whirlpool Tun x1set

- Function: Wort boiling, hopping and whirlpool
- Tank Capacity:1000L (+30% Headspace minimum)
- Dimension: Φ1460x2500mm
- 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 0.2~0.4 µm without dead corner
- Insulation: TH=80mm with environmental protection rock wool
- Heating: Electric
- Steam Jacket:No
- Tank leakage test by full water for 72 hours
- Tank Working Pressure: Atmosphere
- Dished 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 condensor with spray nozzle and valves
- · Sanitary welded thermowell for high accuracy temperature sensor
- Wort inlet on top with elbow to side wall
- 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
- 4pcs completely SUS304 legs with braces
- 4 sets heavy duty foot pad with up-down and slop adjustable

2.3 2000L Hot Liquor Tank x1set

- Function: Hot water supply for mashing, sparging, cleaning
- Tank Capacity:2000L (+15% Headspace minimum)
- Dimension: Φ1560x2400mm (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 0.2~0.4 µm without dead corner
- Insulation: TH=80mm with environmental protection rock wool
- Heating: Electric
- Steam Jacket: No
- Tank leakage test by full water for 72 hours
- Tank Working Pressure: Atmosphere
- Conical top full polished
- Conical bottom
- Top mounted stainless steel manhole (Logo printing available)
- 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 level sensor for stopping heating with alarm
- · Breath port on top
- CIP inlet on top
- · Recovery water 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

2.4 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





2.5 Sanitary Centrifugal Pump x1set

- 1pcs Wort Pump: 5M3/Hr, Sanitary SUS304, delivery 24m
- 1pcs Hot Water Pump: 5M3/Hr, Sanitary SUS304, 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/EFF1
- 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

2.6 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

2.7 Valves and Fittings x1set

- 304SS 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

2.8 Manual Water Mixing Station x1set

- Function: Hot water and cold/city water blending and control
- Temperature and flow easy controled manually
- 1pcs Manual adjustable diaphragm valve in cold line
- 1pcs Manual adjustable diaphragm valve in hot line
- Bimetallic thermometer WIKA Germany for temperature display
- Sector Electromagnetic flow meter for option (Turbine flow meter is available for pure water)
- Section 2 Automatic PLC controled water blending station for optional









2.9 Manual Wort Cooling Station

- 1pcs Manual ball valve for cooling line
- Bimetallic thermometer WIKA Germany for temperature display
- Complete piping and fittings
- Section 2 Automatic PLC controled wort cooling station for optional

2.10 Pipeline Instrument Sensor x0set

- Opcs electromagnetic flow meter for wort from LT to BK, economic brand (IFM, E+H for optional)
- Opcs electromagnetic flow meter for wort from HE to FV, economic brand (IFM, E+H for optional)

2.11 25L Glass Wort Grant x1set

- Function: Buffer tank avoiding negative pressure in lauter tun
- Volume: 25L
- 304SS flange for top and bottom with support braces
- Food grade glass side wall
- CIP ball for cleaning
- Wort inlet at bottom
- Wort outlet at bottom
- Vent port to lauter tun
- Section 14 Section

2.12 10M2 Heat Exchanger x1set

- Function: Wort cooling
- Two stages for city water and glycol water (Single stage for optional)
- Effective Cooling Area: 10M2
- Completely 304 Stainless steel Corrugated plates, TH=0.4mm
- All plates are numbered for easy assembling
- Heavy backplates with full sanitary stainless steel cover
- Full detachable for regular cleaning
- Wort pass without dead corner avoiding cleaning liquid remain
- Hygiene grade EPDM gasket
- Wort inlet Tee with valve for independent and backward CIP cleaning
- Design Pressure: 1.0Mpa
- Design Temperature: 130℃
- Glycol water inlet and outlet
- · City water inlet and outlet
- Wort inlet and outlet
- Size: 800x470x1250mm







2.13 Pipe Filter x1set

- Function: Protect heat exchanger from trub in wort
- Completely 304 Stainless steel
- Inside filter cartridge with 3mm holes
- 0.5mm strainer mesh [Other size is available]
- Union cap with handle
- 2.14 Wort Aeration Station x1set
 - Function: Inline O2 blending with wort
 - Full stainless steel pipe
 - Aeration port with ball valve
 - Aeration stone for equally air dispensing
 - · Sight glass with metal cover for wort observation
 - Triclamps and fittings
 - Θ Excluding air supply line with filter

2.15 20L Yeast Feeder x1set

- Function: Inline yeast pitching for fermentable wort
- Yeast Hold Volume: 20L
- Sanitary 304SS full welded
- Completely draining bottom
- Tri clamp aeration port with ball valve
- Discharge port with butterfly valve
- Size: 500*500*550mm

