

ADOPTED

by Decision of the Council of the
Eurasian Economic

Commission dated July 20, 2012 No. 60



TECHNICAL REGULATIONS
CUSTOMS UNION

TR TS 031/2012

On the safety of agricultural and forestry

tractors and trailers for them

CONTENT

Preface.....	4
Article 1 Scope.....	4
Article 2 Definitions.....	5
Article 3 Rules of circulation on the market.....	7
Article 4 Safety requirements.....	8
Article 5 Ensuring compliance with safety requirements.....	9
Article 6 Confirmation of conformity.....	9
Article 7 Labeling with a single sign of product circulation on the market member states of the Customs Union.....	13
Article 8 Protective clause.....	14
Appendix 1 List of components of tractors or trailers that are subject to the requirements of the technical regulations of the Customs Union "On the safety of agricultural forestry tractors and trailers for them" (TR TS 031/2012).....	15
Appendix 2 Forms of technical descriptions submitted by the manufacturer (person authorized by the manufacturer), importer in order to confirm the compliance of tractors and trailers with the requirements of the technical regulations of the Customs Union "On the safety of agricultural forestry tractors and trailers for them" (TR TS 031/2012).....	18
Appendix 3 Classification of tractors and trailers by category and types in accordance with technical Regulations of the Customs Union "On the safety of agricultural forestry tractors and trailers for them" (TR TS 031/2012).....	37
Appendix 4 List of safety requirements for tractors and trailers in accordance with the technical regulations of the Customs Union "On the safety of agricultural forestry tractors and trailers for them" (TR CU 031/2012).....	40
Appendix 5 Safety requirements for tractors and trailers in accordance with Appendix 4 to this technical regulation of the Customs	



Union, in accordance with the technical safety regulations of the Customs for
tractors and trailers union *ABOUT agricultural forestry
for them" (TR TS 031/2012)..... 49 And

Appendix 6 Tractor manufacturer's plate and classification

technically permissible towed masses in
compliance with technical forestry safety
Customs agricultural union *ABOUT regulations
And
tractors and trailers for them" (TR TS 031/2012)..... 59

PREFACE

1. These technical regulations of the Customs Union were developed in accordance with the Agreement on common principles and rules of technical regulation in the Republic of Belarus, the Republic of Kazakhstan and the Russian Federation dated November 18, 2010.

2. These technical regulations of the Customs Union have been developed with the aim of establishing, in the single customs territory of the Customs Union, uniform mandatory requirements for the application and implementation of wheeled and tracked agricultural and forestry vehicles.

tractors and trailers for them, ensuring the free movement of wheeled and tracked agricultural and forestry tractors and trailers put into circulation in the single customs territory of the Customs

union.

3. If other technical regulations of the Customs Union have been adopted in relation to tractors and trailers, establishing requirements for tractors and trailers, then tractors and trailers must comply with the requirements of these technical regulations of the Customs Union, which apply to them

distributed by.

Article 1. SCOPE OF APPLICATION

1. These technical regulations of the Customs Union applies to newly manufactured and imported wheeled and tracked agricultural and forestry tractors (hereinafter referred to as tractors) and trailers for them (hereinafter referred to as trailers), released into circulation in the single customs territory of the Customs Union,

regardless of country of origin.

This technical regulation of the Customs Union applies for tractors and trailers with a maximum design speed of at least 6 km/h.

The requirements of this technical regulation apply also for newly manufactured and imported components of tractors and trailers (hereinafter referred to as components) affecting their safety and released into circulation in the single customs territory of the Customs Union separately from tractors and trailers, regardless of the country of origin. The list of components that are subject to the requirements of this technical regulation of the Customs Union is given in Appendix 1 to this technical regulation of the Customs Union.

2. These technical regulations of the Customs Union does not apply to:

tractors and trailers manufactured individually in an individual order, as well as in the order of individual creativity;

tractors and trailers put into circulation in the common customs territory of the Customs Union before the entry into force of this technical regulation of the Customs Union, used, in operation or undergone repair in the common customs territory of the Customs Union.

3. This technical regulation of the Customs Union establishes requirements for tractors, trailers and their components in order to protect human life and health, property, protect the environment, as well as prevent actions that mislead consumers (users) regarding their purpose and safety.

Article 2. DEFINITIONS

In this technical regulation of the Customs Union apply the following terms and their definitions:

ballast weights – weights intended for installation on a tractor to additionally load the front and (or) rear axle;

towing device - a structural element of the tractor located in front of the tractor, providing attachment of devices (for example, a bar or towing rope) for towing it;

commissioning is a documented event that records the readiness of a tractor or trailer for its intended use;

tractor height – the distance measured vertically between the supporting surface and the point of the tractor located at the greatest distance from the supporting surface, excluding the antenna. When determining height, the tractor must be equipped with new tires having the largest static radius specified by the manufacturer;

tractor length - the distance measured horizontally between vertical planes perpendicular to the longitudinal axis of the tractor and passing through its extreme points, excluding all mirrors, starting handles, front or side marker lights;

permissible towed weight – the weight that the tractor can tow. The permissible towable weight may include: the weight of one or more towed trailers, the weight of agricultural or forestry vehicles;

manufacturer - a legal entity or an individual as individual entrepreneur carrying out on his own behalf production and sale of a tractor, trailer or component and responsible for its compliance with the safety requirements of the technical regulations of the Customs Union;

An importer is a resident of a member state of the Customs Union, who has concluded a foreign trade agreement with a non-resident of a member state of the Customs Union for the transfer of tractors, trailers or components, carries out the sale of tractors, trailers or components and is responsible for their compliance with the safety requirements of the technical regulations of the Customs Union;

tractor (trailer) category – characteristics of a tractor (trailer) used to establish requirements in the technical regulations of the Customs Union;

component - a device that is an integral part of a tractor or trailer, supplied to assembly production or as replacement (spare) parts for a tractor or trailer in operation, certification of which can be carried out separately from the tractor or trailer;

circulation of a tractor, trailer or component on the market - the processes of transition of a tractor, trailer or component to the consumer (user) in the single customs territory of the Customs Union, which takes place

tractor, trailer or component after completion of its manufacture;

trailer – a vehicle towed by a tractor intended for transporting goods for agricultural or forestry purposes. Trailers also include trailers in which part of the vertical load is transferred to the towing tractor (semi-trailers);

tire rolling radius - the ratio of the longitudinal component of the translational speed of the wheel to its angular speed;

certification tests – tests of a standard sample(s) of a tractor, trailer or component, based on the results

which a conclusion is made about the compliance of the tractor, trailer or component with the safety requirements of the technical regulations of the Customs union;

tractor curb weight - the weight of the tractor in operating condition, including the rollover protection device, with coolant, lubricants, fuel (tank filled to at least 90% of its nominal capacity), tools and operator;

mooring scheme - a scheme in accordance with which connection of lifting equipment during transportation;

technically permissible towed weight – maximum weight, installed by the tractor manufacturer, which the tractor can tow;

technical description - a document given in Appendix 2 to this technical regulation of the Customs Union, containing a list of information that the manufacturer (a person authorized by the manufacturer) and importer must indicate for certification;

type of tractor, trailer or component – tractors, trailers or components characterized by a set of identical design features recorded in technical descriptions, manufactured by one manufacturer. The type may have different variants and versions;

tractor - a wheeled or tracked mechanical vehicle with at least two axles and a maximum speed of at least 6 km/h, using predominantly traction force and intended primarily for towing, pushing, transporting or operating working equipment, used in agriculture or forestry farm;

towing hitch (TCU) – a device whose connecting elements, installed on the tractor and trailer, provide mechanical connection between them;

person authorized by the manufacturer - legal or natural a person registered in the prescribed manner by a member state of the Customs Union, who is determined by the manufacturer on the basis of an agreement with him to carry out actions on his behalf when confirming compliance and placing a tractor, trailer or component in the single customs territory of the Customs Union, as well as to assign

liability for non-conformity of the tractor, trailer or component requirements of the technical regulations of the Customs Union;

tractor width - the horizontal distance measured between vertical planes parallel to the longitudinal axis of the tractor and passing through its extreme points, excluding all mirrors, turn indicators, front or rear side marker lights, any parking lights, tire deformations caused by the weight of the tractor, retractable elements .

Retractable elements may include, for example, lifting steps.

Article 3. MARKET RULES

1. Tractors, trailers and components are put into circulation on the market

if they comply with this technical regulation of the Customs Union, as well as other technical regulations of the Customs Union, the effect which they are subject to, provided that they have passed confirmation of conformity in accordance with Article 6 of these technical regulations of the Customs Union, as well as in accordance with other technical regulations of the Customs Union, which apply to them.

2. Tractors, trailers and components, the compliance of which with the requirements of these technical regulations of the Customs Union has not been confirmed, should not be marked with a single sign of product circulation on the market of the member states of the Customs Union and are not allowed to be put into circulation on the market.

3. Tractors, trailers and components that are not marked with a single sign of circulation on the market of the member states of the Customs Union are not allowed to be put into circulation on the market.

Article 4. SAFETY REQUIREMENTS

1. The design of tractors and trailers must ensure safety
at all stages of the life cycle.

2. The classification of tractors and trailers by categories and types is given in Appendix 3 to these technical regulations
Customs Union.

3. The list of safety requirements for tractors of categories T1, T2, T3, T5, C (except C4) and trailers of category R, as well as UNECE standards and Rules establishing safety requirements and methods of their control, is given in Table 4.1 of Appendix 4 to this technical regulation of the Customs Union.

4. The list of safety requirements for special-purpose tractors of categories T4, C4, as well as UNECE standards and Rules establishing safety requirements and methods of their control, is given in table 4.2 of Appendix 4 to this technical regulation of the Customs Union.

5. Safety requirements for tractors and trailers
in accordance with Appendix 4 to this technical regulation of the Customs Union, are given in Appendix 5 to this technical regulation of the Customs Union.

Article 5. ENSURING COMPLIANCE WITH REQUIREMENTS SECURITY

1. Compliance of tractors and trailers with these technical regulations of the Customs Union is ensured by compliance with its requirements directly and by complying with the requirements of UNECE standards and Rules, as well as the requirements given in Annexes 4 and 5 to these technical regulations of the Customs Union.

Compliance of the components with this technical regulation of the Customs Union is ensured by fulfilling its requirements directly and by complying with the requirements of the UNECE standards and Rules given in Appendix 1 to this technical regulation of the Customs Union.

2. Methods for monitoring tractors and trailers necessary for assessing (confirming) compliance are established in standards and UNECE Rules given in Appendix 4 to this technical regulation of the Customs Union.

Component inspection methods required to carry out the assessment (confirmations) are established by the UNECE Rules ^v standards And given in Appendix 1 to this technical regulation of the Customs Union.

Article 6. CONFIRMATION OF COMPLIANCE

1. Before being placed on the market, tractors, trailers or components must undergo confirmation of compliance with the safety requirements of these technical regulations of the Customs Union.

Confirmation of conformity is carried out according to the schemes in accordance with the Regulations on the procedure for applying standard schemes for assessing (confirming) compliance in the technical regulations of the Customs Union, approved by the Commission of the Customs Union (hereinafter referred to as the Commission).

The classification of tractors and trailers by category and type for the purpose of confirming compliance is given in Appendix 3 to this technical regulation of the Customs Union.

Components, the confirmation of conformity of which is carried out separately, are given in Appendix 1 to this technical regulation of the Customs Union.

If the tractor or trailer manufacturer is a manufacturer of components supplied only to its own assembly plant,

confirmation of the conformity of the components specified in Appendix 1 to this technical regulation of the Customs Union is carried out on the basis of test reports issued by an accredited testing laboratory (center) included in the Unified Register of certification bodies and testing laboratories (centers) of the Customs Union or certificates of conformity.

Certification tests of tractors and trailers are carried out only if there are positive test results in accordance with paragraph 5 of clause 1 of this article or certificates of conformity for the components listed in Appendix 1 to this technical regulation of the Customs Union.

2. Tractors, trailers or components are subject to confirmation compliance in the form of certification (schemes 1c, 3c, 4c).

3. Certification of tractors, trailers or components produced in series is carried out according to scheme 1c. Tractors, trailers or components are submitted for certification by the manufacturer (a person authorized by the manufacturer).

Certification of a batch of tractors, trailers or components is carried out according to the 3c scheme, and a single product - according to the 4c scheme. A batch of tractors, trailers or components (single product) manufactured in the single customs territory of the Customs Union is represented by the manufacturer (person authorized by the manufacturer), a batch of tractors, trailers or components (single product) imported into the single customs territory of the Customs Union is represented by the importer or manufacturer (person authorized by the manufacturer).

4. Certification of tractors, trailers or components is carried out by an accredited certification body (conformity assessment (confirmation)), included in the Unified Register of Certification Bodies and Testing Laboratories (Centers) of the Customs Union.

