

ANALYSIS OF THE HEAT ENERGY USED FOR STEAMING EDGED BEECH LUMBER (Fagus Sylvatica L.) WITH THICKNESS OF 50 MM

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ABSTRACT

Milled lumber steaming is a technological procedure, during which lumber is exposed to the influence of saturated water vapor, temperature and pressure, in a closed system. The purpose of the steaming process is to change the color, improve the properties of the lumber, sterilization, as well as to remove some lumber defects that had occurred during the drying process. This paper presents the results obtained from analysis of the heat energy required for steaming edged beech lumber with thickness of 50 mm. Beech (Fagus Sylvatica L.) is the dominant wood species in primary wood processing industry on the territory of North Macedonia. That being the case, the data related to steaming beech lumber is of particular interest. The heat energy of a metal automated steaming chamber with a capacity of 28 m³/cycle was analyzed. Based on the parameters given, an analysis and technical calculation of the heat energy required for steaming the beech lumber were conducted.

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