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METHODS OF MEASURING TIMBER VOLUMES AND RISKS OF CUSTOMS DECLARATION AND CONTROL

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Abstract

The project considers the problems of measuring round timber when applying the methods used by the customs authorities. The analysis of the considered methods of measuring the volume of round timber by the method of end sections, middle sections, stacked and tabular methods used by declarants to export goods outside the customs territory and customs authorities in order to control raw exports allowed us to draw conclusions about the difficulties of their application and the discrepancies of the results, entailing consequences for participants in foreign economic activity and risks in in the field of customs. The results of the measurements obtained may be the subject of errors caused by the lack of uniform approaches to the measurement of timber volumes, including those fixed at the legislative level, and are also associated with low professional training, corruption, insufficient equipment of technical means of control. In principle difference between the proposed approach to measuring timber consist in the instrumental support of business and the use of equipment as a technical means for customs control by customs authorities in order to minimize the risks of reporting unreliable information that affects payable customs payments and the time of customs operations.

Keywords: Customs authorities, control, measurement, timber

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1. Introduction

Nowadays, there are 4 methods for measuring the volume of round timber.

By transportation outside of the customs territory, according to foreign trade operations with foreign counterparties, methods of end sections, middle sections, stack and tabular methods are used to identify the volume of round timber.

When goods are sold to foreign customer, the exported goods are cleared through customs. Regarding these goods by the customs authorities verification activities are held during the registering goods according with the customs procedure for export.

2. Problem Statement

Declaring information by the Russian participant in foreign economic activity or the customs representative of goods for the purpose to release goods according to the export procedure and their further departure by execution of a foreign trade transaction to the territory of a foreign state, authorized persons of the customs authorities verify the product description, volume, cost, customs duties and other characteristics with the documents and information by applying the forms and measures of customs control.

3. Research Questions

Exploring the characteristics of exporting goods is determined by the realization of verification activities including inspection, the volume and tools of which depend on the number of factors that affect compliance with customs legislation.

4. Purpose of the Study

Verification activities are held by customs inspectors by identification the presented timber and identifying the characteristics which are necessary to comply with prohibitions and restrictions on foreign trade activities and / or imposing customs duties.

5. Research Methods

For measuring the volume of exported goods (round timber in logs by one log or more), the Method of end sections FR.1.27.2011.10629 is used.

This method of measuring as well as the method of measuring timber in quantities of 50 or more pieces per shipment by using volume tables is used to calculate the volume of round timber.

The measurement by the geometric stacking method is used to determine the volume of a shipment of round timber if the quantities in a shipment is from one stack or more just only when loading into wagons and cars FR.1.27.2011.10632.

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The calculation of the volume of round timber is time-consuming according to the Methods FR.1.27.2011.10629 and FR.1.27.2011.10632 because it depends on the accuracy and number of measurements as well as the correctness of the calculations made by using mathematical formulas.

Methodology for measuring the volume of a shipment of round timber using tables of volumes during customs operations and customs control (Metodiki izmereniya lesomaterialov, 2020) in Figure 1.