Tests for certification purposes are carried out by an accredited testing laboratory (center), included in the Unified Register of Certification Bodies and Testing Laboratories (Centers) of the Customs Union.

5. When carrying out certification of tractors, trailers or components (schemes 1c, 3c, 4c):

5.1. manufacturer (person authorized by the manufacturer), importer provides the certification body (assessment (confirmation) of conformity) a set of documents for tractors, trailers or components, confirming the compliance of tractors, trailers or components with the safety requirements of this technical regulation of the Customs

union, which includes:

technical description of the tractor or trailer. The technical description must contain all the necessary information for completing the annex to the certificate of conformity. The form of technical descriptions is given in Appendix 2 to this technical regulation of the Customs Union. The technical description must also include a list of components that have certificates of conformity indicating the numbers of these certificates, messages regarding type approval under the UNECE Regulations;

main design documents related to the component as a whole (technical specifications, technical description, general view drawings, specification) (for certification of components);

operational documents;

a list of characteristics or indicators of a tractor or trailer from the list of safety requirements for tractors and trailers in tables 4.1 and 4.2 of Appendix 4 to this technical specification of the Customs Union regulations;

contract (supply agreement) or shipping documentation (for a batch of tractors, trailers or components (single product) (schemes 3c, 4c).

The following may be submitted as evidence:

test reports issued by an accredited testing laboratory (center) in relation to individual requirements according to tables 4.1 and 4.2 of Appendix 4 to this technical regulation of the Customs Union;

communications concerning type approval under UNECE Regulations;

5.2. the manufacturer takes all necessary measures to ensure that the production process is stable and ensures that manufactured tractors, trailers or components comply with the requirements of these technical regulations of the Customs Union;

5.3. certification body (assessment (confirmation) of conformity):

5.3.1. carries out sampling (samples);

5.3.2. identifies tractors, trailers or components

by establishing the identity of their characteristics with the characteristics established in Article 1 of this technical regulation of the Customs Union, the provisions established by Article 4 of this technical regulation of the Customs Union, and the documents listed in subparagraph 5.1 of paragraph 5 of this article;

5.3.3. sends for testing to an accredited testing center

laboratory (center) sample(s) of a tractor, trailer or component for compliance with the safety requirements of this technical regulation of the Customs Union;

5.3.4. conducts an analysis of the state of production (Scheme 1c).

If the manufacturer has a certified quality management system for production or development and production of tractors, trailers or components, assesses the ability of this system to ensure stable production of certified tractors, trailers or components that meet the requirements of these technical regulations of the Customs Union;

5.3.5. summarizes the test results of the tractor sample(s), trailer or component and production status analysis;

5.3.6. issues a certificate of conformity in a unified form approved Commission, with an annex to the certificate of conformity, which provides technical descriptions of tractors or trailers. Certificate validity period compliance for tractors, trailers or components produced serially is 5 years; for a batch of tractors, trailers or components (single product) the validity period is not established, while the certificate

compliance, the distinctive features of the product batch are indicated - identification numbers, information about the contract (supply agreement) or other;

5.4. manufacturer (person authorized by the manufacturer), importer:

5.4.1. applies a unified sign of product circulation on the market member states of the Customs Union;

5.4.2. After completing the confirmation of compliance, forms a set of documents for tractors, trailers or components, in which includes:

documents provided for in subclause 5.1 of clause 5 of this article;

test report(s);

results of analysis of the state of production;

certificate of conformity;

5.5. The certification body (conformity assessment (confirmation)) carries out inspection control over certified tractors, trailers or components by testing a sample (s) in an accredited testing laboratory (center) and (or) analyzing the state of production (Scheme 1c).

6. The set of documents for tractors, trailers or components must stored on the territory of the member states of the Customs Union for:
commercially produced tractors, trailers or components – from

manufacturer (a person authorized by the manufacturer) for at least 10 years from the date of removal (cessation) from production of these tractors, trailers or components;

a batch of tractors, trailers or components - from the manufacturer (person authorized by the manufacturer), importer for at least 10 years from the date of sale of the last product from the batch.

7. The set of documents must:

be performed in Russian and in the state language(s) of the member state of the Customs Union if there are corresponding requirements in the legislation(s) of the member state(s)

Customs Union;

be provided to state supervisory authorities upon their request.

Article 7. MARKING WITH A SINGLE SIGN FOR PRODUCTS IN THE MARKET OF THE MEMBER STATES CUSTOMS UNION

1. Tractors, trailers and components that meet the safety requirements of this technical regulation of the Customs Union and have passed confirmation of conformity in accordance with Article 6 of this technical regulation of the Customs Union must be marked with a single sign of product circulation on the market of the member states of the Customs Union.

2. Labeling with a single sign of product circulation on the market of member states of the Customs Union is carried out before release tractor, trailer or component into circulation on the market.

3. A single sign of product circulation on the market of the member states of the Customs Union is applied to each tractor and trailer or manufacturer's plate (marking plate) in any way that provides a clear and clear image throughout the entire service life of the tractor and trailer,
and is also given in the operating documents attached to it.

4. When marking components, a single sign of product circulation on the market of the member states of the Customs Union must be applied directly to each component (if technically possible) and on packaging, and is also given in the operating instructions attached to it.
documents

Marking of components with official approval marks is equivalent to marking with a single sign of product circulation on the market of member states of the Customs Union. If present on components

marking with an official approval mark, marking of such components with a single sign of product circulation on the market of member states of the Customs Union is not required.

5. Tractors, trailers or components are marked with a single sign of product circulation on the market of the member states of the Customs Union if they comply with the requirements of all technical regulations of the Customs Union, which apply to them.

Article 8. SAFETY CLAUSE

1. Member states of the Customs Union are obliged to take all measures to limit and prohibit the release into circulation of tractors, trailers and components in the single customs territory of the Customs Union, as well as withdrawal from the market of tractors, trailers and components that do not meet the safety requirements of this technical regulation of the Customs union.

to the technical regulations of the Customs Union
"On the safety of agricultural
and forestry tractors and trailers for them"

(TR TS 031/2012)

List of tractor or trailer components for which
requirements apply
technical regulations of the Customs Union
"On the safety of agricultural and forestry
tractors and trailers for them"
(TR TS 031/2012)

Table 1.1

Tractor or trailer component	Element present technical regulations Customs union or standard designation or UNECE Regulations, establishing requirements to component tractor or trailer	Standard designation or Rules EEC UN, establishing methods control
1	2	3
Mechanical towbars devices	STB 2028-2010	STB 2028-2010
Sound alarm devices ¹⁾ UNECE Regulation	No. 28 (00) Glass ¹⁾	UNECE Regulation No. 28 (00)
	UNECE Regulation No. 43 (00)/ Revision 2	UNECE Regulation No. 43 (00)/ Revision 2
Reflective devices ¹⁾	UNECE Regulation No. 3 (02)/ Revision 3	UNECE Regulation No. 3 (02)/ Revision 3
Tail lights and brake lights ¹⁾	UNECE Regulation No. 7 (02)/ Revision 4	UNECE Regulation No. 7 (02)/ Revision 4
Direction indicators ¹⁾	UNECE Regulation No. 6 (01)/ Revision 4	UNECE Regulation No. 6 (01)/ Revision 4
Accessories for rear license plate lighting ¹⁾	UNECE Regulation No. 4 (00)/ Revision 2	UNECE Regulation No. 4 (00)/ Revision 2

1	2	3
High beam headlights1)	UNECE Regulation No. 1- Revision 4 UNECE Regulation No. 8- Revision 4 UNECE Regulation No. 20 (03)/ Revision 3 UNECE Regulation No. 98 (00)/ Revision 1 UNECE Regulation No. 112 (00)/ Revision 1	UNECE Regulation No. 1- Revision 4 UNECE Regulation No. 8- Revision 4 UNECE Regulation No. 20 (03)/ Revision 3 UNECE Regulation No. 98 (00)/ Revision 1 UNECE Regulation No. 112 (00)/ Revision 1
Low beam headlights1)	UNECE Regulation No. 1- Revision 4 UNECE Regulation No. 8- Revision 4 UNECE Regulation No. 20 (03)/ Revision 3 UNECE Regulation No. 98 (00)/ Revision 1 UNECE Regulation No. 112 (00)/ Revision 1	UNECE Regulation No. 1- Revision 4 UNECE Regulation No. 8- Revision 4 UNECE Regulation No. 20 (03)/ Revision 3 UNECE Regulation No. 98 (00)/ Revision 1 UNECE Regulation No. 112 (00)/ Revision 1
Fog lights1)	UNECE Regulation No. 19 (03)/ Revision 5	UNECE Regulation No. 19 (03)/ Revision 5
Rear fog lights1)	UNECE Regulation No. 38 (00)/ Revision 2	UNECE Regulation No. 38 (00)/ Revision 2
Reversing lights1)	UNECE Regulation No. 23 (00)/ Revision 3	UNECE Regulation No. 23 (00)/ Revision 3
Parking lights1)	UNECE Regulation No. 77 (00)/ Revision 1	UNECE Regulation No. 77 (00)/ Revision 1
Tires	UNECE Regulation No. 106 (00)	UNECE Regulation No. 106 (00)
Engine	Clause 14 applications 5 present technical regulations of the Customs Union UNECE Regulation No. 24 (03)/ Revision 2	UNECE Regulation No. 96 (02)/ Revision 1 UNECE Regulation No. 49 (04)/ Revision 32) UNECE Regulation No. 24 (03)/ Revision 2
Seat	GOST 20062-96	GOST 20062-96
Speed limiting devices1) UNECE Regulation	on No. 89 Speedometers1)	UNECE Regulation No. 89
	UNECE Regulation No. 39 (00)/ Revision 1	UNECE Regulation No. 39 (00)/ Revision 1

1	2	3
Rear view mirrors ¹⁾	UNECE Regulation No. 46 (02)/ Revision 3	UNECE Regulation No. 46 (02)/ Revision 3
Seat belts ¹⁾	UNECE Regulation No. 16 (04)/ Revision 5 GOST 26879-88	UNECE Regulation No. 16 (04)/ Revision 5 GOST 26879-88
Cabin	Clause 12.1 of Appendix 5 present technical regulations of the Customs Union	STB ISO 8082-2004 GOST R ISO 5700-2008 GOST R ISO 3463-2008 GOST R ISO 3449-2009 GOST R ISO 8083-2008 GOST R ISO 8084-2005
<p>¹⁾ If there is a certificate of conformity for the component issued by an accredited body for certification (assessment (confirmation) of conformity) included in the Unified Register of Bodies for certification and testing laboratories (centers) of the Customs Union, based on the message, concerning type approval under UNECE Regulations, confirmation of conformity the specified component in accordance with Article 6 of these technical regulations of the Customs Union is not held.</p> <p>²⁾ For positive ignition engines running on natural gas or liquefied gas oil gas.</p>		

Appendix 2 to
the technical regulations of the Customs Union
“On the safety of agricultural and forestry
tractors and trailers for them” (TR CU 031/2012)

**Forms of technical descriptions submitted by
the manufacturer (person authorized by the manufacturer),
importer in order to confirm the compliance of tractors and
trailers with the requirements of the technical regulations of the Customs
Union “On the safety of agricultural and forestry
tractors and trailers for
them” (TR TS 031/2012)**

1. Complete list of main characteristics A

complete list of main characteristics is filled in if there is not yet one or more certificates of conformity, messages relating to the official type approval under the UNECE Rules for compliance with individual requirements. 0 General information 0.1 Brand name (registered name of the manufacturer)

.....
0.2 Type (if necessary, indicate options and versions)..... 0.2.1
Trademark (if necessary) 0.3 Characteristics
for identifying the type of tractor (trailer) (if
any).....

0.3.1 Manufacturer’s plate (location and installation method)
.....

0.3.2 Chassis number (place of application)

0.4 Category of tractor (trailer) 0.5

Name and address of the manufacturer.....

0.6 Location and method of installation of registration plates and inscriptions
(photos or drawings) 0.7 For

components: place

and method of applying a single sign of product circulation on the market member
states of the Customs Union (approval mark)
.....

0.8 Address of the assembly plant..... 1 Main
design characteristics of the tractor (trailer) (Photos of the tractor
(trailer) ¾ front view and ¾



rear view, as well as a drawing with the indicated overall dimensions of the tractor (trailer)

1.1 Number of axles and wheels.....

1.1.1 Number and arrangement of wheels with dual tires (if necessary).....

1.1.2 Number and location of controlled axes

1.1.3 Drive axles (number, location and drive).....

1.1.4 Brake axles (number, location)

1.2 Position and placement of the drive motor

1.3 Steering wheel position: right/left/middle.....

1.4 Reversible operator's position: yes/no 1.5 Chassis:

block frame/spinal type/spar/hinge/other

designs.....

