



Brilliant products



Compact Brewhouses Microbreweries



Standard and custom-made equipment for small and medium-sized breweries



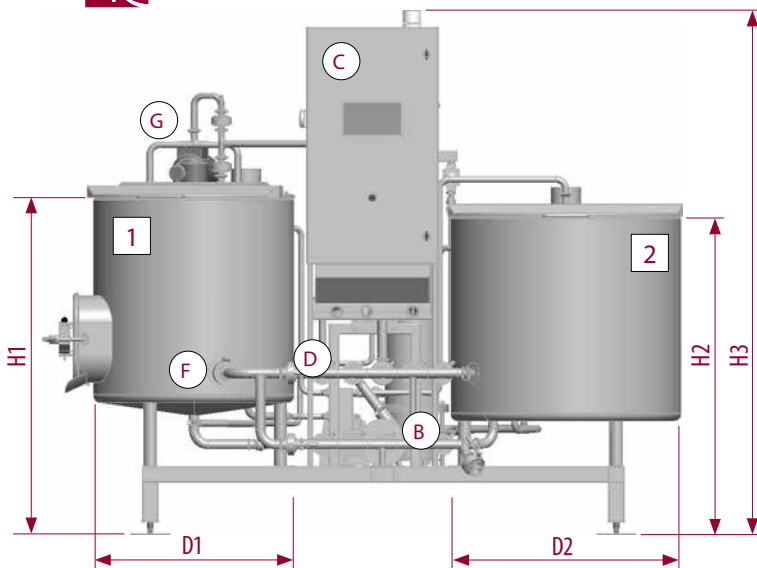
Design

- all-in-one-designs / compact designs / combi tanks and multifunctional tanks in different combinations combined in a single system / individually designed tanks;
- equipped with an effective cooling and heating system, insulated vessels with thermal bottom and jacket;
- completely piped and wired;
- with an integrated pump system;
- platform that combines the vessels into a compact unit;
- with installed CIP system;
- sanitary design: polished internal tank surface and welds ensure easy and effective system cleaning.

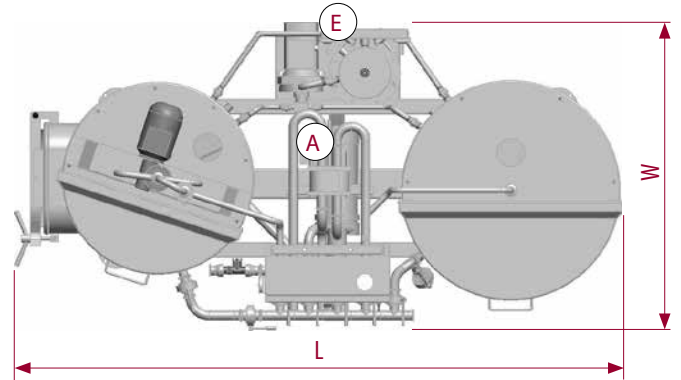
High-quality manufacturing process

- made of stainless steel, only certified materials are used (option: TiN-coated stainless steel);
- automated grinding and polishing of welds and inner surfaces;
- modern welding techniques: TIG welding, laser welded cooling/heating sections (pillow plates) on tank jacket and tank bottom, orbital welded pipes;
- in designing and manufacturing of equipment general rules of the profession and good engineering and manufacturing practice are respected;
- planning, production, control and environmental management are regulated according to the ISO9001 and ISO14001 standards.

Compact Brewhouse BHM 250



- Single-step infusion mashing ▲
- Multi-step infusion mashing ▲
- Decoction mashing ▲



