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*Results of the study of influence Pryvedeny drevesnoy porody indicators on the effect of memory forms timber. Conducted kolychestvennaya evaluation of the effect and etoho Comparison indicators for timber species and breeds nekotoryh veneer. Rassmotrena Possibility of influence the chemical composition of wood on the effect indicators Storage timber.*

***Effect Storage timber forms, kolychestvennaya evaluation of the effect of memory, zamorozhennaya deformation, drevesnaya breed composition himicheskij timber.***

*Results of experimental research of influence of wood species on quantities of memory effect were presented. The quantitative assessment of memory effect, comparison of quantities for some wood species and types of veneer were experimentally investigated. The data on effect of chemical composition of wood on parameters of memory effect wood also are presented.*

***Shape memory effect of wood, a quantitative assessment of memory effect, frozen strain, wood species, chemical composition of wood.***

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**DEFINITION QUALITY TIMBER surfaced**

***MO Beletsky, a graduate student  
ZS Sirko, Ph.D.***

*Investigated the quality of the machined surface when sawing lumber Wood tools of various designs. Targets are machined surface roughness timber.*

***Roughness, round saw, finish, quantitative method for assessing quality.***

Surface quality wood materials cutting process determine the purity and precision of sizes and shapes. In the process, where the chips are the product (eg, Rotary cut veneer and, technological chips, etc.), Is a qualitative indicator of the degree of product cut off in the initial strength of wood [1].

Kontrol and quality assessment of surface treatment can be carried out both qualitative and quantitative methods. Qualitative evaluation method based on a comparison of (visual) treated surface and the sample surface-roughness standard. This method is imperfect because it does not provide objective oversight. A quantitative method for assessing the quality of the machined surface microgeometry based on the measurement surface using devices (Profilers, profilohrafiv, microinterferometer, double microscopes, etc.) [2].

A typical and universal instrument for measuring roughness is MIS-11 microscope. It is designed for laboratory

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quality control of parts of the surface roughness of the metal surface within 800-32 microns, parts of the wood surface roughness 200-4 mm [4]. Microsoft TSP-4 is designed to control the surface roughness of wood within 1600-100 microns. Devices which implemented pneumatic method provide greater measurement accuracy (up to 0.1), the possibility of recording results and automation control.

But at the same time they have several drawbacks: inertia pneumatic devices, high sensitivity to structural inequalities controlled object and the accuracy (stability) basing measurement (sensing) element. The principle of existing pneumatic instrumentation is to determine modest expenditures compressed air that passes through a gap in certain specified pressure.

The roughness of the machined surface timber is regulated by GOST 7016-82 "Options sherohovatosty surface." Roughness parameters are selected from the following range: the arithmetic mean of the heights of some major irregularities on the surface, which is defined by the formula where the distance from the highest to the lowest point of the i-th largest inequality, n - the number of major irregularities; maximum height of roughness profile; - Height of roughness profile on ten points with reference to the baseline; their secondary arithmetic mean absolute deviation profile, the average step of roughness profile on

valves. Limit values roughness parameters listed in Table.

$$1. R_{m_{\max}} - R_{m_{\max}} = \frac{1}{n} \sum^n H_{\max} H_{\max} - R_m - R_z R_a - S_z$$

### 1. The limit values for roughness.

Material, product, method of treatment	The values				
	Parameter $R_{m_{\max}}$	Account Settings			
		$R_m$	$R_z$	$R_a$	$S_z$
1	2	3	4	5	6
Sawn softwood frame after cutting	500-1600	-	-	-	-
Sawn hardwood frame after cutting	320-1000	-	-	-	-
Timber after cutting circular sawing	40-800	-	-	-	-
Veneer Rotary	50-320	-	-	-	-
Flat cut	32-500	-	-	-	-
Solid wood, longitudinal milling	-	16-250	16-250	-	2,5-12,5
Wood veneer and polished	-	250-12,5	10-160	2,5-16	-

**End Table. 1**

1	2	3	4	5	6
Derevynnostruzhkovi ground plate	-	12,5-500	10-400	2,5-12,5	-
Derevynnostruzhkovi not ground plate	-	12,5-630	10-400	2,5-16	0,1-2,5
Fibreboards ground	-	8,0-32	6,3-16,0	0,5-1,6	
Fibreboards not ground	-	10-40	8-20	0,6-3,2	0,12-3,2

Analyzing the table can be noted that the regulated roughness when sawing circular saws (40-800mkm) is much smaller than the sprayed onto the saw-frames (500-1600mkm). Also when sawing circular saws may get the same roughness as the milling solid wood (16-250) (parameters and can be compared with the difference that the average of the first major surface irregularities investigated, and the other is the maximum size bumps on the test site) . This will improve, for example, process manufacturing laminated veneer lumber for Euro by eliminating intermediate operations before jointing zkleyuvannyam blades in a bar.  $R_{m_{\max}} R_m H_{\max}$

**The purpose of research.** Determining the impact of design changes on the tool surface quality of the processed it.

**Materials and methods research.** To conduct studies to determine the roughness blanks according to the method described in GOST 15612-85 "Methods for determining parameters sherohovatosty surface" defined parameter.  $R_{m_{\max}}$

The samples studied were made of pine wood size 400x90x5mm had a moisture content of 18-20%, so that one was processed on conventional saws cut down on the machine C-6 in academic laboratories NUBiP Ukraine, other saws with plates for making chips on bahatopylkovomu machine walter woodworking shop in SE "Boryspil LH". For measurement instrument used light or shadow crossing the MIS-11.

**Results.** Lumber treated using flat circular saws and saw the plates for making chips with a diameter of 350 mm. Measured roughness parameters of treated surfaces parameter  $R_{max}$ . The measurement results are shown in Table. 2. The table shows that the roughness of the samples treated with the help of dust cleaning knives is smaller and is within 43.7 ... 55 microns.

**2. The determination of roughness parameters of samples produced on machines walter and C-6.**

$R_{max}, m$			
Sample number	Walter	Sample number	TS6
1	51.3	1	66.3
2	48	2	65.7
3	50.8	3	66.4
4	43.7	4	72.1
5	55	5	78
6	46	6	68
xser	49.3		69.42

### Conclusions

1. The quality of the surface finish of timber depends on the design of the instrument. Past measurements have shown that the more structurally complex tool - provides better surface quality cutting.

2. Surface roughness samples obtained using pollen from plates for making chips for the average value of the parameter is 30% lower than the surface roughness of the samples processed flat circular saws.

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*Quality of research Monitor pylomateryalov surface at raspylovke derevorezhushchymy Wood raznykh structures. Ustanovleny Options sherohovatosty obrabotannoy pylomateryalov surface.*

***Sherohovatost, Round saws, kolychestvennyy 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.***

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

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*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