2 Weight and dimensions (if necessary, provide a link to the design documentation)

2.1 Curb weight(s)

2.1.1 Curb weight in operating condition

(used as initial value)

(including rollover protection device, without additional accessories, but with coolant, lubricants, fuel, tools and operator):

maximum.....kg

minimum.....kg

2.1.1.1 Distribution of curb weight along the axleskg

for semi-trailers or trailers with a central axle - static vertical load at the coupling point of the trailer hitch

.....N

2.2 Maximum weight specified by the manufacturer.....kg

2.2.1 Technically permissible maximum weight of the tractor (trailer)

depending on the type of tires.....kg

2.2.2 Distribution of maximum mass along the axleskg

for semi-trailers or trailers with a central axle - static vertical load at the coupling point of the trailer

hitchN

2.2.3 Limit values for the distribution of maximum mass along the axles in

percent.....

for semi-trailers or trailers with a central axle - static vertical load at the coupling point of the trailer hitch

.....N

Weight and tires

Number axes	Tires (sizes)	Acceptable load, N	Technically acceptable maximum weight per axle, kg	Technically acceptable static vertical load at the coupling point of the trailer hitch, N
1				
2				
3				

- 2.2.4 Payload.....
- 2.3 Ballast weight (total weight, material, number of parts).....
- 2.3.1 Distribution of ballast mass along the axes.....
- 2.4 Technically permissible towed mass(es) (depending on the type of connection).....kg
- 2.4.1 Trailer weight without brakeskg
- 2.4.2 Weight of trailer with independent brakingkg
- 2.4.3 Trailer weight with inertial brakingkg
- 2.4.4 Trailer weight with hydraulic or pneumatic brakes
.....kg
- 2.4.5 Technically permissible total weight(s) of the tractor and trailer (depending on the design of the trailer braking system)
.....kg
- 2.4.6 Hitch point position
- 2.4.6.1 Height of the coupling point above the supporting surface:
- 2.4.6.1.1 maximummm
- 2.4.6.1.2 minimummm
- 2.4.6.2 Distance from the vertical center plane of the rear axle:
- 2.4.6.2.1 maximummm
- 2.4.6.2.2 minimummm
- 2.4.6.3 Technically permissible static vertical load at the coupling point of the trailer hitch:
- 2.4.6.3.1 tractor.....N
- 2.4.6.3.2 semi-trailer or trailer with a central axle.....N
- 2.5 Base
- 2.5.1 Semi-trailer:
- 2.5.1.1 distance between the hitch axle and the first rear axle.....mm
- 2.5.1.2 distance between the hitch point of the trailer hitch and the rear point of the semi-trailer
.....mm
- 2.6 Maximum and minimum track size on each axle (measured between the center planes of single or dual wheels) (indicated by the manufacturer)
..... mm

2.7 Size range of tractor (trailer) (overall and with equipment for participation in road traffic)

2.7.1 Chassis assembly 2.7.1.1

Lengthmm

2.7.1.1.1 maximum permissible length of the tractor (trailer)mm 2.7.1.1.2

minimum permissible length of the tractor (trailer)mm 2.7.1.2

Width.....mm 2.7.1.2.1 maximum

permissible width of the tractor (trailer)mm 2.7.1.2.2 minimum permissible

width of the tractor (trailer)mm 2.7.1.3 Height (in working position) (with a height-
adjustable chassis during normal movement)mm

2.7.1.4 Front overhangmm 2.7.1.4.1

Front overhang angle:degrees 2.7.1.5 Rear overhang

.....mm 2.7.1.5.1 Rear overhang

angle:degrees 2.7. 1.5.2 Maximum and

minimum permissible overhang of the hitch point

.....mm

2.7.1.6 Ground clearance:

2.7.1.6.1 between the axles.....mm 2.7.1.6.2

under the front axles.....mm 2.7.1.6.3

under the rear axlesmm 2.7. 1.7 Maximum

permissible positions of the center of gravity of the structure and (or) internal configuration,
and (or) equipment, and (or) payload

.....

2.7.2 Overall dimensions of the tractor, including towing device 2.7.2.1 Length for

use in road traffic:

maximummm

minimummm

2.7.2.2 Width for road use:

maximummm

minimummm

2.7.2.3 Height for road use:

maximummm

minimummm

2.7.2.4 Front overhang:

maximummm

minimummm 2.7.2.5

Rear overhang:

maximummm

minimummm 2.7.2.6 Ground clearance:

maximum

.....mm

minimum.....mm 3 Engine

3.1 General 3.1.1

Main engine/motor type (manufacturer's name)

3.1.2 Type and trade name of the main engine and (if necessary) engine family
 3.1.3 Characteristics

to identify the type (if available on the engines), type of installation ...

..... 3.1.3.1 Location and
 mounting location of the engine identification number

3.1.3.2 Place and method of applying the number of the certificate of conformity

..... 3.1.4 Name and address of the manufacturer

..... 3.1.5 Address of the assembly plant

..... 3.1.6 Operating principle:

positive ignition/compression ignition direct injection/chamber

injection two-stroke engine/four-stroke engine 3.1.7

Fuel: diesel/

petrol/liquefied petroleum gas/other fuel Engine Family Type 3.2 Basic

Family Engine Characteristics

3.2.1 Compression Ignition Engine Characteristics 3.2.1.1

Manufacturer

..... 3.2.1.2 Designation of the sample established by the manufacturer

..... 3.2.1.3 Engine: two-stroke/four-stroke 3.2.1.4 Cylinder diameter:

.....mm

3.2.1.5 Stroke:mm 3.2.1.6

Number and arrangement of cylinders 3.2.1.7

Displacementcm³ 3.2.1.8 Rated

speedmin⁻¹ 3.2.1.9 Rotation speed at maximum

torque.....min⁻¹

3.2.1.10 Compression ratio

3.2.1.11 Description of combustion method

..... 3.2.1.12 Drawings of the combustion chamber and piston

crown 3.2.1.13 Minimum cross-section of the intake and
 exhaust channelsmm

3.2.1.14 Cooling system 3.2. 1.14.1

Liquid cooling 3.2.1.14.1.1 Type of coolant

3.2.1.14.1.2 Coolant pump(s): available/not available 3.2.1.14.1.3

Technical characteristics or brand, or type (if
 necessary).....

3.2.1.14.1.4 Drive gear ratio (if necessary) 3.2.1.14.2 Air cooling

3.2.1.14.2.1 Fan: available/not

available 3.2.1.14.2.2 Technical characteristics

or brand or type (if

- necessary).....
- 3.2.1.14.2.3 Drive gear ratio (if necessary)
- 3.2.1.15 Temperature allowed by the manufacturer
- 3.2.1.15.1 Liquid cooling: maximum engine outlet temperature
..... TO
- 3.2.1.15.2 Air cooling: starting point.....
Maximum temperature at the starting point.....K
- 3.2.1.15.3 Maximum charge air temperature at the outlet of the intercooler (if
equipped)K
- 3.2.1.15.4 Maximum temperature of exhaust gases at the outlet of the exhaust
manifold.....K
- 3.2.1.15.5 Engine oil temperature:
minimum.....K
maximumTO
- 3.2.1.16 Air blower: available/not available
- 3.2.1.16.1 Factory brand.....
- 3.2.1.16.2 Type
- 3.2.1.16.3 Description of the system (e.g. maximum pressure of the boost exhaust valve (if
equipped)
- 3.2.1.16.4 Charge air cooler: available/not available
- 3.2.1.17 Intake system: maximum permissible intake vacuum at rated speed and full load:
.....kPa
- 3.2.1.18 Exhaust system: maximum permissible back pressure in the exhaust system at rated
speed and full loadkPa
- 3.2.2 Additional devices that limit the emission of harmful substances (if available and not
specified in another paragraph)
Description and/or drawing(s).....
- 3.2.3 Fuel system
- 3.2.3.1 Fuel pump.....
Pressure:kPa or diagram with characteristics.....
- 3.2.3.2 Injection system
- 3.2.3.2.1 Pump
- 3.2.3.2.1.1 Factory brand(s)
- 3.2.3.2.1.2 Type(s).....
- 3.2.3.2.1.3 Performance: min⁻¹ (rated ³mm per clock cycle at frequency
engine rotation: speed)
..... min⁻¹ (at full injection) or diagram with
characteristics.....
Specify the method used: on the engine/on the pump stand
- 3.2.3.2.1.4 Fuel injection advance
- 3.2.3.2.1.4.1 Injection advance curve
- 3.2.3.2.1.4.2 Fuel injection advance angle
- 3.2.3.2.2 Pressurized fuel supply line

3.2.3.2.2.1 Length:	mm	3.2.3.2.2.2
Inner diameter:	mm	3.2.3.2.3 Nozzle(s)
Factory brand(s)		3.2.3.2.3.1
.....		3.2.3.2.3.2 Type(s)
.....		3.2.3.2.3.3 Pressure at the
initial moment of injection	kPa or pressure change diagram	
.....		3.2.3.2.4 Regulator
		3.2.3.2.4.1 Brand(s)
.....		3.2.3.2.4.2 Type(s).....
.....		3.2.3.2.4.3 Rotation speed at
the moment of stopping the fuel supply at full load:		
.....	min ⁻¹	3.2.3.2.4.4 Maximum
rotation speed without load:	min ⁻¹	3.2.3.2.4.5 Idle speed:
.....	min ⁻¹	3.2.3.3 Cold starting system engine
.....		3.2.3.3.1 Brand(s)
.....		
3.2.3.3.2 Type(s)		3.2.3.3.3
Description.....		3.2.4 Gas distribution
3.2.4.1 Maximum valve stroke, opening and closing angles determined in relation to top		
dead center, or similar data		
.....		
3.2.4.2 Initial or adjustment gaps		3.2.4.3
Variable valve timing system (if used and where: at the inlet and (or) exhaust)		
.....		3.2.4.3.1 Type: constant or plug-in
.....		3.2.4.3.2 Angle of
valve opening phase		3.2.5 Channel design
3.2.5.1 Location,		
Dimensions, quantity.....		
3.2.6 Electronic control		
functions (if the engine has electronic control functions, then their technical characteristics		
must be indicated)		3.2.6.1 Brand name.
3.2.6.2 Type		3.2.6.3 Unit number
.....		
.....		3.2.6.4 Location of the electronic control unit
3.2.6.4.1		
Controlled parameters.....		3.2.6.4.2
Controlled parameters		3.3 Family
of compression ignition engines		Main characteristics of the base engine of the family
3.3.1		List of engine types of the family
3.3. 1.1 Name of the engine		family.....
3.3.1.2 Technical		characteristics of the engine types of this family

					Base engine
Engine type					
Number of cylinders					
Rated speed, rpm					
Fuel supply volume per stroke at rated speed, mm ³					
Net power, kW					
Rotation speed at maximum torque, min ⁻¹					
Fuel supply volume per stroke at a rotation speed corresponding to the maximum torque, mm ³					
Maximum torque, Nm Minimum stable					
idle rotation, min ⁻¹ frequency					
Cylinder displacement (percentage) from the base engine)					100

3.4 Engine type within engine family

Main characteristics of the family engine

3.4.1 Characteristics of a compression ignition engine

3.4.1.1 Manufacturer.....

3.4.1.2 Designation of the sample as established by the manufacturer.....

3.4.1.3 Engine: two-stroke/four-stroke

3.4.1.4 Cylinder diameter:mm

3.4.1.5 Piston stroke:mm

3.4.1.6 Number and arrangement of cylinders.....

3.4.1.7 Working volumecm³

3.4.1.8 Rated speedmin⁻¹

3.4.1.9 Rotation speed at maximum torque.....min⁻¹

3.4.1.10 Compression ratio.....

3.4.1.11 Description of combustion method.....

3.4.1.12 Drawings of the combustion chamber and piston crown.....

3.4.1.13 Minimum cross-section of inlet and outlet channels

3.4.1.14 Cooling system

3.4.1.14.1 Liquid cooling

3.4.1.14.1.1 Type of coolant

3.4.1.14.1.2 Coolant pump(s): present/not present

3.4.1.14.1.3 Specifications or brand or type (if necessary)

.....

