EXPERIMENTAL RESEARCH OF SOME PARAMETERS OF THE LOGS' FREEZING PROCESS

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ABSTRACT

This paper describes the results from an experimental research according to original methodology of the following parameters of the logs' freezing process: change in the temperature and relative humidity of the air processing medium in the freezer used for the experiments; temperature distribution in the longitudinal section of logs subjected to freezing; distribution of wood moisture content and of basic density of the wood in the separate layers of the logs' cross-section. The methodology is used for research of the mentioned parameters during many hours freezing in a freezer at a temperature of approximately –30 ^{o}C of pine logs with a diameter of 240 mm, length of 480 mm and moisture content above the hygroscopic range. The automatic measurement and record of the temperature and the relative humidity is carried out by means of Data Logger type HygrologNT3 produced by the Swiss firm ROTRONIC.

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