



1. Principal technical requirements – MINI BREWERY

1. Rooms - area:

1.000 hl/year	80 - 100 m ²
2.000 hl/year	120 - 140 m ²
3.000 hl/year	140 - 150 m ²
5.000 hl/year	180 - 220 m ²
10.000 hl/year	300 - 350 m ²

Height of rooms:	up to 1.500 hl/year:	- brewhouse - min. 3,0 m - the others - min. 3,0 m
	over 1.500 hl/year:	- brewhouse - min. 3,5 m - the others - min. 3,5 m

2. Energy

a) Electricity - 3 x 380 / 220 V, 50 Hz

Total supply installed: according to the type of heating of the brewhouse from 35 to 220 kW

b) Other sources of energy for brewhouse heating for capacity over 1.500 hl/year:

- external steam source - 200 kg/h
- earth gas - 23 m³/h
- diesel - 19 kg/h
- electric power - 180 kW

3. Raw materials

Water: Consumption 4 - 5 hl water / hl beer

Resource efficiency - without recovery - min. 1,0 l/s
 - with recovery - min. 0,3 l/s

Quality - hardness - max. 12 °n

Waste water: 3 - 4 hl/hl beer, BOD₅ - 1,0 - 5,0 kg/m³

Pilsner malt: Consumption 18 kg/hl

Hop granulated: Consumption 300 g/hl
(partial replacement by hop extract is possible)

Yeast: Consumption 0,1 l/hl

2. Equipment description

The delivery represents a fundamental module, which can be corrected according to specific requirements of the customer. It comprises all the necessary units for production of Pilsner type of beer and other type like Weizen, ALE, stout, designed for particular annual sale.



Specification of basic functional module of brewery:

1. Two-cylinder crushing mill
2. Brewhouse in copper, size 10 or 20 hl/charge
3. Whirlpool
4. Plate cooler
5. Hot water container
6. Fermentation and storage cylindroconical tanks in stainless steel, cooling jacket, insulation
7. Yeast storage vessels
8. Bright beer tanks in stainless steel, cooling jacket, insulation
9. CIP vessels
10. Pumps
11. Air compressor (inclusive the microbiological filtration of air and aeration system)
12. Cooling system for the tanks
13. Pipes and fittings
14. Basic measuring and temperature regulation module for tanks
15. Steam producer (electric, light oil, gas) - including attaching pipelines
16. Kieselguhr filtration of beer
17. Barreling (washer and filler)
18. Engineering comprising the elaboration of technological project
19. Supervising the assembling, start of production and staff training
20. Technological recipe for two sorts of beer

According to customer's demands the delivery may be as "extra" price completed by:

- Full-automatic regulation of process
- Auxiliary facilities and equipment (balance, laboratory facilities, water treatment etc.)
- Staff training on similar equipment in the Czech Republic
- Recipe for special sorts of beer, know-how

For selection of the optimal technical-technological version and to specify the delivery and price, the following data are decisive:

- Electricity voltage system
- Chemical analyses of brewing water
- Waste water regulations
- Initial volume of production
- Maximal volume of production
- Season differences (summer, winter)
- Automation level (manufacturing, half, completely)
- Number of types of beer produced
- Ways of sales (in pub only, barrels, bottles)
- Construction blueprints



Conditions of transport:

1 000 hl/year	3 containers, weight of delivery	8 t
2 000 hl/year	4 containers, weight of delivery	13 t
3 000 hl/year	5 containers, weight of delivery	15 t
5 000 hl/year	6 containers weight of delivery	20 t
10 000 hl/year	13 containers weight of delivery	35 t

3. Terms of delivery

4 - 7 months from signing the contract.