3.4.1.14.1.4 Drive gear ratio (if necessary).....

3.4.1.14.2 Air cooling

3.4.1.14.2.1 Fan: available/not available

3.4.1.14.2.2 Specifications or brand or type (if necessary)

-
- 3.4.1.14.2.3 Drive gear ratio (if necessary).....
- 3.4.1.15 Temperature allowed by the manufacturer.....
- 3.4.1.15.1 Liquid cooling: maximum engine outlet temperature:
.....K
- 3.4.1.15.2 Air cooling: starting point.....
Maximum temperature at the starting point.....K
- 3.4.1.15.3 Maximum charge air temperature at the outlet of the intercooler (if equipped).....K
- 3.4.1.15.4 Maximum temperature of exhaust gases at the outlet of the exhaust manifold.....K
- 3.4.1.15.5 Engine oil temperature:
minimum.....K
maximumK
- 3.4.1.16 Air blower: available/not available
- 3.4.1.16.1 Brand name.....
- 3.4.1.16.2 Type
- 3.4.1.16.3 System description (e.g. maximum boost exhaust valve pressure (if equipped))
.....
- 3.4.1.16.4 Charge air cooler: available/not available
- 3.4.1.17 Intake system: maximum permissible intake vacuum at rated speed and full load
.....kPa
- 3.4.1.18 Exhaust system: maximum permissible back pressure in the exhaust system at rated speed and full load:kPa
- 3.4.2 Additional devices that limit the emission of harmful substances (if available and not specified in another paragraph)
Description and (or) drawing(s).....
- 3.4.3 Fuel system
- 3.4.3.1 Fuel pump
Pressure: kPa or diagram with characteristics.....
- 3.4.3.2 Injection system
- 3.4.3.2.1 Pump
- 3.4.3.2.1.1 Manufacturer's brand(s)
- 3.4.3.2.1.2 Type(s).....
- 3.4.3.2.1.3 Performance..... 3 mm per clock cycle at frequency
engine rotation..... min^{-1} (rated speed)
..... min^{-1} (at full injection) or diagram with
characteristics.....
- Specify the method used: on the engine/on the pump stand
- 3.4.3.2.1.4 Fuel injection advance 3.4.3.2.1.4.1
Injection advance curve
- 3.4.3.2.1.4.2 Injection advance angle.....
- 3.4.3.2.2 Pressurized fuel supply line

- 3.4.3.2.2.1 Length:mm
- 3.4.3.2.2.2 Inner diameter:mm
- 3.4.3.2.3 Nozzle(s)
 - 3.4.3.2.3.1 Manufacturer's brand(s)
 - 3.4.3.2.3.2 Type(s).....
 - 3.4.3.2.3.3 Pressure at the initial moment of injectionkPa or pressure change diagram
- 3.4.3.2.4 Regulator
 - 3.4.3.2.4.1 Manufacturer's brand(s)
 - 3.4.3.2.4.2 Type(s).....
 - 3.4.3.2.4.3 Rotation speed at the moment of stopping the fuel supply at full load.....min⁻¹
 - 3.4.3.2.4.4 Maximum speed without loadmin⁻¹
 - 3.4.3.2.4.5 Idle speed.....min⁻¹
- 3.4.4 Cold starting system
 - 3.4.4.1 Manufacturer's brand(s)
 - 3.4.4.2 Type(s).....
 - 3.4.4.3 Description.....
- 3.4.5 Gas distribution
 - 3.4.5.1 Maximum valve stroke, opening and closing angles determined in relation to top dead center, or similar data
 - 3.4.5.2 Initial or adjustment gaps.....
 - 3.4.5.3 Variable valve timing system (if used and where: at the intake and/or exhaust)
 - 3.4.5.3.1 Type: permanent or plug-in
 - 3.4.5.3.2 Valve opening phase change angle 3.4.6
- Channel design
 - 3.4.6.1 Location, dimensions, quantity
- 3.4.7 Electronic control functions (if the engine has electronic control functions, then the characteristics must be specified) their technical
 - 3.4.7.1 Brand
 - 3.4.7.2 Type
 - 3.4.7.3 Node number.....
 - 3.4.7.4 Location of the electronic control unit
 - 3.4.7.4.1 Controlled parameters.....
 - 3.4.7.4.2 Controlled parameters
- 3.5 Fuel tank(s)
 - 3.5.1 Quantity, volume, materials
 - 3.5.2 Drawing, photograph or precise description showing the position of the tank(s)
 - 3.5.3 Spare fuel tank(s)
 - 3.5.3.1 Quantity, volume, materials.....



- 3.5.3.2 Drawing, photograph or precise description showing the position of the tank(s)
 -
- 3.6 Rated motor power:kW, atmin-1
with standard installation
 - 3.6.1 Additionally: power at the power take-off shaft (PTO) (if equipped) at rated speed(s)
 -
- 3.7 Maximum torque:.....N m, atmin-1
- 3.8 Other drive motors or motor combinations.....
- 3.9 Air filter
 - 3.9.1 Model(s).....
 - 3.9.2 Type(s).....
 - 3.9.3 Average vacuum at maximum power:kPa
- 3.10 Exhaust system
 - 3.10.1 Description and diagrams
 - 3.10.2 Model(s).....
 - 3.10.3 Type(s).....
- 3.11 Electrical system
 - 3.11.1 Rated voltage.....V, positive/negative
grounding
 - 3.11.2 Generator
 - 3.11.2.1 Type
 - 3.11.2.2 Rated power:.....W
- 4 Transmission
 - 4.1 Transmission diagram.....
 - 4.2 Transmission type (mechanical, hydraulic, electric, etc.)
 -
 - 4.2.1 Brief description of electrical/electronic devices (if available)
 -
 - 4.3 Moment of inertia of the engine flywheel
 - 4.3.1 Additional moment of inertia if there is no switching device.....
 - 4.4 Clutch type (if equipped)
 - 4.4.1 Maximum torque conversion.....
 - 4.5 Gearbox (type, clutch control, control method), when
availability
 - 4.6 Gear ratios (if any) with or without divider.....

Transfers	Transfer case gear ratio gears	Gear number	Gear ratio main gear ratio transfers	General
Maximum transmission gearbox1) 1 2	number			



3				
Minimum transmission number gearbox1) Reverse				
1				
...				
1) Continuously variable transmission.				

4.6.1 Maximum tire sizes on drive axles..... 4.7 Maximum estimated speed of the tractor (trailer) in top gear (provide calculation of the maximum speed):km/h 4.7.1 Measured maximum speed:km/h 4.8 Length of the path covered in one revolution of the driving wheelsmm 4.9 Speed regulator available/not available 4.9.1 Characteristics 4.10 Speedometer, tachometer and hour meter (if equipped) 4.10.1 Speedometer (if equipped) 4.10.1.1 Operating principle and description of the drive 4.10.1.2 Constant of the measuring device 4.10.1.3 Tolerance of the measured value 4.10.1.4 Overall gear ratio 4.10.1.5 Drawing of scale or other instrument panel devices 4.10.1.6 Brief description electrical/electronic devices 4.10.2 Tachometer and operating time meter: with/without 4.11 Differential lock: with/without 4.12 Power take-off shaft(s) (rotation speed and relation to engine speed (number, type, location) 4.12.1 Main power take-off shaft(s) 4.12.2 Other power take-off shafts 4.12.3 Protective guard of the power take-off shaft (characteristics, dimensions, drawings, photographs) 4.13 Protection of drive elements, protruding parts and wheels (descriptions, drawings, diagrams, photographs) 4.13.1 Protection of one surface 4.13.2 Protection of several surfaces ... 4.13.3 Protection from all sides..... 4.14 Brief description of electrical/electronic components (if any):

5 Axles

5.1 Characteristics of each axis 5.2 Brand (if necessary) 5.3 Type (if necessary)

6 Suspension (if equipped)

6.1 Possible tire-wheel combinations (smallest and largest possible tire and wheel sizes, characteristics, tire pressure, maximum load, rim sizes and front wheel-rear wheel combinations)

.....

6.2 Suspension design of each axle or each wheel (if equipped)

.....

6.2.1 Level adjustment: available/not available/optional

6.2.2 Brief description of electrical/electronic elements (if any):

.....

6.3 Other devices (if any)

7 Steering (diagrams)

7.1 Steering type: manual/power assisted/power driven/
with volumetric hydraulic drive

7.1.1 Reversible control station (description).....

7.2 Drive and control

7.2.1 Steering gear type (for front and rear wheels, if applicable)

.....

7.2.2 Linkage to wheels (also other types than mechanical linkage for front or rear wheels).....

7.2.2.1 Brief description of electrical/electronic structural elements (if any).....

7.2.3 Amplification method (if available)

7.2.3.1 Operating principle and functional diagram, brand and type

.....

7.2.4 Steering diagram showing the position of various devices operating the tractor, controls
influencing on helmsman

.....

7.2.5 Steering diagram

7.2.6 Adjustment range and method of actuating steering adjustment (if equipped)

.....

7.3 Maximum wheel steering angle (if necessary):

7.3.1 To the right.....degrees

Number of steering wheel revolutions.....

7.3.2 Leftdegrees

Number of steering wheel revolutions.....

7.4 Minimum turning circle diameter (without braking):

7.4.1 Right.....mm

7.4.2 Leftmm

7.5 Type of steering control adjustment (if necessary)

7.6 Brief characteristics of electrical/electronic components (if any)

.....

8 Brake system (drawings and control diagrams)

8.1 Service braking system.....

8.2 Auxiliary braking system (if equipped)	
8.3 Parking brake system.....	
8.4 Additional braking system(s) (especially retarder)	
8.5 For tractors with anti-lock braking system (ABS): description of the system operation (including electronic parts, if equipped), electronic block diagram, diagrams of hydraulic or pneumatic circuits.....	
8.6 List of parts that make up the brake system, their designation	
8.7 Maximum permissible tire sizes on braked axles	
8.8 Calculation of the braking system (ratio of the total braking force to the force applied to the control)	
8.9 Locking the left and right brake controls.....	
8.10 External energy sources (characteristics, energy storage capacity, maximum and minimum pressure, pressure gauge and pressure drop warning device, vacuum booster and compressor, compliance with pressure vessel regulations) 	
8.11 Tractors equipped with a trailer braking system	
8.11.1 Actuation of the trailer braking system (description, characteristics)	
8.11.2 Trailer connection: mechanical/hydraulic/pneumatic	
8.11.3 Connections, protective devices (description, drawing, diagram)	
8.11.4 Single-line/two-line brake drive	
8.11.4.1 Excess pressure in the line (single-line drive):kPa	
8.11.4.2 Excess pressure in the line (two-wire drive):kPa	
9 Visibility, glazing, wipers and rear-view mirrors	
9.1 Visibility	
9.1.1 Drawings or photographs showing the position of elements that are in the forward viewing area	
9.2 Glazing	
9.2.1 Position of the windshield relative to the seat reference point (SIP)	
9.2.2 Windshield(s)	
9.2.2.1 Material(s).....	
9.2.2.2 Installation method.....	
9.2.2.3 Tilt angle.....degrees	
9.2.2.4 Unified mark for the circulation of products on the market of the member states of the Customs Union (official approval mark)	
9.2.2.5 Additional equipment for the windshield, its location and a brief description of possible electrical/electronic elements	

.....

9.2.3 Other glasses

9.2.3.1 Location.....

9.2.3.2 Material(s).....

9.2.3.3 Unified mark for the circulation of products on the market of the member states of the Customs Union (official approval mark)

9.2.3.4 Brief description of the electrical/electronic elements (if any) of the window lift mechanism

9.3 Windshield wipers: present/absent (characteristics, quantity, frequency of cleaning)

.....

9.4 Rear view mirror(s)

9.4.1 Class(es).....

9.4.2 Unified mark for the circulation of products on the market of the member states of the Customs Union (official approval mark)

9.4.3 Location on the tractor (drawings)

9.4.4 Installation method.....

9.4.5 Additional equipment that impairs rear visibility.....

9.4.6 Brief description of the electrical/electronic elements (if any) of the adjusting device.....

9.5 Defrosting and defogging devices

9.5.1 Technical description.....

10 Roll Over Protective Structure (ROPS), Weather Protection, Seats, Load Platform, Roll Angle

10.1 ROPS (dimensional drawing, photographs (if necessary) and specifications)

10.1.1 Frame

10.1.1.0 Available/not available

10.1.1.1 Manufacturer's brand(s)

10.1.1.2 Unified mark for the circulation of products on the market of the member states of the Customs Union (official approval mark)

10.1.1.3 Internal and external dimensions

10.1.1.4 Materials and design.....

10.1.2 Operator's cabin

10.1.2.0 Available/not available

10.1.2.1 Manufacturer's brand(s)

10.1.2.2 Unified mark for the circulation of products on the market of the member states of the Customs Union (official approval mark)

10.1.2.3 Doors (number, dimensions, opening direction, locks and hinges)

.....

10.1.2.4 Windows and emergency exits (number, sizes, location)

.....

10.1.2.5 Other weather protection devices (characteristics):

.....