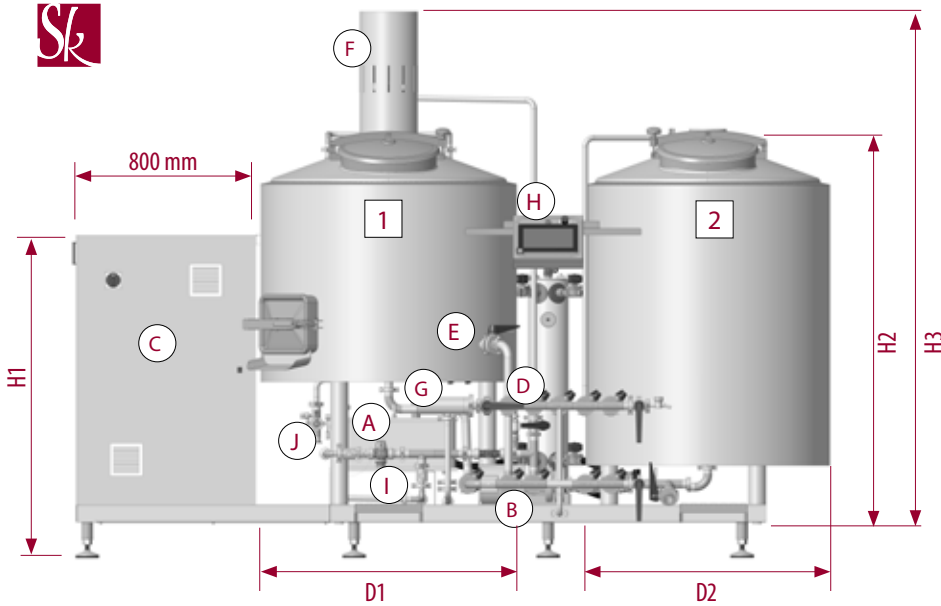
Brewhouse		BHM 250
MM/LT volume (1)	L	265
K/W volume (2)	L	345
MM/LT diameter (D1)	mm	764
K/W diameter (D2)	mm	874
Height (H1)	mm	1285
Height (H2)	mm	1285
Total height (H3)	mm	1940
Total length (L)	mm	2380
Total width (W)	mm	1200
Electric power	kW	20

Main components:

- 1** Mash mixer (MM) / Lauter tun (LT)
- 2** Kettle (K) / Whirlpool (W)
- A** Heat exchanger
- B** Pump
- C** Control cabinet with touch screen control panel
- D** Manifold with butterfly process valves
- E** Integrated oil heater with pump
- F** Inlet for decoction mashing
- G** Mash rake with drive unit (adjustable rotation speed)
- H** Wort filter before heat exchanger

* Dimensions listed in the table are approximate and may vary slightly.

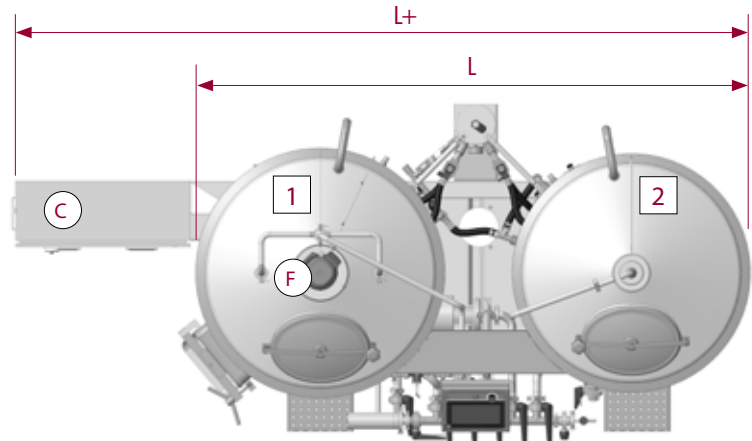
Compact Brewhouse BHM 500



Main components:

- 1 Mash mixer (MM) / Lauter tun (LT)
- 2 Kettle (K) / Whirlpool (W)
- A Heat exchanger
- B Pump
- C Electrical cabinet
- D Manifold with butterfly process valves
- E Inlet for decoction mashing
- F Mash rake with drive unit (adjustable rotation speed)
- G Wort filter before heat exchanger
- H Touch screen control panel
- I Water mixer
- J Oxygenation stone

Brewhouse		BHM 500
MM-LT volume (1)	L	700/600
K-W volume (2)	L	860/600
MM-LT diameter (D1)	mm	1142
K-W diameter (D2)	mm	1091
Height (H1)	mm	1437
Height (H2)	mm	1910
Total height (H3)	mm	2435
Length (L)	mm	2540
Length (L+)	mm	3365
Electric power	kW	38



* Dimensions listed in the table are approximate and may vary slightly.

Hot water tank (option)

The vessel is equipped electric heaters (for breweries with oil heating) or with heating jacket on the tank wall (for breweries with steam heating).

WTX 600 L / 12 kW	WTX 1200 L / 18 kW	WTX 2000 L / 24 kW
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Cold water tank (option)

The vessel is equipped with cooling jacket (pillow plate) in the tank jacket area.

CTX 600 L	CTX 1200 L	CTX 2000 L
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Touch screen control panel

User friendly graphical interface is easy to understand and allows simple monitoring and control of the beer brewing process: pump speed control, mixer rotation control, temperature regulation (separate for side heating and bottom heating); timer and alarm setup; possibility of performing the multi-step mashing procedure, display of actual and set values.

Thermal oil heating bottom and jacket

The heating bottom and jacket are part of the vessel envelope, designed to allow the control of temperature in the vessel by adjusting the through-flow of heating medium. Both vessels are insulated and equipped with heating bottom and jacket.

As standard the system is provided with equipment for **thermal oil heating**. As option the system can be adapted for **steam heating**.