Part 2: Fermentation Unit

- 2.1 1000L Fermentation Tank/Unitank x5sets
 - Function: Wort Fermentation or maturation
 - Tank Capacity: 1000L (+25% Headspace minimum)
 - Dimension: Φ1210x2710mm (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 0.2~0.4 µm without dead corner
 - Insulation: TH=80mm with low thermal conductivity PU
 - Cooling: 35% Glycol liquid -5℃
 - 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/30psi</p>











 Tank leakage test by water and gas, 4bar/60psi for 1hour, 2.5bar/37.5psi for 48 hours

- Tank Working Pressure: ≤ 2bar/30psi
- Dished top full polished
- 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 (Diaphram 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 for optional)
- 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
- Series Pressure adjustable bunging valve 0.2-2.2bar for special request
- Sanitary level tube and valves
- Carbonation port with stone

Part 3: Glycol Cooling Unit

3.1 2000L Glycol Water Tank x1set

- Function: Glycol water supply for FV, BBT, CLT or wort cooling
- Tank Capacity:2000L (+15% Headspace minimum)
- Dimension: Φ1360x2515mm (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 0.2~0.4 µm without dead corner
- Insulation: TH=80mm with low thermal conductivity PU
- ◆ Cooling: Circulated 35% Glycol liquid -5℃ from chiller
- Cooling Jacket: No
- Tank leakage test by full water for 72 hours
- Tank Working Pressure: Atmosphere







- Conical top full polished
- Conical bottom
- Top mounted stainless steel manhole
- Sanitary welded thermowell for high accuracy temperature sensor
- Breath port on top
- Water injection inlet with end cap
- Glycol Water inlet/outlet for chillers on side wall avoiding vortex and sediment
- Glycol Water inlet/outlet for cooling on side wall avoiding vortex and sediment
- Drainage port at center of bottom
- 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
- Sempty level switch included, Economic Brand (IFM or NEGEL for optional)

3.2 5P Glycol Water Chiller x2sets

- Function: Glycol water chilling
- Type: Air cooled glycol water chiller
- Model: ICA-5M
- Ambient Temp 35℃; Water outlet Temp -5℃
- Cooling Capacity: 15000W/12900Kcal/h
- Installed Power:4.8kw, 3-Phase/380V/50Hz (Customized Voltage for special request)
- Rated Current: 10.8A
- Refrigerant: Freon R407C envionmental friendly (Other Freon for special request)
- Programmed 5" LCD control panel with water proof cover
- Automatic temperature controller
- Scroll Compressor [Key Part] by Copeland, Emmerson, Danfoss, Sanyo etc
- [Key part] expansion valve, DANFOS
- V-shape top mounted condensor [Key part] with corrosion resistant inner fin copper tube
- Evaporator[Key part]: 304SS shell and corrosion resistant inner copper tube low risk of leakage
- Corrosion resistant pump for glycol water recycle
- Efficient and low noise fans top amounted
- High and low pressure gauge for fryon monitoring
- High pressure and low pressure alarm
- Over temp alarm
- Over load alarm
- Intelligent anti-freezing protection
- Water flow alarm
- Pressure alarm
- Timer setup for start/stop



- Complete pipes and fitting assembled well
- Noise Level: 61dB(A)
- Corrosion resistant plastic painting cover allow outdoor placement
- All copper welding by Harris USA welding rod
- All chiller has been tested by pressured N2 gas avoid any leakage risk

 The whole machine is Shock absorption design avoiding risk of quake crack during running

- Unit Weight: 200kg; Running Weight: 220kg
- Size: 1220x720x1325mm
- ≤ Inner glycol tank for special request
- Sound the second sec

3.3 Glycol Water Tansfer x1set

- Function: Glycol water circulation
- 1pcs Glycol Water Pump 0.75kw 4M3/HR H=31m
- 304SS Solenoid valve DC24V for each tank (Angle Seat Valve for special request)
- PPR pipes and fittings between GWT and GW pump
- PPR pipes and fittings from GW Pump to tank inlet components
- PPR pipes and fittings from tank outlet components to GWT
- PPR pipes and fittings between chiller and GWT
- PEX pipes and fittings for tank inlet components including solenoid valves
- PEX pipes and fittings for tank outlet components
- Rubber foam Insulation for supply and return loops
- Site installation instruction service included
- All pipe and fittings calculated by layout with 10% allowance
- 6 Temperature controlling points as standard
- Some Section 2 More Temperature controlling points for special request
- Stainless steel pipeline for special request
- ≤ UPVC pipeline for special request
- Θ Mounting bracket or support exclusive
- $\boldsymbol{\Theta}$ Part of the installation tools site preparation by buyer

