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CLASSIFICATION OF SPECIAL VEHICLES ON THE BASIS OF COMMODITY NOMENKLATURE OF FOREIGN ECONOMIC ACTIVITY

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Accordingly, it is possible to analyze all the above data and determine the operation intensity of a blade made of steel 40KHNL; the blade can effortlessly manage the cutting and bending operations.

CONCLUSION. When studying the structural composition, the researchers concluded that the applied steel 40KHNL could be optimally used in further operation. However, it is necessary to mark the fact of worldwide significance concerning the replacement of this material with other more modern types of materials.

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CLASSIFICATION OF SPECIAL VEHICLES ON THE BASIS OF COMMODITY NOMENKLATURE OF FOREIGN ECONOMIC ACTIVITY

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Abstract: *This article classifies the types of special vehicles as a commodity due to various technical changes in the technical and specific parameters of special vehicles, insufficient accuracy of attachment and parameters of additional vehicles. detected. As a result of the*

growing demand for special vehicles, the attachment of additional parts (exterior and interior design changes) by manufacturing plants has led to the classification of this vehicle into another category. As a result of the analysis, we can see in the analysis that from January 1, 2019 to 2022, a total of 11 others (others) CN FEA on 8704 commodity groups imported 8364 special vehicles worth 286 779.7 million US dollars.

The need to improve the unified system of car classification according to CN FEA, was identified. 1 new national ten-digit brand code loaders – 842790000 1; tractors – 842890710 1; excavators – 842952900 1; CN FEA was developed and recommended for practice through detailed coverage (using details) of the technical characteristics of special vehicles.

Keywords: *special vehicles, classification, Commodity Nomenclature of Foreign Economic Activity (CN FEA), classification scheme, brand code, engine capacity, body on-board platform, specialized body with specific load type, body for non-specific special works, formalized with 8704 brand position, sub-position, sub-position vehicles.*

INTRODUCTION. Currently, scientists are conducting research aimed at identifying the characteristics of goods based on the HS, their classification, determination of the classification code, solving problems of duty-tariff and non-tariff regulation of Foreign Economic Activity, as well as creating a universal approach to their assessment. In this regard, special attention is paid to the analysis of factors that are the reason for the low collection of customs duties to the state budget when classifying special vehicles according to HS, the creation of an automated classification system based on the characteristics of motor cars, the development in international economic relations of a classification system of commodity properties based on the harmonized system of the World Customs Organization, methods and algorithms for determining the commodity code without the human factor, as well as application in customs practice.

Today, the final list of special vehicles is not defined by any law, but special equipment installed in the vehicle is required to be provided by the vehicle manufacturer or registered as an amendment to the exterior and interior design of the vehicle. Re-equipment of the vehicle is carried out state registration with the appropriate marks in the technical passport of the vehicle and the vehicle registration certificate. In accordance with the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated April 25, 2017 No 237 "On approval of general technical regulations for the safety of circulating wheeled vehicles" The TN code is inextricably linked to customs rates.

The Russian Federation uses an international classification based on the recommendations of the United Nations Economic Commission for Europe (UNECE) for the certification of motor vehicles. This classification applies to general standards, the development of customs regulations, and in other similar cases. According to the classification based on the recommendations of the BMI EIK, it is proposed to divide all cars, motorcycles and trailers into the following main groups: L, M, N, O. Classification and tariffs” [1].

Table. 1

The 1st number of the vehicle index	Class of light vehicle	Engine operating capacity, l (dm^3)
1	Special small	Till 1,2
2	Small	From 1,3 till 1,8
3	Middle	From 1,9 till 3,5
4	Big	More than 3,5
5	Huge	Operating capacity is not regulated

The classification and designation of trucks is divided into 7 classes depending on the total weight (table 2).

Table. 2

The 1st number of the truck index (class of the truck)	Gross weight, t (tons)
1	Till 1,2
2	From 1,2 till 2,0
3	From 2,1 till 8,0
4	From 9 till 14
5	From 15 till 20
6	From 21 till 40
7	More than 40

Designation of special vehicles of categories L, M and N:

1. Category L - Motor vehicle

- Motorcycles, scooters, tricycles - categories L3, L4 and L5
- ATV - L6 and L7 categories

2. Category M - Passenger vehicles

- Cars - category M1
- Buses, trolleybuses, specialized passenger vehicles - category M2, M3

3. Category N - Trucks

- Truck - category N1, N2 and N3

For the relevant categories of these 3 categories are related to the performance of special tasks of vehicles, designed for the carriage of passengers and cargo, for which a special body and (or) special equipment and other relevant technical parameters meet the requirements.