10.1.2.6 Internal and external dimensions	
10.1.3 Stand, beam front/rear, reclining/not reclining	
10.1.3.0 Available/not available	
10.1.3.1 Characteristics (placement, fastening, etc.).....	
10.1.3.2 Brand (or trade name).....	
10.1.3.3 Unified mark for the circulation of products on the market of the member states of the Customs Union (official approval mark)	
10.1.3.4 Dimensions.....	
10.1.3.5 Materials and design.....	
10.2 Working space and access to the operator's workplace (description, characteristics, drawings and dimensions)	
10.3 Seats and footrests.....	
10.3.1 Operator seat(s) (drawings, photographs, description).....	
10.3.1.1 Factory or trade mark.....	
10.3.1.2 Unified mark for the circulation of products on the market of the member states of the Customs Union (official approval mark)	
10.3.1.3 Seat type category	
10.3.1.4 Location and main characteristics.....	
10.3.1.5 Control system	
10.3.1.6 Range of regulation and blocking	
10.3.2 Passenger seats (number, dimensions, location and characteristics)	
10.3.3 Footrests (quantity, dimensions, location).....	
10.4 Loading platform.....	
10.4.1 Dimensions.....mm	
10.4.2 Location.....	
10.4.3 Technically permissible load.....kg	
10.4.4 Axle load distribution	kg
10.5 Radio interference protection.....	
10.5.1 Characteristics, drawings (or photographs) and material of the engine compartment housing, as well as the adjacent interior parts.....	
10.5.2 Drawings or photographs showing the location of metal components in the engine compartment (for example, heating device, spare tire, air filter, steering, etc.)	
10.5.3 Diagram and drawing of the radio interference suppression device.....	
10.5.4 Information on the nominal value of direct current resistance, and for high-voltage wires of the ignition system - information on the nominal value of resistance per meter of length.....	
10.6 Angle of lateral static stability.....degrees	
11 Lighting and light signaling devices (external view of the tractor indicating the location of all devices; quantity, electrical wiring, a single mark for the circulation of products on the market of the member states of the Customs Union (approval mark) and color of emitted light)	
11.1 Mandatory devices	

11.1.1 Low beam headlights:	11.1.2
Front side lights	11.1.3
marker lights.....	11.1.4
Direction indicators: front	
.....	
rear.....	side:
.....	11.1.5
Rear reflectors	11.1.6
Registration plate light	11.1.7
Brake signal	11.1.8
Emergency warning signal	
.....	11.2
Recommended devices	
.....	11.2.1
High beam headlights	
.....	11.2.2
Fog lights	
.....	11.2.3
Rear fog lights	
.....	11.2.4
Reversing lights	
.....	11.2.5
Working light	11.2.6
Parking lights	11.2.7
Outline lights.....	11.2.8
Lamps for monitoring the operation of the trailer light alarm system.....	11.3
Brief characteristics of other electrical/electronic devices (except flashlights) (if any)	12
Other devices 12.1 Sound signal devices (location)	
.....	12.1.1
Unified mark for the circulation of products on the market of the member states of the Customs Union (official approval mark)	12.2
Mechanical connections between the tractor and trailer	
12.2.1 Type of connection	
.....	12.2.2
Factory brand(s)	
.....	12.2.3
Unified mark for the circulation of products on the market of the member states of the Customs Union (official approval mark)	12.2.4
The device is intended: for maximum horizontal load	kg
for maximum vertical load (if available)	kg
12.3 Lifting with a hydraulic device – three-point hitch: available/not available	
12.4 Electrical connectors for trailer lighting and signaling devices (characteristics).....	
.....	12.5
Location, activation and designation of controls (characteristics, photographs or drawings)	12.6
Installation location of the registration plate (shape and dimensions).....	12.7
Front linkage (drawing with indicated dimensions).....	12.8
description of the electronics installed on the tractor (trailer), used for operation and control.....	

2. A shortened list of characteristics for certification of tractors and trailers

The shortened list is completed if there is already one or more certificates of conformity, messages regarding the official type approval under the UNECE Rules for compliance with individual requirements, and test reports issued by an accredited testing laboratory (center) included in the Unified Register of Certification Bodies and testing laboratories (centers) of the Customs Union, for components the manufacturer of which is the manufacturer of the tractor or trailer and which are supplied only to their own assembly production (hereinafter referred to as

test reports).

The numbers of the relevant test reports, certificates of conformity, messages relating to type approval under the UNECE Regulations must be indicated in the table given in paragraph 4

of this application. The annex to the certificate of conformity must contain the information specified in paragraphs 1 to 12 of paragraph 1 of this annex for each type/variant/version of the tractor (trailer).

If issued test reports, certificates of conformity, messages relating to type approval under UNECE Regulations for compliance with individual requirements are missing, then the corresponding items are supplemented with the necessary information given in the full list of main characteristics.

0 General provisions

0.1 Brand (manufacturer's name)

0.2 Type (if necessary, indicate options and versions)

0.2.1 Trademark (if necessary)

0.3 Characteristics for identifying the type, if available on the tractor (trailer)

0.3.1 Manufacturer's plate (location and installation method).....

0.3.2 Chassis number (installation location)

0.4 Category of tractor (trailer).....

0.5 Name and address of the manufacturer

0.7 For components and individual technical elements, the position and type of application of a single sign of product circulation on the market of the member states of the Customs Union (official approval mark)

0.8 Name and address of the place of manufacture

1 Main technical characteristics of the tractor (trailer)

(Photos of the tractor (trailer) $\frac{3}{4}$ front view and $\frac{3}{4}$

rear view, as well as a drawing with the indicated overall dimensions of the tractor (trailer)

2 Weight and dimensions

3 Engine

4 Transmission

5 Axes

6 Suspension

7 Steering

8 Brake system

9 Visibility, glazing, wipers and rear-view mirrors

10 Roll Over Protective Structure (ROPS), Weather Protection, Seats, Load Platform, Roll Angle

11 Lighting and light signaling devices

12 Other devices

3. The technical description must contain combinations of characteristics that are presented in paragraph 2 of this appendix. In the case of variable information, a letter designation is added to the technical description to make it clear what information relates to each option (version).

For each version, a separate technical description is filled out.

Information for which there are no restrictions regarding its combinations within the execution are indicated in the "all options" column.

Number characteristics	All options	Option 1	Option 2	...	Option n

This information may be presented in another form.

Each option (version) must be identified using digital and (or) alphanumeric code, which is also indicated in the certificate of conformity and its annex for the corresponding tractor (trailer).

4. The table must contain the necessary information valid for a specific tractor (trailer).

For the purpose of issuing a certificate of conformity, the certification body (assessment (confirmation) of conformity) is provided with all relevant test reports, certificates of conformity, messages regarding the official type approval under the UNECE Rules for compliance with individual requirements.

An object	Number of test report, communication certificate, type compliance, approval concerning according to UNECE Rules on tractor, trailer or component (component)	Date of issue of the test report, certificate of conformity, communication regarding the official type approval according to UNECE Regulations for tractor, trailer or component (component)	Type(s) Option(s) Version(s)
Example Mirror rear view			

Signature.....

Job title.....

Date of.....

Appendix 3
to the technical regulations of the Customs Union
“On the safety of agricultural and forestry tractors
and trailers for them”

(TR TS 031/2012)

Classification of tractors and trailers by
categories and types in accordance with technical
Regulations of the Customs Union “On the safety of agricultural
and forestry tractors and trailers for them”
(TR TS 031/2012)

1. Categories of tractors and trailers

1.1. Category T – wheeled tractors

Category T1: wheeled tractors with a maximum design speed of no more than 40 km/h, a minimum track size of the axle¹⁾ located closer to the operator of at least 1150 mm, a curb weight of more than 600 kg and a ground clearance of no more than 1000 mm.

Category T2: wheeled tractors with a maximum design speed of no more than 40 km/h, a minimum track size of less than 1150 mm, a curb weight of more than 600 kg and ground clearance of no more than 600 mm. If the ratio of the height of the tractor's center of gravity to the average minimum axle track size exceeds 0.9, then the maximum design speed should not exceed 30 km/h.

Category T3: wheeled tractors with a maximum design speed of no more than 40 km/h and a curb weight of no more than 600 kg.

Category T4: wheeled tractors for special purposes with maximum design speed no more than 40 km/h:

T4.1 – high-clearance tractors designed for use
when processing tall crops, such as vineyards.

They are characterized by an increased height of the chassis or part of the chassis, thanks to which they can move parallel to the rows of plants with an elevation above them. They are designed to be equipped with working bodies that can be

installed at the front, between the axles, at the rear or on the platform. During operation, the tractor clearance exceeds 1000 mm. If the ratio of the height of the tractor's center of gravity (with conventional tires) to the average minimum axle track size exceeds 0.9, then the maximum design speed should not exceed 30 km/h;

¹⁾ For tractors with a reversible operator seat, the axle closest to the operator is considered to be the axle equipped with the largest diameter tires.

T4.2 – extra-wide tractors. They are characterized by significant in size and designed specifically for cultivating large agricultural areas;

T4.3 - low-clearance forestry or agricultural tractors with four-wheel drive, the replaceable working equipment of which is intended for work in forestry or agriculture, with a supporting frame, one or more power take-off shafts, a technically permissible total weight of not more than 10 tons and a ratio technically permissible total weight to maximum curb weight is less than 2.5. The height of the center of gravity of such tractors (with conventional tires) is less than 850 mm.

Category T5: wheeled tractors with a maximum design speed of more than 40 km/h.

1.2 Category C – crawler tractors

The definitions of tracked tractors of categories C1 - C5 are similar to the definitions of categories of wheeled tractors of categories T1 - T5;

C 4.1 - high-clearance crawler tractors, definition – similar to the definition of wheeled tractors of category T4.1.

1.3 Category R – trailers

Category R1: trailers whose technically permissible total weight does not exceed 1500 kg.

Category R2: trailers whose technically permissible total weight is more than 1500 kg, but does not exceed 3500 kg.

Category R3: trailers with a technically permissible total weight of more than 3,500 kg, but not exceeding 21,000 kg.

Category R4: trailers with a technically permissible total weight exceeding 21,000 kg.

Each category of trailers depending on the maximum design speed is designated by the letter a or b:

a – trailers with a maximum design speed of no more than 40 km/h;

b – trailers with a maximum design speed of more than 40 km/h.

For example, for a trailer of category Rb3, the total technically permissible weight distribution along the axles is more than 3500 kg, but does not exceed 21000 kg, and it is intended to be towed by a tractor of category T5.

2. Types of tractors and trailers

2.1. Wheeled tractors

2.1.1. Tractor type – tractors of the same category, which are characterized by:

one manufacturer;

the same type designation;

identical design characteristics:

chassis frames: spar/articulated (obvious and significant differences);

engine (internal combustion engine/electric motor/hybrid drive);

number of axes.

2.1.2. Option - tractors of the same type, which do not differ in:
engine:
operating principle;
number and arrangement of cylinders; power
(more than 30%, that is, the ratio of maximum power
to the minimum is no more than 1.3);
working volume (by more than 20%, that is, the ratio of the maximum working
volume to the minimum is no more than 1.2);
driving axles (number, location and drive); controlled axes (number
and location); maximum permissible weight when loaded
(more than 10%); transmission type; type of chassis system (for crawler tractors);
rollover protection
device; brake axles (by quantity). 2.1.3. Version – tractors
with a combination of characteristics that are
given in the type approval documents.

2.2. Crawler tractors The
definitions of the types of tracked tractors are similar to the definitions of the types
of wheeled tractors. 2.3.

Trailers: 2.3.1.
Trailer type – trailers of the same category, which are characterized by: one
manufacturer; the same
type designation;
identical design characteristics: chassis frame: spar/
articulated (obvious and significant differences); number of axes. 2.3.2. Option -
trailers of
the same type,
which do not differ in: steerable axles (number and location);
maximum permissible weight when loaded (more than
10%); brake axles (by quantity).