Part 4: Electric Control Unit

5.1 Brewery Control Cabinet [PP Floor] x1set

- Function: Brewhouse, FVs, BBTs controlling
- Cabinet Material: Plastic painting
- Control Panel: Instrumental panel
- Assembling Style: Wall hanging or platform mounted
- Electrical Parts: LS, Schneider, ABB, MW, Omron etc with CE/UL
- VFD brand DELTA with CE/UL or DANFOSS/ABB with CE
- Temp-Controller: Autonics with CE/UL

Brewhouse Control





- Mash/Wort Pump on/off control
- Pump speed adjusted by VFD
- Rake/Agitator motor on/off control
- Rake/Agitator rotation speed adjusted by VFD
- Tanks heating control Auto/Manu switchable (Steam valve or electric or burner)
- Light on/off control for tank light if have
- · Level control for hot water tank with alarm if have
- Level control for wort grant if have
- Flow meter remote display LCD if have
- Malt scale sensor control and LCD display if have

Fermentation Control

- Glycol Water Pump on/off control Auto/Manu switchable
- Chiller on/off control Auto/Manu switchable
- Fermentation tanks cooling control Auto/Manu switchable
- Bright beer tanks cooling control Auto/Manu switchable
- Glycol water tank cooling control Auto/Manua switchable

 \square PLC control with touch screen for special request

Part 5: 100L Portable CIP Cart [Two Tanks]

5.1 100L Single Wall Caustic Tank x1set

- Function:Caustic liquid heating and mixing
- Tank Capacity: 100L
- Dimension: Φ500×1150mm
- Shell: SUS304 full welded; TH=2mm
- Exterior Finish: Oil brushed finish (2B, 8K Mirror finish optional)
- Interior Finish: Sanitary 2B finish, Pickled and Passivated; (8K Mirror finish optional)
- Interior full polished to 0.2~0.4 µm without dead corner
- 100% TIG welding with pure argon gas shield
- Single wall without insulation
- Stringent tank leakage test by water for 48 hours
- Tank Working Pressure: Atmosphere
- Conical top full polished
- Dished bottom
- Top mounted stainless steel manhole
- Heating: Electric with 6Kw
- Floating ball level sensor for stopping heating with alarm
- Sanitary welded thermowell for high accuracy temperature sensor
- Tank inlet on top
- Tank outlet at bottom
- 3pcs completely SUS304 legs with braces



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3 sets heavy duty foot pad with up-down and slop adjustable

5.2 100L Single Wall Acid Tank x1set

- Function: Acid liquid mixing
- Tank Capacity: 100L
- Dimension: Φ500×1150mm
- Shell: SUS304 full welded; TH=2mm
- Exterior Finish: Oil brushed finish (2B, 8K Mirror finish optional)
- Interior Finish: Sanitary 2B finish, Pickled and Passivated; (8K Mirror finish optional)
- Interior full polished to 0.2~0.4 µm without dead corner
- 100% TIG welding with pure argon gas shield
- Single wall without insulation
- Stringent tank leakage test by water for 48 hours
- Tank Working Pressure: Atmosphere
- Conical top full polished
- Dished bottom
- Top mounted stainless steel manhole
- Heating: No
- Tank inlet on top
- Tank outlet at bottom
- 3pcs completely SUS304 legs with braces
- 3 sets heavy duty foot pad with up-down and slop adjustable

5.3 Sanitary Centrifugal Pump x1set

- Function: CIP pump
- 1pcs Pump: 3M3/Hr, Sanitary SUS304, delivery 18m
- 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/EFF1
- All pump have been strictly tested
- Shaft seal: Alloyed hard-wearing, Roplan SWEDEN (Graphite, Carborundum as economical choice)
- Pump seal spare parts in standard list for easy maintenance
- Auxiliary seal: EPDM with FDA certificate
- Pump liquid connection polishing <0.6um
- \bullet Working Temperature: -10 $^\circ\!\!\mathbb{C}$ to +140 $^\circ\!\!\mathbb{C}$
- Section Sec

5.4 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

5.5 Valves and Fittings x1set

- 304SS 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
- Servery hose for special request

5.6 Portable Trolly x1set

Full 304SS TIG weled

4pcs 4" wheels

Tanks welded on the trolly

5.7 CIP Controling Cabinet x1set

- Function: CIP controling
- Cabinet Material: 304 Stainless Steel corrision protection and dust proof in brewery
- Assembling Style: Wall mounted Type
- Electrical Parts: LS,Schneider, ABB,MW, Omron etc with CE/UL
- VFD brand DELTA with CE/UL or DANFOSS/ABB with CE if have
- Temp-Controller: Autonics brand with CE/UL
- Pump on/off control
- Caustic Tank heating control Auto/Manu switchable
- Level control for caustic tank with alarm if have
- VFD control for CIP pump for special request