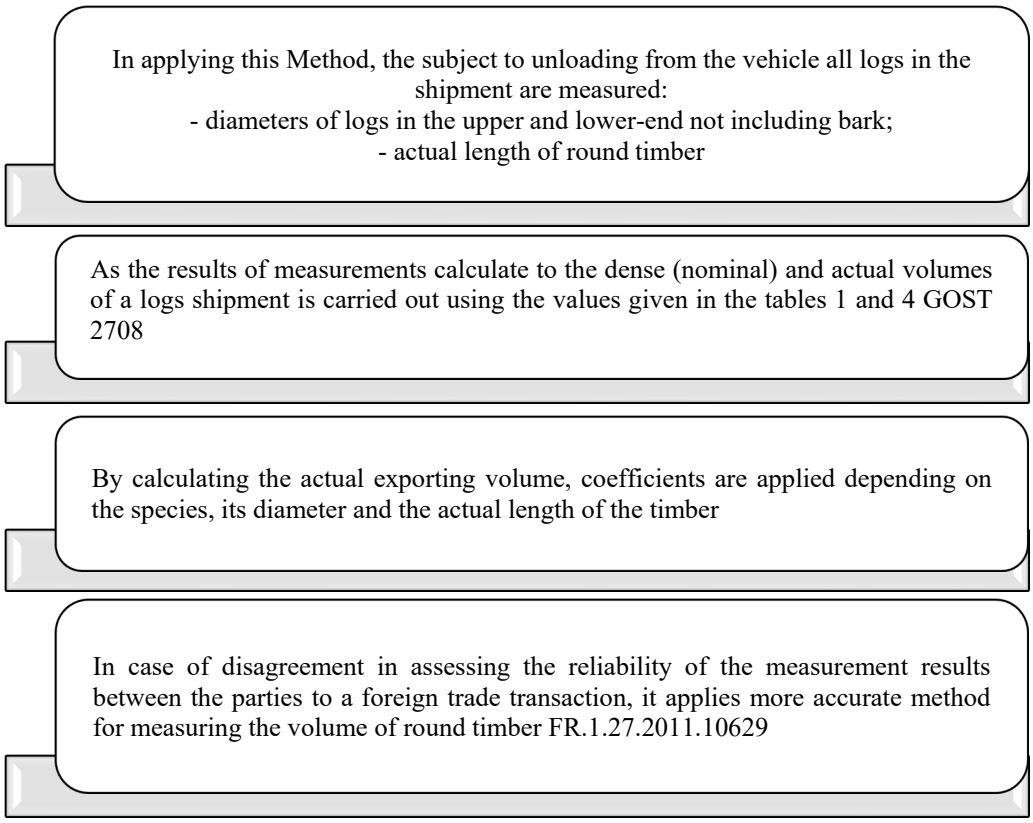

Figure 1. Algorithm of applying the Method FR.1.27.2011.10631

To conduct a customs examination the stacking method for determining the volume of timber the method M 13-01-10 or FR.1.27.2011.10632 is used, which allows measuring the volume of round timber loaded onto a vehicle without unloading.

The requirements for the means, conditions, course of action, frequency and mathematical models of measurements as well as for the processing of the results obtained and the accuracy of the values are providing the accuracy of information which are necessary for declaring goods, the safety of shipment to the foreign counterparty (Kunitskaya & Belyayev, 2021).

Nowadays, the technical means of verification which are used by the customs authorities to measure the volumes of goods of the 44th group of FEACN of the EAEU are insufficient, which doesn`t allow to determine promptly and accurately the necessary information for the customs control including customs operations in the shortest possible time.

In addition, the information for customs control of the volumes of timber for the purpose of moving across the customs border by participant in foreign economic activities is declared. The cubic

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capacity of timber is measured by the warehouse master of a participant in foreign economic activity. Next the logs are processed and stored in a warehouse until shipment after acceptance (Shavkun, 2019).

The volume of the vertex of each log is measured, how many logs and what diameters are in the shipment after that the quantities of logs of each diameter is multiplied by the volume of one log of this diameter. Then all cubic meters are added up and the exact volume of the resulting logs is obtained.

Afterwards, all cubic meters are summed up and the exact volume of accepted logs is obtained. The disadvantage of this stacking method is the long measurement time. However, in connection with supply of a large amount of timber it is necessary to increase the number of employees at the acceptance of wood. Sometimes the calculation is being for one length of the log, therefore, for easy measurement, a "cubaturnik" is compiled in which the diameters of the forest are indicated along the X axis, the number of logs along the Y axis which makes it much easier to measure timber.

The results of the measurements of timber can be subject to considerable mistakes because they are implemented by different persons, for example, participants in foreign economic activity, customs officers (beginning and ending the control). Also, persons measuring the volume of the same product may get different results of measuring timber, which demonstrating the difficulty of the application methodology, the human factor, the difference between the means of control and their verification and other factors.

6. Findings

Therefore, the "manual" wood measurement system is based on established methods, entails errors, most likely associated with unintentional (unpredictable) circumstances, but nevertheless entailing legal and economic consequences for a participant in foreign economic activity owing to the unreliability of the declared information for the goods and identified during the actual customs control. The objective reasons for the differences of results of measuring the volumes of goods of the 44th group of the of FEACN of the EAEU (including timber) include the low level of professional training of persons performing measurements (as participants in foreign economic activity and as inspectors of inspection departments customs authorities), as well as lack as equipment with technical tools control, including the need to equip and equip checkpoints in accordance with international requirements. The subjective reasons of difference in measurement results during measuring and calculating according to established methods might be personal interest or corruption can be attributed.

According to the provisions of national legislation, export duties are established for types of roundwood, the payment basis for their further departure from the customs territory. For example, an exporting spruce by foreign trade deal is taxable under an export duty in the amount of 80 percent of the customs value, but not less than 55.2 euros per cubic meter which confirms the necessary to determine the exact volume of timber while applying the combined rate of customs duty (Kosheleva & Pustovalova, 2021).

The inaccuracy of the measurements and calculations incurred in the case of choosing a specific part of the combined duty may affect the underpayment of customs duties, from the amount of which the issue of an administrative offense or a criminally punishable act can be considered.

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By the example of one wagon with the quantities of 210 logs the calculation of the volume of round larch was made (Nalivayko & Denisova, 2020).

