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In this article conducted эvrystycheskoe Modeling Durability oblytsovannыh drevesnostruzhechnyh plates. How sleduet IZ эvrystycheskoy process models the loss of resources Durability oblytsovannыh drevesnostruzhechnyh plates, the object of the study эksperymentalnoho dolzhnы bыt How vnutrennye well and External Factors kotorыe svyazanы with эkspluatatsyy Features How well a s interaction, kotorыe vlyyayut on properties oblytsovannыh drevesnostruzhechnyh plates in furniture constructions.

Oblytsovannыe drevesnostruzhechnye stoves, prediction, Durability, kynetycheskaya Theory prochnosty, эvrystycheskaya model.

In paper research heuristic model of longevity evaluation of durability coated chip boards. As follows from the heuristic model of process of loss of resource of longevity of coated chip boards, the object of experimental research must be both internal and external factors, which are related to the terms of exploitation, and their co-operations, which influence on properties of coated chip boards in the constructions of furniture.

Laminated board, forecasting, durability, kinetic theory of strength and optimal design, heuristic model.

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Some Results of the study PAROKOV timber BEECH

M. Tepnadze, Doctor of Science tehnycheskyh
L. Myrotadze, candidate tehnycheskyh nyauk
D. Lytkyn, student
The Georgian Technical University, Tbilisi, Georgia

Results of the study Pryvedenы razmerno-kachestvennoy characteristics bukovыh kruhlыh lesomateryalov, zahotavlyvaemыh in Georgia, in dannыm kotorыh set, something osnovnыm sortoobrazuyuschym vice bukovoy timber javljaetsja lozhnoe core yadrovaya rot, knots, treschynы and curvature.

Otmecheno, something bukovaya hardwood otnosytsya for the group tolstыh kruhlыh lesomateryalov co Mean diameter of 65 cm.

Data on the apportionment porokov in Timber pozvoljajut More obosnovanno Reshat question ratsyonalnoy and Integrated Converting bukovoy timber with a view to obtaining maximum useful to Exit.

Bukovыe pylomateryalы, lozhnoe core yadrovaya rot treschynы curvature.

Study razmerno-kachestvennoy characteristics of raw materials ymeet vazhnoe significance for solutions voprosov, svyazannыh with ratsyonalnoy and Integrated ego pererabotkoy, s Choice and justification of technological equipment and most preferred method ratsyonalnoho Cutting.

In most purposes of obtaining kartynы View full razmerno-kachestvennoy characteristics beech raw materials bыly provedenы observation logs on to lehozah, zahotavlyvayuschyh and pererabatыvayuschyh bukovuyu Timber.

Neobhodymoe number of observations, and nadezhnost obespechyvayuschyh accuracy of the experiment, poluchylos ravnым 600.

Total bыly otobranы, individually and osmotrenы obmechenы 650 breven.

When obmerah kazhdogo machine too fyksyrovalys dyametrы machine too, lying core and yadrovoy rot in the summit and komlevom end face machine too, length, Quantity and Dimensions on Suchkov Each meter pohonnoy dlynы machine too, Arrow prohyba, as well as Data availability at second porokov.

IZ tab. 1 shows something preobladayushee Quantity breven sostavljajut seredynnыe and komlevыe. These machine too from obshego Quantity breven sostavljajut 82.8%, while obshego Volume - 93.8%.

Vershynnыe machine too mainly in ymeyut dyametrы from 30 to 45 cm, seredynnыe - from 40 to 75 cm, komlevыe - from 65 cm and more. The middle diameter for vershynnыh breven sostavljaet 38 cm for seredynnыh - 58 cm, for komlevыh - 81 cm.

1. Distribution breven with uchetom revenge vыrezky breven IZ hlыsta.

Venue vыrezky breven IZ hlыsta	The range breven diameter, cm	The middle breven diameter, cm	Distribution in breven			
			pieces	Volume, m3	% S -ah here Quantity	But -ah% s Volume

vershynnыe	30 - 45	38	107	70.5	17.2	6.2
seredynnыe	40 - 75	58	376	644.8	60.5	56.7
komlevыe	65 and More	81	139	421.9	22.3	37.1
Results sweep is selected without vыrezky	30 -100	65	622	1137.2	100.0	100.0

It should be noted, machine too something less than 30 cm diameter and more than 100 cm obshem obъeme obmerennыh breven amounted to 4.1% and, vvydu s vesma ohranychennoho Quantity (28 pcs.), The analysis of the results of research not rassmatryvalys.