Part 6: Spare Parts & Tools

6.1: Spare Parts for brewhouse x1set

- 12m Full sanitary brewery hose TC or DIN Union for wort transportation
- 1pcs pump seal for each 3sets pumps
- 1pcs 304SS spent grain rake L=1400mm
- 1pcs Brix spindle 0-10
- 1pcs Brix spindle 10-20
- 1pcs 304SS wort measuring cylinder, ø38*350mm
- 2pcs manual butterfly valves
- 1pcs pipe sight glass







- 5pcs Tri clamp or DIN Union for each vessel, specification by design
- 10pcs TC or DIN Union gasket for each vessel, specification by design
- 1pcs manhole gasket for each two vessels
- 6.2: Spare Parts for fermentation x1set
 - 1pcs solenoid valve for each five tanks
 - 1pcs manhole gasket for each three vessels
 - 1pcs pressure gauge for each five tanks
 - 2pcs pressure gauge gasket for each gauge
 - 20pcs O seal for rotating raking arm, ø45*4mm
 - 20pcs O seal for rotating raking arm, ø48*5mm
 - 1pcs eccentric reducer ø51-ø38
- 6.3: Spare Parts for control x1set
 - 1pcs temperature sensor for each five tanks
 - 1pcs junction box for each five tanks
 - 1pcs relay
- 6.4: Spare Parts for CIP x1set
 - 2m Full sanitary brewery hose TC or DIN Union for CIP
 - 1pcs electric heating element for caustic tank
- 6.5: Standard Installation Tools x1set
 - 1pcs bubble-tube level
 - 1pcs box ruller
 - 1pcs adjustable wrench
 - 1pcs hook spanner
 - 1pcs socket wrench
 - 2pcs screw driver
 - 1pcs pipe twist
 - Other tools prepared by buyer

Part 7: Semi-auto Keg Filler and washer

7.1 Semi-auto Keg Filler and washer x1set

Function: Keg filling and rinsing

Model: HZQXG-II

Capacity: 30-40kegs/hr

Filler: Upright Filling, Automatic CO2 Pressure Preparation, Isobar Filling and Stop

Filler Work Process: Place the keg-Start-CO2 Pressurization-Filling-Stop-Finish

Filler Input Power: 30W

Washer Input Power: 0.75kwx2

Heating: Electric, Power: 15kw(steam for optional)











Inversion rinsing

Kegs style: 5-50 liters with D=0250-0500mm H=360-600mm

Siemens programmable Controller

Automatically Washing, Sterilizing, and CO2 pressure preparation

Two Tanks: Alkali Tank, hot water tank

Sterilizer/Alkali Water Recycled

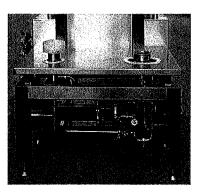
Washer: Pneumatic valve

WasherWorking Process: Start-Clean Water-Caustic Liquid-Hot Water-Hot Water-Steam Sterilization-CO2 Pressurization-Stop

Steam sterilization is user-selectable

Weight: 390kg

Dimensions: 1200x1600x2000mm



Part III: 1100+ Brewery Cases











Japan-10BBL







USA-20BBL 77





Canada-12HL







USA-40BBL





Australia-12HL



nd-20BBL NA



inia-10HL



South Africa-10HL



UK-25HL

USA-20HL



Netherlands-15HL





UK-25HL





Vietnam-15HL

Singapore -10HL



Korea-12HL

South Korea-10HL

3

Sweden-5HL

The P ----....

20







Estonia-10HL





-20HL



Saint Martin-18HL

Designation Australia-20HL









5

Australia-12HL



2



Belgium-50HL



Sweden-20HL





UK-20HL



山东天泰啤酒设备有限公司

Shandong Tiantai Beer Equipment Co.,Ltd

Add: No.2668 Jichang Road Innovation Zone Jinan City China Tel & Fax::+86-(0)531-88161066 Email: info@cnbrewery.com www.craftbrewery.equipment.com

Part IV: Terms and Conditions

1. Installation & Training

- 1.1 We will send engineer for installation instruction.
- 1.2 The buyer is responsible for finding a translator locally for easy understanding.
- 1.3 The buyer will be asked to provide room, board, round-trip transportation.
- 1.4 The buyer will be responsible for the fare of the visa.

1.5 The installation period is 25 calender days including instruction of assembling brewing tanks and training the operater.

1.6 The buyer should pay USD120 per calender day for each engineer for the installation period which should also include the time on the road. Because of the current quarantine policy caused by the epidemic, the daily fee of USD80 was paid for those who did not work normally during the quarantine period.

1.7 Extended installation days will be charged by USD180 per calender day for each engineer. A possible delay of the installation period will be additionally invoiced.

