Sherohovatost, Round saws, kolychestvennыy method for determining quality.

Investigated the surface quality of lumber at sawing wood-cutting tools different constructions. The parameters of roughness surface finish lumber were found.

Roughness, circular saw, quantitative method for determining the quality.
UDC 674.093.26

RESEARCH DEPENDS ON THE INITIAL ABSORPTION OF MOISTURE RETARDANT VENEER PLYWOOD IN THE MANUFACTURE OF REFRACTORY

OI Bryn, Applicant
National Forestry University of Ukraine

Properties of the processing Veneer his flame retardants. The dependence of the absorption of moisture retardant veneers for various durations prososochuvannya in flame retardant solutions based on ammonium dibasic phosphate, ammonium sulfate and ammonium bromide.

Rotary cut veneer, seepage, Fire retardant, moisture absorption flame retardant, weight loss.

Rotary veneer is a semi-finished product, which is used to produce various wood composites (DCM). To ensure high fire DCM advisable to handle Rotary veneer solutions retardants in the production of DCM.

Impregnation of veneer can be done by various methods [1]. In [2] presents rationale for the choice of diffusion impregnation method veneer as the most affordable in the production of fire-resistant plywood at different rates (less than salting retardant on the surface of the veneer, a uniform distribution in the midst, provide better fire protection, no additional operation veneer drying). The advantage of the method is to diffuse its intensification by increasing the temperature and concentration of impregnating solution which achieves a speed other highly intensive methods seepage.

In the production of veneer Veneer its moisture content varies widely, which essentially will affect the absorption retardant diffusion method. It is known that the diffuse infiltration occurs in cases where the maximum pore veneer filling with water. The presence of air in the pores will prevent the penetration of flame retardant in the middle veneer. Therefore, it became necessary to investigate the effect of initial

moisture content veneer on absorption and flame retardant properties impregnated veneer.

The purpose of research - Setting the initial impact of moisture absorption on Veneer retardant.

Materials and methods research. To investigate the influence of moisture absorption veneer on birch plywood used flame retardant size 150 x 75 x 1.5mm humidity ± 8 2 mm. To obtain samples with different moisture veneer kept in water for different time (1.5 min, 5 min, 15 min, 30 min, 90 min, 240 min, 1 day, 3 days, 13 days) and humidity controlled them. Samples impregnated with fire retardant solution for 8 min, 30 min, 45 min and 70 min at room temperature. For prochuvannya used Fire retardant ammonium phosphate based dibasic, ammonium sulphate and ammonium bromide. The concentration of the solution was 30%. After impregnation the samples were kept for re retardant in veneer for 1 h and dried in a drying chamber at a temperature of 103 °C and measured absorption flame retardant by the formula:

$$Q = \frac{m - m_0}{m_0} \cdot 100\% \qquad (1)$$

where m_0 - Mass of absolutely dry veneer before impregnation, g;

m - Mass of absolutely dry veneer after impregnation, g

Exterior veneer assessed visually and recorded the presence of salting.

Results. The results of studies on the relationship between the veneer and moisture absorption flame retardant for various durations leakage shown in Fig. 1.

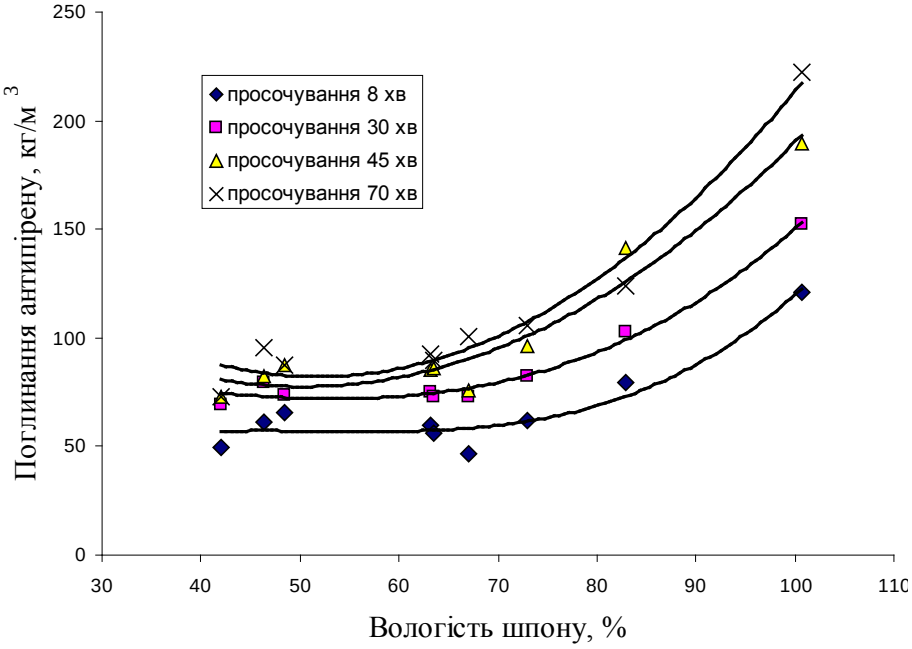

Fig. 1. Dependence of the absorption of moisture retardant veneer.

As can be seen from the graphs, flame retardant absorption increases with humidity veneer, which is associated with better transparency in the process of diffusion impregnation of a veneer filled with water. To ensure the group and fire retardant necessary absorption is about 100 kg / m3. Thus, to achieve flame retardant content of about 105 kg / m3 should veneer moisture over 100% soak 8 minutes, and veneer humidity 70 - 80% - 70 min.

Conclusion. The effect of humidity on the value of the absorption flame retardant. It was established that otryvannya vazhkohoryuchoho Veneer of mass loss of 8.9%, it is necessary to impregnate veneer over 100% humidity for 8 minutes. Reducing the initial moisture Veneer negative infuses the absorption and requires substantial zbilnennya duration leakage.

References

1. *Bryn AI* Methods leakage veneer for plywood manufacturing refractory / AI Bryn // Scientific Bulletin NLTU Ukraine: Coll. scientific-technical. prats.- Lviv: publishing house UkrDLTU. - 2005. - Vyp.15.5. - P. 179-182.

2. *Behta PA* Justification impregnation method for manufacturing refractory veneer plywood / PA Behta, AI Bryn // Scientific Bulletin NLTU Ukraine: zb.nauk.-technical. works. - Lviv: publishing house UkrDLTU. - 2010. - Vyp.20.6. - P. 102-105.

Proanalyzyrovano properties peeling veneer, obrabotannoho pregnation with antiperenes. Dependence of research pohloschenyya retardant from humidity veneer in different ways impregnation of time in soluble antypyrenov based on Diammony phosphate, ammonium sulphate and ammonium bromide.

Flat, impregnation, fire retardant, humidity, pohloschenye retardant, rubbed supply.

The fireproof veneer properties is analyzed. The dependence of salt absorption on veneer moisture content with different impregnation duration is investigated.

***Veneer, impregnation, fire-retardant, moisture content, loss of mass*.**