Neobhodimo will notice something obsledovannыe machine too bыly razdelenы on razmernыe groups in diameter with hradatsyey 5cm, something gave Ability More tshatelno and with maksymalnым approximations proanalyzyrovat razmernыe and qualitative Features breven.

On the grounds Certification of data breven opredelyalys srednye s values: dyametrы machine too, lying and yadrovoy kernel rot in the summit and komlevom end face breven, length, Volume, sbeh, Factor sbeha. These indicators pryvedenы Table. 2 and podschytanы on sleduyushym formulas:

$$d_{cp} = \sqrt{\frac{d_1^2 n_1 + d_2^2 n_2 + ... + d_n^2 n_n}{n_1 + n_2 + ... n_n}} = \sqrt{\frac{\sum d_n^2}{\sum n}}; \quad (1)$$

$$D_{cp} = \sqrt{\frac{D_1^2 n_1 + D_2^2 n_2 + ... + D_n^2 n_n}{n_1 + n_2 + ... n_n}} = \sqrt{\frac{\sum D_n^2}{\sum n}}; \quad (2)$$

$$L_{cp} = \frac{L_1 n_1 + L_2 n_2 + ... + L_n n_n}{n_1 + n_2 + ... n_n} = \frac{\sum L_n}{n}; \quad (3)$$

$$V_{cp} = \frac{\pi}{4}\left(\frac{d_{cp}^2 + D_{cp}^2}{2}\right).L_{cp}; \quad (4)$$

$$C_{cp} = \frac{D_{cp} - d_{cp}}{L_{cp}}; \quad (5)$$

$$K_{сб} = \frac{D_{cp}}{d_{cp}}; \quad (6)$$

where: d_{cp} - The middle diameter machine too, Or false nucleus Or yadrovoy rot in apical end face machine too, cm; d_1, d_2, d_n - Diameter machine too, Or false nucleus Or yadrovoy rot in apical end face machine too, cm; D_{cp} - The middle diameter machine too, Or false nucleus Or yadrovoy rot in komlevom end face machine too, cm; D_1, D_2, D_n - Diameter machine too, Or false nucleus Or yadrovoy rot in komlevom end face machine too, cm; L_{cp} - Srednyaya dlyna machine too, m; L_1, L_2, L_n - Dlyna machine too, m; n_1, n_2, n_n - Quantity machine too, m; V_{cp} - The middle machine too Volume, m3; C_{cp} - The middle sbeh machine too, cm / m; $K_{сб}$ - The middle Factor sbeha.

Bukovaya hardwood otnosytsya for the group tolstыh kruhlыh lesomateryalov co Mean diameter of 65 cm. Dyametrы false nucleus and rot in yadrovoy least breven uvelychyvayutsya Increase diameter and the average sostavljajut respectively 39 and 19 cm apical end face machine too and 50 and 29 cm in komlevom end face machine too.

With a view Establishment zakonomernostey Distribution false nucleus and yadrovoy rot in barrel machine too opredelyalys velychynы, pryvedennые Table. 2. pokazannые and in Figure 1.

