



MET-TECH | Product Data Sheet

BREWERY 145 HL/BREW - 300 000 HL/ANNUM + GLASS BOTTLE FILLING LINE 2

Ref. No.: BREWERY200201

Year: 1998-2002

Brand: HUPPMANN, HOLVRIEKA, KHS, NORRIT

Qty. 1 Second-hand brewery ? 145 HL/brew ? 300 000 HL/annum

Mfc.: Huppmann, Holvrieka, KHS, Norris Prozess Technologie

Capacity: 145 HL/brew ? 300 000 HL/annum

Built: 1998 ? 2002 In full operation until 2013 Stopped in 2017

The brewery has today one bottle filling line. KHS Glass line 20000 bph.

Complete technological systems are still installed and intact.

The list of main equipment:

1. Malt handling equipment, malt receiving in 40 kg bags
2. Brew house Hupmann 145 hl/brew with water tanks
3. Tank farm CCT 13 x 1420 hl Holvrieka glycol cooled, BBT 4 x 730 hl HAIR glycol cooled
4. Beer filtration line Filtrox 150 hl/h with Kieselguhr filter
5. Yeast department with 5 and 30 hl propagators and 90 hl storage tank
6. Packaging department with
? KHS Glass bottle filing line with BWM, 20 000 bph
7. Utilities
? CO2 Recovery plant Haffmans 200 kg(h)
? Water deaeration plant 100 hl/h
? Refrigeration plant York 2 x 327 kW Glycol
? Central CIP system for the whole brewery
? Compressed air supply 2 x Atlas Copco 4 Nm³/h

Detailed equipment list of this brewery

1. Malt Handling System

Malt will arrive in 40 kg bags which will be manually emptied into malt cleaning and storage system. Storage capacity is today 120 ton on bags

? Polishing machines KUNZEL ST 005 / MXE-020, capacity 2.6 ton per hour, year 1998

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? Aspiration system made in year 2006 by a local company

? Weighing scale on malt hopper (3-point measurement).

2. Brewhouse equipment Hupmann 145 hl/brew

Complete brew line from malt mill to wort cooler made by Hupmann in 2001. The brew size is 145 hl and it can make 6-8 brews / day, annual capacity is 300 000 hl. Brew line is controlled with Siemens S7-400 series PLCs and Hupmann made PC based brewery program. Brewery was closed in 2017 but equipment is installed and powered. Original documentation in English is available

Brew line has the following main equipment:

? Malt mill Hupmann-Millstar, wet milling, 5 ton per hour, grade 0.4 mm year 1998. Initially dry malt will enter steeping conditioning chute where water content of husk will be increased to 18-20%. This will cause the elasticity in husk and grain will be slipped of in one piece and endosperm will enter into roll mill dry and clean. This mill has two rotating milling drums.

? Mash tun kettle, volume 180 hl, diameter 2600 mm, heated with steam from bottom (heating surface 4.3 m²) and lower part of side wall (heating surface 2.4 m²) , heating speed 1 °C/min., made by Hupmann in year 2001.

? Lauter tun / filter tun, volume 215 hl, diameter 3700mm filtration area 10,75 m², pressure 256 kg/m² lauter time 3 hours, d = 3700 mm, made by Hupmann in year 1998.

? Wort pre-run tank volume 180 hl, made by Hupmann in year 2001

? Wort kettle, volume 233 hl, diameter 3200 mm, boiling time 90 minutes, inside heater with steam 10-11% evaporation during cooking, with hop dosing unit. Made by Hupmann in year 2001

? Whirlpool, volume 172 hl, diameter 3400 mm, processing time for all brands is 30-35 minutes, made by Hupmann in 1999

? Wort cooler, plate heat exchanger APV type N35, made in year 2009

? CO₂ injection system, 8-12 ppm at 8 C

? CIP tank for caustic, volume 20 hl, made by Norit in 2001

? Hot water tank 1000 hl, diameter 2700 mm, insulated, made by German Hollert Sebiling

? Cold water tank 500 hl, diameter 2200 mm, insulated, made by German Hollert Sebiling

3. Tank Farm

? CCT Holvrieka 13x 1420 hl, insulated tanks, glycol cooled with 3+1 cooling zone, with CIP bowl and pressure valves, made in year 1999

