

## For sale

**Complete brewing room with 3 vessels, all semi-automatic 304 stainless steel – steam heating**

**20-25hl brewing room from RABEK Ingénierie.**

**Year of manufacture and commissioning 2014.**

22 hl for a density of 15.5% plato (20hl at 17% plato and 25hl at 13% plato)

This brewing room is self-emptying (no retention)

Malt processing: \_\_\_\_\_

A hopper for the pouring of the malt which is transported by an endless screw and a chain in a silo which can contain up to 1000 kg of malt.

The malt is stored in the silo and on the day of brewing it is crushed using a malt mill then transported by the auger and a chain to the mash tun. (Automatic system managed by PLC)

The silo is equipped with a malt presence or absence probe.

Pulping time (automatic): 20 mins to 30 mins depending on quantity of malt

The malt is hydrated (hydrator) when it is introduced into the mash tun.

The malt treatment and circuit is managed from the PLC.

Mash and cooking tank (automatic): (total: 3500 liters) all 304 stainless steel

Double-walled mash tank (steam heating)

Equipped with a stirrer with 2 speeds (fast and slow), a temperature probe, a hydrator + a mixed water inlet, an exhaust for the water vapors which are cooled and a chimney, a foam detection probe, 3 CIP balls, a guillotine for the arrival of the malt, lighting, a ladder to descend into the tank and a manhole with door.

The mash/cooking tank is managed from the PLC (temperature, heating, water inlets, temperature levels, etc.)

Filtration tank (automatic): (total 3500 liters)

Equipped with a removable 7-part filtration grid, 3 CIP balls, a bottom inlet, a mash inlet for recycling, 4 cleaning nozzles under the filtration grids, a rake for cutting the spent grain cake, a manual arm for removing spent grain, a manhole door on the top, a door for exiting the spent grain from below, lighting.

The filtration speed, the quantity of filtered must and the watering of the mash (quantity and when) and the different water inlets are managed from the PLC.

A hole is provided at the bottom of the tank for automatic chipping. (Cost around 20,000 euros)

#### Whirlpool tanks: (total 3500 liters)

Stainless steel tank with conical bottom with a must inlet on the side to perform the Whirlpool, an outlet at the bottom of the tank and two outlets for the clear must, a CIP ball and a manhole door at mid-height.

#### Hot water tank:

The hot water tank is located above the Whirlpool tank.

Equipped with a CIP ball, a cold water inlet, a hot water outlet connected to a pump (brand: EBARA), an evacuation outlet, a temperature probe, a door manhole, an internal steam circuit for heating the tank, an external level (tube).

The hot water temperature is managed from the PLC.

#### PLC PLC:

A PLC makes it possible to automatically manage the crushing, the mashing, the filtration and the rinsing and cooking of the wort.

A manual valve assembly allows transfer between the different tanks with a pump (brand: SONDEX) managed on the PLC.

The PLC also manages the hot and cold water supply with a meter.

A counter (brand: Krone) measures the speed and quantity of filtered wort with monitoring on the PLC.

On the PLC you can save 10 beer recipes.

#### 2-stage cooling exchanger + must oxygenator:

Speed: 2500 litres/hour

A cooling stage allows the wort to be cooled between 20 and 30 degrees.

This 1st stage is supplied by clear water from the network or other and it is recovered in the hot water tank at around 50-60°C.

A 2nd stage of cooling is carried out with iced water (in a closed circuit) which allows the must to drop to between 10 and 20°C.

The wort oxygenator allows the oxygenation of the wort during its transfer to the fermentation tanks.

A temperature probe allows control of the outlet temperature of the wort.

A steam inlet at the exchanger outlet for disinfection and sterilization.

Brewing room:

The PLC manages temperature rises by opening and closing the steam inlets (possibility of doing this manually or automatically).

A stainless steel staircase leads to a stainless steel platform which provides access to the mashing/cooking tank and the filter tank.

A cooling tube is used to measure the density.

Switchboard :

The electrical panel integrates all components for the electrical, automatic and pneumatic management of the brewing room.

Two sound alarms inform of malfunctions and the different stages of brewing.

Steam boiler:

WIMA brand gas steam boiler (Germany). Weishaupt burner.

300 kg of steam

Softener and correction system for the water entering the boiler

Stainless steel expansion tank

Steam circuit:

A stainless steel steam circuit supplies the mashing/cooking tank, the hot water tank and the steam supply at the exchanger outlet.

This steam circuit is managed by the PLC with pneumatic valves at the entrance to the various circuits.

Terms :

The brewhouse will be available at the end of 2023/beginning of 2024.

Brewery in operation which can be visited and tried out.

Malt mill, pouring hopper, malt conveyors:

Malt silo, malt mill, malt conveyors:

Brewing room (Mashing/cooking tank and filter tank), valves and PLC:

Brewing room filter tank view with spent grain exit door: \_\_\_\_\_

Whirlpool tank and hot water tank above: \_\_\_\_\_

Whirlpool tank and hot water tank + Temperature exchanger and oxygenator: \_\_\_\_\_

WIMA gas steam boiler + water treatment: