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|  | United Nations | ECE/TRANS/WP.29/GRRF/2018/12 | |
| Description: _unlogo | **Economic and Social Council** | | Distr.: General  7 December 2017  English only |

**Economic Commission for Europe**

Inland Transport Committee

**World Forum for Harmonization of Vehicle Regulations**

**Working Party on Brakes and Running Gear**

**Eighty-sixth session**

Geneva, 12-16 February 2018

Item 7(e) of the provisional agenda

**Tyres: Regulation No. 106**

**Proposal for a Supplement to Regulation No. 106 (Pneumatic tyres for agricultural vehicles and their trailers)**

**Submitted by the experts from the European Tyre and Rim Technical Organisation[[1]](#footnote-2)\***

The text reproduced below was prepared by the experts from the European Tyre and Rim Technical Organisation (ETRTO) amending UN Regulation No. 106. It is a consolidated Text of UN Regulation No. 106 and it includes the proposal contained in ECE/TRANS/WP.29/GRRF/2018/6.

Regulation No. 106

Uniform provisions concerning the approval of pneumatic tyres for agricultural vehicles and their trailers

*Page*

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1. Scope

This Regulation covers new pneumatic tyres\* designed primarily, but not only, for agricultural and forestry vehicles (power-driven vehicles in category T[[2]](#footnote-3)), agricultural machines (power-driven and trailed) and agricultural trailers, and identified by speed category symbols corresponding to speeds of 65 km/h (speed symbol "D") and below.

It does not apply to tyre types designated primarily for other purposes, such as:

(a) Earth-moving equipment;

(b) Industrial and lift trucks.

2. Definitions

For the purposes of this Regulation:

2.1. "*Type of agricultural tyre*" means tyres which do not differ in such essential characteristics as:

(a) The manufacturer’s name;

(b) Tyre-size designation;

(c) Category of use:

(i) Tractor - steering wheel;

(ii) Tractor - drive wheel - standard tread;

(iii) Tractor - drive wheel - special tread;

(iv) Implement - traction;

(v) Implement - trailer;

(vi) Implement - mixed applications;

(vii) Forestry machines – standard tread;

(viii) Forestry machines – special tread;

(ix) Construction applications (IND).

(d) Structure (diagonal or (bias-ply), bias-belted, radial-ply);

(e) Speed category symbol;

(f) Load capacity index;

(g) Tyre cross-section.

2.2. "*Manufacturer*" means the person or body who is responsible to the Type Approval Authority (TAA) for all aspects of the type-approval and for ensuring the conformity of production.

2.3. "*Brand name/trademark*" means the identification of the brand or trademark as defined by the tyre manufacturer and marked on the sidewall(s) of the tyre. The brand name/trademark may be the same as that of the manufacturer.

2.4. "*Trade description/commercial name*" means an identification of a range of tyres as given by the tyre manufacturer. It may coincide with the brand name/trademark.

2.5. For reference on the following terms see explanatory figure in Appendix 1.

2.6. "*Structure of a tyre*" means the technical characteristics of the tyre carcass. The following structures are distinguished in particular:

2.6.1. "*Diagonal*" or "*bias-ply*" describes a tyre structure in which the ply cords extend to the bead and are laid at alternate angles of substantially less than 90° to the centreline of the tread;

2.6.2. "*Bias-belted*" describes a tyre structure of diagonal (bias-ply) type in which the carcass is restricted by a belt comprising two or more layers of substantially inextensible cord material laid at alternate angles close to those of the carcass;

2.6.3. "*Radial*" describes a tyre structure in which the ply cords extend to the beads and are laid substantially at 90° to the centreline of the tread, the carcass being stabilised by an essentially inextensible circumferential belt;

2.7. "*Bead*" means the part of a tyre which is of such shape and structure as to fit the rim and hold the tyre on it;

2.8. "*Cord*" means the strands forming the fabric of the plies in the tyre;

2.9. "*Ply*" means a layer of rubber-coated parallel cords;

2.10. "*Carcass*" means that part of a tyre other than the tread and the rubber sidewalls which, when inflated, bears the load;

2.11. "*Tread*" means that part of a tyre which comes into contact with the ground;

2.12. "*Sidewall*" meansthe part of the tyre, excluding the tread, which is visible when the tyre, fitted to a rim, is viewed from the side;

2.13. "*Section width (S)*" means the linear distance between the outsides of the sidewalls of an inflated tyre, excluding elevations due to labelling (marking), decoration or protective bands or ribs;

2.14. "*Overall width*" means the linear distance between the outside of the sidewalls of an inflated tyre, including labelling (marking), decoration and protective bands or ribs;

2.15. "*Section height (h)*" means a distance equal to half the difference between the outer diameter of the tyre and the nominal rim diameter;

2.16. "*Nominal aspect ratio (Ra)*" means one hundred times the number obtained by dividing the number expressing the nominal section height in millimetres by the number expressing the nominal section width in millimetres;

2.17. "*Outer diameter (D)*" means the overall diameter of an inflated new tyre;

2.18. "*Tyre-size designation*" means a designation showing:

2.18.1. The nominal section width (S1). This value must be expressed in mm.

2.18.2. The nominal aspect ratio (Ra).

2.18.3. An indication of the structure, placed in front of the nominal rim diameter marking, as follows:

2.18.3.1. On diagonal (bias-ply) tyres, the symbol "-" or the letter "D";

2.18.3.2. On radial-ply tyres, the letter "R";

2.18.3.3. On bias-belted tyres, the letter "B".

2.18.4. The conventional number "d" denoting the nominal rim diameter;

2.18.5. Optionally, the letters "IMP" after the nominal rim diameter marking in case of implement tyres;

2.18.6. Optionally, the letters "FRONT" after the nominal rim diameter marking in case of tractor steering wheel tyres;

2.18.7. However for tyres listed in Annex 5 the "tyre size designation" is that shown in the first column of those tables.

2.18.8. The letters "IF" before the nominal section width in case of "Improved Flexion Tyre".

2.18.9. The letters "VF" before the nominal section width in case of "Very High Flexion Tyre".

2.18.10. The letters "CFO" after the nominal rim diameter marking in case of "Improved Flexion" or "Very High Flexion" tractor-drive wheel tyres specifically designed for the equipments of machines to be used in Cyclic Field Operations.

2.18.11. The letters "CHO" after the nominal rim diameter marking in case of standard tractor-drive wheel tyres specifically designed for the equipments of machines to be used in Cyclic Harvesting Operations.

2.18.12. The letters "IND" after the nominal rim diameter marking in case of tyres for construction application (industrial tractors);

2.18.12.1. The letters “IND” may be replaced by the letters “SS” or “NHS” after the nominal rim diameter marking in case of tyres for construction applications as identified in Annex 5 table 10.

2.19. "*Nominal rim diameter (d)*" means a conventional number denoting the nominal diameter of the rim on which a tyre is designed to be mounted and corresponding to the diameter of the rim expressed either by size codes (number below 100 - see table for equivalence with millimeters) or in mm (numbers above 100) but not both;

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *"d" symbol expressed  by codes* | *Value to be used for the calculation in paras. 6.2.1  and 6.4 (mm)* |  | *"d" symbol expressed  by codes* | *Value to be used for the calculation in paras. 6.2.1  and 6.4 (mm)* |  | *"d" symbol expressed  by codes* | *Value to be used for the calculation in paras. 6.2.1  and 6.4 (mm)* |
| 4 | 102 |  | 19 | 483 |  | 48 | 1219 |
| 5 | 127 |  | 20 | 508 |  | 50 | 1270 |
| 6 | 152 |  | 21 | 533 |  | 52 | 1321 |
| 7 | 178 |  | 22 | 559 |  | 54 | 1372 |
| 8 | 203 |  | 24 | 610 |  | 14.5 | 368 |
| 9 | 229 |  | 25 | 635 |  | 15.5 | 394 |
| 10 | 254 |  | 26 | 660 |  | 16.5 | 419 |
| 11 | 279 |  | 28 | 711 |  | 17.5 | 445 |
| 12 | 305 |  | 30 | 762 |  | 19.5 | 495 |
| 13 | 330 |  | 32 | 813 |  | 20.5 | 521 |
| 14 | 356 |  | 34 | 864 |  | 22.5 | 572 |
| 15 | 381 |  | 36 | 914 |  | 24.5 | 622 |
| 15.3 | 389 |  | 38 | 965 |  | 26.5 | 673 |
| 16 | 406 |  | 40 | 1016 |  | 28.5 | 724 |
| 16.1 | 409 |  | 42 | 1067 |  | 30.5 | 775 |
| 17 | 432 |  | 44 | 1118 |  | - | - |
| 18 | 457 |  | 46 | 1168 |  | - | - |

2.20. "*Rim*" means the support for a tyre-and-tube assembly, or for a tubeless tyre, on which the tyre beads are seated;

2.21. "*Theoretical rim*" means the notional rim whose width would be equal to X times the nominal section width of a tyre; the value "X" must be specified by the tyre manufacturer or the reference rim width is that mentioned in Annex 5 for the relevant "tyre size designation";

2.22. "*Measuring rim*" means the rim on which a tyre is fitted for the measurement of the dimensions;

2.23. "*Tractor-drive wheel tyre*" means a tyre designed to be fitted to driven axles of agricultural and forestry tractors (vehicles in categories T) suitable for sustained high torque service. The tread pattern of the tyre consists of lugs or cleats;

2.23.1. "*Improved Flexion Tyre*" or "*Very High Flexion Tyre*" describes a tyre structure in which the carcass is more resistant than that of the corresponding standard tyre.

2.24. "*Tractor steering wheel tyre*" means a tyre designed to be fitted to non-driven axles of agricultural and forestry tractors (motor vehicles in category T). The tread pattern of the tyre generally consists of circumferential grooves and ribs;

2.25. "*Implement tyre*" means a tyre designed primarily for agricultural machines or interchangeable towed equipments (vehicles in category S) or for agricultural trailers (vehicles in category R); however it may also equip either front steering wheels and drive wheels of agricultural and forestry tractors (vehicles in category T), but it is not suitable for sustained high torque services;

2.26. "*Traction tyre*" means a tyre designed primarily for the equipment of driven axles agricultural machinery, excluding sustained high torque services. The tread pattern of the tyre generally consists of blocks**,** lugs or cleats. The type of application is identified with the symbol:



2.27. "*Trailer tyre*" means a tyre designed for the equipment of non-driven (trailed) axles of interchangeable towed equipments, agricultural machinery or trailers.





2.28. "*Mixed applications tyre*" means a tyre designed to be fitted to either driven and non-driven axles of interchangeable towed equipments, agricultural machinery or trailers;

2.29. "*Service description*" means the association of a load capacity index with a speed category symbol;

2.29.1. In case of implement tyres the service description is supplemented with the relevant symbol for the type of application concerned (traction or trailer) as defined in paragraphs 2.26. and 2.27.

2.30. "*Supplementary service description*" means an additional service description, marked within a circle, to identify a special type of service (load rating and speed category) to which the tyre type is also allowed in addition to the applicable load variation with speed (see Annex 7);

2.31. "*Load-capacity index*" means one number which indicates the load the tyre can carry in single formation at the speed corresponding to the associated speed category and when operated in conformity with the requirements governing utilisation specified by the manufacturer. The list of these indices and their corresponding masses is given in Annex 4;

2.32. "*Speed category*", the reference speedexpressed by the speed category symbol as shown in the table below:

|  |  |
| --- | --- |
| *Speed category symbol* | *Reference speed (km/h)* |
| A2 | 10 |
| A4 | 20 |
| A6 | 30 |
| A8 | 40 |
| B | 50 |
| D | 65 |

2.33. "*Table: Variation of load capacity with speed*" means the tables in Annex 7 showing as a function of the category of use, the type of application, the load capacity index and the nominal speed category symbol, the maximum load rating variations which a tyre can withstand when used at speeds different from that corresponding to its speed category symbol;

2.33.1. The table "Variation of load capacity with speed" is not applicable to the "supplementary service description".

2.34. "*Maximum load rating*" means the maximum mass the tyre is rated to carry:

2.34.1. It must not exceed the percentage of the value associated with the relevant load capacity index of the tyre as indicated in the table "Load-capacity variation with speed" (see paragraph 2.30. and 2.33. above), with reference to the category of use, the speed category symbol of the tyre and the speed capability of the vehicle to which the tyre is fitted;

2.35. "*Tread groove*" means the space between the adjacent ribs or blocks in the tread pattern;

2.36. "*Tread lug (or cleat)*" means the solid-block element protruding from the base of the tread pattern;

2.37. "*Special tread*" means a tyre, the tread pattern and structure of which are primarily designed to ensure in marshy areas a better grip than that of a standard tread tyre. The tread pattern of the tyre generally consists of lugs or cleats deeper than those of a standard tyre;

2.38. "*Chunking*" means the breaking away of small pieces of rubber from the tread;

2.39. "*Cord separation*" means the parting of the cords from their rubber coating;

2.40. "*Ply separation*" means the parting of adjacent plies;

2.41. "*Tread separation*" means the pulling away of the tread from the carcass;

2.42. "*Test rim*" means the rim on which a tyre must be fitted for the performance test;

2.43. "*Tyre classification code*" means the optional marking detailed in Annex 10 that identifies the category of use and the particular type of tread pattern and application as specified by ISO 18805.

2.44. “*Forestry tyre”* means a tyre designed to be fitted to machines or equipments used in forestry applications.

2.45. "*Construction application (industrial tractor) tyre*" means a tyre designed to be fitted on industrial tractors, backhoe loaders and other vehicles working in industrial or construction applications (e.g. loaders, excavators, etc.) or some agricultural vehicles (e.g. telehandlers).

2.46 NHS (not for highway service) means a tyre primarily designed for use outside of public roads, but suitable for temporary/incidental use on public roads.

3. Markings

3.1. Tyres submitted for approval shall bear on both sidewalls the following markings:

3.1.1. The manufacturer's name or the brand name/trademark;

3.1.2. The trade description/commercial name (see paragraph 2.4. of this Regulation). However, the trade description is not required when it coincides with the brand name/trademark.

3.1.3. The tyre-size designation;

3.1.4. An indication of the structure as follows:

3.1.4.1. On diagonal (bias-ply) tyres, no additional marking;

3.1.4.2. On radial-ply tyres, optionally, the word "RADIAL";

3.1.4.3. On bias-belted tyres, the words "BIAS-BELTED";

3.1.5. The "service description'';

3.1.5.1. In the case of implement tyre, the service description supplemented with the relevant application symbol;

3.1.5.2. In the case of implement tyre for mixed applications, two service descriptions one for "trailer" applications and the other for "traction" applications, each supplemented with the relevant symbol (see paragraphs 2.26. and 2.27. above) as follows:



3.1.6. The supplementary service description, if applicable.

3.1.7. The inscription "DEEP" (or "R-2" or "LS-3" or "HF-3" or "HF-4") in the case of a special tread tyre;

3.1.7.1. "DEEP" and "R-2" identify special tread tyres for tractor drive wheels.

3.1.8. The inscriptions "F-1" or "F-2" or “F-3” in the case of a tractor steering wheel tyre that is not already marked as per paragraph 2.18.6. above;

3.1.9. The inscriptions "LS-1", "LS-2", "LS-3" or "LS-4" in the case of log-skidder tyres for forestry machines.

3.1.9.1. "LS-3" identifies special tread tyres.

3.1.9.2. The inscription 'I-3' for implement tyres with traction tread as identified in Annex 5, Tables 5 and 6.

3.1.10. The inscription "IMPLEMENT" in the case of an implement tyre that is not already marked as per paragraph 2.18.5. above;

3.1.11. The word "TUBELESS" if the tyre is designed for use without an inner tube;

3.1.12. The inscription "... bar MAX." (or "… kPa MAX") inside the pictogram shown in Annex 11, to notify the cold inflation pressure that shall not be exceeded for bead seating during tyre mounting.

3.1.13**.** The inscription "R-3" for tractor drive wheel tyres with shallow tread as identified in Annex 5, table 2.

3.1.14**.** The inscription "R-4" in the case of a construction application tyre, identified in Annex 5, Table 9, that is not already marked as per paragraph 2.18.12. above.

3.1.15. The inscriptions "HF-1", "HF-2", "HF-3", or "HF-4" in the case of high-flotation tyres for tractor drive wheels or forestry machines listed in Annex 5 table 7.

3.1.15.1. "HF-3" and "HF-4" identify special tread tyres.

3.1.16. An indication, in kPa, of the inflation pressure to be adopted for measurements (as specified in Annex 6 point 1) and for the tyre resistance to bursting (as specified in Annex 8 point 2.1) and, if applicable, the load/speed test (as specified in Annex 9 point 2.3). This marking shall be preceded by the symbol "@" or the word “at” (e.g. “@ 240 kPa” or “at 240 kPa”) and be placed near the service description, either after or below.

3.1.16.1. However, this indication shall not be mandatory on any tyre type approved before the entry into force of Supplement 17 to this Regulation.

3.2. Tyres submitted for approval shall bear on one sidewall only the following:

3.2.1. The date of manufacture in the form of a group of four digits, the first two showing the week and the last two the year of manufacture

3.2.2. A free space sufficiently large to accommodate an approval mark as shown in Annex 2 to this Regulation.

3.3. All markings shall be clearly and legibly moulded and produced as part of the process during manufacture. The use of branding or other methods of marking after completion of the original manufacturing process is not permitted.

3.4. Annex 3 gives examples of the arrangement of tyre markings.

4. Application for approval

4.1. The application for approval of a type of tyre for agricultural and forestry services with regard to this Regulation shall be submitted by the tyre manufacturer or by his duly accredited representative. It shall specify:

4.1.1. The tyre-size designation;

4.1.2. The manufacturer's name;

4.1.2.1. The brand name(s)/trademark(s);

4.1.2.2. The trade description(s)/commercial name(s).

4.1.3. The category of use as defined in paragraph 2.1. of this Regulation;

4.1.4. The structure;

4.1.5. The speed category symbol;

4.1.6. The load-capacity index of the tyre, specifying in case of implement tyres that for traction (only) and that for trailer application, if applicable;

4.1.7. Whether the tyre is to be fitted with or without an inner tube;

4.1.8. The supplementary service description, if applicable;

4.1.9. The tyre/rim configuration;

4.1.10. The rim to be used for measurements and the rim to be used for tests;

4.1.11. The rim(s) on which the tyre can be mounted;

4.1.12. The inflation pressure (bar or kPa) for measurements as detailed in paragraph 3.1.16.;

4.1.13. The factor X referred to in paragraph 2.21. or the applicable table of Annex 5;

4.1.14. The cold inflation pressure that shall not be exceeded for bead seating during tyre mounting, as specified by the tyre manufacturer for the tyre type;

4.1.15. The test pressure, in kPa (or in bar) as detailed in paragraph 3.1.16..

4.2. On request of the Type Approval Authority, the tyre manufacturer must also submit a complete technical file for each tyre type containing in particular sketches or photographs (three copies) to identify the tread pattern and the envelope of the inflated tyre mounted on the measuring rim showing the relevant dimensions (see paragraphs 6.1. and 6.2. below) of the component type submitted for approval. It shall also either contain the test report issued by an approved test laboratory or be accompanied by one sample of the tyre type, as requested by the Type Approval Authority.

5. Approval

5.1. If the type of tyre submitted for approval in pursuance to this Regulation meets the requirements of paragraph 6. below, approval of that type of tyre shall be granted.

5.2. An approval number shall be assigned to each type approved. Its first two digits (at present 00, for the Regulation in its original form) shall indicate the series of amendments incorporating the most recent major technical amendments made to the Regulation at the time of issue of the approval. The same Contracting Party shall not assign the same number to another type of tyre covered by this Regulation.

5.3. Notice of approval or extension or refusal or withdrawal of approval or production definitively discontinued of a type of tyre pursuant to this Regulation shall be communicated to the Parties to the 1958 Agreement which apply this Regulation, by means of a form conforming to the model in Annex 1 to this Regulation.

5.4. There shall be affixed, conspicuously, to every tyre conforming to a type of tyre approved under this Regulation, in the space referred to in paragraph 3.2.2. above and in addition to the markings prescribed in paragraphs 3.1. and 3.2. above, an international approval mark consisting of:

5.4.1. A circle surrounding the letter "E" followed by the distinguishing number of the country which has granted approval.[[3]](#footnote-4)

5.4.2. The number of this Regulation followed by the letter "R", a dash and the type approval number.

5.5. The approval mark shall be clearly legible and be indelible.

5.6. Annex 2 to this Regulation gives an example of the arrangement of the approval mark.

6. Requirements

6.1. Section width of a tyre

6.1.1. The section width shall be obtained by means of the following formula:

S = S1 + K (A - A1),

Where:

S is the "section width" rounded to the nearest millimetre related to the measuring rim;

S1 is "the nominal section width" in mm, as shown on the sidewall of the tyre in the tyre designation as prescribed;

A is the width (expressed in mm)[[4]](#footnote-5) of the measuring rim, as shown by the manufacturer in the descriptive note;

A1 is the width of the theoretical rim; it is taken to equal S1 multiplied by the factor X as specified by the tyre manufacturer; and K is taken to equal 0.4.

6.1.2. However, for the types of tyre for which the size designation is given in the first column of the tables in Annex 5, the theoretical rim width code (A1) and the nominal section width (S1) are given opposite the tyre size designation in those tables.

6.2. Outer diameter of a tyre

6.2.1. Except as provided by paragraph 6.2.2., the outer diameter of a tyre is calculated by the following formula:

D = d + 2 H

Where:

D is the outer diameter expressed in mm;

d is the conventional number denoting the nominal rim diameter expressed in mm (see paragraph 2.19.);

H is the nominal section height rounded to the nearest millimetre and is equal to:

H = 0.01 • Ra • S1

Where:

Ra is the nominal aspect ratio;

S1 is the "nominal section width" in mm.

All as shown on the sidewall of the tyre in the tyre-size designation in conformity with the requirements of paragraph 2.18.

6.2.2. However, for the types of tyres for which the size designation is given in the first column of the tables of Annex 5 the outer diameter (D) and the nominal rim diameter (d) expressed in mm are given opposite the tyre size designation in those tables.

6.3. Tyre section width: specification of tolerances

6.3.1. The overall width of a tyre may be less than the section width determined pursuant to paragraph 6.1., or shown in Annex 5;

6.3.2. The overall width of a tyre may not exceed the section width determined pursuant to paragraph 6.1. by more than the following:

Radial construction: +5 per cent

Diagonal (bias) construction: +8 per cent

Calculated value to be rounded to the nearest mm;

6.3.3. However, for the types of tyre for which the size designation is given in the first column of the tables in Annex 5, the allowed percentages are those given in the relevant tables, if any.

6.4. Tyre outer diameter: specification of tolerances

6.4.1. The outer diameter of a tyre must not be outside the values D min and D max obtained from the following formulae:

D min = d + 2 • Hmin

D max = d + 2 • Hmax

Where

Hmin = H • a , rounded to the nearest mm

Hmax = H • b , rounded to the nearest mm

"H" and "d" are as defined in paragraph 6.2.1.

Coefficients "a" and "b" are specified in paragraph 6.4.2.

6.4.1.1. For sizes listed in Annex 5: H = 0,5 (D - d)

(for references see paragraph 6.2. above).

6.4.2. Coefficients "a" and "b" are respectively:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Category of use* | *Radial* | | *Diagonal (bias)* | |
|  | *a* | *b* | *a* | *b* |
| Steering wheels | 0,96 | 1,04 | 0,96 | 1,07 |
| Tractor drive wheels and forestry machines - normal | 0,96 | 1,04 | 0,96 | 1,07 |
| Tractor drive wheels and forestry machines – special | 1,00 | 1,12 | 1,00 | 1,12 |
| Implement | 0,96 | 1,04 | 0,96 | 1,07 |
| Construction Applications | 0,96 | 1,04 | 0,97 | 1,07 |

6.4.3. However, for the types of tyre for which the size designation is given in the first column of the tables in Annex 5, the allowed percentages are those given in the relevant tables, if any.

6.5. Test procedures

6.5.1. The actual dimensions of tyres are measured as prescribed in Annex 6.

6.5.2. The test procedure to assess the resistance of the tyre to burst is described in Annex 8.

6.5.2.1. A tyre which, after undergoing the relevant test to assess the resistance to burst, does not exhibit any tread separation, ply separation, cord separation, broken beads or broken cords is deemed to have passed the test. The tyre tested shall not be used for any other tests.

6.5.3. The test procedures to assess the suitability of the tyre for the claimed performances are described in Annex 9.

6.5.3.1. A tyre which, after undergoing the relevant load/speed test, does not exhibit any tread separation, ply separation, cord separation or broken cords is deemed to have passed the test. The tyre tested shall not be used for any other tests.

6.5.3.2. A tyre which, after undergoing the relevant load/speed test, does exhibit chunking, due to the specific test conditions is deemed to have passed the test.

6.5.4. Where a tyre manufacturer produces a range of tyres it is not considered necessary to carry out tests on every type of tyre in the range.

7. Modification of tyre type and extension of approval

7.1. Every modification of a tyre type shall be notified to the Type Approval Authority which approved the tyre type. That Authority may then either:

7.1.1. Consider that the modifications made are unlikely to have an appreciable adverse effect and that in any case the tyre still meet the requirements; or

7.1.2. Require a further test report from the Technical Service responsible for carrying out the tests.

7.2. A modification of the tread pattern of the tyre shall not be considered to necessitate a repetition of the tests prescribed in paragraph 6. of this Regulation.

7.3. Confirmation or refusal of approval, specifying the alterations, shall be communicated by the procedure specified in paragraph 5.3. above to the Parties to the Agreement which apply this Regulation.

7.4. The Type Approval Authority issuing the extension of approval shall assign a series number for such an extension and inform thereof the other Parties to the 1958 Agreement applying this Regulation by means of a communication form conforming to the model in Annex 1 to this Regulation.

8. Conformity of production

The conformity of production procedures shall comply with those set out in the Agreement, Appendix 2 (E/ECE/324-E/ECE/TRANS/505/Rev.2), with the following requirements:

8.1. The tyres approved under this Regulation shall be so manufactured as to conform to the type approved by meeting the requirements set forth in paragraph 6. above.

8.2. The Type Approval Authority which has granted type approval may at any time verify the conformity control methods applied in each production facility. For each production facility, the normal frequency of these verifications shall be once every two years.

9. Penalties for non-conformity of production

9.1. The approval granted in respect of a type of tyre pursuant to this Regulation may be withdrawn if the requirement laid down in paragraph 8.1. above is not complied with or if the tyres taken from the series have failed to pass the tests prescribed in that paragraph.

9.2. If a Party to the Agreement which applies this Regulation withdraws an approval it has previously granted, it shall forthwith so notify the other Contracting Parties which apply this Regulation, by means of a communication form conforming to the model in Annex 1 to this Regulation.

10. Production definitively discontinued

If the holder of an approval completely ceases to manufacture a type of tyre approved in accordance with this Regulation, he shall so inform the Type Approval Authority which granted the approval. Upon receiving the relevant communication that Authority shall inform thereof the other Parties to the Agreement which apply this Regulation by means of a communication form conforming to the model in Annex 1 to this Regulation.

11. Names and addresses of Technical Services responsible for conducting approval tests, of test laboratories, and of Type Approval Authorities

11.1. The Contracting Parties to the 1958 Agreement which apply this Regulation shall communicate to the United Nations Secretariat the names and addresses of the Technical Services responsible for conducting approval tests and, where applicable, of the approved test laboratories and of the Type Approval Authorities which grant approval and to which forms certifying approval, or extension of approval, or refusal of approval or withdrawal of approval or production definitively discontinued, issued in other countries, are to be sent.

11.2. The Contracting Parties to the 1958 Agreement which apply this Regulation may designate laboratories of tyre manufacturers as approved test laboratories.

11.3. Where a Contracting Party to the 1958 Agreement applies paragraph 11.2. above, it may, if it so desires, be represented at the tests by one or more persons of its choice.

# Explanatory figure

# **Type cross section**



Annex 1

Communication

(Maximum format: A4 (210 x 297 mm))

[[5]](#footnote-6)

issued by : Name of administration:

......................................

......................................

......................................

concerning:[[6]](#footnote-7) Approval granted

Approval extended

Approval refused

Approval withdrawn

Production definitively discontinued

of a type of tyre for motor vehicles pursuant to Regulation No. 106

Approval No.: …………………......... Extension No. : ………………….........

1. Manufacturer's name and address:

2. Tyre type designation**3**...................................................................................................

2.1. Brandname(s)/trademark(s): ........................................................................................

2.2. Trade description(s)/ Commercial name(s): .................................................................

3. If applicable, name and address of manufacturer's representative:

4. Summarized description:

4.1. Size of tyre:

4.2. Category of use:

4.3. Structure: diagonal or bias-ply/bias belted/radial2

4.4. Speed category symbol:

4.5. Load-capacity index:

4.5.1. For traction (implement only):

4.5.2. For trailer (implement only):

4.6. Whether the tyre is to be fitted with or without an inner tube

4.7. The supplementary service description, if applicable:

5. Technical Service and, where applicable, test laboratory approved for purposes   
of approval or of verification of conformity:

6. Date of report issued by that Service:

7. Number of report issued by that Service:

8. Reason(s) of extension (if applicable):

9. Any remarks:

10. Place:

11. Date:

12. Signature:

13. Annexed to this communication is a list of documents in the approval file deposited at the Type Approval Authorities having delivered the approval and which can be obtained upon request

Annex 2

Arrangement of approval mark



a = 12 mm min

The above approval mark affixed to a tyre shows that the type of tyre concerned has been approved in the Netherlands (E 4) pursuant to Regulation No. 106 under approval number 002439. The first two digits of the approval number indicate that the approval was granted in accordance with the requirements of Regulation No. 106 in its original form.

*Note:* The approval number must be placed close to the circle and either above or below the "E" or to the left or right of that letter. The digits of the approval number must be on the same side of the "E" and face in the same direction. The use of Roman numerals as approval numbers should be avoided so as to prevent any confusion with other symbols.

Annex 3

Arrangement of tyre markings

(See paragraphs 3.1. and 3.2. of this Regulation)

Part A: Drive wheel tyres for agricultural tractors

# Example of the markings to be borne by types of tyres complying with this Regulation

# 

# Minimum heights of markings (mm)

|  |  |  |  |
| --- | --- | --- | --- |
| *Tyres of nominal section width* | *Tyres of rim diameter code* | | |
| *Up to 12* | *13 to 19.5* | *20 and above* |
| up to 130 | b = 4 c = 4 | b = 6 c = 4 | b = 9 c = 4 |
| 135 to 235 | b = 6 c = 4 | b = 6 c = 4 | b = 9 c = 4 |
| 240 and above | b = 9 c = 4 | b = 9 c = 4 | b = 9 c = 4 |

These markings define a drive wheel tyre:

(a) Having a nominal section width of 360;

(b) Having a nominal aspect ratio of 70;

(c) Of radial ply structure (R);

(d) Having a nominal rim diameter of 610 for which the code is 24;

(e) Having a load capacity of 1250 kg, corresponding to load index 116 in Annex 4;

(f) Classified in the speed category A8 (reference speed 40 km/h);

(g) Allowed to be used additionally at 50 km/h (speed category symbol B) with a load, capacity of 1150 kg corresponding to the load capacity index 113 shown in Annex 4;

(h) For fitting without an inner tube ("tubeless");

(i) Having a special tread ("R-2");

(j) Manufactured during the twenty-fifth week of the year 2006 (see paragraph 3.2. of this Regulation);

(k) Requiring to be inflated to 240 kPa for measurements and tyre resistance to burst and, if applicable, load/speed test.

The positioning and order of the markings constituting the tyre designation are as follows:

(a) The size designation, comprising the prefix (if any), the nominal section width, the nominal aspect ratio, the type-of-structure symbol (where applicable) and the nominal rim diameter, must be grouped as shown in the examples:

360/70 R 24, IF 360/70 R 24, VF 360/70 R 24, IF 800/65 R 32 CFO, 800/70 R 24 CHO;

(b) The service description (load index and the speed category symbol) is placed near the size designation. It may either precede or follow it or be placed above or below it;

(c) The symbols "TUBELESS", "R-2" or "DEEP", the optional word "RADIAL" and the date of production may be at a distance from the size designation;

(d) The marking of the additional service description inside the circle may show either the speed category symbol after or below the load index;

(e) The inflation pressure to be used for measurement and tests is placed near the service description. It may either follow or be placed below it.

Part B: Steering wheel tyres for agricultural and forestry tractors

# Example of the markings to be borne by types of tyres complying with this Regulation



# Minimum heights of markings (mm)

|  |  |  |  |
| --- | --- | --- | --- |
| *Tyres of nominal section width* | *Tyres of rim diameter code* | | |
| *Up to 12* | *13 to 19.5* | *20 and above* |
| up to 130 | b = 4 c = 4 | b = 6 c = 4 | b = 9 c = 4 |
| 135 to 235 | b = 6 c = 4 | b = 6 c = 4 | b = 9 c = 4 |
| 240 and above | b = 9 c = 4 | b = 9 c = 4 | b = 9 c = 4 |

These markings define a steering wheel tyre:

(a) Having a nominal section width of 250;

(b) Having a nominal aspect ratio of 70;

(c) Of radial-ply structure (R);

(d) Having a nominal rim diameter of 405 mm, for which the code is 16, designed for the equipment of non-driven steering axles of agricultural tractors (FRONT);

(e) Having load capacities of 925 kg, corresponding to the load capacity index 105 shown in Annex 4;

(f) Classified in the nominal speed category A6 (reference speed 30 km/h);

(g) For fitting without an inner tube "tubeless";

(h) Manufactured during the twenty-fifth week of the year 2006 (see paragraph 3.2. of this Regulation);

(i) Requiring to be inflated to 240 kPa for measurements and tyre resistance to burst.

The positioning and order of the markings constituting the tyre designation are as follows:

(a) The size designation, comprising the nominal section width, the nominal aspect ratio, the type-of-structure symbol (where applicable), the nominal rim diameter and, optionally the letters "FRONT", must be grouped as shown in the above example: 250/70 R 16 FRONT;

(b) The service description (the load index and the speed category symbol) is placed together near the size designation. It may either precede or follow it or be placed above or below it;

(c) The symbol "TUBELESS", the optional word "RADIAL", the optional symbol "F-1", and the date of manufacture may be at a distance from the size designation;

(d) The inflation pressure to be used for measurement and tests is placed near the service description. It may either follow or be placed below it.

Part C: Implement tyres

# Example of the markings to be borne by types of tyres complying with this Regulation



# Minimum heights of markings (mm)

|  |  |  |  |
| --- | --- | --- | --- |
| *Tyres of nominal section width* | *Tyres of rim diameter code* | | |
| *Up to 12* | *13 to 19.5* | *20 and above* |
| up to 130 | b = 4 c = 4 d = 7 | b = 6 c = 4 d = 12 | b = 9 c = 4 d = 12 |
| 135 to 235 | b = 6 c = 4 d = 12 | b = 6 c = 4 d = 12 | b = 9 c = 4 d = 12 |
| 240 and above | b = 9 c = 4 d = 12 | b = 9 c = 4 d = 12 | b = 9 c = 4 d = 12 |

These markings define an implement tyre:

(a) Having a nominal section width of 250;

(b) Having a nominal aspect ratio of 70;

(c) Of radial-ply structure (R);

(d) Having a nominal rim diameter of 508 mm, for which the code is 20;

(e) Designed primarily for the equipment of implements, agricultural machinery or agricultural trailers (IMP);

(f) Having load capacities of 690 kg corresponding to the load capacity index 95 shown in Annex 4 when used on driven axles (traction application), as identified by the appropriate symbol;

(g) Having load capacities of 1,000 kg when used on non-driven axles (trailer application) corresponding to the load capacity index 108 shown in Annex 4, as identified by the appropriate symbol;

(h) Both applications being classified in the nominal speed category A6 (reference speed 30 km/h);

(i) For fitting without an inner tube "tubeless";

(j) Manufactured during the twenty-fifth week of the year 2006 (see paragraph 3.2. of the Regulation);

(k) Requiring to be inflated to 240 kPa for measurements and tyre resistance to burst and, if applicable, load/speed test.

The positioning and order of the markings constituting the tyre designation are as follows:

(a) The size designation, comprising the nominal section width, the nominal aspect ratio, the type-of-structure symbol (where applicable), the nominal rim diameter and optionally the letters 'IMP' must be grouped as shown in the above example: 250/70 R 20 IMP;

(b) The service description (the load index and the speed category symbol) and the relevant type of application symbol are placed together near the size designation. They may either precede or follow it or be placed above or below it;

(c) The symbol "TUBELESS", I-3 if any, the optional word "RADIAL", the optional word "IMPLEMENT" and the date of manufacture may be at a distance from the size designation;

(d) The inflation pressure to be used for measurement and tests is placed near the service description. It may either follow or be placed below it.

Part D: Tyres for forestry machines

Example of the markings to be borne by types of tyres complying with this Regulation

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ↓ |  | ↓ |  | | ↓ | |  | | |  | | ↓ | | |
| **600/55 – 26.5** | **b** | **LS-2** | **b** | **154 A8** | | **b** | | | **@ 240 kPa** | | | | | **c** |
|  | **↑** |  | **↑** |  | | **↑** | |  | | |  | | **↑** | | |
|  | **↓** |  |  | | **↓** | |  |  | |  | |
| **TUBELESS** | **c** |  | **2506** | | **c** | |  |  | |  | |
|  | **↑** |  |  | | **↑** | |  |  | |  | |

Minimum heights of markings: b: 9 mm c: 4 mm

These markings define a tyre for forestry machines:

(a) Having a nominal section width of 600;

(b) Having a nominal aspect ratio of 55;

(c) Of diagonal ply structure (-);

(d) Having a nominal rim diameter of 673 mm for which the code is 26.5;

(e) Having an intermediate tread ("LS-2");

(f) Having a load capacity of 3750 kg, corresponding to load index 154 in Annex 4;

(g) Classified in the speed category A8 (reference speed 40 km/h);

(h) For fitting without an inner tube ("tubeless");

(i) Manufactured during the twenty-fifth week of the year 2006 (see paragraph 3.2. of this Regulation);

(j) Requiring to be inflated to 240 kPa for measurements and tyre resistance to burst.

The positioning and order of the markings constituting the tyre designation are as follows:

(a) The size designation, comprising the nominal section width, the nominal aspect ratio, the type of structure symbol (where applicable) and the nominal rim diameter, must be grouped as shown in the above example: 600/55 – 26.5;

(b) The inscription "LS-*n*" (or "HF-*n*" in the case of high-flotation tyres) is placed after the size designation, where *n* is the number pertaining to the appropriate classification code as defined in Annex 10 (e.g. "LS-2" in the example above);

(c) The service description (load index and the speed category symbol) is placed near the size designation. It may either precede or follow it or be placed above or below it;

(d) The symbols "TUBELESS" and the date of production may be at a distance from the size designation;

(e) The inflation pressure to be used for measurement and tests is placed near the service description. It may either follow or be placed below it.

Part E: Tyres for construction applications (industrial tractors)

Example of the markings to be borne by types of tyres complying with this Regulation

b 400/80 – 24 IND b b 156 A8 b b 153 B b c @ 240 kPa c

c TUBELESS c c 2513 c

Minimum heights of markings:

b: 9 mm c: 4 mm

These markings define a tyre for construction applications (IND):

(a) Having a nominal section width of 400;

(b) Having a nominal aspect ratio of 80;

(c) Of diagonal ply structure (-);

(d) Having a nominal rim diameter of 610 mm for which the code is 24;

(e) Having a load capacity of 4000 kg, corresponding to load index 156 in Annex 4;

(f) Classified in the speed category A8 (reference speed 40 km/h) ;

(g) Allowed to be used additionally at 50 km/h (speed category symbol B) with a load, capacity of 3650 kg corresponding to the load capacity index 153 shown in Annex 4;

(h) For fitting without an inner tube ("TUBELESS");

(i) Manufactured during the twenty-fifth week of the year 2013 (see paragraph 3.2. of the Regulation);

(j) Requiring to be inflated to 240 kPa for measurements and tyre resistance to burst and, if applicable, load/speed test.

The positioning and order of the markings constituting the tyre designation are as follows:

(a) The size designation, comprising the nominal section width, the nominal aspect ratio, the type of structure symbol, the nominal rim diameter and the suffix IND, must be grouped as shown in the above example: 400/80 – 24 IND;

(b) The service description (load index and the speed category symbol) is placed near the size designation. It may either precede or follow it or be placed above or below it;

(c) The symbols "TUBELESS', "R-4" if applicable, and the date of production may be at a distance from the size designation";

(d) The marking of the additional Service Description inside the circle, if any, may show either the speed category symbol after or below the load index;

(e) The inflation pressure to be used for measurement and tests is placed near the service description. It may either follow or be placed below it.

Annex 4

List of load capacity indices (LI) and corresponding maximum mass to be carried (kg)

(See paragraph 2.28. of this Regulation)

| *LI* | *kg* | | *LI* | *kg* | | *LI* | *kg* | | *LI* | *kg* | | | *LI* | *kg* | | *LI* | *kg* | | | *LI* | *kg* | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 45 | | 40 | 140 | | 80 | 450 | | 120 | 1 400 | | | 160 | 4 500 | | 200 | 14 000 | | | 240 | 45 000 | |
| 1 | 46.2 | | 41 | 145 | | 81 | 462 | | 121 | 1 450 | | | 161 | 4 625 | | 201 | 14 500 | | | 241 | 46 250 | |
| 2 | 47.5 | | 42 | 150 | | 82 | 475 | | 122 | 1 500 | | | 162 | 4 750 | | 202 | 15 000 | | | 242 | 47 500 | |
| 3 | 48.7 | | 43 | 155 | | 83 | 487 | | 123 | 1 550 | | | 163 | 4 875 | | 203 | 15 500 | | | 243 | 48 750 | |
| 4 | 50 | | 44 | 160 | | 84 | 500 | | 124 | 1 600 | | | 164 | 5 000 | | 204 | 16 000 | | | 244 | 50 000 | |
| 5 | 51.5 | | 45 | 165 | | 85 | 515 | | 125 | 1 650 | | | 165 | 5 150 | | 205 | 16 500 | | | 245 | 51 500 | |
| 6 | 53 | | 46 | 170 | | 86 | 530 | | 126 | 1 700 | | | 166 | 5 300 | | 206 | 17 000 | | | 246 | 53 000 | |
| 7 | 54.5 | | 47 | 175 | | 87 | 545 | | 127 | 1 750 | | | 167 | 5 450 | | 207 | 17 500 | | | 247 | 54 500 | |
| 8 | 56 | | 48 | 180 | | 88 | 560 | | 128 | 1 800 | | | 168 | 5 600 | | 208 | 18 000 | | | 248 | 56 000 | |
| 9 | 58 | | 49 | 185 | | 89 | 580 | | 129 | 1 850 | | | 169 | 5 800 | | 209 | 18 500 | | | 249 | 58 000 | |
| 10 | 60 | | 50 | 190 | | 90 | 600 | | 130 | 1 900 | | | 170 | 6 000 | | 210 | 19 000 | | | 250 | 60 000 | |
| 11 | 61.5 | | 51 | 195 | | 91 | 615 | | 131 | 1 950 | | | 171 | 6 150 | | 211 | 19 500 | | | 251 | 61 500 | |
| 12 | 63 | | 52 | 200 | | 92 | 630 | | 132 | 2 000 | | | 172 | 6 300 | | 212 | 20 000 | | | 252 | 63 000 | |
| 13 | 65 | | 53 | 206 | | 93 | 650 | | 133 | 2 060 | | | 173 | 6 500 | | 213 | 20 600 | | | 253 | 65 000 | |
| 14 | 67 | | 54 | 212 | | 94 | 670 | | 134 | 2 120 | | | 174 | 6 700 | | 214 | 21 200 | | | 254 | 67 000 | |
| 15 | 69 | | 55 | 218 | | 95 | 690 | | 135 | 2 180 | | | 175 | 6 900 | | 215 | 21 800 | | | 255 | 69 000 | |
| 16 | 71 | | 56 | 224 | | 96 | 710 | | 136 | 2 240 | | | 176 | 7 100 | | 216 | 22 400 | | | 256 | 71 000 | |
| 17 | 73 | | 57 | 230 | | 97 | 730 | | 137 | 2 300 | | | 177 | 7 300 | | 217 | 23 000 | | | 257 | 73 000 | |
| 18 | 75 | | 58 | 236 | | 98 | 750 | | 138 | 2 360 | | | 178 | 7 500 | | 218 | 23 600 | | | 258 | 75 000 | |
| 19 | 77.5 | | 59 | 243 | | 99 | 775 | | 139 | 2 430 | | | 179 | 7 750 | | 219 | 24 300 | | | 259 | 77 500 | |
| 20 | 80 | | 60 | 250 | | 100 | 800 | | 140 | 2 500 | | | 180 | 8 000 | | 220 | 25 000 | | | 260 | 80 000 | |
| 21 | 82.5 | | 61 | 257 | | 101 | 825 | | 141 | 2 575 | | | 181 | 8 250 | | 221 | 25 750 | | | 261 | 82 500 | |
| 22 | 85 | | 62 | 265 | | 102 | 850 | | 142 | 2 650 | | | 182 | 8 500 | | 222 | 26 500 | | | 262 | 85 000 | |
| 23 | 87.5 | | 63 | 272 | | 103 | 875 | | 143 | 2 725 | | | 183 | 8 750 | | 223 | 27 250 | | | 263 | 87 500 | |
| 24 | 90 | | 64 | 280 | | 104 | 900 | | 144 | 2 800 | | | 184 | 9 000 | | 224 | 28 000 | | | 264 | 90 000 | |
| 25 | 92.5 | | 65 | 290 | | 105 | 925 | | 145 | 2 900 | | | 185 | 9 250 | | 225 | 29 000 | | | 265 | 92 500 | |
| 26 | 95 | | 66 | 300 | | 106 | 950 | | 146 | 3 000 | | | 186 | 9 500 | | 226 | 30 000 | | | 266 | 95 000 | |
| 27 | 97.5 | | 67 | 307 | | 107 | 975 | | 147 | 3 075 | | | 187 | 9 750 | | 227 | 30 750 | | | 267 | 97 500 | |
| 28 | 100 | | 68 | 315 | | 108 | 1 000 | | 148 | 3 150 | | | 188 | 10 000 | | 228 | 31 500 | | | 268 | 100 000 | |
| 29 | 103 | | 69 | 325 | | 109 | 1 030 | | 149 | 3 250 | | | 189 | 10 300 | | 229 | 32 500 | | | 269 | 103 000 | |
| 30 | 106 | | 70 | 335 | | 110 | 1 060 | | 150 | 3 350 | | | 190 | 10 600 | | 230 | 33 500 | | | 270 | 106 000 | |
| 31 | 109 | | 71 | 345 | | 111 | 1 090 | | 151 | 3 450 | | | 191 | 10 900 | | 231 | 34 500 | | | 271 | 109 000 | |
| 32 | 112 | | 72 | 355 | | 112 | 1 120 | | 152 | 3 550 | | | 192 | 11 200 | | 232 | 35 500 | | | 272 | 112 000 | |
| 33 | 115 | | 73 | 365 | | 113 | 1 150 | | 153 | 3 650 | | | 193 | 11 500 | | 233 | 36 500 | | | 273 | 115 000 | |
| 34 | 118 | | 74 | 375 | | 114 | 1 180 | | 154 | 3 750 | | | 194 | 11 800 | | 234 | 37 500 | | | 274 | 118 000 | |
| 35 | 121 | | 75 | 387 | | 115 | 1 215 | | 155 | 3 875 | | | 195 | 12 150 | | 235 | 38 750 | | | 275 | 121 500 | |
| 36 | 125 | | 76 | 400 | | 116 | 1 250 | | 156 | 4 000 | | | 196 | 12 500 | | 236 | 40 000 | | | 276 | 125 000 | |
| 37 | 128 | | 77 | 412 | | 117 | 1 285 | | 157 | 4 125 | | | 197 | 12 850 | | 237 | 41 250 | | | 277 | 128 500 | |
| 38 | 132 | | 78 | 425 | | 118 | 1 320 | | 158 | 4 250 | | | 198 | 13 200 | | 238 | 42 500 | | | 278 | 132 000 | |
| 39 | 136 | | 79 | 437 | | 119 | 1 360 | | 159 | 4 375 | | | 199 | 13 600 | | 239 | 43 750 | | | 279 | 136 000 | |