? BBT Hair 4 x 730 hl, insulated and glycol cooled

4. Filtration line capacity 150 hl/h with KG filter

Complete filtration department was delivered by German Norrit Process Technologie in year 2001. Filtration line has the following main equipment:

? Unfiltered beer buuffer tank 7500 liters, insulated and equipment with CIP

bowl

? KG dosing unit Dosimat 250 G, capacity 250 liters with mixer and CIP

? Additives dosing units 2 x 100 liters with mixer and CIP

? Kieselguhr filter Filtrox FOJ 1100/1850, volume 1350 liters, with 18 clamping screws

? Shock absorption vessel 1200 liter, 3.0 bar, with CIP bowl

? Carboblender

? Control PLC Siemens Simatic S 7-300

? Pumps, pipes, valves and instruments

5. Yeast Department

Yeast department equipment was made by German Norrit Prozess Technologie in year 2001. It consists of the following main equipment

? Yeast storage tank (0 -2 °C), 90 hl., with mixer 10/50 min. on/off

? Propogator tank 5 hl with cooling jacket and CIP bowl

? Yeast propagator 30 hl with cooling jacket and CIP bowl

? Control PLC Siemens Simatic ET-200

6. Glass Bottle Filling Line KHS 20 000 bph with BWM

This line was installed in 2004 from new and used equipment.

Operation was stopped in 2013 and machines were preserved for reuse. The line have the following main equipment:

? Manual depalletiser KHS - Loma AK (Nominal capacity 20 000 bph), year 1999

? Bottle washer Double end KHS - DMT 29/87, capacity 25000 bph , year 1999

? Empty Bottle Inspection visual control MIHO LS2000, capacity 25000 bph, year 2003

? Filler/Crowner KHS INNOFILL, DMG (SVF) 66/10KK, year 2004 having 66 filling valves with two times CO2 evacuation, 10 capping heads for crown cork and controls with Siemens Simatic S7-400 PLC with touch screen. Mangetechnik cap feeding system, Less than 10 000 operating hours.

? Filling height/crown cork inspection Filtec MAT 15 FT 47 year 1997

? Flash Pasteurizer 150 hl/h made by Leushuis 2004 with 80 hl glycol cooled buffer tank

? Labeler KHS Solar 20, type 50/120-30 RM-GT-V with two precut paper labeling station, cold glue, front-back-neck, capacity 30 000 bph, year 1986

? Wrap around carton packer KHS WRAP 300, year 2004, capacity 30 000 bph

? Date coder Videojet 170 UHS, year 2007

? Conveyers KHS 2004

? Tunnel pasteurizer Sander Hansen, two levels, made in year 1981

7. Utilities

? Raw water plant

? Haffman 200 kg/h complete CO2 recovery plant made in year 2001

o Mehrer TZW 60 CO2 compressor, 200 kg/h, 486 rpm, 22 kW

o Foam trap, CO2 balloon, washing column, CO2 compressor, filter/dryer, Bitzer freon cooling compressor, stripper / CO2 condenser, liquid CO2 tank and CO2 evaporator

o Control PLC Siemens S 7-300 with MMI Operation screen

? Central CIP-system

This is complete CIP system for whole brewery made by Norit company in year 2001 with 6 main tanks and 3 chemical dosing tanks, two circuit system and with one plate heat exchanger. Control: Siemens Simatic ET-200.

There are all pumps, valves with the following stainless-steel main tanks:

o Hot water tank 5 m3 insulated

o Acid unfltrate tank 5 m3

o Acid fildtrate tank 5 m3

o Cold caustic tank 5 m3

o Hot caustic tank 5 m3 insulated

o Concentrated chemical tanks, material PVC, 3 x 300 liters with pumps

? Water dearearion plant Haffmann 100 hl/h hot deareation type WDS-100W with buffer tank

o Buffer tank

o Control PLC Siemens Simatic S7-300

? Refrigeration plant York 2 x 327 kW Glycol, refrigerant R-134a, year 2012

? Compressed air supply 2 x Atlas Copco ZT 30 with air dryer FD 90 with a 4 m3 pressure air tank

? Laboratory equipment