Price List
valid from 01.01.2014

Eurolux Brew House, Microbrewery in copper with 10hl Volume - complete
2 brews / day = 20 hl NEW

Price: Euro 324.930,-- / unit

Cat-No. 14-00202L

Technical sepecifications:

Brewing equipment type copper 1000 + Whirlpool

Our offer is based on the following information:

Beer Type : Pilsener , 12 % wort

Wort Volume: 10 hl (1 hl = 100 l)

per brew malt to bed: 190 kg Pilsener malt

brews per week on average: 2 or 4

Working weeks per year: 50

Working days per year: 250

Disappeared: 15 %

Fermentation period: 1 week (7 days)

shelf life: 3 weeks (14 days)

Calculation of annual production

10 hl / brew x 4 brews / week x 50 weeks /year x 0.88 = 1760 hl

Ejection extension when increasing the tank capacity is possible.

Plant description Sudwerk in copper cladding

This includes brewhouse include all components for a complete in themselves brewhouse. All components used have high quality standards and are characterized by their ease of use.
The three-vessel brewhouse consists of a lauter tun, mash and a Wort kettle and a separate hot tub.

The lauter tun is equipped with hoeing, the to break up to the Marc cake is used.

For temperature monitoring of 2 digital temperature sensors are in the System installed by default.
The hops are introduced trough the hood door of the pan.
The hot wort is cooled by a two-stage plate heat exchanger on pitching. The heated countercurrently brewing water is collected in the offered with hot water tank.

Pan lauter tun and whirlpool are built on their own two feet which are adjustable in height.

The casing is made of stainless steel brewery usual drinks pipe. Butterfly valves and ball valves are made of stainless steel 1.4301.

Vessels, piping and valves are made of stainless steel 1.4301.

Die Execution of the pan of the lauter tun and whirlpool are given in Appendix
Technical description mash and wort kettle and
Technical description lauter tun specified.
Specified technical description Whirlpool.

To clean the brewhouse area cleaning liquid (soda) is recognized in the brew kettle and can be pumped over all vessels and piping in a circle.
All vessels and pipelines in the brewhouse are therefore suitable for CIP.

Operator platform not included

Brewhouse dimensions
Approx. length = 3.5m
Width = 2.0m
Height = 2.5m
System weight: about 1900 kg Each container has 3 feet

Pos.1 Brewhouse

The brewhouse is designed for the following operating conditions:

Wort/ brew	10 hl
Grist/brew	max. 190 kg

Lautertun
see " Technical Description lauter tun "

Mash-wort kettle
see " Technical Description mash and wort kettle "

Whirlpool
see" Technical Description Whirlpool "

Mash and wort pump
stationary

Dressed mash and wort copper in copper

The pan is made of stainless steel. The hood and cloak in the visible part is clad with copper. Hood and mantle are isolated.

The system offered the hoods and the jacket are executed the same way. Agitator and hoeing clad in copper.

Technical Description

Max. Bulk(18 % stock wort):	max. 190 kg grist
Pan - full - volume:	10 hl

Inside the whole tank made of stainless steel, material 1.4301.
Container with a flat bottom inclined slightly.

An operation called manhole cover is integrated into the hood. These folding doors are usually made of a copper body and brass trim.

The mixer is built vertically and clad in copper.

The Brüdden crackdown with spray nozzles are made from the hood to the Gully. The vapors tube is clad with copper.

Surface

The hood, the jacket sheet are made of copper. The floor and inner panels are made of stainless stell, material no. 1.4301 (cold rolled, IIIC), made. The welds inside and out, stained and sanded.

Fittings and Trim

In the conical cover the pan: - pipe for vapor pipe, CIP connection with spray ball, pumped circulation, water supply, agitator, lighting and access panels.
In coat the pan - thermometer PT 100 nozzles, high and low boil protection.

In the bottom of the pan: - discharge spout

Clad in copper lauter tun

Technical Description

The tub is made of stainless steel. The hood and cloak in the visible part is clad with copper.