1.8 Facilities provided by buyer are excluded from the above terms and conditions.

1.9 Assisting purchased facilities by seller including bottling system, steam boiler, water treatment, etc should be installed separately. If needed, cost calculate additionally.

2. Service

- 2.1 Free consultation service before, during, and after sales.
- 2.2 Project planning and design services.
- 2.3 Free debugging instruction of equipment until everything is functional.
- 2.4 Management of equipments' long distance shipping from seller's factory to named port or station by buyer.
- 2.5 Training of equipment maintenance and operating personally.
- 2.6 The remind of regular maintenance and maintenance register consultant.

3. Guarantee

3.1 Provide **5** years complete warrantee for tanks body under normal use conditions. The use of extreme conditions such as super-standard acids, alkalis, pressure, mechanical damage, etc. is not covered by this warranty.

- 3.2 Provide 1 year complete warrantee for all accessories and auxiliary facilities.
- 3.3 Provide 3 month warrantee for wearing parts and sensitive components, such as pump seals, gasket, sensors etc.
- 3.4 The seller is responsible for the nature damage of the machinery in the warranty period except for man-made damage.
- 3.5 Standard spare parts and wearing parts are attached with the machinery for free.

3.6 In the event of non-human damage during the warranty period, our company still provides technical services. If parts replacement is required, only the lowest cost will be charged.

4. Payment Terms

3.1 40% of the whole amount pay as down payment by T/T before production. The balance 60% paid before shippment after inspection by T/T.

3.2 We accept a not less than 5% deposit to lock in the contract price, thus to reduce the price fluctuation risk caused by raw materials cost rising, currency changing etc. The price locking period does not exceed 180 days.

3.3 Both parties agreed that the transaction currency shall be US dollars, and the exchange rate risk shall be borne by both parties.

3.4 We accept transactions denominated in RMB to reduce the risk of exchange rate fluctuations.

5. Delivery Time

4.1 Within 80-100 days after confirmation of the initial payment and the technical documents.

4.2 Statutory holidays will be automatically postponed to meet after the holidays.

4.3 The delivery period will fluctuate depending on the production arrangement at the time. Please check with our sales consultant for the accurate delivery period.

6. Shipment

5.1 All the machines in the list should be loaded in 1x 40' containers.

5.2 We will load container and in charge of the transportation from factory to the shippment port.

5.3 We are able to arrange the sea transportation from delivery port to destination port if entrusted by the buyer.

5.4 Door to door transporation service if available if entrusted by the buyer.

5.5 Sea freight often fluctuates per week, so overpayment should be refunded to buyer or deficiency should be repaid to us before shipping according to actual freight.



山东天泰啤酒设备有限公司

Shandong Tiantai Beer Equipment Co.,Ltd

Add: No 2668 Jichang Ruad Innovation Zone Jinan City China Tel & Fax::=46403531-88161066 Email: info@cabrewery.com www.crafibrewery.equipment.com

No.	Name	Specification	Q'ty
	Miller Accessories	1.5kw	1pcs
1	Drive Motor	1.5KW	3pcs
2	Belt		1pcs
_	Electromagnetic Starter		Thes
4	Spray Ball	SUS304/Ф25	1pcs
5	Sparging Ring	SUS304	1pcs
6	Rake Motor&Reducer	0.75KW	1pcs (As designed
7	Rake	Standard	1pcs (As designed
8	Foot Pad	SUS304	4pcs
9	Manway with Gasket	SUS304&Silicon Rubber	1pcs
10	Agitator Motor&Reducer	0.75KW	As designed
11	Agitator	SUS304	As designed
12	Spray Bail	SUS304/Ф25	1pcs
13	Level Gauge	Φ15/glass	1pcs
14	Foot Pad	SUS304	4pcs
15	Manway with Gasket	SUS304&Silicon Rubber	1pcs
16	Steam Condensor	SUS304 With Nozzle	As designed
17	Level Gauge	Φ15/glass	1pcs
18	Foot Pad	SUS304	4pcs
19	Manway with Gasket	SUS304&Silicon Rubber	1pcs
20	Wort Pump	Centrifugal/0.75KW	1pcs
21	Hot Water Pump	Centrifugal/0.75KW	As designed
22	Piping Manifold	with butterfly valve	As designed
23	Hard Pipings	as design	1set
24	Aeration Device	with stone and	1pcs
25	Brewery Hose	Rubber/Ф32	6meter
26	Hose End	SUS304/Φ32	4pcs
27	Gas Tube	Sanitary Plastic/Φ10	10meter
28	Gas Tube End	SUS304/Φ10	2pcs
20	Grain Rabble	Stainless steel	1pcs
30	Saccharimeter	0-10	2pcs
31	Saccharimeter	10-20	2pcs
32	Measuring cylinder	Stainless steel 400mm	1pcs
33	Butterfly Valve	SUS304	As designed
34	Tri clamp	SUS304	As designed
35	Gaskets	Rubber	As designed
	nentation Tank Accessories		1
36	CIP Arm	SUS304/Φ32/butterfly	1pcs
37	CO2 Blowoff Arm	SUS304/Φ32/butterfly	1pcs
38	Pipe Support	SUS304	3pcs
39	Spray Bali	SUS304/Ф25	1pcs
40	Pressure Gauge	Shockproof/Mpa&PSI	1pcs
41	Discharge Arm	SUS304/with butterfly	1pcs
41		SUS304/ with butterfly	1pcs
42	Rotating Racking Arm Pressure Relief Valve	SUS304/2bar	1pcs
43		SUS304/2001	1pcs
44		SUS304	4pcs
45		SUS304	As designed
40		SUS304	As designed
47	Gaskets	Rubber	As designed
	ht Beer Tank Accessories		. is assigned
49	CIP Arm	SUS304/Φ32/butterfly	1pcs
49 50		SUS304	3pcs
50		SUS304/Ф25	1pcs
	Spray Ball Pressure Gauge	Shockproof/Mpa&PSI	1pcs
52		SUS304/with butterfly	1pcs
53	Discharge Arm	and the second design of the	
54		SUS304/2bar SUS304	1pcs
55	Sanitary Sample Valve		1pcs
56		with butterfly valve	1pcs
57		with SUS ball valve	1pcs
58		SUS304	4pcs
59		SUS304	As designed
	Tri clamp	SUS304	As designed
60 61	Gaskets	Rubber	As designed