Compact Brewhouse BH2 / BH3

- combi tanks and multifunctional tanks in different combinations;
- completely wired and piped, including manifold with butterfly process valves;
- integrated pump (in the standard configuration the brewhouse is equipped with one pump; optionally the system can be upgraded with a second pump to improve the brewing capacity of the brewhouse);
- lauter tun with heated bottom and tank wall;
- space saving design: support frame and perforated walk-on platform combine the vessels and other components in a compact block;
- master brew interface control system: temperature control, flow regulation, pump on/off, mixer rotation speed, setting of timers and step mashing parameters;
- the system allows performing of the multi-step infusion mashing;
- available also in a configuration for high gravity brewing.



Compact Brewhouse BH2

- | | |
|--|--|
| BH2 | 1 Mash mixer (MM) / Lauter tun (LT) - top comp. of combi tank |
| | 2 Hot water tank (HWT) - bottom compartment of combi tank |
| | 3 Kettle (K) / Whirlpool (W) |
| | A Heat exchanger |
| | B Pump |
| | C Control cabinet with touch screen operating panel |
| | D Integrated process piping |
| | E Grist case (option) |
| F Platform with stairs and guardrails | |
| G Mash rake with drive unit | |

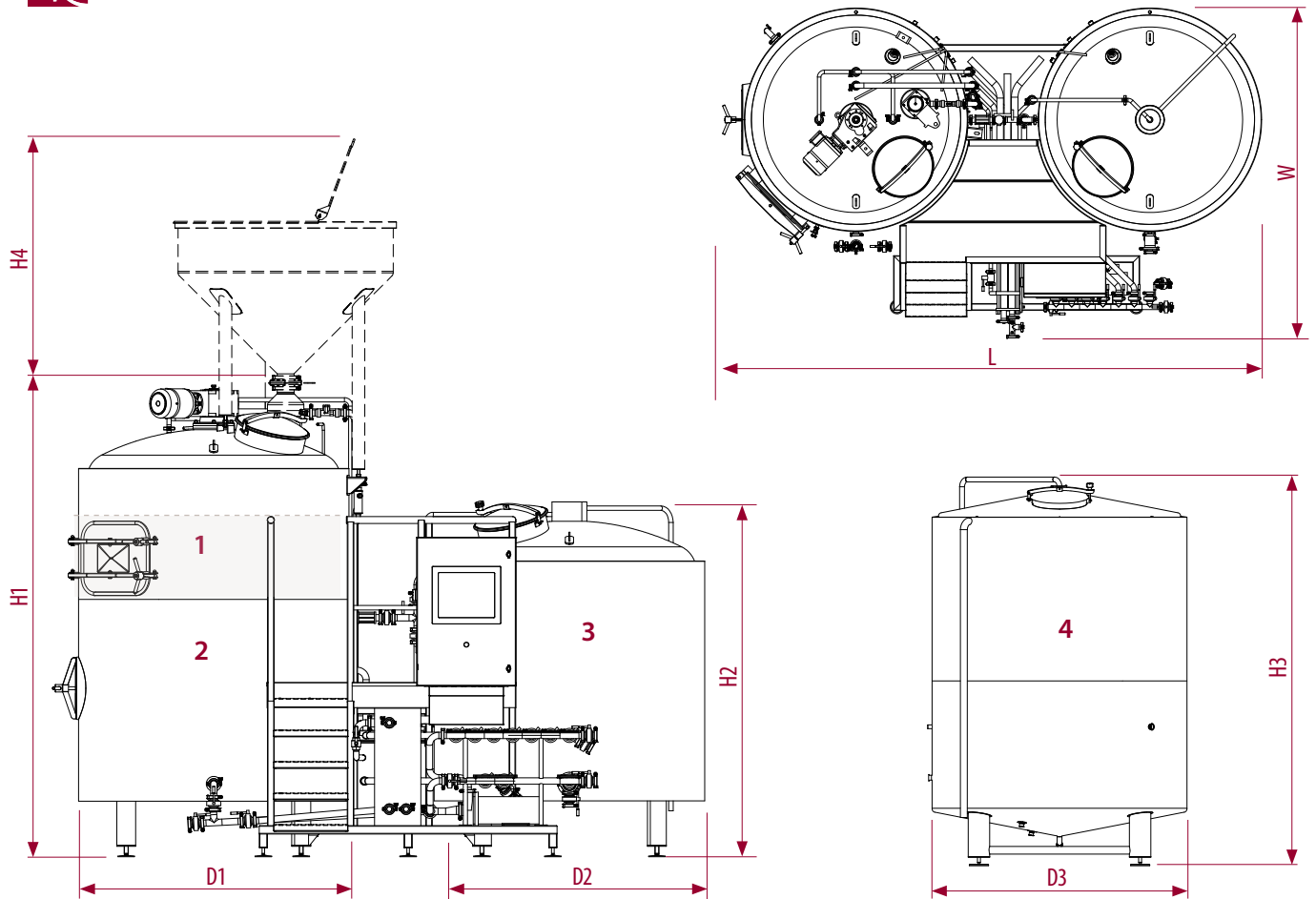
Compact Brewhouse BH3

- | | |
|------------------------------------|--|
| BH3 | 1 Mash mixer (MM) / Lauter tun (LT) - top comp. of combi tank |
| | 2 Whirlpool (W) - bottom compartment of combi tank |
| | 3 Kettle (K) |
| | 4 Hot water tank (HWT) |
| | A Heat exchanger |
| | B Pump (2x) |
| | C Control cabinet with touch screen operating panel |
| | D Integrated process piping |
| | E Grist case (option) |
| | F Platform with stairs and guardrails |
| G Mash rake with drive unit | |





Multi-step infusion mashing



Brewhouse BH2 / BH3		BH 10 hl	BH 20 hl	BH 25 hl
Max. mash volume in tank (1)	L	655	1580	1790
Tank volume (2)	L	1140	2800	2915
Tank volume (3)	L	1400	2670	3200
Tank volume (4)	L	2000	4100	5100
Tank diameter (D1)	mm	1335	1890	1990
Tank diameter (D2)	mm	1335	1760	1925
Tank diameter (D3)	mm	1370	1680	1680
Tank height (H1)	mm	2730	2790	2850