Inside, the whole tank made of stainless steel, material 1.4301. Container with a flat bottom inclined slightly.

An operation called manhole cover is integrated into the hood. The hoeing is built vertically and clad in copper.

Container with a slotted false bottom.

Another cover is to be need on the casing soil layer to remove the grains. The cover is of sufficient size to take the false bottom segments from the lauter tun out can.

The vapors without crushing and spray nozzles are made from the hood and ends with a threaded neck and blind mother.

Surface

The hood, the jacket sheet are made of copper. The floor and in panels are made of stainless steel, material no. 1.4301 (cold rolled, IIIC) made. The welds are stained inside and out and sanded.

Fittings and Trim

In the conical hood:

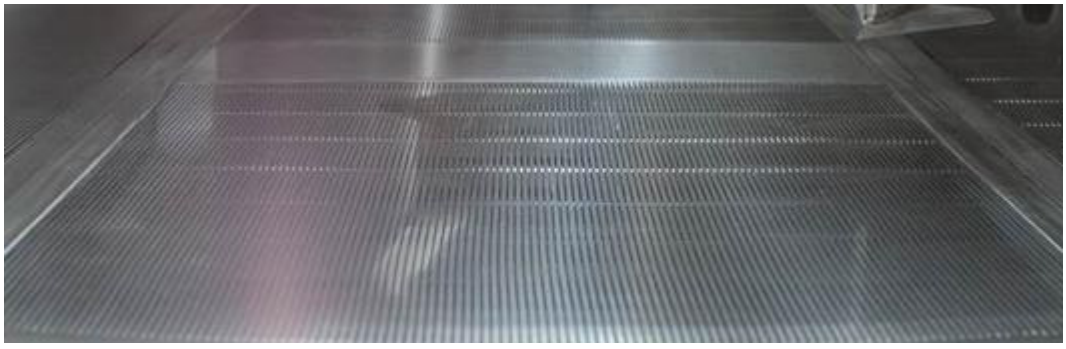
- Connector for vapor tube
- Operation cover
- Hoeing connection
- Lighting
- Connection sparging / CIP connection with spray ball

In shell:
- Operation cover / marc opening
- Running-worts / mash-inlet above the false bottom

floor:
- Centrally Abläuter lines / drain line
- Laterally spice pull the radiator

Strainer
- Number of segments:

For the false bottom of a slotted ground in stainless steel is used.
The segments must be locked against slippage and easily removable for inspection purposes.



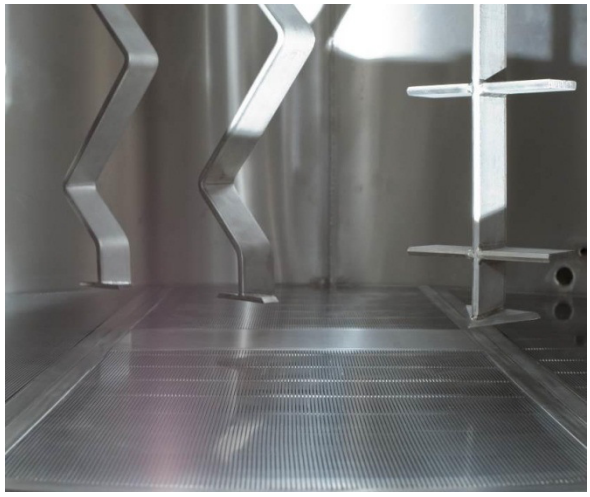
Lauter pipe connections

It is a lauter pipe connection provided.
The piercing itself is to be kept in a conical shape. The conical shape is to take the wake of the on going wort / second wort from the spent grain cake and increase the uniformity of the inflow from the entire source area.

Raking

The cutting machine consists of a centrally managed from the top shaft carrying two horizontal blades.
On these horizontal bar undulating or zigzag blades are attached at regular intervals in a staggered arrangement, which are provided laterally with small horizontal diameters and on foot with "plow-like shoes." This cut loose the grains cake so that the straight flow channels of the wort / recasts are closed, so that the sparging can happen (without extract recording) the spent grain cakes no longer through the existing channels.