Classification and designation of passenger vehicles are divided into 5 classes (table 1) [2].

MATERIAL AND METHODS. According to GOST R 52051-2003, vehicles of categories M, N and O can be divided into special vehicles designed for passenger and cargo transportation, associated with the performance of special functions that require a special body and (or) special equipment. The designation of the category of special purpose vehicles must be completed with the symbol "C". For example, an M_2 ambulance must have an “M_2C” sign. At the first regional workshop on December 20, 2019 to discuss the use of data analysis to assess risks in the classification process, customs organizations around the world are analyzing data to identify risks. It is emphasized that it is important to improve the methods of increasing accuracy through the use of data analysis, quantifying economic risks and ensuring the balance of customs control [3]. Scheme of classification of special carrier trucks (picture 1).

As a result of the growing demand for special vehicles, the attachment of additional parts (exterior and interior design changes) by manufacturing plants has led to the classification of this vehicle into another category.

The classification of special vehicles is regulated by a state standard. According to this standard, a special vehicle is a vehicle designed for the carriage of goods and passengers, associated with the performance of special functions, in which the presence of a specialized body and equipment is a prerequisite. These vehicles include:

- Special transport of the Ministry of Emergency Situations;
- Truck cranes and drilling rigs mounted on truck chassis;
- Car repair shops, car shops and thermal vans;
- Mobile laboratories;
- Replacement of special transport;

- Wagon houses of various types, mounted on commercial vehicles or instead of vans, etc [4].