Annex 5

Theoretical rim, outer diameter and nominal section width of tyres of certain size designations

# Table 1 (1 of 2)

# **Agricultural steering wheels - Normal and low Section sizes**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal width (S1) (mm)* | *Overall diameter (D) (mm)* | | *Nominal width (d) (mm)* |
|  | *(\*)* |
| 4.00 ‑ 9 | 3 | 112 | 460 | - | 229 |
| 4.00 ‑ 12 | 3 | 112 | 535 | 526 | 305 |
| 4.00 ‑ 15 | 3 | 112 | 610 | 602 | 381 |
| 4.00 ‑ 16 | 3 | 112 | 630 | - | 406 |
| 4.00 ‑ 19 | 3 | 112 | 712 | 704 | 483 |
| 4.50 ‑ 10 | 3 | 121 | 505 | - | 254 |
| 4.50 ‑ 16 | 3 | 122 | 655 | - | 406 |
| 4.50 ‑ 19 | 3 | 122 | 736 | - | 483 |
| 5.00 ‑ 10 | 3 | 130 | 530 | - | 254 |
| 5.00 ‑ 12 | 3 | 130 | 580 | - | 305 |
| 5.00 ‑ 15 | 4 | 140 | 655 | 649 | 381 |
| 5.00 ‑ 16 | 4 | 140 | 680 | - | 406 |
| 5.50 ‑ 16 | 4 | 150 | 710 | 694 | 406 |
| 6.00 ‑ 14 | 5 | 169 | 688 | 669 | 356 |
| 6.00 ‑ 16 | 4,5 | 165 | 735 | 720 | 406 |
| 6.00 ‑ 18 | 4 | 160 | 790 | - | 457 |
| 6.00 ‑ 19 | 4,5 | 165 | 814 | 796 | 483 |
| 6.00 ‑ 20 | 4,5 | 165 | 840 | - | 508 |
| 6.50 ‑ 10 | 4,5 | 175 | 608 | - | 254 |
| 6.50 ‑ 16 | 4,5 | 175 | 760 | 739 | 406 |
| 6.50 ‑ 20 | 4,5 | 175 | 865 | - | 508 |
| 7.50 ‑ 16 | 5,5 | 205 | 805 | 782 | 406 |
| 7.50 ‑ 18 | 5,5 | 205 | 860 | 833 | 457 |
| 7.50 ‑ 20 | 5,5 | 205 | 915 | 883 | 508 |
| 8.00 ‑ 16 | 5,5 | 211 | 813 | 813 | 406 |
| 9.00 ‑ 16 | 6 | 234 | 855 | 827 | 406 |
| 9.50 ‑ 20 | 7 | 254 | 978 | - | 508 |
| 10.00 ‑ 16 | 8 | 274 | 895 | - | 406 |
| 11.00 ‑ 16 | 10 | 315 | 965 | 935 | 406 |
| 11.00 ‑ 24 | 10 | 315 | 1 170 | 1138 | 610 |

# Table 1 (2 of 2)

# **Agricultural steering wheels - Normal and low section sizes**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Tyre size designation* | | *Theoretical rim width code (A1)* | | | *Nominal width (S1) (mm)* | | *Overall diameter (D) (mm)* | | | | *Nominal width (d) (mm)* |
|  | | *(\*)* | |
| Low Section | | | | | | | | | | | |
| 7.5L - 15 | | 6 | | | 210 | | 745 | | - | | 381 |
| 8.25/85 ‑ 15 | | 6 | | | 210 | | 745 | | - | | 381 |
| 9.5L ‑ 15 | | 8 | | | 240 | | 785 | | - | | 381 |
| 9.5/85 ‑ 15 | | 8 | | | 240 | | 785 | | - | | 381 |
| 11L ‑ 15 | | 8 | | | 280 | | 815 | | 783 | | 381 |
| 11.5/75 ‑ 15 | | 8 | | | 280 | | 815 | | - | | 381 |
| 7.5L ‑ 16 | | 6 | | | 208 | | 746 | | - | | 406 |
| 11L ‑ 16 | | 8 | | | 279 | | 840 | | 808 | | 406 |
| 11.5/80 - 15.3 | | 9 | | | 290 | | 845 | | - | | 389 |
| 14L ‑ 16.1 | | 11 | | | 360 | | 985 | | 950 | | 409 |
| 14.0/80 ‑ 16.1 | | 11 | | | 360 | | 985 | | - | | 409 |
| 14.5/75 ‑ 16.1 | | 11 | | | 373 | | 940 | | 904 | | 409 |
| 16.5L ‑ 16.1 | | 14 | | | 419 | | 1 072 | | 1031 | | 409 |
| *Notes:*  1. Agricultural steering wheels tyres are identified either by suffix "Front" placed after the Tyre size designation (e.g. 4.00 - 9 Front) or by one of the following additional markings added to the Tyre sidewalls: "F-1", "F-2" or "F-3".  2. Tyres of radial structure are identified by means of the letter "R" in place of " - " (e.g. 4.00R9).  3. Overall diameters (D) in column (\*) apply to tyres for industrial service (construction applications) marked with classification code "F-3" – see paragraph 3.1.8 of this Regulation. These tyres may be marked with the suffix "IND" instead of "Front".  4. For diagonal tyres marked on the tyre sidewall with classification code "F-1" (see paragraph 3.1.8. of this regulation), the overall diameter (D) is to be increased by 12 mm. | | | | | | | | | | | |

# Table 2 (1 of 5)

# **Drive wheel tyres for agricultural tractors - Normal section sizes**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | | *Overall diameter (D) (mm)* | | *Nominal rim*  *diameter (d)*  *(mm)* |
| *Radial* | *Diagonal* | *Radial* | *Diagonal (\*)* |
| 4.00‑7 | 3 | - | 112 | - | 410 | 178 |
| 4.00‑8 | 3 | - | 112 | - | 435 | 203 |
| 4.00‑9 | 3 | - | 112 | - | 460 | 229 |
| 4.00‑10 | 3 | - | 112 | - | 485 | 254 |
| 4.00‑12 | 3 | - | 112 | - | 535 | 305 |
| 4.00‑18 | 3 | - | 112 | - | 690 | 457 |
| 4.50‑10 | 3 | - | 121 | - | 505 | 254 |
| 5.0 ‑10 | 4 | - | 135 | - | 505 | 254 |
| 5.00‑10 | 3 | - | 130 | - | 530 | 254 |
| 5.00‑12 | 4 | - | 145 | - | 580 | 305 |
| 5.00‑15 | 4 | - | 145 | - | 645 | 381 |
| 6.00‑12 | 4 | - | 160 | - | 635 | 305 |
| 6.00‑16 | 4 | - | 160 | - | 735 | 406 |
| 6.5‑15 | 5 | - | 167 | - | 685 | 381 |
| 6.50‑16 | 5 | - | 175 | - | 760 | 406 |
| 7.00-16 | 6 | - | 183 | - | 742 | 406 |
| 7.00-18 | 6 | - | 183 | - | 792 | 457 |
| 7.50-16 | 5,5 | 205 | - | 805 | - | 406 |
| 7.50‑18 | 5,5 | 205 | 205 | 880 | 860 | 457 |
| 8.00‑20 | 6 | - | 220 | - | 965 | 508 |
| 5‑12 | 4 | - | 127 | - | 545 | 305 |
| 5‑14 | 4 | - | 127 | - | 595 | 356 |
| 5‑26 | 4 | - | 127 | - | 900 | 660 |
| 6‑10 | 5 | - | 157 | - | 550 | 254 |
| 6‑12 | 5 | - | 157 | - | 600 | 305 |
| 6‑14 | 5 | - | 157 | - | 650 | 356 |
| 7‑14 | 5 | - | 173 | - | 690 | 356 |
| 7‑16 | 6 | - | 183 | - | 740 | 406 |
| 8‑16 | 6 | - | 201 | - | 790 | 406 |
| 8‑18 | 7 | - | 211 | - | 840 | 457 |
| 7.2‑20 | 6 | - | 183 | - | 845 | 508 |
| 7.2‑24 | 6 | - | 183 | - | 945 | 610 |
| 7.2‑30 | 6 | - | 183 | - | 1 095 | 762 |
| 7.2‑36 | 6 | - | 183 | - | 1 250 | 914 |
| 7.2‑40 | 6 | - | 183 | - | 1 350 | 1 016 |
| 8.3‑16 | 7 | - | 211 | - | 790 | 406 |

Table 2 (2 of 5)

**Drive wheel tyres for agricultural tractors - Normal section sizes**

| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | | *Overall diameter (D) (mm)* | | *Nominal rim diameter (d) (mm)* |
| --- | --- | --- | --- | --- | --- | --- |
| *Radial* | *Diagonal* | *Radial* | *Diagonal (\*)* |
| 8.3‑20 | 7 | - | 211 | - | 890 | 508 |
| 8.3‑22 | 7 | - | 211 | - | 940 | 559 |
| 8.3‑24 | 7 | 211 | 211 | 985 | 995 | 610 |
| 8.3‑26 | 7 | - | 211 | - | 1 045 | 660 |
| 8.3‑28 | 7 | - | 211 | - | 1 095 | 711 |
| 8.3‑32 | 7 | 211 | 211 | 1 190 | 1 195 | 813 |
| 8.3‑36 | 7 | 211 | 211 | 1 290 | 1 300 | 914 |
| 8.3‑38 | 7 | - | 211 | - | 1 350 | 965 |
| 8.3‑42 | 7 | 211 | 211 | 1 440 | 1 450 | 1 067 |
| 8.3‑44 | 7 | 211 | 211 | 1 495 | 1 500 | 1 118 |
| 9.5‑16 | 8 | - | 241 | - | 845 | 406 |
| 9.5‑18 | 8 | - | 241 | - | 895 | 457 |
| 9.5‑20 | 8 | 241 | 241 | 940 | 945 | 508 |
| 9.5‑22 | 8 | - | 241 | - | 995 | 559 |
| 9.5‑24 | 8 | 241 | 241 | 1 040 | 1 050 | 610 |
| 9.5‑26 | 8 | - | 241 | - | 1 100 | 660 |
| 9.5‑28 | 8 | 241 |  | 1 140 |  | 711 |
| 9.5‑32 | 8 | - | 241 | - | 1 250 | 813 |
| 9.5‑36 | 8 | 241 | 241 | 1 345 | 1 355 | 914 |
| 9.5‑38 | 8 | - | 241 | - | 1 405 | 965 |
| 9.5‑42 | 8 | - | 241 | - | 1 505 | 1 067 |
| 9.5‑44 | 8 | 241 | 241 | 1 550 | 1 555 | 1 118 |
| 9.5‑48 | 8 | 241 | 241 | 1 650 | 1 655 | 1 219 |

# Table 2 (3 of 5)

# **Drive wheel tyres for agricultural tractors - Normal section sizes**

| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | | *Overall diameter (D) (mm)* | | *Nominal rim diameter (d) (mm)* |
| --- | --- | --- | --- | --- | --- | --- |
| *Radial* | *Diagonal* | *Radial* | *Diagonal (\*)* |
| 11.2‑18 | 10 | - | 284 | - | 955 | 457 |
| 11.2‑20 | 10 | 284 | 284 | 995 | 1 005 | 508 |
| 11.2‑24 | 10 | 284 | 284 | 1 095 | 1 105 | 610 |
| 11.2‑26 | 10 | - | 284 | - | 1 155 | 660 |
| 11.2‑28 | 10 | 284 | 284 | 1 200 | 1 205 | 711 |
| 11.2‑36 | 10 | 284 | 284 | 1 400 | 1 410 | 914 |
| 11.2‑38 | 10 | 284 | 284 | 1 455 | 1 460 | 965 |
| 11.2‑42 | 10 | 284 | - | 1 555 | - | 1 067 |
| 11.2‑44 | 10 | 284 | - | 1 610 | - | 1 118 |
| 11.2‑48 | 10 | 284 | - | 1 710 | - | 1 219 |
| 12.4‑16 | 11 | - | 315 | - | 956 | 406 |
| 12.4‑20 | 11 | 315 | - | 1 045 | - | 508 |
| 12.4‑24 | 11 | 315 | 315 | 1 145 | 1 160 | 610 |
| 12.4‑26 | 11 | - | 315 | - | 1 210 | 660 |
| 12.4‑28 | 11 | 315 | 315 | 1 250 | 1 260 | 711 |
| 12.4‑30 | 11 | - | 315 | - | 1 310 | 762 |
| 12.4‑32 | 11 | 315 | 315 | 1 350 | 1 360 | 813 |
| 12.4‑36 | 11 | 315 | 315 | 1 450 | 1 465 | 914 |
| 12.4‑38 | 11 | 315 | 315 | 1 500 | 1 515 | 965 |
| 12.4‑42 | 11 | - | 315 | - | 1 615 | 1 067 |
| 12.4‑46 | 11 | 315 | - | 1 705 | - | 1 168 |
| 12.4‑52 | 11 | 315 | - | 1 860 | - | 1 321 |
| 13.6‑16 | 12 | - | 345 | - | 1 005 | 406 |
| 13.6‑24 | 12 | 345 | 345 | 1 190 | 1 210 | 610 |
| 13.6‑26 | 12 | 345 | 345 | 1 260 | 1 260 | 660 |
| 13.6‑28 | 12 | 345 | 345 | 1 295 | 1 310 | 711 |
| 13.6‑36 | 12 | 345 | 345 | 1 500 | 1 515 | 914 |
| 13.6‑38 | 12 | 345 | 345 | 1 550 | 1 565 | 965 |
| 13.6-46 | 12 | - | 345 | - | 1 768 | 1 168 |
| 13.6‑48 | 12 | 345 | - | 1 805 | - | 1 219 |
| 13.9‑36 | 12 | - | 353 | - | 1 478 | 965 |
| 14.9/80‑24 | 12 | - | 368 | - | 1 215 | 610 |
| 14.9‑20 | 13 | - | 378 | - | 1 165 | 508 |
| 14.9‑24 | 13 | 378 | 378 | 1 245 | 1 265 | 610 |
| 14.9‑26 | 13 | 378 | 378 | 1 295 | 1 315 | 660 |
| 14.9‑28 | 13 | 378 | 378 | 1 350 | 1 365 | 711 |
| 14.9‑30 | 13 | 378 | 378 | 1 400 | 1 415 | 762 |

Table 2 (4 of 5)

**Drive wheel tyres for agricultural tractors - Normal section sizes**

| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | | *Overall diameter (D) (mm)* | | *Nominal rim diameter (d) (mm)* |
| --- | --- | --- | --- | --- | --- | --- |
| *Radial* | *Diagonal* | *Radial* | *Diagonal (\*)* |
| 14.9‑38 | 13 | 378 | 378 | 1 600 | 1 615 | 965 |
| 14.9‑46 | 13 | 378 | - | 1 824 | - | 1 168 |
| 15.5‑38 | 14 | 394 | 394 | 1 565 | 1 570 | 965 |
| 16.9‑24 | 15 | 429 | 429 | 1 320 | 1 335 | 610 |
| 16.9‑26 | 15 | 429 | 429 | 1 370 | 1 385 | 660 |
| 16.9‑28 | 15 | 429 | 429 | 1 420 | 1 435 | 711 |
| 16.9‑30 | 15 | 429 | 429 | 1 475 | 1 485 | 762 |
| 16.9‑34 | 15 | 429 | 429 | 1 575 | 1 585 | 864 |
| 16.9‑38 | 15 | 429 | 429 | 1 675 | 1 690 | 965 |
| 16.9‑42 | 15 | 429 | - | 1 775 | - | 1 067 |
| 18.4‑16.1 | 16 | - | 467 |  | 1 137 | 409 |
| 18.4‑24 | 16 | 467 | 467 | 1 395 | 1 400 | 610 |
| 18.4‑26 | 16 | 467 | 467 | 1 440 | 1 450 | 660 |
| 18.4‑28 | 16 | 467 | 467 | 1 490 | 1 501 | 711 |
| 18.4‑30 | 16 | 467 | 467 | 1 545 | 1 550 | 762 |
| 18.4‑34 | 16 | 467 | 467 | 1 645 | 1 650 | 864 |
| 18.4‑38 | 16 | 467 | 467 | 1 750 | 1 750 | 965 |
| 18.4‑42 | 16 | 467 | 467 | 1 850 | 1 850 | 1 067 |
| 18.4‑46 | 16 | 467 | - | 1 958 | - | 1 168 |

# Table 2 (5 of 5)

# **Drive wheel tyres for agricultural tractors - Normal and low section sizes**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | |
| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | | *Overall diameter (D) (mm)* | | *Nominal rim diameter (d) (mm)* |
| *Radial* | *Diagonal* | *Radial* | *Diagonal (\*)* |
| 20.8‑34 | 18 | 528 | 528 | 1 735 | 1 735 | 864 |
| 20.8‑38 | 18 | 528 | 528 | 1 835 | 1 835 | 965 |
| 20.8‑42 | 18 | 528 | 528 | 1 935 | 1 935 | 1 067 |
| 23.1‑26 | 20 | 587 | 587 | 1 605 | 1 605 | 660 |
| 23.1‑30 | 20 | 587 | 587 | 1 700 | 1 705 | 762 |
| 23.1‑34 | 20 | 587 | 587 | 1 800 | 1 805 | 864 |
| 24.5‑32 | 21 | 622 | 622 | 1 800 | 1 805 | 813 |
| Low section height | | | | | | |
| 7.5L‑15 | 6 | - | 210 | - | 745 | 381 |
| 14.9LR-20 | 13 | 378 | - | 1 100 | - | 508 |
| 17.5L‑24 | 15 | 445 | 445 | 1 241 | 1 265 | 610 |
| 19.5L‑24 | 17 | 495 | 495 | 1 314 | 1 339 | 610 |
| 21L‑24 | 18 | - | 533 | - | 1 402 | 610 |
| 28.1‑26 | 25 | - | 714 | - | 1 615 | 660 |
| 28L‑26 | 25 | 719 | 714 | 1 607 | 1 615 | 660 |
| 30.5L‑32 |  |  |  | 1 820 | 1 820 |  |
| 35.5L-32 | 31 | - | 902 | - | 1981 | 813 |
| *Notes:*  1. The Tyre size designation may be supplemented by a rim contour prefix: ex: VA35.5L-32 instead of 35.5L-32.  2. Tyres of radial structure are identified by means of the letter "R" in place of " - " (e.g. 23.1R26).  3. Coefficient for the calculation of the overall width: +8 per cent. | | | | | | |

# Table 3

# **Drive wheel tyres for agricultural tractors - Low section series**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | *Overall diameter (D) (mm)* | *Nominal rim diameter (d) (mm)* |
| 11.2/78‑28 | 10 | 296 | 1 180 | 711 |
| 12.4/78‑28 | 11 | 327 | 1 240 | 711 |
| 12.4/78‑36 | 11 | 327 | 1 440 | 914 |
| 13.6/78‑28 | 12 | 367 | 1 285 | 711 |
| 13.6/78‑36 | 12 | 367 | 1 490 | 914 |
| 14.9/78‑28 | 13 | 400 | 1 345 | 711 |
| 16.9/78‑28 | 15 | 452 | 1 410 | 711 |
| 16.9/78‑30 | 15 | 452 | 1 460 | 762 |
| 16.9/78‑34 | 15 | 452 | 1 560 | 864 |
| 16.9/78‑38 | 15 | 452 | 1 665 | 965 |
| 18.4/78‑30 | 16 | 490 | 1 525 | 762 |
| 18.4/78‑38 | 16 | 490 | 1 730 | 965 |

# Table 4

**Drive wheel tyres for agricultural tractors - Low section series**

| *Tyre size designation (1)* | *Theoretical rim width code (A1)* | | *Nominal section width (S1) (mm)* | | *Overall diameter (D) (mm)* | *Nominal rim diameter (d)(mm)* |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | IF / VF |  | IF / VF |  |  |
| 300/70R20 | 9 | - | 295 | - | 952 | 508 |
| 320/70R20 | 10 | - | 319 | - | 982 | 508 |
| 320/70R24 | 10 | - | 319 | - | 1 094 | 610 |
| 320/70R28 | 10 | - | 319 | - | 1 189 | 711 |
| 360/70R20 | 11 | - | 357 | - | 1 042 | 508 |
| 360/70R24 | 11 | - | 357 | - | 1 152 | 610 |
| 360/70R28 | 11 | - | 357 | - | 1 251 | 711 |
| 380/70R20 | 12 | 13 | 380 | 379 | 1 082 | 508 |
| 380/70R24 | 12 | 13 | 380 | 379 | 1 190 | 610 |
| 380/70R28 | 12 | 13 | 380 | 379 | 1 293 | 711 |
| 420/70R24 | 13 | 14 | 418 | 415 | 1 248 | 610 |
| 420/70R28 | 13 | 14 | 418 | 415 | 1 349 | 711 |
| 420/70R30 | 13 | 14 | 418 | 415 | 1 398 | 762 |
| 480/70R24 | 15 | 16 | 479 | 475 | 1 316 | 610 |
| 480/70R26 | 15 | 16 | 479 | 475 | 1 372 | 660 |
| 480/70R28 | 15 | 16 | 479 | 475 | 1 421 | 711 |
| 480/70R30 | 15 | 16 | 479 | 475 | 1 478 | 762 |
| 480/70R34 | 15 | 16 | 479 | 475 | 1 580 | 864 |
| 480/70R38 | 15 | 16 | 479 | 475 | 1 681 | 965 |
| 520/70R26 | 16 | 18 | 516 | 521 | 1 456 | 660 |
| 520/70R30 | 16 | 18 | 516 | 521 | 1 536 | 762 |
| 520/70R34 | 16 | 18 | 516 | 521 | 1 640 | 864 |
| 520/70R38 | 16 | 18 | 516 | 521 | 1 749 | 965 |
| 580/70R38 | 18 | 20 | 577 | 580 | 1 827 | 965 |

# (1) "*Improved flexion tyres*" are identified by means of the letters "IF" added in front of the size designation (e.g. IF480/70R38) ; "*Very high flexion tyres*" are identified by means of the letters "VF" added in front of the size designation (e.g. VF480/70R38) – see paragraphs 2.18.8. and 2.18.9. of this Regulation.



# Table 5 (1 of 3)

# **Agricultural implement tyres - Normal section sizes**

| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | *Overall diameter (D) (mm)* | | *Nominal rim diameter (d) (mm)* |
| --- | --- | --- | --- | --- | --- |
|  | *(\*)* |  |
| 125 ‑ 15 IMP | 3,5 | 127 | 590 | - | 381 |
| 140 ‑ 6 IMP | 4,5 | 135 | 315 | - | 152 |
| 165 ‑ 15 IMP | 4,5 | 167 | 650 | - | 381 |
| 190-8 IMP | 5.50 | 182 | 430 | - | 203 |
| 2.50 ‑ 4 IMP | 1,75 | 68 | 225 | - | 102 |
| 2.75 ‑ 4 IMP | 1,75 | 70 | 234 | - | 102 |
| 2.50 ‑ 8 IMP | 1,5 | 68 | 338 | - | 203 |
| 3.00 ‑ 4 IMP | 2,5 | 90 | 265 | - | 102 |
| 3.00 ‑ 8 IMP | 2,5 | 90 | 367 | - | 203 |
| 3.00 ‑ 10 IMP | 2,5 | 90 | 418 | - | 254 |
| 3.25 ‑ 8 IMP | 2,10 | 84 | 366 | - | 203 |
| 3.25 ‑ 16 IMP | 1,85 | 88 | 590 | - | 406 |
| 3.50 ‑ 5 IMP | 3 | 95 | 292 | - | 127 |
| 3.50 ‑ 6 IMP | 2,5 | 100 | 343 | - | 152 |
| 3.50 ‑ 8 IMP | 2,5 | 100 | 393 | - | 203 |
| 3.50 ‑ 16 IMP | 1,85 | 92 | 590 | - | 406 |
| 4.00 ‑ 4 IMP | 3 | 114 | 313 | - | 102 |
| 4.00 ‑ 5 IMP | 3 | 102 | 310 | - | 127 |
| 4.00 ‑ 6 IMP | 3 | 114 | 374 | - | 152 |
| 4.00 – 8 IMP | 3 | 112 | 418 | 425 | 203 |
| 4.00 – 9 IMP | 3 | 112 | 443 | 460 | 229 |
| 4.0 – 10 IMP | 3 | 114 | 455 | 465 | 254 |
| 4.00 – 10 IMP | 3 | 114 | 465 | 475 | 254 |
| 4.00 – 12 IMP | 3 | 112 | 519 | 536 | 305 |
| 4.00 – 15 IMP | 3 | 112 | 595 | 612 | 381 |
| 4.00 ‑ 16 IMP | 3 | 114 | 618 | - | 406 |
| 4.00 – 18 IMP | 3 | 112 | 672 | 688 | 457 |
| 4.00 – 19 IMP | 3 | 114 | 694 | - | 483 |
| 4.00 ‑ 21 IMP | 3 | 112 | 765 | - | 533 |
| 4.00/4.50 ‑ 21 IMP | 3 | 110 | 765 | - | 533 |
| 4.10 ‑ 4 IMP | 3,25 | 102 | 268 | - | 102 |
| 4.10 ‑ 6 IMP | 3,25 | 102 | 319 | - | 152 |
| 4.10/3.50-4 IMP | 2.10 | 89 | 272 | - | 101 |
| 4.50 ‑ 9 IMP | 3 | 124 | 466 | - | 229 |
| 4.50 ‑ 14 IMP | 3 | 124 | 593 | - | 356 |
| 4.50 ‑ 16 IMP | 3 | 123 | 647 | - | 406 |
| 4.50 ‑ 19 IMP | 3 | 124 | 720 | 733 | 483 |
| 4.80 – 8 IMP | 3,75 | 121 | 423 | 449 | 203 |
| 5.00 ‑ 8 IMP | 4 | 145 | 467 | - | 203 |

# Table 5 (2 of 3)

# **Agricultural implement tyres - Normal section sizes**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | *Overall diameter (D) (mm)* | | *Nominal rim diameter (d) (mm)* |
|  | *(\*)* |
| 5.00 ‑ 9 IMP | 3,5 | 141 | 497 | - | 229 |
| 5.0 – 10 IMP | 4 | 145 | 505 | 517 | 254 |
| 5.0 ‑ 12 IMP | 4 | 145 | 566 | - | 305 |
| 5.00 – 12 IMP | 4 | 145 | 567 | 580 | 305 |
| 5.00 – 14 IMP | 4 | 145 | 618 | 631 | 356 |
| 5.0 ‑ 15 IMP | 4 | 145 | 642 | - | 381 |
| 5.00 – 15 IMP | 3 | 130 | 639 | 655 | 381 |
| 5.00 ‑ 16 IMP | 4 | 145 | 669 | - | 406 |
| 5.00/5.25 ‑ 21 IMP | 3 | 136 | 824 | - | 533 |
| 5.50 – 16 IMP | 4 | 150 | 685 | 703 | 406 |
| 5.70 ‑ 12 IMP | 4,5 | 146 | 570 | - | 305 |
| 5.70 ‑ 15 IMP | 4,5 | 146 | 647 | - | 381 |
| 5.90 – 15 IMP | 4 | 150 | 665 | 681 | 381 |
| 6 ‑ 6 IMP | 4 | 145 | 425 | - | 152 |
| 6.00 - 9 IMP | 4,5 | 169 | 543 | 556 | 229 |
| 6 ‑ 12 IMP | 5 | 145 | 585 | - | 305 |
| 6.0 ‑ 12 IMP | 5 | 155 | 569 | - | 305 |
| 6.00 ‑ 12 IMP | 5 | 152 | 579 | - | 305 |
| 6.00 - 16 IMP | 4 | 158 | 712 | 729 | 406 |
| 6.00 ‑ 19 IMP | 4,5 | 169 | 810 | - | 483 |
| 6.00 ‑ 20 IMP | 4,5 | 169 | 830 | - | 508 |
| 6.40 ‑ 15 IMP | 4,5 | 163 | 684 | - | 381 |
| 6.5 ‑ 15 IMP | 5 | 163 | 674 | - | 381 |
| 6.50 ‑ 10 IMP | 5 | 178 | 597 | - | 254 |
| 6.50 – 16 IMP | 4,5 | 173 | 735 | 754 | 406 |
| 6.50 ‑ 20 IMP | 5 | 176 | 850 | - | 508 |
| 6.70 – 15 IMP | 4,5 | 182 | 704 | 720 | 381 |
| 6.90 ‑ 9 IMP | 5,5 | 175 | 545 | - | 229 |
| 7.00- 12 IMP | 5 | 187 | 667 | 685 | 305 |
| 7.00 ‑ 14 IMP | 5 | 170 | 691 | - | 356 |
| 7.00 ‑ 15 IMP | 5,5 | 200 | 744 | - | 381 |
| 7.00 ‑ 16 IMP | 5,5 | 200 | 769 | - | 406 |
| 7.00 ‑ 18 IMP | 5,5 | 200 | 820 | - | 457 |
| 7.00 ‑ 19 IMP | 5,5 | 200 | 845 | - | 483 |
| 7.50 – 10 IMP | 6 | 214 | 634 | 649 | 254 |
| 7.50 ‑ 14 IMP | 5,5 | 194 | 686 | - | 356 |
| 7.50 ‑ 15 IMP | 6 | 215 | 808 | - | 381 |
| 7.50 – 16 IMP | 5,5 | 202 | 785 | 801 | 406 |
| 7.50 – 18 IMP | 5,5 | 202 | 836 | 852 | 457 |

