

USE

The micromalting machine is laboratory equipment used specifically for test malting of barley but may be utilized for cultivation of other grains as well. The machine is designed to determine suitability of the tested sort of barley and its malting properties under various processes and algorithms. Thanks to small-scale micromalting tests, involving minimum waste of raw material, this is possible to adjust an optimum technology for the large-scale malting production.

Micromalting machine is used as complementary laboratory equipment in malt plants, specialized research institutes, schools, etc.

DESCRIPTION

The micromalting machine in itself is a set of four basic parts: three processing boxes (for steeping, germinating and kilning) and PC set (computer, screen, keyboard, mouse and printer). The processing boxes are made of stainless steel, each one equipped with 8 (16) sample containers with a removable bottom. One container accommodates 1 (0.5) kg of barley. Due to unified dimensions all containers are applicable for any processing box, so there is no need to remove barley from one container and place it into another during the micromalting process. Suitable insulation prevents heat losses and makes the boxes independent on ambient temperature. Every box is equipped with cooling and heating units, valves, pumps, pipe connections etc. of its own that are mounted on the machine frame and secured with removable covers. Each process box is fitted with its own switchboard, which contains all the automation elements necessary for the control of the technological process. Individual parts of the micromalting machine, i.e. processing boxes and PC workstation are interconnected with communication cables. The whole technological process is operated by a programmable logic controller with automatic control and monitoring system.

Basic features of the control system software:

- Complete remote manual and automatic process operation of action elements
- Collection, evaluation and transmission of process data
- Process diagnostic system
- Setting of required parameters and their limits
- Real-time display of actual process course and parameter values
- Protocol prints of failure states, operator interventions and process parameters
- Storage of selected data in a local database
- Sheet and print reports with the customer's logo

MAIN FEATURES

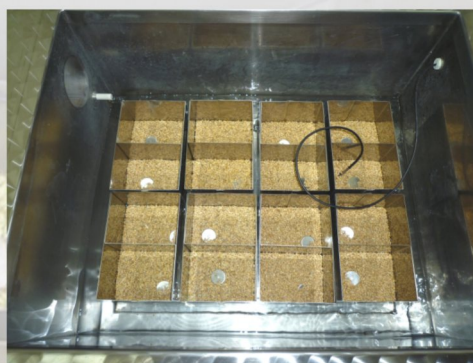
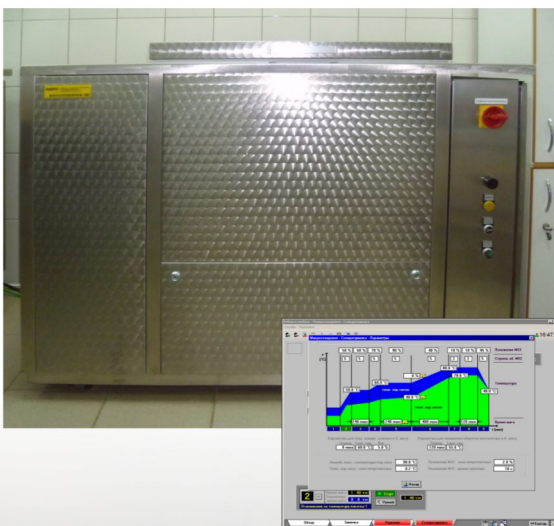
- High technical level and reliability
- User-friendly operation and visualization (modifications on request)
- Minimum construction changes before installation (230V power sockets and water and sewage connections)
- Variable arrangements to fit clients' space requirements
- Easy assembly, installation and operation

ACCESSORIES

The machine is supplied with a spare-parts set for two-year operation, detailed pictorial application and maintenance manuals included.

OTHER APPLICATION

The micromalting machine can be used for other cereals as well; the customer is however advised to consult specific usage with the manufacturer.



PARAMETERS

Processing unit dimensions	1385 x 730 x 1060 mm
Processing unit weight	max 175 kg
Total installed input	6.5 kW
Water inlet requirements	pressure 0.3 - 0.6 MPa, flow rate min. 10 liters/min