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	Name	Specification	Q'ty
lyco	I Cooling Unit Accessories		
62	Glycol Water Pump	Centrifugal/3M3/Hr	1pcs
63	Solenoid Valve	Ф25/DC24V /0-1MPa	Each FV&BBT
	PPR Pipe	Φ32; th=4.2mm	As designed
_		Φ25; th=3.5mm	As designed
_	PPR Pipe	PPR/Ф25	As designed
_	Double Union Ball Valve		
_	Double Union Ball Valve	PPR/Ф32	As designed
	Female Union Ball Valve	Φ32 Pipe/11/4"thread	As designed
69	Female Union	Φ25Pipe*1"thread	As designed
70	Female Union	Φ32Pipe*11/4"thread	As designed
71	Male Union	Φ25 Pipe*1"thread	As designed
72	Male Union	Φ32 Pipe*11/4"thread	As designed
73	Male Adaptor	Φ25 Pipe*1"thread	As designed
74	Male Adaptor	Φ32 Pipe*1 1/4"thread	As designed
75	Male Adaptor	Φ32 Pipe*1 1/4"thread	As designed
76	Reducing Adaptor	11/4"*1"	As designed
77	90 PPR Elbow	1"	As designed
78	90 PPR Elbow	11/4"	As designed
78	Reducing Tee	11/4"*1"	As designed
		11/4"	As designed
80	Straight Tee	11/4" 11/4"thread*11/4" TC	
81	Female TC Ferrule		As designed
82	Insulation Foam	11/4"	As designed
83	Insulation Foam	1"	As designed
84	Pipe Tie		As designed
85	Thread Seal Tape		As designed
86	PPR Meltor		1pcs
87	PPR Cutter		1pcs
IP I	Jnit Accessories		
88	Union Manhole	Ø89/Glass	2pcs
89	Heating Elements	4kw	1pcs
90	CIP Pump	3M3/Hr	1pcs
91	Hose	Rubber/Φ32	2meter
92	Hose End	SUS304/Ф32	2pcs
-		SUS304	As designed
93	Butterfly Valve		-
94	Tri clamp	SUS304	As designed
	Gaskets	Rubber	As designed
95			
	ric Cabinet Accessories		
	ric Cabinet Accessories Thermocouple	PT100	As designed
lect		PT100	As designed Each tank
lect 96	Thermocouple	PT100 0.3mm ²	
96 97	Thermocouple Junction Box		Each tank
96 97 98 99	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc	0.3mm ²	Each tank Prepared locally
96 97 98 99 100	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc	0.3mm² 1.5m²	Each tank Prepared locally Prepared locally
96 97 98 99 100 101	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape	0.3mm² 1.5m²	Each tank Prepared locally Prepared locally Prepared locally 2pcs
96 97 98 99 100 101 102	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape Cable Tie	0.3mm² 1.5m²	Each tank Prepared locally Prepared locally Prepared locally
96 97 98 99 100 101 102 Fool s	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape Cable Tie	0.3mm² 1.5m²	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs
96 97 98 99 100 101 102 Fool s 103	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape Cable Tie Adjustable Wrench	0.3mm ² 1.5ư' 6ư'	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs
96 97 98 99 100 101 102 Fool 103 104	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife	0.3mm ² 1.5m' 6m' 32	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs
96 97 98 99 100 101 102 Fools 103 104	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape Cable Tie Adjustable Wrench	0.3mm ² 1.5m ² 6m ² 32 3.2	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs
96 97 98 99 100 101 102 Fool: 103 104 105 106	Thermocouple Junction Box Signal Cable for PT100 etc Cable for rotor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive	0.3mm ² 1.5m' 6m' 32	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 1pcs
96 97 98 99 100 101 102 Fool: 103 104 105 106	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive	0.3mm ² 1.5m ² 6m ² 32 3.2	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs
96 97 98 99 100 101 102 Fool: 103 104 105 106 107	Thermocouple Junction Box Signal Cable for PT100 etc Cable for rotor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive	0.3mm ² 1.5m ² 6m ² 32 3.2	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 1pcs
Iect 96 97 98 99 100 101 102 rools 103 104 105 106 107 Spar	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chilier etc Cable for motor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive Pipe Wrench	0.3mm ² 1.5m ² 6m ² 32 3.2	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 1pcs
96 97 98 99 100 101 102 Fool: 103 104 105 106 107 Spar 108	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive Pipe Wrench e Parts	0.3mm ² 1.5m' 6m' 32 3.2 3.2	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 1pcs 1pcs
96 97 98 99 100 101 102 103 104 105 106 107 5par 108 109	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive Pipe Wrench e Parts Butterfly Valve Butterfly Valve	0.3mm ² 1.5m' 6m' 32 3.2 3.2 5US304/Φ32	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 1pcs 1pcs 2pcs 2pcs 2pcs
