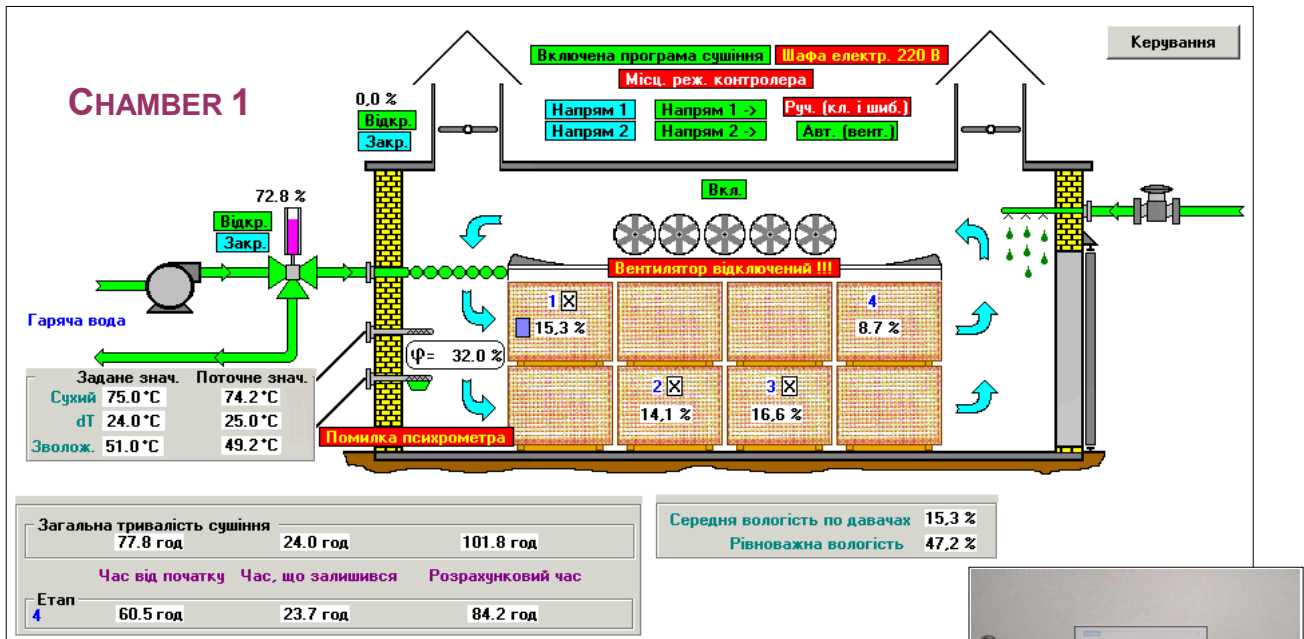


AUTOMATED CONTROL SYSTEM OF TIMBER DRYING CHAMBERS

Automated control system of timber drying chambers at joint enterprise "Lavanda", Kolomyia is created on the basis of the newest multipurpose automation system SIMATIC C7-613 from SIEMENS and personal computer that together perform the functions of measurement, control, automatic regulation, visualization, archiving of events and parameters of different timber drying process in cycling operation drying chambers.



The system represents controlling complex of specified structure, which free parameters can be adjusted in compliance with timber properties and drying chamber design values, that is, the system implements the principle of deterministic regulator with parametric optimization.

The system fixes the moment of switching of preset rational operating conditions of drying agent depending on the change of timber humidity that is determined by means of humidity meter or automatically by modelling of the kinetics of timber drying process. In intervals between these moments the system stabilizes operating conditions according to standard PID Control algorithm.



Objects of automation:

- Hot water pump
- Hot water valve with servomotor
- Cold water splashing system
- Water calorifer
- Drying chamber
- Gate with servomotor
- Reversible fan
- Electromagnetic valve on cold water