Tank height (H2)	mm	2050	2150	2210
Tank height (H3)	mm	2000	2500	3000
Grist case height (H4)	mm	1150	1610	1880
Total length approx. (L)	mm	3400	4250	4600
Total width approx. (W)	mm	1950	2510	2640



* Dimensions listed in the table are approximate and may vary slightly.



Microbrewery MB2 / MB4 / MB5

- we plan and design complete medium-sized breweries, all systems can be designed with the client's input for a defined process;
- a variety of different vessel combinations and a number of vessels: multi-functional tanks (mash mixer - lauter, kettle - whirlpool), individual process tanks (mash mixer, lauter, boil kettle, whirlpool, hot/cold water tanks);
- fully piped and wired, including valves and sensors;
- integrated pump system;
- CIP system: separated CIP for individual tanks to prevent cross product interference;
- master brew interface control system (touch screen control panel),
- staircases and platform combine the vessels in a compact unit, perforated and sectional construction of the walk-on surface ensures protection against slipping;
- automated lautering, automated water mixing.

Multi-step infusion mashing

Multi-step mashing procedure includes a series of rests at various temperatures in a mash mixer. From one step to the next the temperature is increased to the desired value.

The main advantage of the temperature-programmed mashing is that both specific enzyme activity and fermentability of the wort can be promoted by controlling the temperature and duration of stands at selected points. This method is widely utilized for German and European style beer.

The step mashing program includes 6 steps with the possibility of time and temperature setting. Wort recirculation (duty cycle and pump speed) and rake rotation (duty cycle and rotation speed) can be set for each step to ensure a homogeneous mash temperature.



Implementation of CIP cleaning

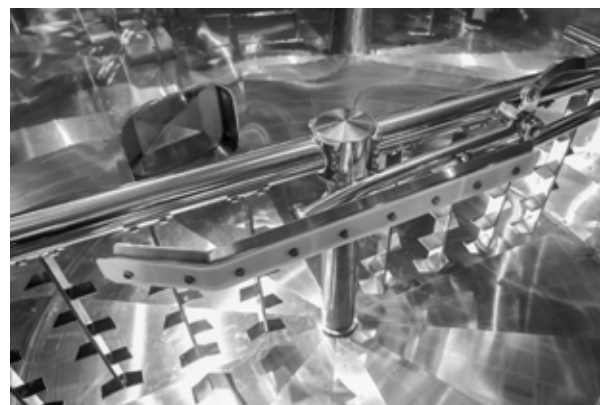
Integrated CIP system provides two different cleaning options:

- rinsing the system with water from the hot water tank,
- rinsing the system or individual tank with prepared cleaning substance from external source via drain connection.