96 97 98 99 100 101 102 Fools 103 104 105 106 107 Spar 108 109 110	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive Pipe Wrench e Parts Butterfly Valve Butterfly Valve	0.3mm ² 1.5m ³ 6m ³ 32 3.2 3.2 3.2 SUS304/Φ32 SUS304/Φ32 or Φ51 SUS304/Φ32-38	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs
Iect 96 97 98 99 100 101 102 rools 103 104 105 106 107 Spar 108 109 110 111	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive Pipe Wrench e Parts Butterfly Valve Butterfly Valve Tri clamp Tri clamp	0.3mm ² 1.5m ³ 6m ³ 32 3.2 3.2 3.2 SUS304/Ф32 SUS304/Ф32 SUS304/Ф32-38 SUS304/Ф51	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs
Sector 96 97 98 99 100 101 102 Fools 103 104 105 106 107 Spar 108 109 110 111 112	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive Pipe Wrench e Parts Butterfly Valve Butterfly Valve Tri clamp Tri clamp Tri clamp	0.3mm ² 1.5m ² 6m ³ 32 32 3.2 3.2 3.2 SUS304/Ф32 SUS304/Ф32 SUS304/Ф32-38 SUS304/Ф51 Rubber Ф32-Ф38	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs
Sector 96 97 98 99 100 101 102 Fools 103 104 105 106 107 Spar 108 109 110 111 112 113	Thermocouple Junction Box Signal Cable for PT100 etc Cable for rotor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive Pipe Wrench e Parts Butterfly Valve Butterfly Valve Tri clamp Tri clamp Tri clamp Gasket Tri clamp Gasket	0.3mm ² 1.5m ² 6m ³ 32 3.2 3.2 3.2 5US304/Ф32 SUS304/Ф32 SUS304/Ф32 SUS304/Ф32 SUS304/Ф31 Rubber Ф32-Ф38 SUS304/Ф51	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs 2pcs
Sector 96 97 98 99 100 101 102 rools 103 104 105 106 107 Spar 108 109 110 111 112 113 114	Thermocouple Junction Box Signal Cable for PT100 etc Cable for rotor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive Pipe Wrench e Parts Butterfly Valve Butterfly Valve Tri clamp Tri clamp Tri clamp Gasket Tri clamp Gasket	0.3mm ² 1.5m' 6m' 32 32 3.2 3.2 3.2 5US304/Ф32 SUS304/Ф32 SUS304/Ф32-38 SUS304/Ф51 Rubber Ф32-Ф38 SUS304/Ф51 PT100	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 2pcs
Sector 96 97 98 99 100 101 102 rools 103 104 105 106 107 Spar 108 109 110 111 112 113 114	Thermocouple Junction Box Signal Cable for PT100 etc Cable for rotor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive Pipe Wrench e Parts Butterfly Valve Butterfly Valve Tri clamp Tri clamp Tri clamp Gasket Tri clamp Gasket	0.3mm ² 1.5m' 6m' 32 32 3.2 3.2 3.2 SUS304/Ф32 SUS304/Ф32 SUS304/Ф32-38 SUS304/Ф31 Rubber Ф32-Ф38 SUS304/Ф51 PT100 DC24	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 2pcs
Sector 96 97 98 99 100 101 102 roold 103 104 105 106 107 Spar 108 109 110 111 112 113 114 115	Thermocouple Junction Box Signal Cable for PT100 etc Cable for rotor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive Pipe Wrench e Parts Butterfly Valve Butterfly Valve Tri clamp Tri clamp Tri clamp Gasket Tri clamp Gasket	0.3mm ² 1.5m' 6m' 32 32 3.2 3.2 3.2 5US304/Ф32 SUS304/Ф32 SUS304/Ф32-38 SUS304/Ф51 Rubber Ф32-Ф38 SUS304/Ф51 PT100	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 2pcs
Sect 96 97 98 99 100 101 102 rools 103 104 105 106 107 Spar 110 111 112 113 114 115 116	Thermocouple Junction Box Signal Cable for PT100 etc Cable for rotor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive Pipe Wrench e Parts Butterfly Valve Butterfly Valve Butterfly Valve Tri clamp Tri clamp Tri clamp Gasket Tri clamp Gasket Thermocouple Relay	0.3mm ² 1.5m' 6m' 32 32 3.2 3.2 3.2 SUS304/Ф32 SUS304/Ф32 SUS304/Ф32-38 SUS304/Ф31 Rubber Ф32-Ф38 SUS304/Ф51 PT100 DC24	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 2pcs
Sect 96 97 98 99 100 101 102 rools 103 104 105 106 107 Spar 110 111 112 113 114 115 116 117	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive Pipe Wrench e Parts Butterfly Valve Butterfly Valve Butterfly Valve Tri clamp Tri clamp Tri clamp Gasket Thermocouple Relay Solenoid Valve	0.3mm ² 1.5m' 6m' 32 32 3.2 3.2 3.2 SUS304/Ф32 SUS304/Ф32 SUS304/Ф32-38 SUS304/Ф31 Rubber Ф32-Ф38 SUS304/Ф51 PT100 DC24 Ф25/DC24V /0-1MPa	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 2pcs
Sect 96 97 98 99 100 101 102 Fools 103 104 105 106 107 Spar 110 111 112 113 114 115 116 117 118	Thermocouple Junction Box Signal Cable for PT100 etc Cable for chiller etc Cable for motor/pump etc Insulating tape Cable Tie S Adjustable Wrench Knife Straight Screw Drive Cross Screw Drive Pipe Wrench e Parts Butterfly Valve Butterfly Valve Tri clamp Tri clamp Tri clamp Tri clamp Gasket Tri clamp Gasket Tri clamp Gasket Tri clamp Gasket Thermocouple Relay Solenoid Valve	0.3mm ² 1.5m' 6m' 32 32 3.2 3.2 3.2 SUS304/Ф32 SUS304/Ф32 SUS304/Ф32-38 SUS304/Ф31 Rubber Ф32-Ф38 SUS304/Ф51 PT100 DC24 Ф25/DC24V /0-1MPa	Each tank Prepared locally Prepared locally Prepared locally 2pcs 1pcs 1pcs 1pcs 1pcs 1pcs 2pcs