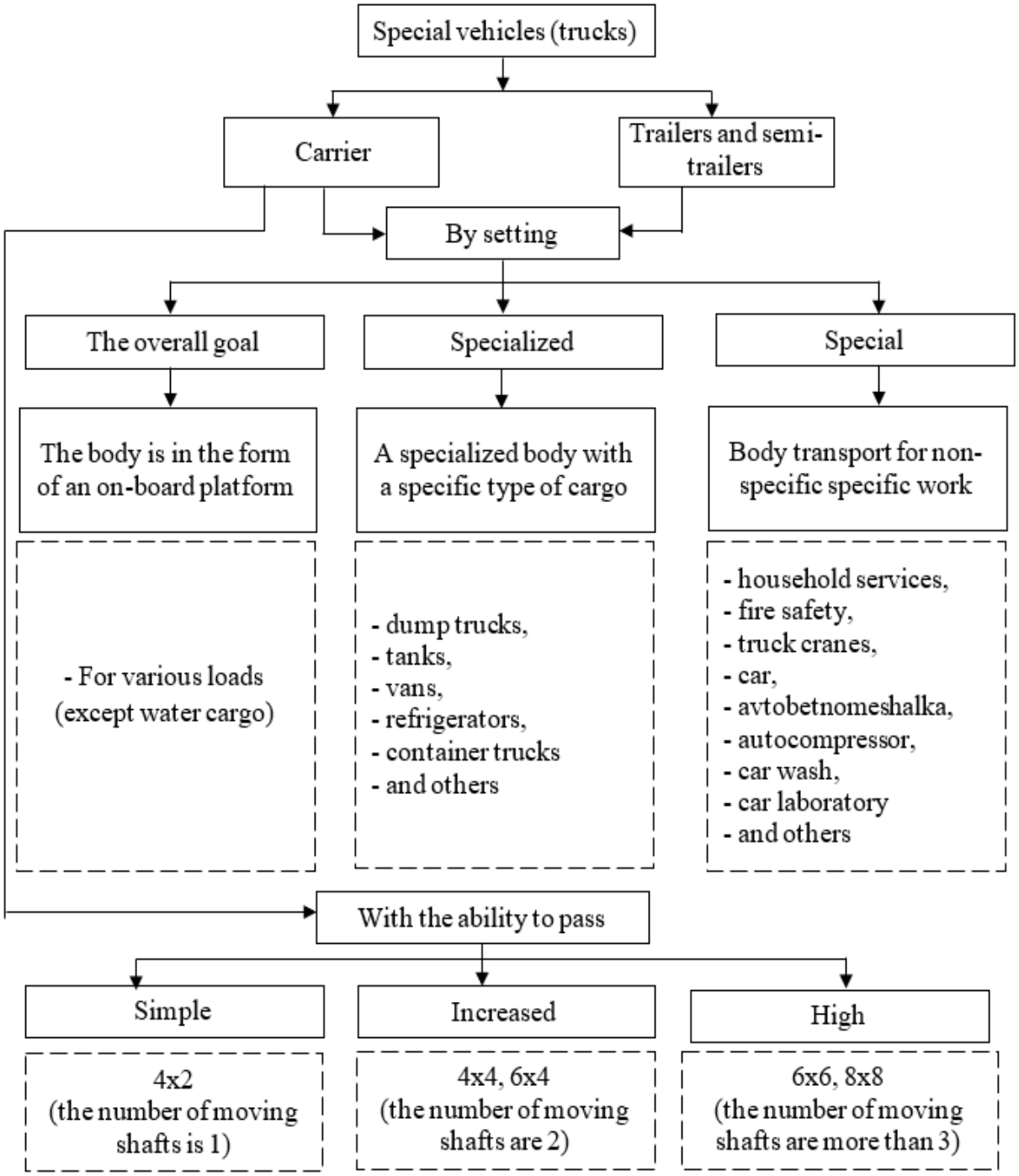


Fig. 1. Scheme of classification of special carrier trucks.

Problems in the classification of special vehicles according to CN FEA. The most common problems in the practical activities of customs authorities, in particular, customs control, classification of goods and means of transport, as well as their identification are [5,6]:

1. Partial or incorrect description of land vehicles based on the information in the documents intended for customs clearance;
2. Incorrect classification of land vehicles;
3. Difficulties in creating product nomenclature and using basic interpretation rules (BRI);

4. Lack of practical skills of customs specialists in the use of special materials that help in the classification of land vehicles (references, databases);

5. Unclear interpretation of vehicle names in accordance with CN FEA in current trade practices and customs classification;

6. After the adoption of the Customs Union in accordance with the CN FEA and the observed errors are also recorded in the CN FEA Unified Automated Information Systems (UAIS).

According to the results of the study and analysis: 8704 commodity positions consist of a total of 63 sequences, 6 harmonized system commodity subheadings, 1 mixed commodity nomenclature of the EU member states (KNEES), 11 commodity subheadings of the CIS countries, 45 member states of the Eurasian Economic Community and the Republic of Uzbekistan brand subsection CN FEA can meet motor vehicles for cargo transportation. To them,

- dump trucks for off-road use;
- specially designed for transportation of highly radioactive materials;
- vehicles equipped with a loading and unloading device (such as a "forwarder") designed to transport timber from the cutting point to the point of installation or on the road;
- 4-lane vehicles with two wheeled carts designed to carry large volumes of cargo with a length of more than 24 m in swampy or snowy areas.

At item 8704 we can see that the goods depend on the CN FEA code for the following parameters (Picture 2). As can be seen from Figure 2, the brand code of special vehicles in commodity position 8704 according to CN FEA shows that its technical and specific characteristics depend. In our research work, the last January 1, 2019 to 2021 As of December 31, 8704 special vehicles on commodity positions were registered in the import mode Box 33 was analyzed in relation to the “Commodity Code” and Box 31 was analyzed in relation to the product description.