The length of the slender and narrow blades are such that can be hacked even at the highest bed in the lowest position.
Raking during the cutting machine rotates at a speed level of about 3 V / min.



Whirlpool stainless steel

Technical Description

The hot tub is made of stainless steel, stainless steel, material 1.4301. An operation called manhole cover is integrated into the hood.

Surface

The hood, the shell plate and the floor are made of stainless steel, material no. 1.4301 (cold rolled, IIIC), made. The welds are attained inside and out and sanded.

Fittings and Trim

In the conical hood:

- Connector for vapor tube
- Operation cover
- CIP-connection with spray ball

In shell:

- Tangential (Whirlpool)
- Running-wort

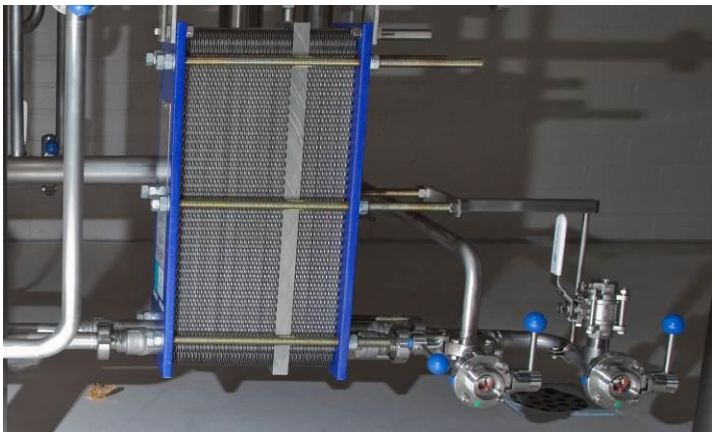
Floor

- Gully line
- Laterally spice pull the radiator

Accessories

2 Two stage centrifugal pumps form mash with stainless steel hood and feet. The wort pump is frequency controlled.

1 2-stage plate cooler, plates in stainless steel material 1.4404 painted steel frame. Pitching 12℃



1 Agitator with spur gear (vertical) and double-sealed with food oil filled. Agitator speed control by frequency in the control cabinet.

1 Hoeing with stronger (because of the grain Scheid helical gear (perpendicular), double sealed and filled with food oil.

3 Spray ball form ash kettle, lauter tun and whirlpool

1 Set of hand wheel and ball valves in stainless steel

1 Set screw in stainless steel according to DIN 11851 (Dairy)
1 Temperature monitoring of the wort outlet after the cooling by PT 100 with transducers in the head.

1 Temperature monitoring in the pan by PT 100 with transmitter in the head.

About ane and sub-boil protection (heat can not be started if pan is not filled)
1 Marc Scheid at the Hack Factory

1 Flow sensor in the lauter line

1 A thermostatic mixing valve (water supply to the mash tun) (setting 50° C – 75℃), setting the mixed water temperature control dial with a clear temperature scaling Incl. Flowmeter
with magnetic valve to the water supply targeted.

1 Sieve before the wort cooler

1 Piping of the entire brewhouse is running backwards, since the brewhouse is walled on the front. No visible ports on the front.

Control with automatic mash

General description of the electrical control

The delivered hardware and software is state of the art at the time of quotation. We reserve during the offer term, a price adjustment due to technical developments. Technical developments during order processing can no longer, or only with additional costs are taken into account. Changes from the text of the offer in accordance with the technical progress we reserve the right.

The hardware design contained in the package includes:
-Technical clarification
-Balance the I/O assignment

- Creating or adapting the PLC
- Editing and setting the switch
The hardware-electrical documentation is created and delivered.
- 1x in paper form along with the hardware supply
The electrical system is designed according to the latest standard.
There are only type-tested components from reputable manufacturers.
Switching and control cabinet
Fully wired and ready for connection.