Appendix 4

to the technical regulations of the Customs Union
 “On the safety of agricultural and forestry tractors and
 trailers for them”
 (TR TS 031/2012)

List of safety requirements for tractors and trailers
 in accordance with the technical regulations of the Customs Union
 “On the safety of agricultural and forestry
 tractors and trailers for them” (TR TS 031/2012)

Table 4.1 – List of safety requirements for tractors and trailers

Characteristic or indicator tractor or trailer	Element of the present technical regulations of the technical regulations of the Customs Union or the Customs Union or the designation of a standard or the designation of a standard or UNECE Rules, establishing characterization requirements or indicator	Item of the present Categories of tractors and trailers technical regulations of the Customs Union or the designation of a standard or UNECE Regulations establishing methods for control	of tractors and trailers					
			T1	T2	T3	T5	C (except C4)	R
1		3						9
1 Technically permissible weight Point 1	2 appendices 5 to these technical regulations of the Customs Union	GOST 12.2.002-91	4 X	5 X	6 X	7 X	8 (X)	[X]
2 Installation location of the registration plate	Clause 11 of Appendix 5 to these technical regulations of the Customs Union	Clause 11 of Appendix 5 to these technical regulations of the Customs Union	X	X	X	X	I	[X]
3 Fuel tank	GOST 12.2.019-2005 Clause 3 of Appendix 5 to these technical regulations of the Customs Union	GOST 12.2.019-2005 Clause 3 of Appendix 5 to these technical regulations of the Customs Union	X	X	X	X	I	-
4 Ballast weights	Clause 2 of Appendix 5 to these technical regulations of the Customs Union	Clause 2 of Appendix 5 to these technical regulations of the Customs Union	X	X (X)		(X)	I	-

1	2	3	4	5	6	7	8	9
5 Alarm devices 6 External noise	sound GOST 12.2.019 -2005 GOST 12.2.102 -89	GOST 12.2.019 -2005	4 X	X	6 X	X	I	-
	GOST R 51920 -2002 GOST 12.2.019 -2005	GOST R 51920 -2002 GOST 12.2.002 -91	X	X	X (X)		I	-
7 Maximum speed	GOST 30748 -2001 Clause 4 of Appendix 5 to this technical regulation of the Customs Union Clause 5 of Annex 5	GOST 30748 -2001 Clause 4 of Appendix 5 to this technical regulation of the Customs Union GOST 12.2.002 -91	X	X	X (X)		I	-
8 Cargo platform	to this technical regulation of the Customs Union GOST R 51961 -2002 STB ISO 15077 -2010 UNECE		X	X	X (X)		I	-
9 Steering	Rules No. 10 (03) / Revision 3 GOST	STB 1611 -2006	X	X	X	(X)	(X)	-
10 Electromagnetic compatibility	12.2.019 -2005 UNECE Rules No. 13 (10) /	UNECE Regulation No. 10 (03) /	X	X	X	X	I	-
11 Brake systems	Revision 6 STB 2216 -2011 UNECE Rules No. 86 (00) GOST 8769 -75	Revision 3 GOST 12.2.002.3 -91 UNECE Regulation No. 13 (10) /	X	X	X	-	(X)	-
			-	-	-	X	-	[X]
12 Lighting and light signaling devices		Revision 6 GOST 12.2.002.3 -91 UNECE Regulation No. 86	X	X	X	X	I	[X]
			-	-	-	-	-	X
13 Towing devices	Clause 7 of Appendix 5 to these technical regulations of the Customs Union GOST 3480 -76 Clause 8 of Appendix 5 to	(00) GOST 12.2.002 -91 GOST 12.2 .102 -89 Clause 7 of Appendix 5 to these technical regulations of the Customs Union	X	X	X (X)		I	-
14 Power take-off shafts 15	Appendix 5 to	GOST 26025 -83	X	X	X	X	I	-
Dimensions of tractor, trailer and trailer towed weight	these technical regulations of the Customs Union STB 2216 -2011	GOST 26025 -83	X	X	X	(X)	I	X
16 Load on the towing device 17 Requirements		GOST 28307 -89	-	-	-	-	-	X
for the design of tractors and trailers	Clause 1 3 of Appendix 5 to this TR CU	GOST 12.2.002 -91 GOST 31177 -2003	X	X	X	X	I	[X]

	2	3		5		7	8	9
1 18 Protection of parts	STB 1984 -2009	GOST 12.2.002 -91 GOST 12.2.102 -89	4 X	X	6 X (X)		I	-
19 Mechanical towing devices	STB 2028 -2010	STB 2028 -2010	X	X	X (X)		I	[X]
20 Manufacturer's plate	Clause 9 of Appendix 5 to these technical regulations of the Customs Union	GOST 26828 -86	X	X	X (X)		I	[X]
21 Operating manual	GOST ISO/TO 12100 - 2 -2002 GOST 27388 -87 STB ISO 5676 -2010	Visual assessment	X	X	X	X	I	X
22 Trailer brake connection	Clause 1 0 of Appendix 5 to these technical regulations of the Customs Union Clause 1 4 of Appendix 5 to these technical regulations of the Customs Union	GOST 22895 -77 STB ISO 5676 -2010	X	X	X (X)		I	X
23 Emissions of harmful substances	Customs Union	UNECE Regulation No. 96 (02) / Revision 1 UNECE Regulation No. 49 (04) / Revision 3 *	X	X	X	X	X	-
24 Smokiness spent gases	UNECE Regulation No. 24 (03) / Revision 2	UNECE Regulation No. 2 4 (03) / Revision 2	X	X	X	X	X	-
25 Speed meter	UNECE Regulation No. 39 (00) / Revision 1	UNECE Regulation No. 39 (00) / Revision 1	-	-	-	X	-	-
26 Spray protection from systems	STB 2022 -2009	STB 2022 -2009	-	-	-	X	-	[X]
27 Tires	UNECE Regulation No. 106 (00) UNECE Regulation No. 89	UNECE Regulation No. 106 (00) UNECE Regulation No. 89	X	X	X	X	-	X
28 Speed devices restrictions	UNECE Regulation No. 89	UNECE Regulation No. 89	-	-	-	X	-	-
29 Side protection	UNECE Regulation No. 73 (00)	UNECE Regulation No. 73 (00)	-	-	-	X	-	X
30 Rear protection	UNECE Regulation No. 58 - Revision 1 STB EN 1853 -2006	UNECE Regulation No. 58 - Revision 1	-	-	-	-	-	X
31 Trailer stability		GOST 12.2.002 -91 STB EN 1853	-	-	-	-	-	X
32 Support device (semi-trailer)	STB 2216 -2011	-2006 GOST 12.2.002 -91	-	-	-	-	-	X

	2	3		5		7	8	9
1 33 Engine Starting and Stopping System Requirements 34 Roll	GOST 12.2.019 -2005 GOST 19677 -87	GOST 12.2.002 -91	4 X	X	6 X	X	I	-
Over Protective Structure (ROPS) (Static Test) 35 Roll Over Protective Structure (ROPS)	Clause 12.1 of Appendix 5 to this technical regulation of the Customs Union Clause 12.1 of Appendix 5 to	STB ISO 8082 -2004 GOST R ISO 5700 -2008	X	-	-	(X)	I	-
(Dynamic Test) 36 Falling Object Protective Structure (FOPS)	This Technical Regulations of the Customs Union clause 12.1 of Appendix 5 to this	STB ISO 8082 -2004 GOST R ISO 3463 - 2008	X	-	-	(X)	(X)	-
	Technical Regulations of the Customs Union Clause 12.1 of Appendix 5 to this Technical Regulations of the Customs	GOST R ISO 3449 -2009 GOST R ISO 8083 -2008	X	X	X	X	I	-
37 Operator protection device (OPS)	Union paragraph 12.2 of Appendix 5 to the Terms of the Customs Union GOST ISO 4252 -2005 GOST ISO 4252 -2005	GOST R ISO 8084 -2005	X	X	X	X	I	-
38 Operator protection from harmful substances	GOST ISO 4252-2005 GOST ISO 4254 - 3 -2005 GOST 12.2.102 -89 STB 2216 -2011 STB EN 1853 -2006 STB ISO	STB EN 15695 - 1 -2011	X	X	X	X	I	-
39 Workspace and access to the operator's seat 40 Access systems	15077 -2010 GOST ISO 4254 - 3 -2005 GOST 26336	GOST 12.2.002 -91	X	-	X (X)		I	-
	-97	GOST 12.2.002 -91 GOST 26025 -83 GOST 12.2.102 -89	X	X	X	X	I	-
		GOST 12.2.002 -91 GOST 26025 -83	-	-	-	-	-	X
41 Controls		GOST 12.2.002 -91	X	X	X (X)		I	-
42 Location of locking devices and lifting forces of trailer platforms	STB 2216 -2011	GOST 12.2.002 -91	-	-	-	-	-	X
43 Glazing	GOST 12.2.120 -2005 UNECE Regulation No. 43 (00) / Revision 2	STB 1639 -2006 GOST 5727 -88 UNECE Regulation No. 43 (00) / Revision 2	X	X	X	X	I	-

	2	3	4	5	6	7	8	9
1 44 Seat belt attachment points	UNECE Regulation No. 14 (06)/ Revision 4 GOST 26879-88	UNECE Regulation No. 14 (06)/ Revision 4 GOST 26879-88	4 X	X	6 X	X	8 X	-
45 Seat belts	GOST 26879-88 UNECE Regulation No. 16 (04)/ Revision 5	GOST 26879-88 UNECE Regulation No. 16 (04)/ Revision 5	-	-	-	X	-	-
46 Field visibility windscreen wipers	And UNECE Regulation No. 71 GOST 12.2.019-2005	UNECE Regulation No. 71	X	X	X (X)		I	-
47 Rear view mirrors	Clause 6 of Appendix 5 to these technical regulations of the Customs Union	To UNECE Regulation No. 46 (02)/ Revision 3	X	X (X)		(X)	I	-
48 Operator's seat	GOST 20062-96 GOST ISO 4253-2005	GOST 20062-96	X	X	X	(X)	(X)	-
49 Passenger seat 50	GOST ISO 4254-3-2005	GOST 12.2.002-91	X	-	X (X)	(X) X	I	-
Sound level at the operator's station	GOST 12.2.019-2005 GOST 12.2.102-89	GOST 12.2.002-91 GOST 12.2.102-89	X	X			I	-
51 Vibration safety	GOST 12.1.012-2004	GOST 31193-2004	X	X	X	X	I	-
<p>Legend:</p> <ul style="list-style-type: none"> X – requirement applies. (X) – the applicability of the requirements is established by the manufacturer. [X] – the specified standards or UNECE Rules apply in terms of the requirements applicable to trailers. - the requirement does not apply. I – as for T, depending on the category. <p>* For positive ignition engines running on natural compressed gas or liquefied petroleum gas.</p>								

Table 4.2 – List of safety requirements for special-purpose tractors

Characteristic or indicator tractors	Element of the present technical regulations of the Customs Union or designation of a standard or UNECE Rules, establishing performance requirements or indicator	Element of this technical regulation of the Customs Union or designation of a standard or UNECE Rules establishing control methods	Tractor categories			
			T4.1	T4.2 T4.3		C4.1
1						7
1 Technically permissible weight	Clause 1 2 applications 5 To of these technical regulations of the Customs Union	3 GOST 12.2.002-91	4 X	5 X	6 X	X
2nd place installations registration plate	Clause 11 of Appendix 5 to these technical regulations of the Customs Union To	Clause 11 of Appendix 5 to these technical regulations of the Customs Union To	(X)	(X)	X	(X)
3 Fuel tank	GOST 12.2.019-2005 Clause 3 of Appendix 5 to these technical regulations of the Customs Union To	GOST 12.2.019-2005 Clause 3 of Appendix 5 to these technical regulations of the Customs Union To	X	X	X	X
4 Ballast weights	Clause 2 of Appendix 5 to these technical regulations of the Customs Union To	Clause 2 of Appendix 5 to these technical regulations of the Customs Union To	X	X	X	X
5 Devices sound alarm	GOST 12.2.019-2005 GOST 12.2.102-89	GOST 12.2.019-2005	X	X	X	X
6 External noise	GOST R 51920-2002 GOST 12.2.019-2005	GOST R 51920-2002 GOST 12.2.002-91	(X)	(X)	X	(X)
7 Maximum speed	GOST 30748-2001 Clause 4 of Appendix 5 to these technical regulations of the Customs Union To	GOST 30748-2001 Clause 4 of Appendix 5 to these technical regulations of the Customs Union To	X	X	X	X
8 Loading platform	Clause 5 of Appendix 5 to these technical regulations of the Customs Union To	GOST 12.2.002-91	(X)	X	(X)	(X)

1	2	3	4	5	6	7
9 Electromagnetic compatibility	UNECE Regulation No. 10 (03)/ Revision 3	UNECE Regulation No. 10 (03)/ Revision 3	4 X	X	6 X	X
10 Steering	GOST R 51961-2002 STB ISO 15077-2010	STB 1611-2006	X	X	X	SD
11 Braking systems	GOST 12.2.019-2005	GOST 12.2.002.3-91	(X)	X	X	(X)
12 Lighting and light signaling devices	UNECE Rules No. 86 (00)	UNECE Rules No. 86 (00)	X	X	X	X
13 Towing devices	Clause 7 applications 5 To of these technical regulations of the Customs Union	Clause 7 of Appendix 5 to these To technical regulations of the Customs Union	(X)	X	X	(X)
14 Power take-off shafts	GOST 3480-76	GOST 26025-83	X	X	X	X
15 Tractor dimensions and trailer towing weight	Clause 8 applications 5 To of these technical regulations of the Customs Union	GOST 26025-83	(X)	X	X	(X)
16 Protection of parts	STB 1984-2009	GOST 12.2.002-91 GOST 12.2.102-87	(X)	X	X	(X)
17 Mechanical towing couplings devices	STB 2028-2010	STB 2028-2010	X	(X)	X	X
18 Manufacturer's plate	Clause 9 applications 5 To of these technical regulations of the Customs Union	GOST 26828-86	X	X	X	X
19 Operating instructions	GOST ISO/TO 12100-2-2002 GOST 27388-87	Visual assessment	X	X	X	X
20 Connecting device trailer brake drive	STB ISO 5676-2010 Clause 10 of Appendix 5 to these To technical regulations of the Customs Union	GOST 22895-77 STB ISO 5676-2010	X	(X)	X	X
21 Emissions of harmful substances	Clause 14 of Appendix 5 to these To technical regulations of the Customs Union	UNECE Regulation No. 96 (02)/ Revision 1 UNECE Regulation No. 49 (04)/ Revision 3*	X	X	X	X
22 Exhaust smoke	UNECE Regulation No. 24 (03)/ Revision 2	UNECE Regulation No. 24 (03)/ Revision 2	X	X	X	X
23 Tires	UNECE Regulation No. 106 (00)	UNECE Regulation No. 106 (00)	X	X	X	-