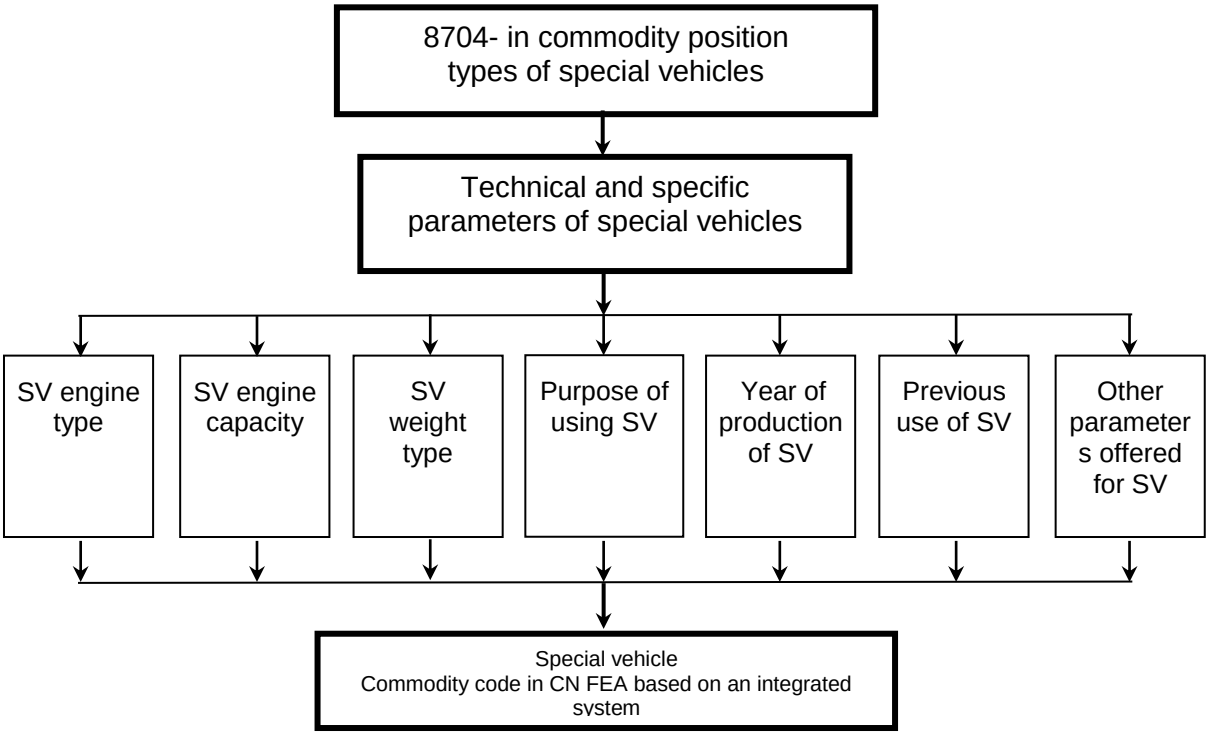
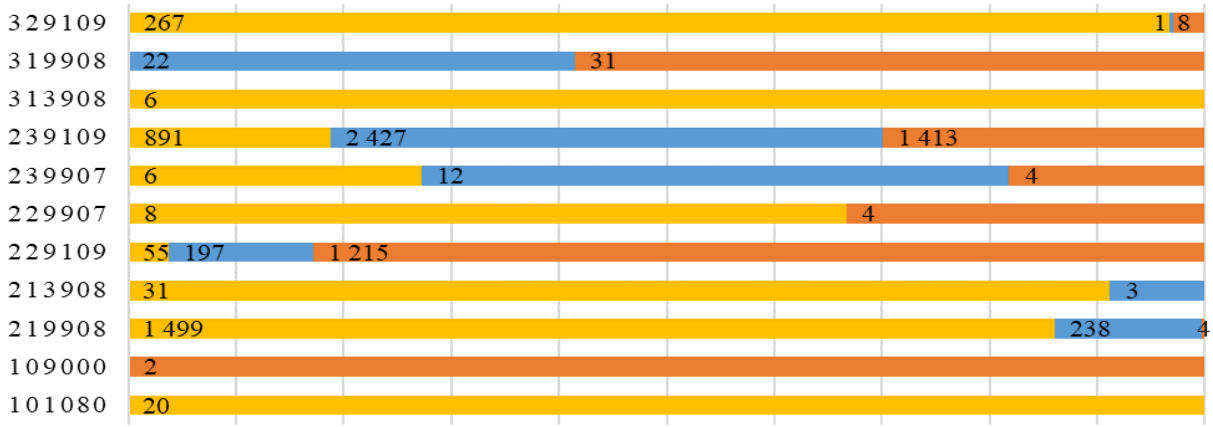


Fig. 2. Sequence structure for determining the brand code of a special vehicle in position 8704 in accordance with CN FEA

RESULTS AND DISCUSSION. Today, from January 1, 2019 to December 31, 2021, the total number of motor vehicles for the import of motor vehicles for freight in the Republic on 28 sub-items 8704 (others) is 28643 units. of which 8364 (29.2%) vehicles were registered due to insufficient and inaccurate changes in various technical changes, attachment and parameters of additional vehicles.

Numerical diagrammatic table of CN FEA of motor vehicles for 8364 units of freight imported on 8704 commodity positions for 2019-2021 (Picture 3).