Panel Mounting with:
1 x control Beckhoff CP6607 ***Touchscreen***
1 x Protective circuit agitator
1 x Protective circuit hoeing
1 x Protective circuit 230V/16A burner
2 x 24VDC outlet temperature sensor
2 x temperature measurement
2 x level measurement
Analog input 4-20
Remote control via Ipad or other remote maintenance.

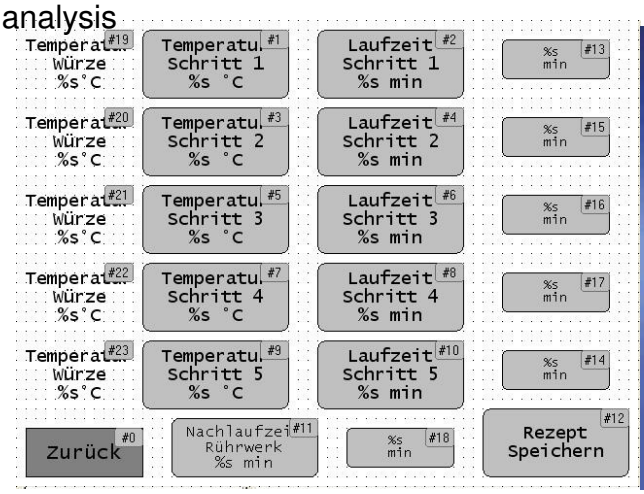
Hardware und Software

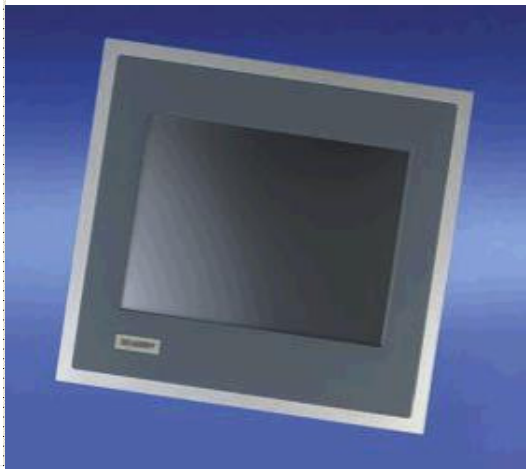
The control with automatic mash is for the connection of mash pump, hoeing and two temperature sensors provided. The lauter and agitator are frequency-controlled.
Control:
There are 5 recipes stored in the controller.

The brewhouse includes a cabinet in stainless steel.

Dokumentation

Creating the system documentation in one triplicate in German language consisting of:
• Delivery Directory
• Operating and maintenance instructions
• Safety instructions
• User guide
• Declaration of Conformity
• Hazard analysis





Other

1 mobile centrifugal pump (also for cleaning of all tanks)
All parts coming in contact with the medium made of stainless steel 1.4404, electrolytically polished.
Medium: **Beer/ CIP flow** :
1 -8 m³/h Förderhöhe: 20,1 m
= 1,97 bar Temperature:
95°C
Connections: DIN 11851
Suction side: DN 40
Pressure side: DN 32
Mechanical seal
Materialcombination: Carbon/ Silicon Carbide /
EPDM secondary seals: EPDM
Power : 1,1 kW
Voltage/protection: 2pole 230-400V 50Hz/460V 60Hz, IP55-F
speed: 2950 RPM

3 piece beer hose DN 25 je 3x 5m incl. 1 piece double threaded connection DN 25

1 piece wort aeration

1 piece mobile compressor and oil free

Pos.2 Malt

Top quality at a reasonable price. High quality material roller assures excellent wear resistance. The crusher is designed for wall mounting and has a bagger.
Power: 2.2 kW, 300-400 kg/h
Weight: 112 kg
Dimensions in cm BHT: 60x58,5x41