	2			5		7
1 24 Requirements for the engine starting and stopping system 25	GOST 12.2.019 -2005 GOST 19677 -87	3 GOST 12.2.002 -91	4 X	X	6 X	X
Operator protection from exposure to harmful substances	Clause 12.2 of Appendix 5 to these technical regulations of the Customs Union Clause 12.1 of Appendix 5	STB EN 15695 - 1 -2011	X	X	X	X
26 Roll Over Protective Structure (ROPS) (Static Test) 27 Roll Over Protective Structure	to this technical regulation of the Customs Union Clause 12.1 of Appendix 5 to this technical	STB ISO 8082 -2004 GOST R ISO 5700 -2008	SD	X	X	SD
(ROPS) (Dynamic Test) 28 Working Space and Operator Seat Access 29 Access Systems	regulation of the Customs Union GOST ISO 4252 -2005 GOST ISO 4253 -2005 GOST 12.2.019 -2005 GOST ISO 4254 - 3 -2005	STB ISO 8082 -2004 GOST R ISO 3463 -2008	SD	X	X	SD
	GOST 12.2.102 -89	GOST 12.2.002 -91	(X)	(X)	(X)	(X)
		GOST 12.2.002 -91 GOST 26025 -83 GOST 12.2.102 -89	X	X	X	X
30 Controls	STB ISO 15077 -2010 GOST ISO 4254 - 3 -2005 GOST 26336 -97	GOST 12.2.002 -91	X	X	X	X
31 Glazing	GOST 12.2.120 -2005	STB 1639 -2006 GOST 5727 -88	X	X	X	X
32 Field visibility, windscreen wipers	UNECE Rules No. 71 GOST 12.2.019 -2005 Clause 6	UNECE Regulation No. 71	(X)	(X)	X	(X)
33 Rear mirrors in Ida	of Appendix 5 to these technical regulations of the Customs Union GOST 20062 -96 GOST ISO 4253 -2005 GOST ISO	UNECE Regulation No. 46 (02) / Revision 3	(X)	X	X	(X)
34 Operator's seat	4254 - 3 -2005 GOST 12.2.019 -2005 GOST	GOST 20062 -96	(X)	X	X	(X)
35 Passenger seat 36 Sound	12.2.102 -2005	GOST 12.2.002 -91	X	X	X	X
level at the operator's station 37 Vibration safety		GOST 12.2.002 -91 GOST 12.2.102 -89	(X)	X	X	(X)
	GOST 12.1.012 -2004	GOST 31193 -2004	X	X	X	X



	2			5		7	
1 38 Requirements for the design of tractors	Clause 13 of Appendix 5 to these technical regulations of the Customs Union	To	3 GOST 12.2.002-91 GOST 31177-2003	4 X	X	6 X	X

Legend:
 X – requirement applies.
 (X) – the applicability of the requirements is established by the manufacturer.
 SD – requirement not established.
 * – the requirement does not apply.
 For positive ignition engines running on natural compressed gas or liquefied petroleum gas.

Appendix 5

to the technical regulations of the Customs Union
 "On the safety of agricultural and forestry tractors and
 trailers for them"

(TR TS 031/2012)

Safety requirements,
 requirements for tractors and trailers in accordance with Appendix 4
 to this technical regulation of the Customs Union,
 in accordance with the technical regulations of the Customs Union
 "On the safety of agricultural and forestry
 tractors and trailers for them"
 (TR TS 031/2012)

1. Requirements for the technically permissible operating weight of wheeled tractors

1.1. The technically permissible operating weight of the tractor and the maximum permissible distribution of the operating weight along the axles, depending on the category of the tractor, must not exceed the values given in Table 5.1.

The technically permissible operating weight specified by the manufacturer must also be confirmed by positive test results carried out in a testing laboratory (center), in particular with regard to the effectiveness of the braking system and steering.

Table 5.1

Tractor category	Number of axes	Technically permissible operating weight, t	Maximum allowed weight distribution along the axes, t	
			Driving axle	Non-driving axle
T1, T2, T4.1		18 (with ballast) 11.5	24 (with ballast)	10
		11.5 0.6 (without ballast)	Not installed ¹⁾	10
T3	2 3 2	installed ¹⁾ Not installed ¹⁾		
T4.3	or 3 2, 3 or 4	10 (with ballast) Not installed ¹⁾	Not installed ¹⁾	

¹⁾ For tractors of categories T3 and T4.3, the maximum permissible weight distribution along the axles is not established, since tractors of categories T3 and T4.3 have restrictions on the maximum permissible operating weight with and without ballast.

Note – These requirements apply only to the categories of tractors listed in this table.

1.2. For any load of the tractor, the mass transmitted to the road by the wheels steered axle must be at least 20% of the tractor's curb weight.

2. Requirements for ballast loads of wheeled tractors

2.1. If, in order to comply with the requirements of this technical regulation of the Customs Union, tractors must be equipped with ballast weights, then the ballast weights must be supplied by the tractor manufacturer, be convenient for mounting on the tractor and be marked by the manufacturer indicating the weight in kilograms with an error of $\pm 5\%$. Front ballast weights intended for frequent removal/installation must be designed to provide a safety clearance of at least 25 mm for the handles to be grabbed. The method of installing ballast weights must prevent their unintentional detachment (for example, in the event of a tractor overturning).

3. Requirements for fuel tanks

3.1. Fuel tanks must be corrosion resistant. They must maintain tightness at a pressure 2 times higher than the operating pressure (but not less than 30 kPa). Excess pressure or pressure exceeding operating pressure must be automatically compensated by appropriate devices (air, safety valves, etc.).

The design of air valves must ensure fire safety. Fuel must not leak through the tank cap or overpressure compensation devices, even if the tank is completely inverted (dripping is allowed).

3.2. Fuel tanks should be installed so that they are protected from the consequences of an impact on the front or rear of the tractor. There should be no protruding parts, sharp edges, etc. near the tank.

3.3. The fuel lines and filler neck must be located outside the cab.

4. Requirements for calculating and checking the maximum design speed of wheeled tractors

4.1. In order for the testing laboratory (center) to determine the maximum design speed of the tractor, the manufacturer must indicate the transmission gear ratio, the actual movement of the drive wheels per full revolution of the wheel, and the nominal crankshaft speed

engine.

4.2. When testing a tractor, the speed of movement must be measured on a straight section, which the tractor must cross in the forward and reverse directions in one run. The surface of the site must be made of hard material, be flat, level, at least 100 m long, and slopes of no more than 1.5% are allowed.

4.3. When testing, the tractor must be in operating mode, unloaded, without ballast weights and special equipment, and the tire pressure must correspond to that specified by the manufacturer for transport work.

4.4. When testing, the tractor must be equipped with new pneumatic tires with the largest rolling radius specified by the manufacturer for the tractor.

4.5. The gearbox gear used in the test is

must ensure maximum tractor speed, and the position of the engine speed governor controls must correspond to full fuel supply.

4.6. During testing, it is considered acceptable to exceed the values obtained as a result of measurements over the permissible values for a given type of tractor by 3 km/h, in order to take into account inaccuracies in measurements, as well as an increase in engine speed at partial load.

5. Requirements for the loading platform of wheeled tractors

5.1. The center of gravity of the loading platform must be located between axes.

5.2. The dimensions of the loading platform must meet the following requirements:

the length must not exceed the track size of the front or rear wheels tractors (depending on which one is larger) more than 1.4 times;

The width must not exceed the maximum overall width of the tractor without working equipment.

5.3. The platform must be located symmetrically relative to the longitudinal plane of the tractor.

5.4. The height of the loading platform above the supporting surface should be no more than 1500 mm.

5.5. The design and method of fastening the platform under normal load should not impair the operator's field of view, nor interfere with the normal functioning of lighting and signaling devices.

5.6. The loading platform must be removable and must be attached to tractor in such a way as to prevent accidental disconnection.

6. Requirements for installing rear-view mirrors of wheeled tractors

6.1. Tractors must be equipped with rear-view mirrors of classes I and II according to UNECE Regulation No. 46 (02)/Revision 3.

6.2. Rear view mirrors must be installed in such a way that under normal driving conditions their position was maintained.

6.3. All tractors must be equipped with at least one an external rear view mirror installed on the left side of the tractor.

6.4. The rear view mirror must be positioned so that the operator, seated in the normal operating position, has a clear view of the part of the road defined in paragraph 6.11

paragraph 6 of this appendix.

6.5. The rear view mirror must be visible through the part of the windshield that is cleared by the wiper, or through the side windows if the tractor is equipped with them.

6.6. The rear view mirror must not protrude beyond the external dimensions of the tractor or tractor-trailer combination more than is necessary to obtain the field of view defined in subclause 6.11 of clause 6 of this applications.

6.7. If the lower edge of the rear view mirror is located less than 2 m above the supporting surface when the tractor is loaded, it is a rear view mirror

type should not protrude more than 0.2 m beyond the overall width of the tractor or tractor-trailer combination, measured without rear-view mirrors.

6.8. Any interior rearview mirror must be adjusted by the operator from the operator's station.

6.9. The operator must be able to adjust the position of the outside rear view mirror while at the workplace. In this case, the mirror can be fixed in the required position from the outside.

The exterior rear view mirror can be adjusted from the outside, and the operator must have at least three points of support.

6.10. The requirement given in subclause 6.9 of clause 6 of this application does not apply to outside rear view mirrors, which, once moved, automatically return to their original position without the use of tools.

6.11. The field of view of the left rear view mirror must be such that the operator can see behind a portion of a level and level road to the left of a plane parallel to the vertical longitudinal median plane that passes through the leftmost point of the overall width of the tractor or tractor-trailer combination.

7. Requirements for towing devices of wheeled tractors

7.1. Each tractor must have a special device that allows the attachment of a device (for example, a bar or towing rope) for towing it.

7.2. A device equipped with a connecting pin must be located in front of the tractor.

7.3. The device must be a plug. The distance between the inner planes of the fork in the center of the connecting pin should be 60 ± 0.5

± 0.5 mm, and the grip depth of the fork, measured from the center of the pin, should be (62 ± 0.5) mm.

The connecting pin must have a diameter of 30 ± 1.5 mm and be equipped with a device that prevents it from falling out of the socket during use. The locking device must be non-removable.

8. Requirements for the dimensions of wheeled tractors, trailers and the permissible towed weight of the trailer

8.1. Dimensions

8.1.1. The overall dimensions of the tractor must be no more than:
length 12 m;

width 2.55 m (not taking into account the protrusions formed by the tires near the point of their contact with the supporting surface), it is allowed to increase the overall width to 3.1 m while ensuring road safety (for tractors of category T4.2, the overall width of the tractor should be no more 4.4 m);

height 4 m.

8.1.2. The overall dimensions of the trailer must be no more than:

width 2.55 m (not taking into account the protrusions formed by the tires near the point their contact with the supporting surface);
height 4 m.

8.2. Permissible trailer towing weight

8.2.1. The permissible towed weight of the trailer must not exceed:

technically permissible towed weight recommended by the tractor manufacturer;

towed weight set for the towbar.

9. Requirements for the location, fastening and content of manufacturer's plates on wheeled tractors and trailers

9.1. All agricultural and forestry tractors and trailers must be equipped with plates with the markings, the contents of which are given below. Labels are installed by the manufacturer.

9.2. Manufacturer's plate

9.2.1. The manufacturer's plate must be installed in a clearly visible and easily accessible place on a part of the tractor or trailer that must not be replaced during its entire service life. The text of the plate must be clearly readable and preserved throughout the entire service life of the tractor and trailer.

The manufacturer's plate on the tractor must contain the following information:

manufacturer's name;
tractor type and variant (version) (if available);
number of the certificate of conformity (applied additionally after obtaining a certificate of conformity);
tractor identification number;
the minimum and maximum total permissible weight of the tractor when loaded, depending on the permissible types of tires that can be installed;

the maximum permissible load on each axle of the tractor, according to the possible types of tires that can be installed (information should be listed in order from front to rear axle);

technically permissible towed weight(s) of the trailer.

The manufacturer's plate on the trailer must contain the following information:

manufacturer's name;
trailer type and option (if available);
number of the certificate of conformity (applied additionally after obtaining a certificate of conformity);
total permissible weight of the trailer when loaded, depending on the permissible types of tires that can be installed;
maximum permissible load on each trailer axle (information should be listed in order from front to rear axle);
load on the tractor towing device (for semi-trailers).