The volumes of a log shipment of the same type, the same wagon and the quantities are different. By the method of end sections, the volume of logs without bark is 64.05 m3 (FR.1.27.2011.10629), according to the method of table volumes, the volume of logs without bark is 70.16 m3 (FR.1.27.2011.10631). It follows from this that "manual" measurement methods are always related to the human factor and the chosen measurement Method, so it is difficult to receive the same measurement results. Therefore, the risk of false declaration of goods increases, as a result of which customs payments may not be paid full (Velkin et al., 2020).

In addition, the disadvantage of these methods is the customs authorities during inaccurate identified information must selectively apply customs control forms in order to minimize the risk. A consignment of goods is about 25 wagons (there are about 100-200 logs in one wagon) must be rolled out on the platform (trestle) or on the ground in one row. The place for rolling out timber should be prepared for measurements including the territory there should not be a mixture of logs are under customs control and declared in the declaration for goods with other goods of future shipments abroad. In addition, the logs must be cleaned of snow, mud or ice, as well as other accumulations that affect the accuracy of measurements. The location of logs should allow to measure by the piece the diameter and length of the logs, to record each measurement with the subsequent calculation of the total volume. It is advisable to make measurements taking into account climatic conditions, for example, humidity, environment temperature, also the characteristics of technical equipment according to the operational documentation or the use certificate and other requirements that depends on measurements.

The apparent condition of the logs should exclude the possibility of distortion of the measurement results while their curvature and bevel cut should not exceed the limits for these wood defects according to GOST 9462 (for hardwoods) and according to GOST 9463 (for softwoods).

7. Conclusion

All these actions take a lot of time of the customs authorities and do not allow to meet the deadline for customs inspection and the time frame of the release of goods. The act of customs inspection must be sent to the declarant immediately after the inspection, which does not correspond to the actual time frame, which, due to filling in and calculating the volume of timber, can be up to 3 weeks after the goods declaration is accepted for verification, entails the company's failure to fulfill contractual obligations, loss of revenue and the occurrence of damages.

Therefore, the calculation of one shipment of timber showed that the discrepancy between the volumes according to the measurement methods used is 6.11 m3, which is an inaccurate information since it depends on not only the customs payments payable but also the spending of the quota volume and the imposition of high rates of export customs duties of goods same time consideration of the issue of violation of customs regulations.

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References

Kosheleva, O. E., & Pustovalova, A. S. (2021). Analiz sovremennogo sostoyaniya mer gosudarstvennogo i tamozhennogo kontrolya eksportiruyemykh lesomaterialov [Analysis of the current state of measures of state and customs control of exported timber]. *Journal Economic Sciences, Bulletin of Innovative Technologies, 5*(1(17), 14-18. https://cyberleninka.ru/article/n/analiz-sovremennogo-sostoyaniya-mer-gosudarstvennogo-i-tamozhennogo-kontrolya-eksportiruemyh-lesomaterialov/viewer

Kunitskaya, O. A., & Belyayev, N. L. (2021). Obosnovaniye neobkhodimosti povysheniya effektivnosti ucheta kruglykh lesomaterialov [Justification of increasing the roundwood accounting efficiency]. *Journal of Vestnik AGATU, 4*(4), 73-79. http://www.vestnik-agatu.ru/wp-content/uploads/2021/12/73-79.pdf

Metodiki izmereniya lesomaterialov [Methods for measuring timber]. (2020). Retrieved on 07 June, 2022 from https://customs.gov.ru/uchastnikam-ved/spravochnaya-informacziya/metodiki-izmereniya-lesomaterialov

Nalivayko, Yu. A., & Denisova, N. A. (2020). Metodiki izmereniya ob"ema pilo- i lesomaterialov i ih vliyanie na raschet tamozhennyh platezhej [Methods for measuring the volume of sawn and timber products and their impact on the calculation of customs payments] *Proceedings of the Institute of Business Communications. T.8. / Ministry of Education and Science of the Russian Federation; FGBU VO "St. Petersburg. state University of Industrial Technology and Design. SPb.: SPbGUPTD,* 142-148. http://publish.sutd.ru/docs/content/trudyibk8_2020.pdf

Shavkun, G. A. (2019). Lesnaya promyshlennost Rossii: sovremennyye problemy i puti ikh resheniya [Forest industry in Russia: modern problems and ways to solve them] *Journal of Vestnik Chelyabinskogo gosudarstvennogo universiteta, 7*(429), 102-109. https://cyberleninka.ru/article/n/lesnaya-promyshlennost-rossii-sovremennye-problemy-i-puti-ih-resheniya/viewer

Velkin, A. V., Goltyapina, I. Yu., & Rogoznaya, A. O. (2020). O problemakh kvalifikatsii deyaniy pri privlechenii k administrativnoy otvetstvennosti za nedeklarirovaniye i nedostovernoye deklarirovaniye tovarov [On the problems of qualification of actions when bringing to administrative responsibility for non-declaration and unreliable declaration of goods]. *Journal of Tamozhennoye delo, 1,* 20-26.