	101080	109000	219908	213908	229109	229907	239907	239109	313908	319908	329109
2019 year	20		1 499	31	55	8	6	891	6		267
2020 year			238	3	197		12	2 427		22	1
2021 year		2	4		1 215	4	4	1 413		31	8

Fig. 3. Information on vehicles registered over the years under subheading 8704

Information on motor vehicles for cargo transportation imported to the Republic from foreign countries 8704 commodity positions for 2019-2021 is shown in Figure 4.

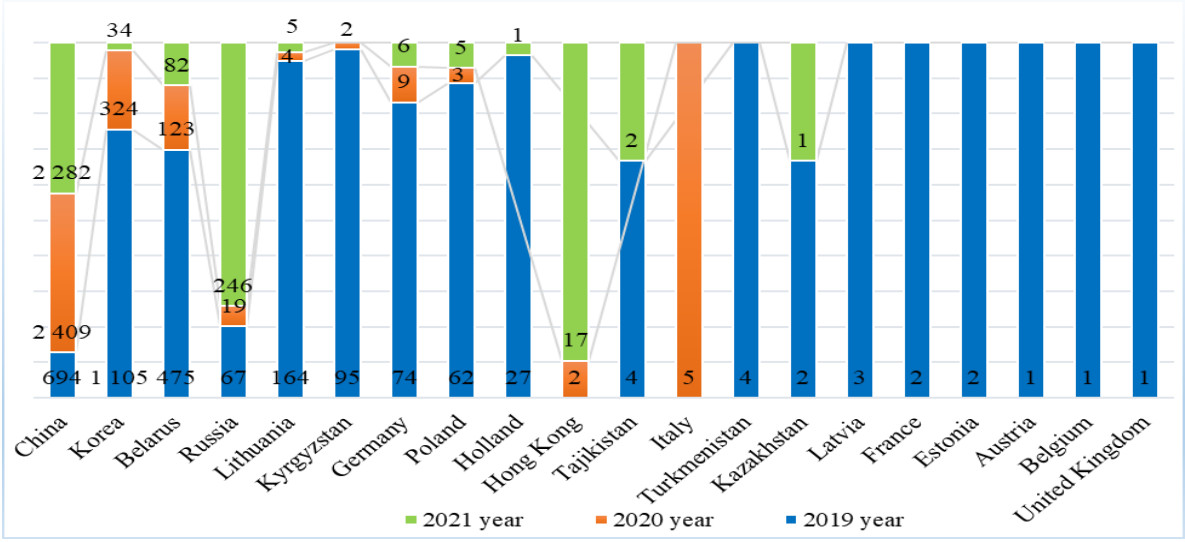


Fig. 4. Information on vehicles from foreign countries registered over the years under subheading of goods position 8704 (others)

As a result of the analysis, we can see in the analysis that from January 1, 2019 to 2022, a total of 11 others (others) CN FEA on 8704 commodity groups imported 8364 special vehicles worth 286 779.7 million US dollars. The analysis clearly shows that the country's import potential has been growing over the years.

Table 3

Analysis of item 8704 in relation to the "Code of the goods" of column 33 of the CCDs registered in the import regime.

Regim code FEA NG	Total		2019 year		2020 year		2021 year	
	Quantity	Value thousand US dollars)	Quantity	Value (thousand US dollars)	Quantity	Value (thousand US dollars)	Quantity	Value (thousand US dollars)
Total	8 364	286 779,7	2 783	71 780,0	2 900	113 885,2	2 681	101 114,5
8704239109	4 731	218 941,1	891	47 541,4	2 427	104 190,1	1 413	67 209,6
8704229109	1 467	43 492,1	55	1 918,2	197	8 633,8	1 215	32 940,2
8704319908	53	36,0			22	22,5	31	13,5
8704329109	276	16 522,4	267	16 009,4	1	64,9	8	448,1
8704219908	1 741	4 230,9	1 499	3 719,7	238	501,9	4	9,4
8704229907	12	196,0	8	94,8			4	101,2
8704239907	22	1 044,7	6	345,5	12	463,3	4	235,9
8704109000	2	156,7					2	156,7
8704213908	34	76,2	31	67,4	3	8,8		
8704313908	6	26,8	6	26,8				
8704101080	20	2 056,8	20	2 056,8				

Until January 1, 2019-2022, according to the code CN FEA8704239109, the technical parameters of the vehicle, mainly motor vehicle types, worth $ 218,941.1 million were imported without significant changes. A total of 4,731 vehicles were imported under the CN FEA code over 3 years, of which 3,539 (74.8%) were registered as dump trucks. The turnover of the registered vehicle in 2020 alone is 90558.58 million US dollars (2187 dump trucks). The car is a wheeled vehicle with an independent power source, designed to transport goods and people on land without rails or to perform special work using devices mounted on it, with comfort and safety, and the engine, which is one of its parts, was an important factor.