# Table 5 (3 of 3)

# **Agricultural implement tyres - Normal section sizes**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | *Overall diameter (D) (mm)* | | *Nominal rim diameter (d) (mm)* |
|  | *(\*)* |
| 7.50 – 20 IMP | 5,5 | 202 | 887 | 903 | 508 |
| 7.50 – 24 IMP | 5,5 | 202 | 989 | 1013 | 610 |
| 7.60 – 15 IMP | 5,5 | 193 | 734 | 751 | 381 |
| 8 ‑ 16 IMP | 6 | 211 | 795 | - | 406 |
| 8.00 ‑ 6 IMP | 7 | 203 | 452 | - | 152 |
| 8.00 ‑ 12 IMP | 5 | 214 | 710 | - | 305 |
| 8.00 ‑ 16 IMP | 6 | 206 | 808 | - | 406 |
| 8.00 ‑ 19 IMP | 6 | 214 | 888 | - | 483 |
| 8.00 ‑ 20 IMP | 6 | 214 | 945 | - | 508 |
| 8.25 ‑ 15 IMP | 6,5 | 237 | 835 | - | 381 |
| 8.25 ‑ 16 IMP | 6 | 229 | 832 | - | 406 |
| 8.25 ‑ 20 IMP | 6 | 229 | 934 | 950 | 508 |
| 9.00 ‑ 10 IMP | 6 | 234 | 696 | - | 254 |
| 9.00 ‑ 13 IMP | 5,5 | 247 | 814 | - | 330 |
| 9.00 ‑ 15 IMP | 5,5 | 247 | 850 | - | 381 |
| 9.00 ‑ 16 IMP | 6 | 234 | 848 | - | 406 |
| 9.00 ‑ 24 IMP | 8 | 272 | 1 094 | - | 610 |
| 10.00 ‑ 12 IMP | 6,5 | 262 | 790 | - | 305 |
| 10.00 ‑ 15 IMP | 8 | 274 | 853 | - | 381 |
| 10.00 ‑ 16 IMP | 8 | 274 | 895 | - | 406 |
| 10.50 ‑ 16 IMP | 6,5 | 280 | 955 | - | 406 |
| 11.00 ‑ 12 IMP | 6,5 | 277 | 835 | - | 305 |
| 11.00 ‑ 16 IMP | 6,5 | 277 | 937 | - | 406 |
| 11.0 ‑ 20 IMP | 9 | 285 | 950 | - | 508 |
| 11.25 ‑ 24 IMP | 10 | 325 | 1 171 | - | 610 |
| 11.25 ‑ 28 IMP | 10 | 325 | 1 273 | - | 711 |
| 11.5 ‑ 24 IMP | 10 | 305 | 1 070 | - | 610 |
| 13.50 – 16.1 IMP | 11 | 353 | 1021 | 1043 | 409 |
| 14.0 ‑ 24 IMP | 12 | 370 | 1 170 | - | 610 |
| 15.0 ‑ 24 IMP | 13 | 400 | 1 210 | - | 610 |
| 15.0 ‑ 28 IMP | 13 | 400 | 1 310 | - | 711 |
| 17.0 ‑ 28 IMP | 15 | 455 | 1 390 | - | 711 |
| 17.0 ‑ 30 IMP | 15 | 455 | 1 440 | - | 762 |
| 18.5 ‑ 34 IMP | 16 | 490 | 1 600 | - | 864 |
| 20 ‑ 20 IMP | 14 | 520 | 1 270 | - | 508 |
| *Notes:*  1. The suffix "IMP" may be replaced by the wording "IMPLEMENT" on the tyre sidewall.  2. Tyres of radial structure are identified by means of the letter "R" in place of "-" (e.g. 7.5 L R 15).  3. Overall diameters (D) in column (\*) apply to tyres marked with classification code "I-3" – see paragraph 3.1.9.2. of this Regulation. | | | | | |

# Table 6 (1 of 3)

# **Agricultural implement and construction applications tyres - Low section sizes**

| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | *Overall diameter (D) (mm)* | | *Nominal rim diameter (d) (mm)* |
| --- | --- | --- | --- | --- | --- |
|  | *(\*)* |
| 7.5 L ‑ 15 IMP | 6 | 210 | 745 | - | 381 |
| 8.5L – 14 IMP | 6 | 216 | 721 | 735 | 356 |
| 9.5L – 14 IMP | 7 | 241 | 741 | 757 | 356 |
| 9.5L – 15 IMP | 7 | 241 | 767 | 782 | 381 |
| 11L – 14 IMP | 8 | 279 | 752 | 770 | 356 |
| 11L – 15 IMP | 8 | 279 | 777 | 796 | 381 |
| 11L – 16 IMP | 8 | 279 | 803 | 821 | 406 |
| 12.5L – 15 IMP | 10 | 318 | 823 | 845 | 381 |
| 12.5L – 16 IMP | 10 | 318 | 848 | 870 | 406 |
| 14L ‑ 16.1 IMP | 11 | 356 | 940 | - | 409 |
| 16.5L – 16.1 IMP | 14 | 419 | 1024 | 1046 | 409 |
| 19 L ‑ 16.1 IMP | 16 | 483 | 1 087 | - | 409 |
| 21.5 L ‑ 16.1 IMP | 18 | 546 | 1 130 | 1 162 | 409 |
|  | | | | | |

# Table 6 (2 of 3)

# **Agricultural implement and construction applications tyres - Low section sizes**

| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | *Overall diameter (D) (mm)* | | *Nominal rim diameter (d) (mm)* |
| --- | --- | --- | --- | --- | --- |
|  | *(\*)* |
| 205/50 ‑ 10 IMP | 7 | 211 | 450 | - | 254 |
| 19.0/45 ‑ 17 IMP | 16 | 491 | 866 | - | 432 |
| 15.0/55 - 17 IMP | 13 | 391 | 850 | 872 | 432 |
| 10.5/65 ‑ 16 IMP | 9 | 274 | 755 | - | 406 |
| 11.0/60 ‑ 16 IMP | 9 | 281 | 742 | - | 406 |
| 11.0/65 - 12 IMP | 9 | 281 | 670 | 692 | 305 |
| 13.0/65 ‑ 18 IMP | 11 | 336 | 890 | - | 457 |
| 13.0/70 ‑ 16 IMP | 11 | 337 | 890 | - | 406 |
| 14.0/65 ‑ 16 IMP | 11 | 353 | 870 | - | 406 |
| 9.0/70 ‑ 16 IMP | 7 | 226 | 725 | - | 406 |
| 11.5/70 ‑ 16 IMP | 9 | 290 | 815 | - | 406 |
| 11.5/70 ‑ 18 IMP | 9 | 290 | 865 | - | 457 |
| 15.0/70 ‑ 18 IMP | 13 | 391 | 990 | - | 457 |
| 16.0/70 - 20 IMP | 14 | 418 | 1075 | 1097 | 508 |
| 16.5/70 ‑ 22.5 MP | 13 | 417 | 1 158 | - | 572 |
| 20.0/70 ‑ 508 IMP | 16 | 508 | 1 220 | - | 508 |
| 8.0/75 ‑ 15 IMP | 6,5 | 199 | 710 | - | 381 |
| 9.0/75 – 16 IMP | 7 | 226 | 749 | 770 | 406 |
| 10.0/75 ‑ 12 IMP | 9 | 264 | 685 | - | 305 |
| 10.0 - 15.3 IMP | 9 | 258 | 785 | - | 389 |
| 10.0/75 ‑ 15.3 IMP | 9 | 264 | 760 | 780 | 389 |
| 10.0/75 ‑ 16 IMP | 9 | 264 | 805 | - | 406 |
| 12.0/75 - 18 IMP | 9 | 299 | 915 | 937 | 457 |
| 13.0/75 ‑ 16 IMP | 11 | 336 | 900 | - | 406 |
| 13.5/75 ‑ 430.9 MP | 11 | 345 | 945 | - | 431 |
| 14.5/75 ‑ 20 IMP | 12 | 372 | 1 060 | - | 508 |
| 6.5/80 – 12 IMP | 5 | 163 | 569 | 588 | 305 |
| 6.5/80 – 15 IMP | 5 | 163 | 645 | 663 | 381 |
| 8.50 - 12 IMP | 7 | 235 | 715 | - | 305 |
| 10.0/80 – 12 IMP | 9 | 264 | 710 | 730 | 305 |
| 10 - 18 IMP | 9 | 260 | 875 | - | 457 |
| 10.5/80 – 18 IMP | 9 | 274 | 885 | 907 | 457 |
| 11.5/80 – 15.3 IMP | 9 | 290 | 845 | 867 | 389 |
| 11.5/80 - 15.3 IMP | 9 | 290 | 845 | - | 389 |
| 12.5/80 - 15.3 IMP | 9 | 307 | 889 | - | 389 |
| 12.5/80 - 18 IMP | 9 | 308 | 965 | 987 | 457 |
| 14.5/80 - 18 IMP | 12 | 372 | 1060 | 1082 | 457 |

# Table 6 (3 of 3)

# **Agricultural implement and construction applications tyres - Low section sizes**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | *Overall diameter (D) (mm)* | | *Nominal rim diameter (d) (mm)* |
|  | *(\*)* |
| 15.5/80 - 24 IMP | 13 | 394 | 1240 | 1262 | 610 |
| 17.0/80 - 508 IMP | 13 | 426 | 1200 | - | 508 |
| 19.5/80 - 20 IMP | 16 | 499 | 1300 | - | 508 |
| 21.0/80 - 20 IMP | 16 | 525 | 1362 | - | 508 |
| 5.5/85 - 9 IMP | 4 | 145 | 475 | - | 229 |
| 10.5/85 - 15.3 IMP | 9 | 274 | 792 | - | 389 |
| 13.5/85 - 28 IMP | 11 | 345 | 1293 | - | 711 |
| 16.5/85 - 24 IMP | 13 | 417 | 1322 | 1344 | 610 |
| 16.5/85 - 28 IMP | 13 | 417 | 1423 | 1445 | 711 |
| *Notes:*  1. The suffix "IMP" may be replaced by the wording "IMPLEMENT". In case of tyres marked with classification code 'I-3' on the tyre sidewall the suffix "IND" may be used in place of "IMP".  2. Tyres of radial structure are identified by means of the letter "R" in place of " - " (e.g. 205/50R10).  3. Overall diameters (D) in column (\*) apply to tyres marked with classification code "I-3" – see paragraph 3.1.9.2. of this Regulation. | | | | | |

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# Table 7 (1 of 4)

# **Agricultural high flotation tyres**

| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | *Overall diameter (D) (mm)* | *Nominal rim diameter (d) (mm)* |
| --- | --- | --- | --- | --- |
| 9x3.50 ‑ 4 | 2,75 | 91 | 229 | 101 |
| 11x4.00 ‑ 4 | 3,25 | 102 | 280 | 101 |
| 11x4.00 ‑ 5 | 3 | 104 | 272 | 127 |
| 11x7 ‑ 4 | 6 | 185 | 270 | 101 |
| 12x4.00 ‑ 5 | 3 | 112 | 298 | 127 |
| 13x5.00 ‑ 6 | 3,5 | 122 | 320 | 152 |
| 13x6.00 - 6 | 5 | 154 | 330 | 152 |
| 13x6.00 ‑ 8 | 5 | 154 | 330 | 203 |
| 13x6.50 ‑ 6 | 5 | 163 | 330 | 152 |
| 14x4.50 - 6 | 3,5 | 113 | 356 | 152 |
| 14x5.00 ‑ 6 | 4 | 127 | 347 | 152 |
| 14x6.00 ‑ 6 | 4,5 | 157 | 340 | 152 |
| 15x6.00 ‑ 6 | 4,5 | 155 | 366 | 152 |
| 16x4.50 ‑ 9 | 3 | 105 | 405 | 229 |
| 16x5.50 ‑ 8 | 4,25 | 142 | 414 | 203 |
| 16x6.50 ‑ 8 | 5,375 | 165 | 405 | 203 |
| 16x7.50 ‑ 8 | 5,375 | 188 | 411 | 203 |
| 17x8.00 ‑ 8 | 7 | 203 | 438 | 203 |
| 17x8.00 ‑ 12 | 7 | 203 | 432 | 305 |
| 18x6.50 ‑ 8 | 5 | 163 | 457 | 203 |
| 18x7.00 ‑ 8 | 5,5 | 178 | 450 | 203 |
| 18x7.50-8 | 6 | 191 | 457 | 203 |
| 18x8.50 ‑ 8 | 7 | 214 | 450 | 203 |
| 18x9.50 ‑ 8 | 7 | 235 | 462 | 203 |
| 19x9.50 - 8 | 7,5 | 240 | 483 | 203 |
| 19x7.50 ‑ 8 | 5,5 | 180 | 480 | 203 |
| 19x8.00 ‑ 10 | 7 | 203 | 483 | 254 |
| 19x10.00 ‑ 8 | 8,5 | 254 | 483 | 203 |
| 20x8.00 - 8 | 6,5 | 204 | 508 | 203 |
| 20x8.00 ‑ 10 | 7 | 203 | 500 | 254 |
| 20x9.00 - 8 | 7 | 227 | 508 | 203 |
| 20x10.00 ‑ 8 | 8 | 254 | 508 | 203 |
| 20x10.00 ‑ 10 | 8,5 | 254 | 508 | 254 |
| 20.5x8.00 ‑ 10 | 6 | 208 | 526 | 254 |
| 21x7.00 - 10 | 5,5 | 177 | 533 | 254 |
| 21x8.00 ‑ 10 | 7 | 203 | 525 | 254 |
| 21x11.00 ‑ 8 | 8,5 | 282 | 518 | 203 |
| 21x11.00 ‑ 10 | 9 | 279 | 525 | 254 |
| 22x8.00 ‑ 10 | 6 | 196 | 556 | 254 |
| 22x8.50 ‑ 12 | 7 | 216 | 551 | 305 |
| 22x10.00 ‑ 8 | 7 | 244 | 572 | 203 |
| 22x10.00 ‑ 10 | 8,5 | 254 | 559 | 254 |