Pos.3 Tanks

3.1 Water treatment

1 Heiswassertank
Volume 2000 l net , without pressure
Material: 1.4301
conical bottom 15°
Sprayball ф50
LEVEL INDICATOR with BOROSILICATE tube Φ20
Overflow pipe DN32
Oval manhole
Admission DN32 with disc valve DN32
Outlet DN32 with butterfly valve DN32
D =1253mm / D+isolation = 1393 Hmax=3000mm
Insulation 70 mm mineral wool and covered by stainless steel

Pos.3.2 Fermenting and storage tanks

8 CCT 20 hl

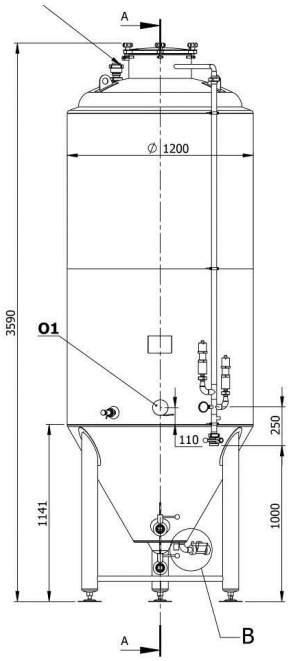
CCT 20 hl

Net content : 20 hl gross content : 25 hl inner
diameter = 1200mm outside diameter = 1350mm
Hmax = approx. 3600mm
Operating conditions
operating temperature: -
5/+30 °C Design pressure:
3,0 bar Operating pressure:
2,8 bar
Test pressure: 4,3 bar

Finish
Upper floor: Inner Bevel
Zyl. Part: Cold-rolled material according to DIN EN 10028-7 2B
Material = 1.4301 AISI 304
Surfaces stained and neutralized metal blank.
Surface inside: 2B
Outside surface: sanded

Zylinderkonischer Floor: 60°

Tank equipment
Drawn stainless steel wires in the operating room
Manhole DN400
Sprayball Φ50 with CIP(CO2) in DN32 with screw and washer valve DN 32
Safety valve on CIP line
Vacuum valve
Bung apparatus
Pressure gauge on the CIP line
Cooling 1
At the conical bottom Pmax 2.5bar
Cooling 2
On jacket Pmax=2.5bar
Cooling 3
On jacket Pmax=2.5bar
Connections cooling nipple G1“
Sampling valve
Temperature sensor connection (without PT 100)
G 1/2" beer run on conical disc valve DN40
Hefeauslauf the cone disc valve DN40
Isolation welded 75mm POLYURETHANE the jacket and cone in stainless steel 1.4301



Pos.3.3 Refrigeration System

1 piece Water chiller
Net cooling capacity at 15/32℃:
Adapted for the cooling tank, with 2 pumps
For separate internal and external refrigerant circuit incl. internal bypass dry run protection painted housing.
German Produkt

1 piece Central control cabinet for 10 Controller

Cooling control unit in stainless steel cabinet for 10 units (2 off reserve) controller system for modular extension. Control function cooling, heating and automatic.

8 piece	temperature controller for central control cabinet
8 piece	temperature sensor
8 piece	solenoid valves
8 piece	strainer
16 piece	double nipple
16 piece	ball valve
8 piece	VA-thermocouple sleeve to allow incorporation into the tank

Pos.4 Steam generator (german manufacturer)

1 piece electr. steam generator

Type	CD45 Duplex 120 kg/h
Dimensions	
Length (mm)	1300
Height (mm)	1510
Width (mm)	1090
Weight (kg)	350

Performance

Steam capacity (kg/h)	120
Heat capacity (kcal)	75850
Max. Operating Pressure (kPa)	500
Number of heating elements	10

Electrical parameters

Operating voltage (V / Hz phases)	400/50/3
Heating capacity (kW)	90
Total power (kW)	91
Current (A)	2x3x63
Current supply (A)	2x3x63
Mindesquerschnitt (mm2)	2x5x25

Installation sizes

Steam pipe	DN40
Water supply tank	DN15
Drain valve	DN15
Blowdown valve	DN15
Safety valve	DN20
Overflow Tank	DN25
Condensate Tank inlet	DN25

Additional equipment for steam generator included.