9.2.2. The manufacturer may provide additional information below or to the side of the main marking, outside the clearly marked rectangles,

including only the information provided in subclause 9.2.1 of clause 9 of this application. An example of a manufacturer's plate is given in Appendix 6 to these technical regulations of the Customs Union.

9.3. Tractor identification number

9.3.1. The tractor identification number is a fixed combination of characters assigned to each tractor by the manufacturer. Its purpose is to ensure that every tractor can be clearly identified by the manufacturer for 30 years.

9.3.2. The identification number must be marked on the manufacturer's plate and on the frame or other structural element on the front right side of the tractor.

9.3.3. The ID number should be placed on one line whenever possible.

9.3.4. The identification number must be placed in a clearly visible and accessible place, struck or stamped so that it cannot be erased or damaged.

9.4. Signs

9.4.1. Marking provided for in subclause 9.2 of clause 9 of this application, carried out in Russian and in the state language(s) of the member state of the Customs Union if there are corresponding requirements in the legislation(s) of the member state(s)

Customs Union. For markings provided for in subclauses 9.2 and 9.3 paragraph 9 of this annex, Arabic numerals must be used.

9.4.2. When designating the tractor identification number, capital Latin letters must be used; the use of the letters "I", "O", "Q", dashes, asterisks and other special characters is not allowed.

The minimum height of letters and numbers is as follows:

7 mm for signs applied directly to the frame or other similar tractor design;

4 mm for characters applied to the manufacturer's plate.

10. Requirements for the trailer brake system control and connecting device for the trailer brake drive of wheeled tractors

10.1. The tractor must be equipped with a trailer brake control, which may be hand-operated or foot-operated and must be controlled from the operator's station and independent of other controls.

If the tractor is equipped with a pneumatic or hydraulic drive of trailer brakes, then the braking of the tractor and trailer combination must be controlled by only one single control.

10.2. The braking systems used may have characteristics consistent with those given in UNECE Regulation No. 13(10)/Revision 6 for braking devices of wheeled agricultural and forestry tractors and trailers.

Braking systems must be designed to allow the tractor and trailer to stop safely in the event of trailer brake failure or coupling failure.

10.3. If pneumatic, hydraulic or combined tractor and trailer drive is provided, it must meet the following conditions.

10.3.1. Hydraulic drive

The hydraulic drive must be of the single-line type.

The hydraulic connecting device must comply with STB ISO 5676-2010, the male coupling half must be installed on the tractor.

The trailer brake control must ensure that there is no pressure in the connecting head in the non-working position; the operating pressure must be no less than 10 MPa and no more than 15 MPa.

The power source must not be disconnected from the engine.

10.3.2. Pneumatic drive

The pneumatic drive of the trailer brakes must be of a two-wire type, and the braking process must begin when the pressure in the control line increases.

It is allowed to install a single-line pneumatic drive for trailer brakes on tractors. In this case, the braking process should begin when the pressure in the brake line decreases.

The connection head must comply with STB ISO 1728-2010.

The trailer brake control must provide a maximum pressure to the coupling head of no less than 0.65 MPa and no more than 0.8 MPa.

10.3.3. The design of the pneumatic, combined hydraulic And trailer brake drive must ensure that the trailer is braked in the event of an emergency disengagement of the trailer from the tractor.

11. Space requirements for installing the rear registration plate
tractors

11.1. Configuration and dimensions of the space for installing the rear registration plate.

The location for mounting the rear registration plate must be a flat, vertical, rectangular surface with the following minimum dimensions:

length – 255 mm;

width – 165 mm.

11.2. Location of the rear registration plate mounting area and
rear registration plate mount.

The location for installing the rear registration plate must be such that the following conditions are met when the registration plate is properly attached.

11.2.1. The position of the registration plate relative to the width of the tractor.

The center of the registration plate should not be located to the right of plane of symmetry of the tractor.

The left edge of the registration plate cannot be located to the left of the vertical plane parallel to the plane of symmetry of the tractor and

passing through the most protruding part of the tractor in width.

11.2.2. The position of the registration plate relative to the longitudinal plane of symmetry of the tractor.

The registration plate must be positioned perpendicular to or almost perpendicular to the longitudinal plane of symmetry of the tractor.

11.2.3. The position of the registration plate relative to the vertical plane.

The registration plate must be positioned vertically with a tolerance of 5°. Despite this, the registration plate may be located at an angle to the vertical if the tractor configuration requires it:

at an angle of no more than 30°, when the upper part of the registration plate is tilted forward, provided that the upper edge of the registration plate is located no higher than 1.20 m above the supporting surface;

at an angle of no more than 15° when the top of the registration plate is tilted backwards, provided that the top edge of the registration plate is located above 1.20 m above the supporting surface.

11.2.4. The height of the registration plate above the supporting surface.

The lower edge of the registration plate must be located above the supporting surface at a height of at least 0.3 m, and the upper edge at a height of no more than 4 m.

11.2.5. Determining the height of the registration plate above the reference surface.

The height specified in subclauses 11.2.3 and 11.2.4 of clause 11 of this applications, should be measured on a tractor with the main equipment installed (including rollover protection devices and excluding additional accessories), with a load on the seat corresponding to the operator's weight (75 ± 10) kg, with fuel, lubricants and coolant containers fully filled,

tool.

12. Protective properties of the tractor cabin

Agricultural tractors must be equipped with protective cabs or have falling object protection devices and rollover protection devices.

Forestry tractors must have cabs and be equipped with rollover protection devices, falling object protection devices and operator protection devices.

12.1. Operator protection devices

Falling object protection devices (FOPS) for agricultural tractors must comply with ingress protection level I in accordance with GOST R ISO 3449-2009.

Agricultural Roll Over Protective Structures (ROPS) tractors - according to GOST R ISO 3463-2008 or GOST R ISO 5700-2008.

Operator safety devices for forestry tractors must

correspond:

STB ISO 8082-2004 – regarding rollover protective devices (ROPS);

GOST R ISO 8083-2008 – regarding falling object protection devices (FOPS);

GOST R ISO 8084-2005 – regarding operator protection devices (OPS).

12.2. Protecting the operator from exposure to harmful substances

All tractors that are intended for use in which there is a possible risk of operator contact with hazardous substances must be equipped with cabs that meet the requirements of levels 2, 3 and 4 according to STB EN 15695-1-2011. The level selection criterion should be given in the operating manual.

Tractors with installed equipment for spraying pesticides must be equipped with a cabin that meets the requirements of level 4 according to STB EN 15695-1-2011.

13. Additional requirements for the design of tractors and trailers

13.1. Stability requirements for tractors and trailers

The angle of lateral static stability of tractors and trailers, depending on the categories and conditions of their use, is established in accordance with GOST 12.2.019-2005. The form of technical descriptions is given in Appendix 2 to this technical regulation of the Customs Union.

Tractors intended for work in mountain conditions must be equipped with maximum permissible roll indicators.

13.2. Requirements for fire protection of tractors

Fire protection of the tractor must comply with STB EN 13478-2006 and GOST 30879-2003 (regarding materials used for interior decoration).

Tractors must have places for mounting

fire extinguisher.

13.3. Requirements for hydraulic drive of tractors and trailers

Hydraulic drives of tractors and trailers must meet the requirements GOST 31177-2003.

13.4. Requirements for ensuring safety during operation

Structural elements of the tractor and trailer that may pose a hazard during operation, maintenance or transportation must have a warning color. Signal colors and safety signs must comply with GOST R 12.4.026-2001.

Schemes for mooring and connecting strapping chains must be shown on the tractor and trailer and indicated in the operating manual. Places for installing jacks are marked on the tractor and trailer with symbols in accordance with GOST 26336-97.

13.5. Additional requirements for tractor cabs

The tractor cabin must have space for placing medical first aid kit, operator's outerwear and technical documentation.

The tractor cabin must be equipped with front window washers.

The tractor cabin must be equipped with a device that protects the operator's face from direct sunlight.

Openable tractor cabin windows must be opened from the inside and have a device for fixing them in the open and closed position.

The doors of the tractor cab must have locks that can be locked with a key and a lock to hold them in the extreme open position.

13.6. Additional requirements for dump trailers

Tipper trailers and semi-trailers must be designed in such a way that the highest permissible raised position of the platform cannot be exceeded.

Dump trailers and semi-trailers must be equipped with a device (stop) for fixing the unloaded platform in a raised position (to one side and back, or only back if there is no lateral unloading).

14. Requirements for emissions of harmful substances contained in exhaust gases from tractor engines

14.1. Until February 15, 2017, emissions of harmful substances contained in the exhaust gases of tractor engines must not exceed the values given in:

UNECE Regulation No. 49 (04)/Revision 3 (clause 5.2.1, line B1) - for positive ignition engines running on natural compressed gas or liquefied petroleum gas;

UNECE Regulation No. 96 (02)/Revision 1 – for engines with compression ignition.

14.2. From February 15, 2017, emissions of harmful substances contained in the exhaust gases of tractor engines must not exceed the values given in:

UNECE Regulation No. 49 (04)/Revision 3 (clause 5.2.1, line B2) - for positive ignition engines running on natural compressed gas or liquefied petroleum gas;

Table 5.2 – for engines with compression ignition.

Table 5.2

Power tractor engine, kW	Mass of carbon monoxide (CO), g/kWh	Weight hydrocarbons (HC), g/kWh	Weight nitrogen oxides (NO _x), g/kWh	Mass of solid particles (PT), g/kWh
From 19 to 37	5.5	(HC + NO _x) 7.5		0.6
« 37 « 56	5.0	(HC + NO _x) 4.7		0.025
« 56 «	5.0	0.19	3.3	0.025
75 « 75 «	5.0	0.19	3.3	0.025
130 « 130 « 560 incl.	3.5	0.19	2.0	0.025

14.3. It is allowed to apply the requirements given in paragraph 14.2 of this appendix until February 15, 2017.

Appendix 6

to the technical regulations of the Customs Union
 “On the safety of agricultural and forestry
 tractors and trailers for them”
 (TR TS 031/2012)

**Tractor manufacturer's plate and
 classification of technically permissible towed masses
 in accordance with the technical regulations of the Customs Union
 “On the safety of agricultural and forestry
 tractors and trailers for them”
 (TR TS 031/2012)**

1. Example of a tractor manufacturer's plate

MINSK TRACTOR PLANT	
Type: 846E	
Certificate of conformity number $\ddot{y}\ddot{y}\ddot{y}$	
ID number: GBS18041947	
Total permissible weight*:	Permissible 4,820 – 6,300 kg
front axle load*:	Permissible 2,390 – 3,200 kg
rear axle load*:	Permissible 3,130 – 4,260 kg
*Depending on tires.	
Permissible trailer towing weight:	
- without brakes:	3,000 kg
with independent braking:	6,000 kg
- with inertial braking:	3,000 kg
- with hydraulic or pneumatic	
brake drive:	12,000 kg

2. Classification of technically permissible towed masses

The following technically permissible towed masses are taken into account:
 trailers:

2.1. Trailer weight without brakes.

2.2. Trailer weight with independent braking, i.e. The machine-tractor unit is braked by means of devices having the following characteristics:

The trailer brake control is independent of the tractor brake control and in all cases installed on the tractor in such a way that it can be easily operated by the operator from his workplace;

the operator's muscular strength is the energy used to braking of a towed trailer.

2.3. Trailer weight with inertial braking, i.e. the trailer is braked by using the force generated when approaching
trailer to the tractor.

2.4. The weight of a trailer equipped with a hydraulic, pneumatic or combined brake drive, i.e. braking of a machine-tractor unit can be continuous, semi-continuous or independent mechanized drive.

Continuous braking of the machine-tractor unit is carried out using a device having the following characteristics:

a single governing body, which is in its place
the operator acts in one smooth movement;

the energy used to brake the machine-tractor unit comes from the same source (which may be the operator's muscular strength);

The braking system provides simultaneous or gradual braking
and tractor and trailer, regardless of their relative position.

The semi-continuous unit is carried out using a device having the following characteristics:

a single control element, which the operator in his place acts on with one smooth movement;

the energy used to brake a machine-tractor unit comes from several different sources (one of which may be the operator's muscular strength);

The braking system provides simultaneous or gradual braking
and tractor and trailer, regardless of their relative position.

Braking with an independent mechanized drive of a machine-tractor unit is carried out using a device having
the following characteristics:

The trailer brake control is independent of the
tractor brake control and in all cases installed on the tractor in such a way that it can be easily operated by the operator from his workplace;

the operator's muscular strength is not the energy used for
braking of a towed trailer.

3. The difference between the technically permissible towed weight established by the manufacturer and the permissible towed weight is given in paragraph 8.2 of Appendix 5 to this technical regulation of the
Customs
union.