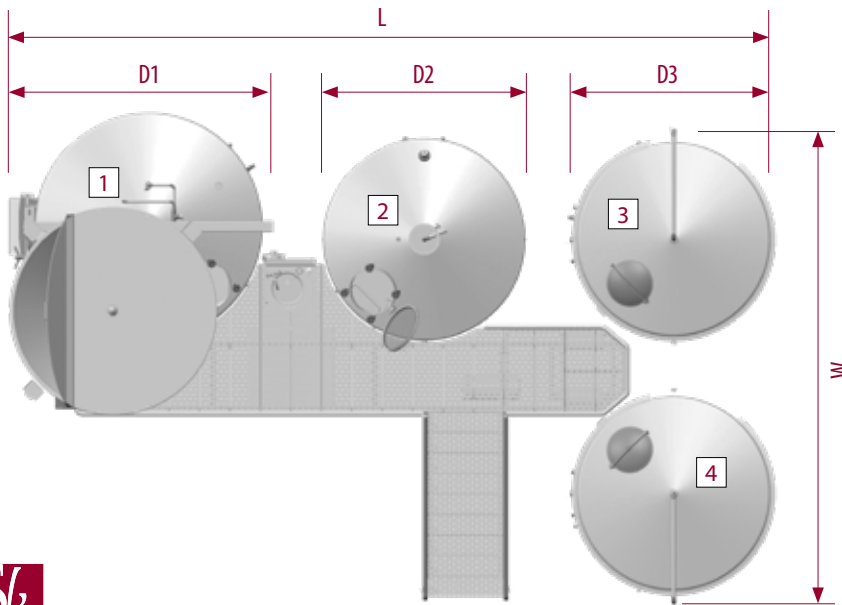
Integrated pumps

The system includes several centrifugal sanitary pumps: for hot and cold water tank, for lauter tun, for mash tun, for wort kettle and whirlpool. The number of pumps depends on the brewhouse model.

All the pumps are suitable for use in food and beverage industry. They serve to offer an efficient transfer of the product and can also be used for CIP.



- ▲ Mash mixer / Lauter tun
- ▲ Kettle / Whirlpool



Main components:

- 1 Mash mixer / Lauter tun
- 2 Kettle / Whirlpool
- 3 Hot water tank
- 4 Cold water tank
- A Heat exchanger
- B Pumps
- C Control and operating panel
- D Electrical cabinet
- E Grist case
- F Platform with stairs and guardrails



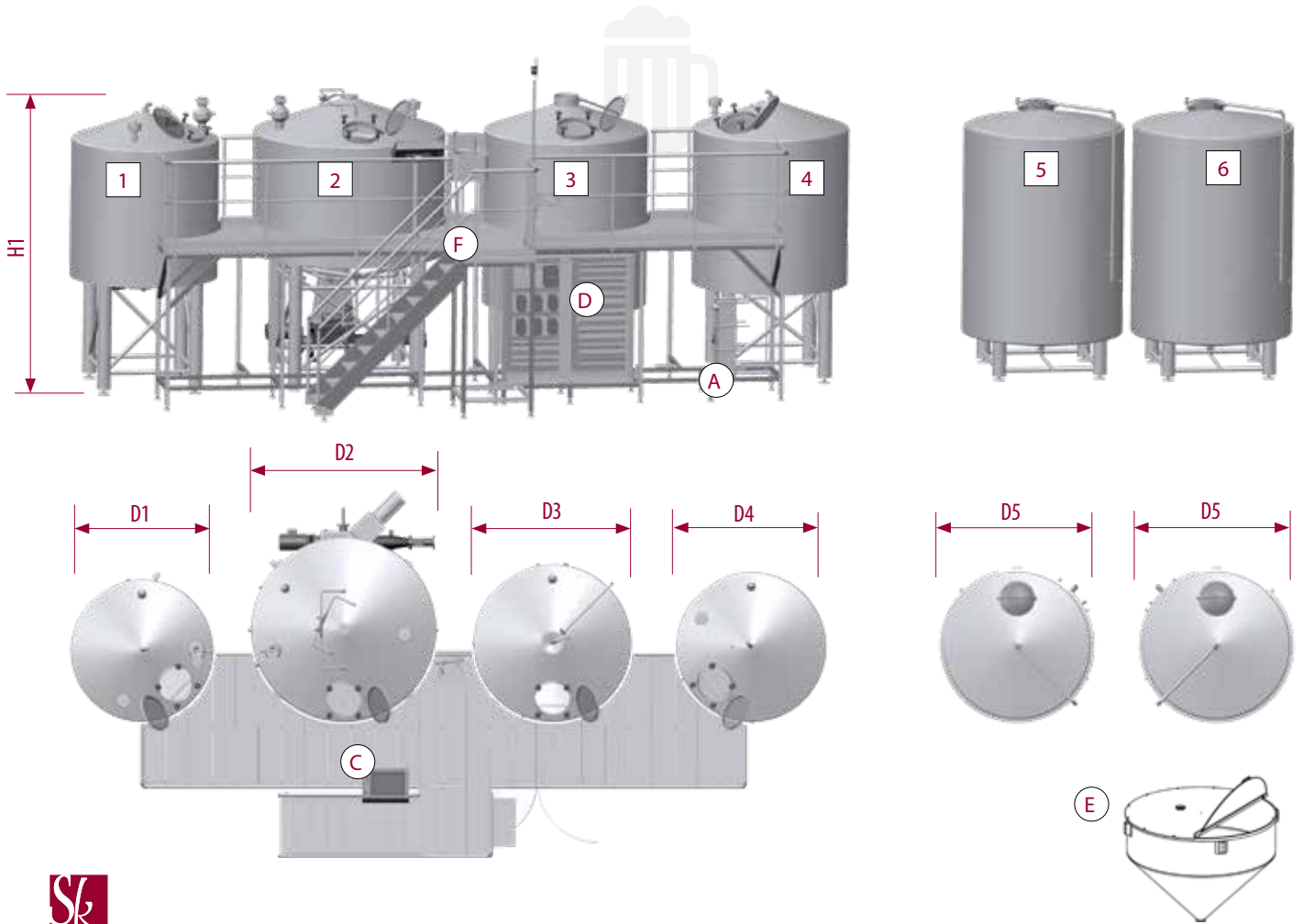
Microbrewery		MB2-40 hl
Mash / Lauter tun volume (1)	L	4820
Kettle / Whirlpool volume (2)	L	5810
Hot water tank volume (3)	L	7150
Cold water tank volume (4)	L	7150
Tank diameter (D1) _ ID / OD	mm	2135 / 2235
Tank diameter (D2)	mm	1983
Tank diameter (D3)	mm	2000
Height without grist case (H1)	mm	3550
Height with grist case (H2)	mm	5860
Total length approx. (L)	mm	7600
Total width approx. (W)	mm	4880