1 piece pressure reducing station for reducing the vapor pressure of t he operating pressure on a 0,5-4 baror 2 – Including 10 bar strainer, safety valve and fittings DN 20.

1 piece water softener:
Water treatment plant Type DINOSOFT I 100 D - double unit
For the treatment of boiler feed water, fully automatic system on the on exchange method, crowd control, adjustable blending.

Regeneration salt
1 bag a 25 kg

1 piece Automatic Blowdown
Timed, with time relay, timer and pneumatic valve
(On-site compressed air connection required)

1piece Blowdown-flash vessel

(Mixed water cooler) Material stainless steel
with thermostat control and water solenoid valve

Commissioning

The steam generator is included in the offer.
The customer is responsible for the installation on the space provided. The unit is supplied ready for use so far.
The connection of steam and condensate to the mash tun is on site to join.
The setting and commissioning by the suppler. For room and board, the buyer is.

Pos.5 Part KEG Automatic cleaning system

Main Features:
Power 15 KEG/h
for KEG internal cleaning
for all standard barrels (Euro-KEG, DIN KEG, Plus KEG, KEG Party, AF Containers, Slim-KEG, Keggy, FreshKEG…)
für alle commercial Fittingsysteme (z.B. Flachfitting, Korbfitting, Kombifitting, AF-Fitting, Keggy, FreshKEG ...)

pulsing interval cleaning of barrel wall and fitting (riser pipe) installation components exclusively from reputable manufacturers **machine:**
entirely of stainless steel – at least 1.4301/AISI 304
an integrated detergent tank
four height adjustable feet, movable in all directions
Cabinet entirely of stainless steel
Manual Fassa coupling with a modified stainless steel keg coupler
Tubular drum support barrel attacks
Flow and return pipe with 3-piece ball valves
Stainless steel piston rod pneumatic valve with optical position indicator
For vibrant interior cleaning (barrel wall-Fittung), seat PTFE seal supply line from pump with check valve
Heat resistant food hose fo connection to the tap head
Flow line NE 20, DIN 11850
Return line NW 25, DIN 11850

Container:
Integrated container, 80 liters net content
Container lid with plastic handle
6,5kW electric immersion heaters, welded stainless steel construction pump 0,9kW – 5m3/h against 25 mvp with silicon/EPDM shaft seal specifically for caustic and acid operation
Dry running protection for pump with float switch

PTC temperature sensor in the thermowell
Return line with air or Schneider steam chamber

Channel outlet NW 40 integrated tank overflow for
Polokaltube connection
Container emptying NW 65

Cotrol:
Siemens SPS-control (Logo®)
Digital temperature regulator for tank heating with actual value automatic control of cleaning barrel wall-fitting automatic control of the caustic cleaning cycle all the controls on the front control box.
Pneumatic valve (control valve for latching) with hand override
Contactor and thermal motor protection for pump

EURO*lux* GmbH
Industriegebiet-Hessheimer Weg 3-7
D-97753 Karlstadt-Karlburg (b.Würzburg)
GERMANY
Tel. +49 (0) 93 53 – 9 09 05 – 0
Fax. +49 (0) 93 53 – 9 09 05 – 22

Sitz der Gesellschaft: Würzburg
Registergericht: Amtsgericht Würzburg
HRB Nr. 4983 • Geschäftsführung: Paul Lamprecht
Gerichtsstand: Würzburg
Ust-IdNr. DE 811 655 121
info@eurolux.de

Sparkasse Mainfranken Würzburg
BLZ 790 500 00
Konto-Nr. 190 012 336
S.W.I.F.T-Code BY LA DE M1 SWU
IBAN DE 56 7905 0000 0190 0123 36
www.eurolux-ag.com

Start button for pump selector switch for pulse valve selector switch for tank heating
optional equipment:
Tank heating with steam or hot water

Pos.6 Assembly and insertion (only within Germany)

For the M-installation, we assume that the installation can be carried out without interruptions.
Otherwise, the on-time arrival and departure beyond arrivals and departures are counted separately and the agreed completion dates shift accordingly. This should be documented by a protocol.
The M-assembly affects only the components supplied by us. Free delivery construction site not unloaded.