# Table 7 (2 of 4)

# **Agricultural high flotation tyres**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | *Overall diameter (D) (mm)* | *Nominal rim diameter (d) (mm)* |
| 22x11.00 ‑ 8 | 8,5 | 284 | 546 | 203 |
| 22x11.00 ‑ 10 | 8,5 | 254 | 559 | 254 |
| 23x8.50 ‑ 12 | 7 | 214 | 575 | 305 |
| 23x9.00 ‑ 12 | 7,5 | 229 | 575 | 305 |
| 23x9.50 - 12 | 7 | 235 | 577 | 305 |
| 23x10.50 ‑ 12 | 8,5 | 264 | 579 | 305 |
| 24x8.00 - 12 | 6,5 | 204 | 610 | 305 |
| 24x8.50 ‑ 12 | 7 | 213 | 602 | 305 |
| 24x8.50 ‑ 14 | 7 | 213 | 602 | 356 |
| 24x10.00 - 12 | 8 | 254 | 610 | 305 |
| 24x11.00 ‑ 10 | 8,5 | 254 | 607 | 254 |
| 24x12.00-12 | 9,5 | 304 | 610 | 305 |
| 24x13.00 ‑ 12 | 10,5 | 325 | 592 | 305 |
| 25x7.50 ‑ 15 | 5,5 | 191 | 640 | 381 |
| 25x8.00 - 12 | 6,5 | 203 | 635 | 305 |
| 25x8.50 ‑ 14 | 7 | 213 | 645 | 356 |
| 25x10.00 - 12 | 8 | 254 | 635 | 305 |
| 25x10.50 ‑ 15 | 8 | 267 | 640 | 381 |
| 25x11.00 - 12 | 9 | 279 | 635 | 305 |
| 25x12.00 - 9 | 10 | 305 | 635 | 229 |
| 25x12.50 - 15 | 10 | 310 | 640 | 381 |
| 26x8.00 - 12 | 6,5 |  |  |  |
| 26x8.00 - 14 | 6,5 |  |  |  |
| 26x10.00 ‑ 12 |  |  |  |  |
| 26x12.00 ‑ 12 | 10 | 310 | 660 | 305 |
| 26x14.00 ‑ 12 | 12 | 356 | 660 | 305 |
| 27x8.50 ‑ 15 | 7 | 214 | 680 | 381 |
| 27x9.50 ‑ 15 | 7 | 229 | 686 | 381 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| 27x12.00 - 14 | 9,5 | 304 | 686 | 356 |
| 28x9.00 - 14 | 7 | 227 | 711 | 356 |
|  |  |  |  |  |
| 28x10.00 - 12 | 8 | 254 | 711 | 305 |
| 28x10.00 - 15 | 8 | 254 | 711 | 381 |
| 28x11.00 - 14 | 9 | 281 | 711 | 356 |
| 28x11.00 - 15 | 9 | 281 | 711 | 381 |

# Table 7 (3 of 4)

# **Agricultural high flotation tyres**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | *Overall diameter (D) (mm)* | *Nominal rim diameter (d) (mm)* |
| 28x12.00 - 12 | 9,5 | 304 | 711 | 305 |
| 28x13 ‑ 15 | 11,5 | 330 | 711 | 381 |
| 29x9.00 - 14 | 7 | 227 | 737 | 356 |
| 29x9.00 - 15 | 7 | 227 | 737 | 381 |
| 29x9.00 - 16 | 7 | 227 | 737 | 406 |
| 29x9.50 - 15 | 7,5 | 240 | 737 | 381 |
| 29x11.00 - 14 | 9 | 281 | 737 | 356 |
| 29x11.00 - 16 | 9 | 281 | 737 | 406 |
| 29x12.00 ‑ 15 | 10 | 310 | 742 | 381 |
| 29x12.50 ‑ 15 | 10 | 310 | 742 | 381 |
| 29x13.50 ‑ 15 | 10 | 351 | 742 | 381 |
| 30x9.00 - 14 | 7 | 227 | 762 | 356 |
| 30x10.00 - 14 | 8 | 254 | 762 | 356 |
| 30x10.00 - 15 | 8 | 254 | 762 | 381 |
| 30x11.00 - 14 | 9 | 281 | 762 | 356 |
| 31x10.00 - 17 | 8 | 254 | 787 | 432 |
| 31x11.50 ‑ 15 | 8 | 301 | 793 | 381 |
| 31x12.50 ‑ 15 | 10 | 310 | 792 | 381 |
| 31x13.50 ‑ 15 | 10 | 351 | 782 | 381 |
| 31x13.5 ‑ 15 | 10 | 351 | 782 | 381 |
| 31x15.50 ‑ 15 | 13 | 391 | 792 | 381 |
| 31x15.5 ‑ 15 | 13 | 391 | 792 | 381 |
| 32x10.00 - 16 | 8 | 254 | 813 | 406 |
| 32x10.00 - 18 | 8 | 254 | 813 | 457 |
| 33x12.50 ‑ 15 | 10 | 310 | 843 | 381 |
| 33x15.50 ‑ 15 | 13 | 391 | 843 | 381 |
| 35x16 - 17.5 | 10.5 | 406 | 914 | 445 |
| 36x13.50 ‑ 15 | 10 | 351 | 909 | 381 |
| 38x14.00 ‑ 20 | 11 | 356 | 991 | 508 |
| 38x18.00 ‑ 20 | 14 | 457 | 991 | 508 |
| 38x20.00 ‑ 16.1 | 16 | 488 | 991 | 409 |
| 40x19 - 19.5 | 15 | 495 | 1003 | 495 |
| 41x14.00 ‑ 20 | 11 | 356 | 1 067 | 508 |
| 42x25.00 ‑ 20 | 20,5 | 622 | 1 080 | 508 |
| 43x13.50 ‑ 22 | 10 | 360 | 1 102 | 559 |
| 44x18.00 ‑ 20 | 14 | 457 | 1 143 | 508 |
| 44x41.00 ‑ 20 | 36 | 991 | 1 143 | 508 |



















































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# Table 7 (4 of 4)

# **Agricultural high flotation tyres**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | *Overall diameter (D) (mm)* | *Nominal rim diameter (d) (mm)* |
| 48x20.00 ‑ 24 | 15 | 457 | 1 245 | 610 |
| 48x25.00 ‑ 20 | 20,5 | 635 | 1 245 | 508 |
| 48x31.00 ‑ 20 | 26 | 775 | 1 245 | 508 |
| 54x31.00 ‑ 26 | 26 | 775 | 1 397 | 660 |
| 54x37.00 - 25 | 32 | 940 | 1397 | 635 |
| 57x31.00 - 26 | 26 | 775 | 1473 | 660 |
| 66x43.00 ‑ 25 | 36 | 1 054 | 1 702 | 635 |
| 66x43.00 ‑ 26 | 36 | 1 054 | 1 702 | 660 |
| 66x44.00 ‑ 25 | 36 | 1 118 | 1 702 | 635 |
| 67x34.00 ‑ 25 | 30 | 864 | 1 727 | 635 |
| 67x34.00 ‑ 26 | 30 | 864 | 1 727 | 660 |
| 67x34.00 ‑ 30 | 30 | 864 | 1 727 | 762 |
| 68x50.00 ‑ 32 | 44 | 1 270 | 1 753 | 813 |
| 73x44.00 - 32 | 36 | 1 118 | 1 880 | 813 |
| VA73x44.00 ‑ 32 | 36 | 1 118 | 1 880 | 813 |
| DH73x44.00 ‑ 32 | 36 | 1 118 | 1 880 | 813 |
| DH73x50.00-32 | 44 | 1270 | 1880 | 813 |
| 73x50.00-32 | 44 | 1 270 | 1 880 | 813 |
| 76x50.00-32 | 44 | 1270 | 1956 | 813 |
| *Notes:*  1. These Tyres may be classified in categories of use "Tractor Drive Wheels", "Implement" or, in the case of tyres with nominal rim diameters of 635 mm and above, also "Forestry Machines".  2. Implement Tyres are identified either by suffix "IMP" placed after the Tyre size designation (e.g. 11x4.00 - 4 IMP) or by the word "IMPLEMENT" marked on the Tyre sidewalls.  3. Tyres of radial structure are identified by means of the letter "R" in place of " - " (e.g. 11x4.00 R 4). The Tyre size designation may be supplemented by a rim contour prefix (eg: VA73x44.00-32 instead of 73x44.00-32)  4. Coefficient "b" for the calculation of the Overall diameter Dmax:  (a) 1.12 for tyres with Nominal rim Diameter (d) less than 380 mm;  (b) 1.10 for tyres with Nominal rim Diameter (d) 381 mm and above.  5. In case of Tyre Size designations not included in this table (e.g. 27x10.00 – 16):  (a) the first number (e.g. 27) represents the overall diameter (D) expressed by code;  i. For tyres with rim diameters of 508 mm and above, add 1 before converting to mm  (b) the second number (e.g. 10.00) represents the nominal section width (S1) expressed by code, and  (c) the third number (e.g. 16) represents the nominal rim diameter (d) expressed by code – see point 2.19.  To convert dimensions expressed in code to mm multiply by 25.4 and round to the nearest mm.  The theoretical rim width code (A1) is taken to equal to the nominal section width (S1) expressed by code multiplied by the factor 0.8 rounded to the nearest 0.5 step. | | | | |

Table 8 **Log-Skidder Tyres for Forestry Machines – Code-Designated Sizes**

| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | *Overall diameter (D) (mm)* | *Nominal rim diameter (d) (mm)* |
| --- | --- | --- | --- | --- |
| 16.9-30 LS | 15 | 429 | 1511 | 762 |
| 18.4-26 LS | 16 | 467 | 1476 | 660 |
| 18.4-30 LS | 16 | 467 | 1577 | 762 |
| 18.4-34 LS | 16 | 467 | 1679 | 864 |
| 23.1-26 LS | 20 | 587 | 1632 | 660 |
| 24.5-32 LS | 21 | 622 | 1831 | 813 |
| 28L-26 LS | 25 | 714 | 1644 | 660 |
| 30.5L-32 LS | 27 | 775 | 1847 | 813 |
| 35.5L-32 LS | 31 | 902 | 2011 | 813 |
| *Notes:*  1. Log-Skidder Tyres are identified by suffix "LS-1", "LS-2", "LS-3", or "LS-4" placed after the size designation (e.g. 30.5L-32 LS-2).  2. Tyres of radial structure are identified by means of the letter "R" in place of "-" (e.g. 30.5LR32 LS).  3. The Tyre size designation may be supplemented by a rim contour prefix (e.g.: DH35.5L-32 LS instead of 35.5L-32 LS). | | | | |

Table 9  
**Tyres for construction applications (industrial tractors)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Tyre size*  *designation* | *Theoretical*  *rim width*  *code (A1)* | *Nominal section*  *width (S1) (mm)* | | *Overall  diameter (D)*  *(mm)* | | *Nominal rim*  *diameter (d)*  *(mm)* |
| *Radial* | *Diagonal* | *Radial* | *Diagonal* |  |
| 10.5/80-18 | 9 | 274 | 274 | 885 | 885 | 457 |
| 11L-16 IND | 8 | 290 | - | 850 | - | 406 |
| 12.5/80-18 | 9 | 308 | 308 | 965 | 965 | 457 |
| 12.5-18 | 11 | 325 | 325 | 990 | 990 | 457 |
| 12.5-20 | 11 | 325 | 325 | 1040 | 1040 | 508 |
| 14.5-20 | 11 | 355 | 355 | 1095 | 1095 | 508 |
| 14.9-24 | 13 | 378 | 378 | 1 245 | 1 240 | 610 |
| 14.9-28 | 13 | 378 | 378 | 1 350 | 1 345 | 711 |
| 16.9-24 | 15 | 429 | 429 | 1 320 | 1 310 | 610 |
| 16.9-28 | 15 | 429 | 429 | 1 420 | 1 410 | 711 |
| 16.9-34 | 15 | - | 429 | - | 1 560 | 864 |
| 17.5L-24 | 15 | 445 | 445 | 1 250 | 1 241 | 610 |
| 18.4-24 | 16 | 467 | 467 | 1 395 | 1 375 | 610 |
| 18.4-26 | 16 | - | 467 | - | 1 425 | 660 |
| 18.4-28 | 16 | 467 | 467 | 1 490 | 1 477 | 711 |
| 18.4-30 | 16 | - | 467 | - | 1 525 | 762 |
| 19.5L-24 | 17 | 495 | 495 | 1 320 | 1 314 | 610 |
| 21L-24 | 18 | 533 | 533 | 1 395 | 1 378 | 610 |
| 21L-28 | 18 | - | 533 | - | 1479 | 711 |
| 23.1-26 | 20 | - | 587 | - | 1 580 | 660 |
| *Notes:*  1. These tyres are identified either by suffix "IND", placed after the Tyre size designation (e.g. 14.9-24 IND), or by the following marking added to the tyre sidewalls: "R-4".  2. Tyres of radial structure are identified by means of the letter "R" in place of " - " (e.g. 14.9 R 24).  3. Coefficient for the calculation of the overall width of radial tyres: + 8 %. | | | | | | |

Table 10  
**Tyres for construction applications (skid-steers / mini-loaders)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Tyre size designation* | *Theoretical rim width code (A1)* | *Nominal section width (S1) (mm)* | *Overall*  *diameter (D) (mm)* | *Nominal rim diameter (d)*  *(mm)* |
| 7.00–15 | 5.50 | 201 | 762 | 381 |
| 8.25–15 | 6.00 | 231 | 848 | 381 |
| 5.70–12 | 4.50 | 146 | 570 | 305 |
| 5.70–15 | 4.50 | 146 | 647 | 381 |
| 23x8.50–12 | 7.00 | 213 | 574 | 305 |
| 23x8.50–14 | 7.00 | 218 | 584 | 356 |
| 23x10.50–12 | 8.50 | 264 | 579 | 305 |
| 25x8.50–14 | 7.00 | 218 | 635 | 356 |
| 26x12.00–12 | 10.50 | 307 | 648 | 305 |
| 9.00–20 | 7.00 | 259 | 1038 | 508 |
| 10.00–20 | 7.50 | 278 | 1075 | 508 |
| 11.00–20 | 8.00 | 293 | 1104 | 508 |
| 10–16.5 | 8.25 | 264 | 773 | 419 |
| 12–16.5 | 9.75 | 307 | 831 | 419 |
| 14–17.5 | 10.50 | 349 | 921 | 445 |
| 15–19.5 | 11.75 | 389 | 1019 | 495 |
| 15–22.5 | 11.75 | 389 | 1095 | 572 |
| 18–19.5 | 14 | 457 | 1096 | 495 |
| 18–22.5 | 14 | 457 | 1172 | 572 |
| *Notes:*  1. Tyres of radial structure are identified by means of the letter "R" in place of "–" (e.g. 12R16.5)  2. Suffixes "IND" or "NHS" or "SS" identify tyres for skid-steers / mini-loaders (see paragraph 2.18.12.1) | | | | |

Annex 6

Test method for measuring tyre dimensions

1. The tyre shall be mounted on the measuring rim specified by the manufacturer and is inflated to a pressure specified by the manufacturer.

1.1. To seat the beads do not exceed the inflation pressure marked on the tyre sidewalls.

1.2. Having properly seated tyre beads on the rim, adjust the pressure to the value specified for tyre measurements.

2. The tyre fitted on its rim is conditioned to the ambient temperature of the laboratory for at least 24 hours.

3. The pressure is readjusted to the value specified in paragraph 1.

4. The overall width is measured by calliper at six equally-paced points, account being taken of the thickness of the protective ribs or bands. The highest measurement so obtained is taken as the overall width.