Note: 1. All parts listed above are as standard configuration reference. The accturate accessories and spare parts should be designed according to the final confirmed order. 2. More spare parts are available for your store shelf in further by extra charge. 3. The glycol cooling PPR pipes and fittings are designed by a standard integerated brewery. some parts may be needed locally according to the actual construction site.

Part V: Accessories & Spare Parts



Note: The above accessories are general configuration standards, for reference only. For specific order, please refer to the actual configuration as agreed.





AUTO WELDING MACHINE

Perfect and uniform longitudinal welding seams High tensile resistance, less oxidation and longer X-ray testings to avoid any welding defects Fast cooling of welding seams to avoid deformations

DECOILING MACHINE

Perfect flatness without scratchings Cut stainless steel plates in precise length Automatic conveying to laser cutting machine



PUNCHING MACHINE
Automatic formation of dimple jackets as to design
Uniform shaping and punching without damages

CONE ROLLING MACHINE

Precise cone formation as per custom design Protect the finish from scratching or damaging To avoid any deformation failures



LASER CUTTING MACHINE Cut precisely as per technical drawing Smooth cutting edges without burrs





Perfect and uniform longitudinal welding seams High tensile resistance, less oxidation and longer X-ray testings to avoid any welding defects



AUTO POLISHING MACHINE Well control of polishing precisions as requirements High polishing accuracy to ensure sanitary finishes Smooth and shiny appearance



AUTO PIPE WELDING MACHINE
Neat and smooth welding seams without dead angles
Less oxidation and longer service life