Table 4

Information about registration of vehicles

Years	Engine operating capacity sm3															
	6494	8900	9700	9726	9839	11150	11596	11762	11946	12130	12419	12880	13120	14860	Not specified	Total
2019				142			129	17	4			2		95	502	891
2020			54	2019			39	2			2			32	279	2427
2021	1	2		612	3	5	6			299			1	21	463	1413
Total	1	2	54	2773	3	5	174	19	4	299	2	2	1	148	1244	4731

The car is a wheeled vehicle with an independent power source, designed to transport goods and people on land without rails or to perform special work using devices mounted on it, with comfort and safety, and the engine, which is one of its parts, was an important factor. That is, the engine determines how much power the vehicle has. According to the code CN FEA8704239109 we can see that the engine capacity of a total of 4731 units of vehicles for 3 years was irregularly formalized Table 4. In accordance with the current requirements of the World Customs Organization, a new CN FEA code will be assigned to the relevant product group in accordance with the established standards for goods (s) with a turnover of more than $ 50 million per year.

As a result of the analysis, it is important for the Republic of Uzbekistan, as well as any other country in the society, to have its own rating on the classification of vehicles and to improve it in accordance with the requirements of the FEA NG. For FEA participants, both for customs purposes, it is important to ensure the economic security of the country. As a result, the FEA process will be accelerated, FEA participants will systematically simplify the process of customs clearance, ensure proper collection of customs duties to the state treasury under the CN FEA brand code, ensure accurate maintenance of customs statistics on export-import processes.

CONCLUSION. Currently, there are uncertainties in determining the commodity code based on CN FEA in the turnover of goods in the FEA between countries. The main technical characteristics and technical classification of special vehicles manufactured in foreign countries were considered. The need to improve the unified system of car classification according to CN FEA, was identified. 1 new national ten-digit brand code loaders – 842790000 1; tractors – 842890710 1; excavators – 842952900 1; CN FEA was developed and recommended for practice through detailed coverage (using details) of the technical characteristics of special vehicles.

In order to improve the mechanism of ensuring a coherent link between the description of goods, the Commodity Code and customs rates, the State Customs Committee introduced into practice the two-stage classification methods developed for special vehicles in accordance with paragraph 8704 of the FEA NG. As a result, it was possible to coordinate the integration of the two-stage classification method of form control, the logical control method of verification of 31 graphs with 33 graphs of cargo customs declaration. The proposed new CN FEA commodity codes have allowed for accurate and complete collection (collection) of customs duties, the correct formation of customs statistics, as well as ensuring national economic security.

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STATIC PROBLEM OF THE ASYMMETRIC WEDGE

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Abstract: *In the article, the equations of the equilibrium state were derived by the method of forces addition, and the reaction forces of constraints of the wedge pair were determined. A mathematical expression for determining the reaction force of an axisymmetric wedge pair was obtained which generalizes the formula (found in literature) for determining the reaction force of constraints of a given object under constant. Research methods are based on the classical laws of theoretical mechanics to derive an equilibrium state equation and an analytical method for determining the reaction force of constraints.*

Keywords: *reaction forces, equilibrium state, wedge pairs, constant force.*

INTRODUCTION. Wedge pairs are found in many mechanisms used in mechanical engineering. Agricultural machines are equipped with V-belt and wedge friction gears; wedge valves are used in oil product transportation lines; freight car bogies are equipped with wedge spring-friction sets. Wedge pairs are widely described in specific literature [1, 2].

A model was considered and a method was developed for calculating the reaction of constraints of a spring-friction set of a freight car bogie, taking into account the possible edge contact of friction bodies with separate faces [3].

Using the method of forces addition between two infinitesimal sections of the rod, in accordance with the d'Alembert principle, a differential equation for the dynamics of a wedge pair was derived in [4]. The general and particular solutions of the differential equation of longitudinal vibrations of a wedge pair were presented and their propagation under the action of a constant force corresponding to the given initial and boundary conditions was studied.