* Dimensions listed in the table are approximate and may vary slightly.



- ▲ Mash mixer
- ▲ Lauter tun
- ▲ Kettle
- ▲ Whirlpool



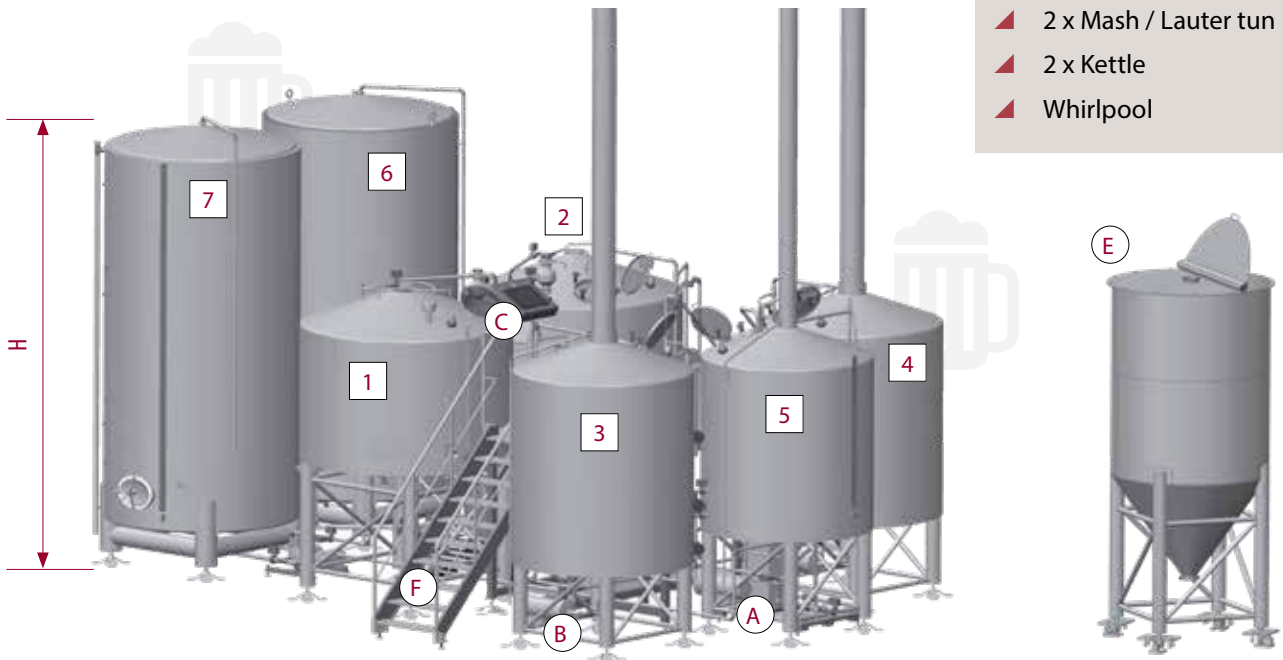
Main components:

