

MILLED LUMBER STEAMING CHAMBERS

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ABSTRACT

This paper describes the steaming chambers used for thermal treatment of milled lumber. The steaming process is a principal operation, as part of the primary wood processing. This technological process is a relevant prerequisite for obtaining quality lumber for final manufacturing. Steaming processes take place in constructed facilities called steaming chambers, under normal range of barometric pressure. This paper presents the two methods used for milled lumber steaming, direct vaporization and indirect vaporization. The two methods are characterized by different functional principles and different installation of the steaming chambers. An important aspect for obtaining quality lumber is the level of automatization of the steaming process. Automatization is composed by technical equipment for process monitoring and allows precise insight into the steaming process. The traditional manual steaming chambers monitor the color of the condensate as an indicator of the phase of the steaming process. Alongside automatization, this paper describes the industrial energetic and water supply installation of the steaming chambers.

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