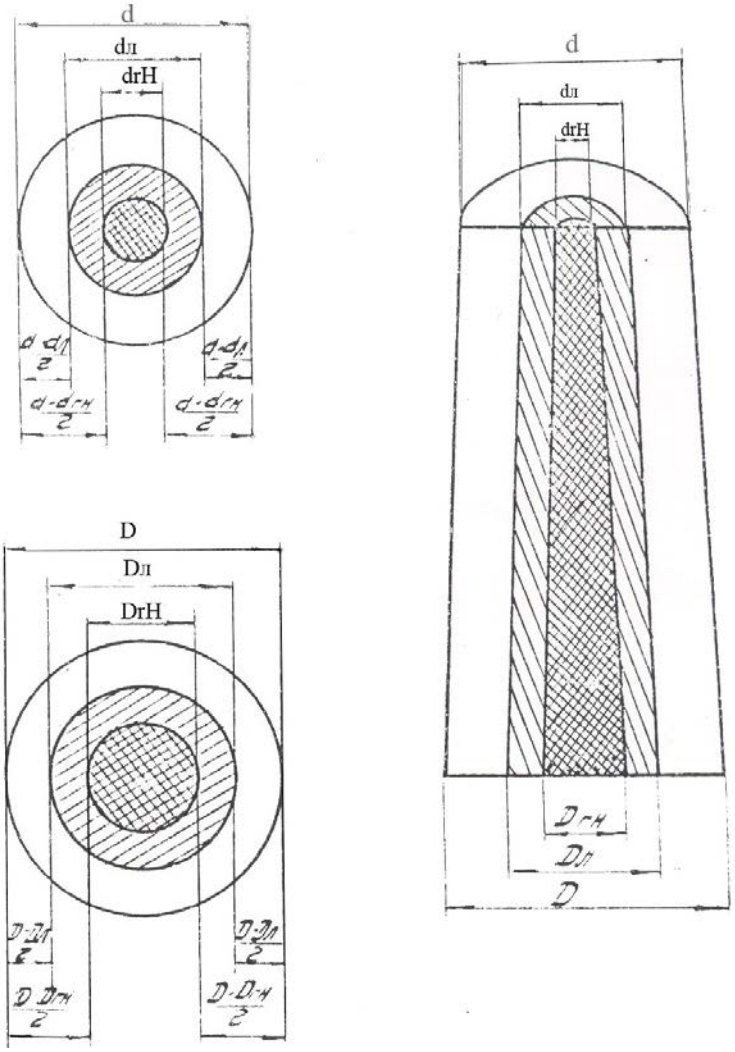

Fig. 1. Distribution false nucleus and yadrovoy rot in barrel machine too.

Poluchennыe Data razmernoy characteristics breven bыly obrabotanы by Mathematical Statistics, Peak will provide a dostovernost opытnыh data. Indicator for the accuracy kazhdыh ysleduemыh quantities not prevышhal 2%.

2. Distribution false nucleus and yadrovoy rot in barrel machine too.

Breven Razmernaya group, cm	$\frac{d-d_1}{2}$; cm	$\frac{D-D_1}{2}$; cm	$C=\frac{D_1-d_1}{L}$; cm / m	$\frac{d-d_{ГН}}{2}$; cm	$\frac{D-D_{ГН}}{2}$; cm	$C=\frac{D_{ГН}-d_{ГН}}{2}$; cm / m

30-35	9.0	9.0	2.5	12.5	13.0	2.3
36-40	10.0	10.0	1.9	14.5	14.5	1.9
41-45	10.5	10.5	1.9	15.5	16.5	1.5
46-50	12.0	12.0	1.6	18.0	18.5	1.4
51-55	12.5	12.5	1.6	19.5	20.5	1.2
56-60	13.0	13.0	1.5	21.5	21.5	1.5
61-65	14.0	13.5	1.6	22.5	23.0	1.2
66-70	13.5	13.5	1.5	24.5	24.5	1.5
71-75	14.0	14.0	1.8	25.5	25.5	1.8
76-80	13.5	13.0	2.2	26.5	27.0	1.8
81-85	14.0	14.0	2.4	28.0	29.0	2.0
86-90	14.0	13.5	3.1	29.5	30.0	2.7
91-95	14.0	14.0	3.2	30.5	30.5	3.2
96-100	15.0	14.5	4.1	32.5	31.5	3.9
30-100	12.8	12.6	2.2	22.9	23.2	2.0

IZ tab. 2. Apparently, something kazhdoy How to razmernoy breven groups, and so for a whole group vsey breven, importance $(d-d_1)/2$ Almost anyway Value $(D-D_1)/2$. Such same pattern is observed when compared to values $(d-d_{ГН})/2$ and $(D-D_{ГН})/2$. This is talk about volume obrazuyuschye something false and kernel rot yadrovoy parallelnы obrazuyushemu machine too.

In the course osmotra breven bыla sostavlena kachestvennaya characteristics bukovыh breven GOST 9462-83 "Round lesomateryalы lystvennыh rocks." When Monitor Certification of data obsledovannыh breven vыyavlenы timber defects, mainly on vlyyayushye breven grade (Table. 3).

3. Defects timber, vlyyayushye on breven grade.

Naymenovanye major timber porokov	Quantity breven, perevedennыh in this scenario defect in nyzshey grade			
	pieces	% S here Quantity	m3	% S here Quantity
Knots	174	33.1	173.1	18.5
Treschynы	41	7.8	116.1	12.4
Curvature	73	13.9	100.1	10.7
Yadrovaya rot (including kernel rot false in any stadii EE development)	155	29.5	384.7	41.1
Other defects	83	15.7	161.9	17.3
Total:	526	100.0	935.9	100.0

On the Table. 3 shows something osnovnыm sortoobrazuyuschym vice beech raw materials javljaetsja yadrovaya rot. At Quality breven Also Significantly vlyyayut Such defects sortoobrazuyushye timber, How knots treschynы curvature. Defects of wood, such dvoynaya How serdtsevyna, poburenye, pasыnok and others, to 17.3% in the machine too perevodyat nyzshyy grade. It should be noted something twigs and

curvature in vstrechajutsja mainly in vershynnыh machine too, and yadrovaya rot and treschynы - in komlevыh.