- 1 Mash mixer (MM)
- 2 Lauter tun (LT)
- 3 Kettle (K)
- 4 Whirlpool (W)
- 5 Hot water tank (HWT)
- 6 Cold water tank (CWT)
- A Heat exchanger
- B Integrated pumps
- C Control and operating touch screen panel
- D Electrical cabinet
- E Grist case (option)
- F Platform with stairs and guardrails

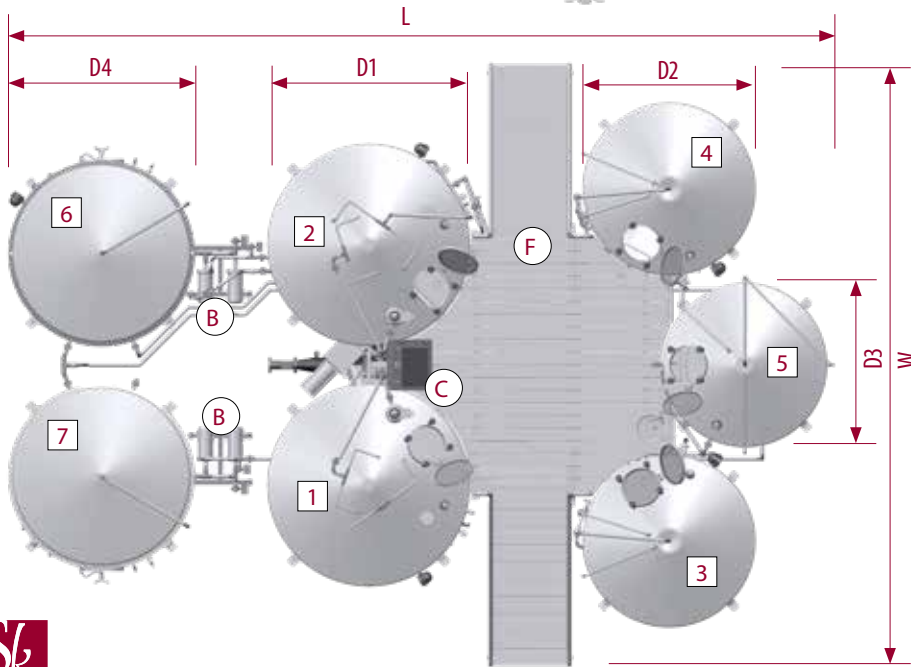
Microbrewery		MB4-40 hl
Mash mixer volume (1)	L	3745
Lauter tun volume (2)	L	5800
Kettle volume (3)	L	5725
Whirlpool volume (4)	L	4780
Hot water tank volume (5)	L	7150
Cold water tank volume (6)	L	7150
Mash mixer diameter (D1)	mm	1850
Lauter diameter (D2) _ID / OD	mm	2291 / 2387
Kettle diameter (D3)	mm	2035
Whirlpool diameter (D4)	mm	1935
HWT/CWT diameter (D5)	mm	2000
Height without grist case (H1)	mm	3580
Height with grist case	mm	6480
Total length approx. (L)	mm	9860
Total width approx. (W)	mm	6135

* Dimensions listed in the table are approximate and may vary slightly.





- ▲ 2 x Mash / Lauter tun
- ▲ 2 x Kettle
- ▲ Whirlpool



Main components:

- 1 Mash mixer / Lauter tun
- 2 Mash mixer / Lauter tun
- 3 Kettle
- 4 Kettle
- 5 Whirlpool
- 6 Hot water tank
- 7 Cold water tank
- A Heat exchanger
- B Pumps
- C Touch screen control panel
- D Electrical cabinet
- E Grist case
- F Platform with stairs and guardrails



Microbrewery		MB5-40 hl
Mash mixer / Lauter tun(1, 2)	L	5800
Kettle (3, 4)	L	5725
Whirlpool (5)	L	4780
Hot water tank volume (6)	L	14350
Cold water tank volume (7)	L	14350
Lauter diameter (D1) _ ID/OD	mm	2291 / 2387
Kettle diameter (D2)	mm	2035
Whirlpool diameter (D3)	mm	1935
HWT/CWT diameter (D4)	mm	2200
Total height approx. (H)	mm	5090
Total length approx. (L)	mm	9765
Total width approx. (W)	mm	7140

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About Škrlj d.o.o.



Škrlj d.o.o. is a business with a strong foundation that was built on rich family tradition and is today a valued European company with an established international market.

We design, manufacture, and sell stainless steel equipment for:

- winemaking
- beer brewing
- the food industry
- the pharmaceutical industry

High-quality products, adaptability and innovation – these are the reasons which have convinced our customers.

