

DESTILA®

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Brewhouse for 3–10 hl of cold wort

A two-vessel brewhouse from stainless steel or copper for brewing 3.5 and 10 hl of cold wort with a steam chimney imitation.

The brewhouse enables brewing by means of both decoction and infusion.

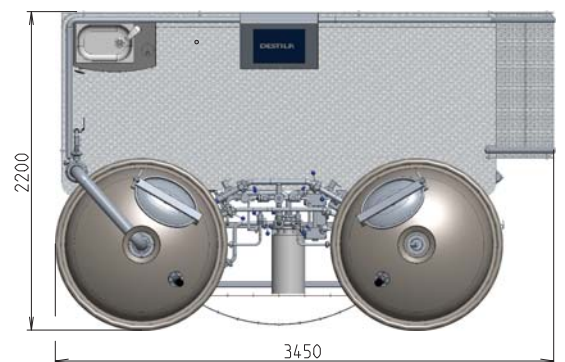
The mash and wort tub is heated by gas or electric steam generator with the output of 50-120 kg of steam per hour with the working power pressure of 4.4 bars. An alternative is a non-pressure variant where the heating medium is heat transfer oil. The input of the boiler with electric heating bodies is 37.5 – 75 kW. The vessels and connecting pipes are from stainless steel DIN 1.4301. The inner surface roughness in the vessels is $Ra \leq 0.8$. The outer jackets of the vessels are also from stainless steel and they are welded.

The outer surface can be brushed or polished or it can be plated with copper if required. The heat insulation of the cylindrical part of the vessels is from a 50 mm layer of PUR foam. The heating bottom with a side duplicator is insulated with mineral wool. Vessels are washed and cleaned by means of washing heads.



3-10 hl

Stainless steel brewhouse 5 hl
(illustration)



Brewhouse parts

Mash and filtration vat

A cylindrical vessel with a flat bottom. Above the bottom there is a stainless-steel strainer from welded trapezoid wire. The vessel is equipped with a stirrer for better wort filtration and a height-adjustable bar enabling malt residue discharge.

ACCESSORIES: stirring arm drive with FM revolution regulation, side malt residue discharge, nozzles for rinsing the area under the filtration bottom, temperature sensor PT100, manhole, inner LED light in the vessel, steam chimney imitation

Mash and wort tub

A cylindrical vessel with a slightly conical bottom equipped with a stainless-steel heating bottom and a separately controlled side duplicator in the lower part of the vessel for steam heating. Steam duplicators meet the requirements of the Czech Republic government decree No 219/2016 Coll. (Regulation of the European Parliament and Council No 2014/68/EU) for pressurized vessels. The steam supply valves allow continuous regulation. The vessel is used as a whirling vat where the whirling is ensured by a circulation pump.

ACCESSORIES: heating bottom with a side duplicator, heat sensor PT100, manhole, inner LED light in the vessel, steam chimney imitation

Centrifugal pump

It is intended for mash and wort and is equipped with an open impeller wheel. It is used for pumping mash and filtration. The pump revolutions are controlled by FM.

Board wort cooler

A single-stage cooler for wort cooling from +98 °C to the yeast starter temperature. The cooling medium is ice-cold water. The input temperature is +1°C, the output temperature is +70 °C. The wort output temperature regulation is controlled manually or automatically according to the temperature set on the control power of the brewing room.

Wort aerator, connecting pipeline and malt residue containers

Operator's ramp

It enables access to the tanks, control elements and control panel of the brewing room.

Tools for the brewhouse operation

3 saccharometers, 1 cooling cylinder, 1 stainless steel sink, 1 water mixer, 2 measuring rods, 2 malt residue containers, tools for the technologist, brushes

Waste vapour condenser

It ensures condensation of the steam generated during brewing and its discharge to sewerage. At the same time, it minimizes the smell in the brewing room area. The discharged steam also heats water which is collected in a hot water vessel. In the pipeline there is a showering head preventing deposition of hop oil sediments.

Brewhouse control

You can choose from two control system versions. In both versions it is possible to control the motors of the pumps and the drives of the brewing room agitators with smooth regulation of revolutions by means of a frequency converter.

1. A graphic panel enables manual remote control of flaps by means of pneumatic drives and automatic monitoring of selected limit temperatures when brewing. It shows the information about the temperature in the brewing room tanks.
2. An operator panel with a touch screen and programmable automatic control (PLC) Simatic S7 1200 by Siemens company. The panel enables setting parameters, programming and running technological processes, changing their modes and displaying and archiving the course of the measured values and error states. It also enables a remote access and control through the Internet.

Brewhouse [hl]	3	5	10
Overall dimensions L/W/H [mm]	2500×1500×2200	3450×2220×2650	3500×2500×3100
Ramp height [mm]	200	580	1000
Empty brewhouse weight including the ramp [kg]	650	1500	2000
Total filtration vat volume [l]	400	780	1530
Maximum filtration strainer load [kg/m ²]	120	130	150
Total mash and wort tub volume [l]	400	780	1410
Average load per 1 m ² with full brewhouse [kg]	380	460	420
Heating steam consumption [kg/hour]	50	80	120
Steam consumption [per 1 batch]	135	225	450
Electric steamer input [kW]	40	50	80
Electric oil-fuelled boiler input [kW]	37,5	37,5	75
Water consumption for waste vapour cooling [l/batch]	60	100	200