5. The outer diameter is determined by measuring the maximum circumference and dividing the figure so obtained by π (3,1416).

Annex 7

Variation of load capacity with speed

(See paragraphs 2.33. and 2.34. of this Regulation)

Part A: Drive wheel tyres for agricultural tractors

Applicable to tyres classified with categories of use: "Tractor drive wheel" (see paragraph 2.23. of this Regulation)

Variation of load carrying capacity (per cent)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Speed*  *(km/h)* | *Speed category symbol* | | | | | |  |  |  |
| *A2* | *A6 (+)* | *A8 (+)* | *D (+)* | *A8 (2)* | *D (2)* | *(1)* | *(3)* |
| 10 | [0] | +40 | +50 | +50 | 0 | 0 |  | + 58 | + 56 |
| 15 | -6 | +30 | +34 | +34 | 0 | 0 |  | + 32 | + 44 |
| 20 | -11 | +20 | +23 | +23 | 0 | 0 |  | + 26 | + 33 |
| 25 | -16 | +7 | +11 | +18,5 | 0 | 0 |  | + 19 | + 22 |
| 30 | -20 | [0] | +7 | +15 | 0 | 0 |  | + 12 | + 11 |
| 35 | -24 | -5 | +3 | +12 | 0 | 0 |  | + 10 | + 6 |
| 40 | -27 | -10 | [0] | +9,5 | [0] | 0 |  | + 6 | [0] |
| 45 | - | - | -4 | +7 | -4 | 0 |  | + 2 | - |
| 50 | - | - | -9 | +5 | -9 | 0 |  | [0] | - |
| 55 | - | - | - | +3 | - | 0 |  | - | - |
| 60 | - | - | - | +1,5 | - | 0 |  | - | - |
| 65 | - | - | - | [0] | - | [0] |  | - | - |
| 70 | - | - | - | -9 | - | -9 |  | - | - |

The above load/speed variations apply when the tyre is not subjected to sustained high torque service.

(+) For field applications with sustained high torque service the values shown in the line 30 km/h apply.

(1) These percentages apply only in case of tyres listed in Annex 5, Table 7, with nominal rim diameter (d) 381 mm and above, marked with speed symbol "B"

(2) These load/speed variations apply to IF and VF Tyres.

(3) These percentages apply only in case of diagonal tyres listed in Annex 5, Table 2 ‘Drive wheel tyres for agricultural tractors - Normal section sizes’ with nominal section width (S1) 211 mm and above (i.e. section width code 8.3 and above) marked with speed symbol "A8".



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Part B: Steering wheel tyres for agricultural and forestry tractors

Applicable to tyres classified with category of use "Tractor steering wheels" and marked "Front" or "F-1" or "F-2" or "F-3" (see paragraph 2.24. of this Regulation)

Variation of load carrying capacity (per cent) (See paragraph 2.33. of this Regulation)

|  |  |  |
| --- | --- | --- |
| *Speed  (km/h)* | *Speed category symbol* | |
| *A6* | *A8* |
| 10 | +50 | +67 |
| 15 | +43 | +50 |
| 20 | +35 | +39 |
| 25 | +15 | +28 |
| 30 | [0] | +11 |
| 35 | -10 | +4 |
| 40 | -20 | [0] |
| 45 | - | -7 |

Part C: Implement tyres

Applicable to tyres classified with categories of use: "Implement"  
and marked "IMP" or "IMPLEMENT" (see paragraph 2.25. of this Regulation)

Variation of load carrying capacity (per cent) (see paragraphs 2.33. and 2.34. of this Regulation)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Speed  (km/h)* | *Speed category symbol* | | | |  |  |
| *A4* | *A6(\*)* | *A8(\*)* | *D* |  | *(1)* |
| 10 | + 20 | + 29 | + 40 | + 80 |  | + 58 |
| 15 | + 12 | + 21 | + 33 | + 73 |  | + 32 |
| 20 | [0] | + 14 | + 26 | + 65 |  | + 26 |
| 25 | - 2 | + 7 | + 19 | + 58 |  | + 19 |
| 30 | - 5 | [0] | + 12 | + 51 |  | + 12 |
| 35 |  | - 5 | + 5 | + 44 |  | + 10 |
| 40 |  | - 10 | [0] | + 36 |  | + 6 |
| 45 |  |  | - 5 | + 29 |  | + 2 |
| 50 |  |  | - 10 | + 21 |  | [0] |
| 55 |  |  |  | + 14 |  | - |
| 60 |  |  |  | + 7 |  | - |
| 65 |  |  |  | [0] |  |  |
| 70 |  |  |  | - 9 |  | - |

The above load/speed variations apply when the tyre is not subjected to sustained high torque service.

(\*) For tyres with nominal rim diameter code 24 and above, excluding codes 24.5, 26.5 and 30.5, Annex 7, Part A applies.

(1) These percentages apply only in case of tyres listed in Annex 5, Table 7, with nominal rim diameter (d) 381 mm and above, marked with speed symbol "B".

Part D: Tyres for forestry machines

Applicable to tyres classified with categories of use: "Forestry machines" (see paragraph 2.44. of this Regulation)

Variation of load carrying capacity (per cent) for tyres marked with speed category symbol**s** A6 and A8 (see paragraphs 2.33. and 2.34. of this Regulation)

|  |  |  |  |
| --- | --- | --- | --- |
| *Service condition* | *Speed (Km/h)* | *A6* | *A8* |
| Road service | 20 | +15 % | +23 % |
| 30 | 0 | +7 % |
| 40 | -10 % | 0 |



Part E: Tyres for construction applications (industrial tractors)

Applicable to tyres classified with categories of use: "Construction Applications" (see paragraph 2.45.) and marked "IND" or "R-4" or "SS" or "NHS" (see paragraph 2.25. and 2.18.12.1 of this Regulation)

Variation of load carrying capacity (per cent) (see paragraph 2.33. of this Regulation)

|  |  |  |  |
| --- | --- | --- | --- |
| *Speed (km/h)* | *Speed Category Symbol* | | |
| *A2* | *A8* | |
| *Constant load* | *Cyclic applications (+)* |
| 5 | + 11 | + 45 | + 67 (1) |
| 10 | [0] | + 25 | + 50 (2) |
| 15 | - 21 | + 13 | + 34 |
| 20 | - 24 | + 9 | + 23 |
| 25 | - 28 | + 6 | + 11 |
| 30 | - 32 | + 4 | + 7 |
| 35 | - 33 | + 2 | + 3 |
| 40 | - 34 | [0] | [0] |
| 45 | - 35 | - 4 | - 4 |
| 50 | - 37 | - 9 | - 9 |

(+) Cyclic means applications where tyres are used one way laden and return unladen (e.g loaders).

(1) One way distance 150 m, fully loaded.

(2) One way distance 600 m, fully loaded.

Note: speed category symbol A2 applies to tyres marked with suffix "SS" or "NHS"

Annex 8

Test procedure to assess tyre resistance to bursting

1. Preparing the tyre

1.1. Mount a new tyre on the test equipment. Wheels used for the test shall be suitable to withstand, with no deformation, the highest value of pressure achievable during the test.

1.2. Carefully centre the tyre beads on the retention device and adjust the outer distance of the tyre beads to a value corresponding to the width of the rim specified by the manufacturer pursuant to paragraph 4.1.10. of this Regulation.

1.3. Fill the tyre with water taking care that all the air inside the tyre is expelled.

2. Test procedure

2.1. Activate the apparatus and increase the pressure of the water inside the tyre in order to reach progressively the limit given by two and half times the pressure specified by the tyre manufacturer pursuant to paragraph 4.1.12. of this Regulation;

2.1.1. In no case, however, the limit value shall be lower than 6 bar (600 kPa) or higher than 10 bar (1 000 kPa).

2.2. Maintain constant the value of the pressure for at least 10 minutes.

2.3. Decrease, progressively, the pressure of the water to zero and drain the tyre.

2.4. Whilst the pressure of the water inside the tyre is higher than the ambient pressure, nobody shall stand inside the test room that shall be safely locked.

3. Equivalent test methods

If a method other than that described above is used, its equivalence must be demonstrated.

Annex 9

Load/speed test procedure

1. Scope and range of application

1.1. This test procedure is applicable for new tyres marked with speed category symbol "D".

1.2. It serves the purpose to assess the suitability of the tyre for the claimed performances.

2. Preparing the tyre

2.1. Mount new tyres on the test rim specified by the manufacturer pursuant to paragraph 4.1.10. of this Regulation.

2.1.1. To seat the beads do not exceed the maximum pressure marked on the tyre sidewalls.

2.2. Use a new inner tube when testing tyres with inner tubes (i.e. tyres not bearing the marking "Tubeless").

2.3. With the tyre beads properly seated on the rim, inflate the tyre to the pressure corresponding to the test pressure specified by the tyre manufacturer for the type of test programme, pursuant to paragraph 4.1.15. of this Regulation.

2.4. Condition the tyre and wheel assembly at test room temperature for not less than three hours.

2.5. Readjust the tyre pressure to that specified in paragraph 2.3. above.

2.6. On request of the tyre manufacturer proceed with the test programme as specified in either of the following paragraphs:

Test procedure in a laboratory on a test drum (paragraph 3. below), or

Test procedure on a road using a trailer (paragraph 4.).

3. Test procedure on a test drum

3.1. Mount the tyre and wheel assembly on the test axle and press it against the outer face of a smooth power-driven test drum of at least   
1,700 mm ± 1 per cent in diameter having a surface at least as wide as the tyre tread.

3.1.1. Drum widths narrower than the tyre tread pattern may be used if the tyre manufacturer agrees.

3.2. Test drum speed: 20 km/h.

3.3. Apply to test axle a series of masses in accordance with the load/speed test programme shown in paragraph 3.4. below, with reference to the test load which equates:

3.3.1. The mass corresponding to load index marked on the tyre in case of tyres marked with speed symbol D.

3.4. Load/speed test programme:

|  |  |  |  |
| --- | --- | --- | --- |
| *Tyre speed category symbol* | *Test step* | *Percentage of the test load* | *Duration (hours)* |
| D | 1 | 66 per cent | 7 |
| 2 | 84 per cent | 16 |
| 3 | 101 per cent | 24 |

3.4.1. In case of a test drum diameter larger than 1,700 mm ± 1 per cent, the above "percentage of test load" shall be increased as follows:

F1 = K ·F2

Where:



R1 is the diameter of test drum, in millimeter

R2 is the diameter of the reference test drum of 1,700 mm

rT is the tyre outer diameter (see paragraph 6.2. of this Regulation), in millimeter

F1 is the percentage of load to be applied for the test drum

F2 is the percentage of load, as per above table, to be applied for reference test drum of 1,700 mm

Example:

K = 1 for a test drum diameter of 1,700 mm;

In case of a test drum diameter of 3,000 mm and a tyre diameter of 1500 mm:



3.5. The tyre pressure must not be corrected throughout the test and the test load must be kept constant throughout each of the three test steps.

3.6. During the test the temperature in the test room must be maintained at between 20 °C and 30 °C or at another temperature if the manufacturer so agrees.

3.7. The load/speed test programme must be carried out without interruption.

4. Test procedure on a trailer

4.1. Mount two new tyres of the same type on a trailer

4.2. Apply on the trailer a mass in order that each tyre be equally loaded with a test load corresponding to the load carrying capacity allowed for that tyre type at 15 km/h (see load variations in Annex 7).

4.3. Run the trailer at a constant speed of 15 km/h ± 1 km/h for 48 hours.

4.3.1. Temporary interruptions are allowed, but they must be compensated by an additional run-in of 5 min for every 20 minutes of interruption.

4.4. The tyre pressure must not be corrected and the test load must be kept constant throughout the test.

4.5. During the test the ambient temperature shall be between 5 °C and 30 °C or at another temperature if the manufacturer so agrees.

5. Equivalent test methods

If a method other than those described above is used, its equivalence must be demonstrated.

Annex 10

Tyre classification code

(Optional marking)

|  |  |
| --- | --- |
| *Classification code* | *Nomenclature* |
| F-1 | Agricultural tractor steering wheel tyres: single rib tread |
| F-2 | Agricultural tractor steering wheel tyres: multiple rib tread |
| F-3 | Steering wheel tyres: industrial service (construction application) |
| G-1 | Garden tractor tyres (implement tyres): traction service |
| G-2 | Garden tractor tyres (implement tyres): flotation traction service |
| G-3 | Garden tractor tyres (implement tyres): maximum flotation service |
| HF-1 | High-flotation tyres: shallow tread |
| HF-2 | High-flotation tyres: regular tread |
| HF-3 | High-flotation tyres: deep tread |
| HF-4 | High-flotation tyres: extra deep tread |
| I-1 | Agricultural implement tyres: multi-rib tread |
| I-2 | Agricultural implement tyres: moderate traction service |
| I-3 | Agricultural implement tyres: traction tread |
| I-4 | Agricultural implement tyres: plough tail wheel service |
| I-5 | Agricultural implement tyres: steering service |
| I-6 | Agricultural implement tyres: Smooth tread |
| LS-1 | Logging and forestry service tyres: regular tread |
| LS-2 | Logging and forestry service tyres: intermediate tread |
| LS-3 | Logging and forestry service tyres: deep tread |
| LS-4 | Logging and forestry service tyres: shallow tread |
| R-1 | Agricultural tractor drive wheel tyres: regular tread |
| R-2 | Agricultural tractor drive wheel tyres: cane and rice service (deep tread) |
| R-3 | Agricultural tractor drive wheel tyres: flotation service (shallow tread) |
| R-4 | Drive wheel tyres: industrial service (construction application) |

Annex 11

Example of the pictogram to be marked on both tyre sidewalls of the tyres to explicit the maximum inflation pressure not to be exceeded for bead seating during tyre mounting



|  |  |  |
| --- | --- | --- |
| a | = | 2 mm min (height of lettering) |
| b | = | 12 mm min for tyre section height < 120 mm |
|  |  | 18 mm min for tyre section height > 120 mm |
| c | = | 14 mm min (width of lettering) |

The pictogram must be placed on both sidewalls.

The value of inflation pressure (250 kPa in the example) must be the same as specified by the tyre manufacturer in paragraph 4.1.14. of this Regulation.

1. \* In accordance with the programme of work of the Inland Transport Committee for 2014–2018 (ECE/TRANS/240, para. 105 and ECE/TRANS/2014/26, cluster 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate. [↑](#footnote-ref-2)
2. As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.2, para. 2. - [www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html)

   \* For the purpose of this Regulation "tyres" means "pneumatic tyres"

   [↑](#footnote-ref-3)
3. The distinguishing numbers of the Contracting Parties to the 1958 Agreement are reproduced in Annex 3 to the Consolidated Resolution on the Construction of Vehicles (R.E.3), documentECE/TRANS/WP.29/78/Rev.2/Amend.3 - [www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html) [↑](#footnote-ref-4)
4. Conversion factor from code to mm is 25,4. [↑](#footnote-ref-5)
5. Distinguishing number of the country which has granted/extended/refused/withdrawn approval (see approval provisions in the Regulation). [↑](#footnote-ref-6)
6. Strike out what does not apply.

   3A list of brand name(s)/trademark(s) or Trade description(s)/ Commercial name(s) may be annexed to this communication. [↑](#footnote-ref-7)