M-Mounting
This assumes that:
- The buyer provides helpers and required equipment is available to be able to introduce all supplied components.
- Can work without interference from other trades the newly built installations are matched before beginning work with the commissioner of the brewery and are then built once. Change requests during or after installation will be charged at cost. This should be documented by a protocol.

The M-assembly includes:
-

The M-mount does it include :
- Water connections
- Gas connection
- Wiring of the consumer
- Necessary wall openings
- All other work not specified in this listing are included in this montage NOT.

For room and board, the buyer is
E-mount

Not included in the offer

Grist mill
Is introduced in the space provided. The power connection 3-phase.
Outlet must be available.

Fermenting and storage celler
Be introduced at the designated place and the components for the tank are screwed.

EURO*lux* GmbH
Industriegebiet-Hessheimer Weg 3-7
D-97753 Karlstadt-Karlburg (b.Würzburg)
GERMANY
Tel. +49 (0) 93 53 – 9 09 05 – 0
Fax. +49 (0) 93 53 – 9 09 05 – 22

Sitz der Gesellschaft: Würzburg
Registergericht: Amtsgericht Würzburg
HRB Nr. 4983 • Geschäftsführung: Paul Lamprecht
Gerichtsstand: Würzburg
Ust-IdNr. DE 811 655 121
info@eurolux.de

Sparkasse Mainfranken Würzburg
BLZ 790 500 00
Konto-Nr. 190 012 336
S.W.I.F.T-Code BY LA DE M1 SWU
IBAN DE 56 7905 0000 0190 0123 36
www.eurolux-ag.com

Steam generator
Is introduced in the space provided without connections.
The start-up of the steam generator is performed by the manufacturer.

KEG-Cleaner
Is introduced in the space provided. All connections must be prepared by customer.

Pos.7 packaging, delivery

The area was already packed and ready for pickup. Transport not included in the offer.

Pos.8 Engineering and processing

The amount offered includes the amount of time required to create basic planning. If the project manager be across, this must be grees separately.

- Planning and coordination
- Discussions with stakeholders
- Scheduling/schedule tracking
- Technical clarify the components tob e delivered
- Design and procurement of all components
- Delivery
- Creating documentation in German language

Price composition:

Pos.1 brewhouse 10hl including in copper. accessories	***140.856,00 €***
Pos.2 malt	***2.977,00 €***
Pos.3 tanks incl. refrigeration system	***129.340,00 €***
Pos.4 steam generator inc..	***21.984,00 €***
Pos.5 KEG-cleaning system	***10.120,00 €***
Pos.6 assembly and insertion	***5.531,00 €***
Pos.7 engineering and processing	***14.122,00 €***

All prices are valid Ex-Works, excl.VAT
Freight Charges: depending on dimensions and destination
Delivery: from D-97753 Karlstadt-Karlburg
Subject to prior sale

Please visit our Web-Site: www.eurolux-ag.com

EURO*lux* GmbH
Industriegebiet-Hessheimer Weg 3-7
D-97753 Karlstadt-Karlburg (b.Würzburg)
GERMANY
Tel. +49 (0) 93 53 – 9 09 05 – 0
Fax. +49 (0) 93 53 – 9 09 05 – 22

Sitz der Gesellschaft: Würzburg
Registergericht: Amtsgericht Würzburg
HRB Nr. 4983 • Geschäftsführung: Paul Lamprecht
Gerichtsstand: Würzburg
Ust-IdNr. DE 811 655 121
info@eurolux.de

Sparkasse Mainfranken Würzburg
BLZ 790 500 00
Konto-Nr. 190 012 336
S.W.I.F.T-Code BY LA DE M1 SWU
IBAN DE 56 7905 0000 0190 0123 36
www.eurolux-ag.com