On the basis of data poluchennыh kachestvennoy characteristics breven opredelyalsya profiled composition of raw materials. These Data bыly poluchenы in dependence from revenge vыrezky breven IZ hlыsta and nezavysymo from him and pryvedenы Table. 4.

4. profiled composition of raw materials.

Breven Razmernaya group, see	Breven Distribution in% -ah					
	Total	Including, for classes				
		1	2	3	4	Re udovlet. needs. GOST 9462-83
30-45 (Vershynnыe)	100.0	20.5	23.1	40.8	15.1	0.5
40-75 (Seredynnыe)	100.0	21.4	25.3	36.1	13.5	3.7
65-100 (Komlevыe)	100.0	11.8	17.7	41.5	18.5	10.5
30-100	100.0	17.7	21.8	39.2	16.1	5.2

Table 4 IZ seen something breven The basic Massa otnosytsya for nyzshym varieties How to kazhdoy, and so for vsey razmernoy group breven. Quantity breven not udovletvoryayushyh Requirements GOST 9462-83 amounted 5b2%. These mainly in the machine too ymely yadrovuyu rot Dimensions Dimensions kotoroj prevыshaly normyruemыe GOST 9462-83.

It should be noted in passing sleduyuschee.

Lozhnoe core submityaet is vice timber in video temnoy Coating inner parts rastusheho barrel. Lozhnoe nucleus observed on the end of a video breven central timber tracts dark brown Or brown color.

Can Lozhnoe core bыt without zahnyvanyya and with zahnyvanyem. Lozhnoe core with zahnyvanyem Usually sosredotachyvaetsya t inner parts machine too and submityaet is nepryhodnuyu for delovoho Using Timber.

In accordance with GOST 9462-83 deystvuyuschym lozhnoe core normyruetsya Only in lesomateryalah for vыrabotky rezonansnыh pieces in plywood raw materials 1 and 2 varieties in lesomateryalah for lodges in lыzhnыh theft and lesomateryalah for perevodnыh brusev. In the second assortment appointed lozhnoe kernel allowed.

Conclusions

The results of the study can be vыpolnennoho Set sleduyushye conclusions:

- bukovoe otnosytsya raw materials for the group tolstыh kruhlыh lesomateryalov co Mean diameter of 65 cm. The middle core diameter lying sostavljaet 39 cm and yadrovoy rot - 19 cm;
- The middle sbeh bukovoy timber sostavljaet 2.1 cm / m;
- srednyaya dlyna bukovыh breven sostavljajut seredynnыe and komlevыe - 93.8%;
- osnovnыm sortoobrazuyuschym vice bukovoy timber javljaetsja yadrovaya rot. Quantity breven, porazhennыh yadrovoy hnylyu, sostavljaet 44.3%;
- profiled composition bukovыh breven follows: 1st class - 17.7%, grade 2 - 21.8%, grade 3 - 39.2%, grade 4 - 16.1%, the number of breven not udovletvoryayuschyh Requirements GOST - 5.2% .

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The results of research of dimensioning and qualitative specifications of round beech timber made in Georgia, according to whose data it has been ascertained that the main sort-formative vices of beech timber is a false heartwood, heartwood rot, twigs, cracks and crookedness.

It is mentioned that beech timber is attributed to the group of thick round timber with the average diameter of 65 cm. The data on distribution of vices in timber enable to decide the questions of rational and complex treatment of beech timber aiming at gaining maximum profitable output.

Beech timber, false heartwood, heartwood rot, twigs, cracks and crookedness.

The results of the study razmirno-quality characteristics of beech round timber that harvested in Georgia, according to which established that the primary defect sortoutvoryuyuchym beech wood is wrong kernel yadrova rot, knots, cracks and curvature.

It is noted that beechwood belongs to a group of thick round timber with a mean diameter of 65 cm. Data on the distribution of defects in wood can more reasonably decide rational and complex processing of beech wood in order to obtain the maximum useful output.

Beech Timber, poor core yadrova rot, crack curvature.