We offer the following range of services:

- sheet metal coil cutting line
- plain sheet polishing and grinding line
- internal and external grinding (tank and tank bottom)
- sheet metal bending, shaping
- manual, machine (linear and circular), and robotic welding (TIG, MIG/MAG, plasma)
- automatic sandblasting of larger products in special sandblasting chamber (using CrNi beads)
- passivation of finished products
- treatment with CNC processing machine
- abrasive water jet cutting
- 3D scanning
- 2D and 3D laser cutting
- laser welding
- electropolishing



Winemaking



- Wine storage tanks
- Fermenters
- Pneumatic presses
- Temperature regulating equipment
- Labeling machines

Beer brewing



- Fermentation tanks
- Brite beer tanks
- Compact Brewhouses
- Microbreweries
- CIP-stations
- Yeast propagators
- Cold and hot water tanks
- Labeling machines

Food industry



- Storage tanks for milk and yoghurt
- Process vessels for milk and dairy products
- Tanks for production and storage of alcoholic drinks
- Tanks for production and storage of juices and fizzy drinks
- Storage tanks for water, oil and vinegar

Pharma
Biotechnology

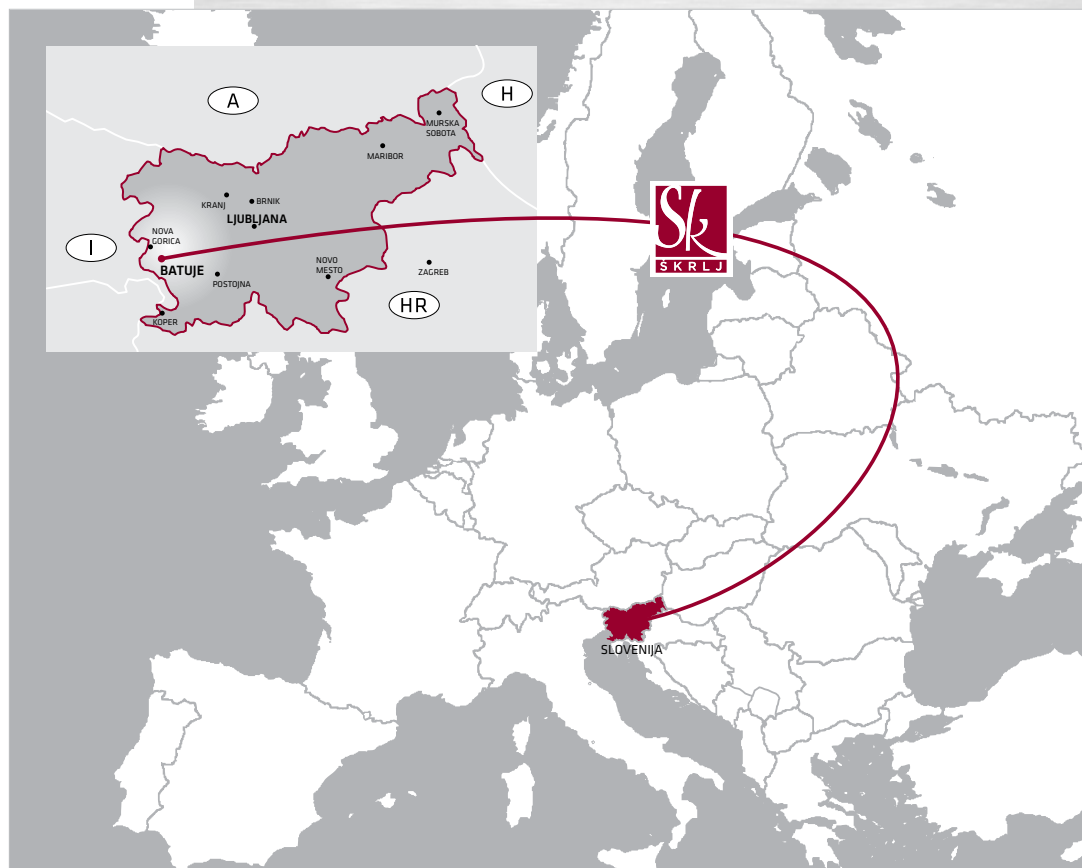


- CIP / SIP tanks
- Vessels for preparation of sterile water WFI and purified water PW
- Vessels for treatment of sterile and non-sterile solutions
- Reactors / bioreactors
- Fermenters
- Agitator vessels

Other products



- Containers for processing and storage of chemical substances
- Silos for storage of bulk materials (grain, flour, etc.)
- Containers for storage of liquids
- Containers for storage of waste materials
- Walk-on gratings, platforms and stair-cases
- Stainless steel drain channels



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