Definitions for tyres as proposed by ETRTO

Reinforced tyre" or “extra load tyre"

COM 316

"Reinforced tyre" or "extra load tyre" means a C1 pneumatic-tyre structure in which the carcass is designed to carry more load than that of the corresponding standard tyre

ETRTO proposal:

"Reinforced tyre" or "extra load tyre" means a pneumatic-tyre structure designed to carry more load at a higher inflation pressure than the load carried by the corresponding standard version tyre at the standard inflation pressure as specified in ISO 4000 part 1.

Marking: the word “REINFORCED” or the words “EXTRA LOAD” if this tyre is a reinforced tyre. (as per Reg. 30)

Comments:

Currently edition 8 of ISO 4000 – 1 is under revision at DIS stage and the edition 9 will be issued within year 2009.

“Snow tyre”

COM 316

“Snow tyre” means a tyre whose tread pattern, tread compound or structure are primarily designed to achieve in snow conditions a performance better than that of a normal tyre with regard to its ability to initiate or maintain vehicle motion.

ETRTO proposal

“Snow tyre” means a tyre whose tread pattern, tread compound or structure are primarily designed to achieve in snow conditions a performance better than that of a normal tyre with regard to its ability to initiate, maintain or stop vehicle motion.

In category C1 and C2, this improved performance is compared to a Standard Reference Test Tyre as defined in a standardized test procedure according to Annex VII of Regulation 117.02.

In category C3, this improved performance is indicated within the type approval’s information documentation submitted in accordance to UNECE Reg. 54.

Marking:

“Alpine” symbol ("3-peak-mountain with snowflake") next to the M+S marking for category C1 and C2.

The inscription M+S (or alternatively M.S or M&S) for C1, C2 & C3.

Rational:

Test methods and reference tyre are currently available for C1 / C2. Tests methods need to be developed for C3 and the definition for C3 snow tyres as per Reg. 54 should apply as long as the tests are not available.

Comments

The combination of the “Alpine” symbol & near by M+S inscription is an international recognized and referred marking for these category of use’s tyre.

C3 tyre types: test method will be introduced through comitology in due time (by end of 2012).
"Traction tyre"

**COM 316**

"Traction tyre" means a tyre in categories C2 or C3 bearing the inscription M+S or M.S. or M&S and intended to be fitted to vehicle drive axle(s).

**ETRTO Proposal:**

"Traction tyre" means a tyre in category C2 or C3 tyre bearing the inscription TRACTION intended to be fitted primarily to the drive axle(s) of a vehicle to maximize force transmission in various circumstances. This increased traction is generally achieved through the use of tread patterns with either transversal sipes and/or large blocks created with transversal grooves which are wider than 1,5 mm.

**Marking:** “TRACTION”

**Comments:**

ETRTO is proposing the use of the specific inscription "TRACTION" and is considering to add additional criteria to improve the robustness of the definition.

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**Special Use**

**COM 316**

"Special use tyre“ means a tyre intended for mixed use both on and off-road or for other special duty.

**ETRTO Proposal:**

"Special Use" means a tyre intended for mixed use both on and off-road or for other special duty. These tyres are primarily designed to initiate and maintain the vehicle in motion in off-road conditions. To achieve this performance they have a block tread pattern in which the blocks are larger and more widely spaced than for normal tyres and have the following characteristics:

- For C1/C2 tyres: a tread depth ≥ 11 mm or void to fill ratio ≥ 35%
- For C3 tyres: a tread depth ≥ 16 mm or void to fill ratio ≥ 35%

**Marking:**

"Special use tyres" bear an inscription ML, MPT, ET or POR:
- ET means Extra Tread
- ML means Mining and Logging
- MPT means Multi Purpose Tyre
- POR means Professional Off-Road.

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**‘Professional Off Road’ Tyre**

**COM 316**

"Off-road professional tyre“ is a sub-group of special use tyre primarily used for servicing in severe off-road conditions.

**ETRTO Proposal:**

"Professional Off-road tyre" is a special use tyre primarily used for servicing in severe off-road conditions, and which has all of the following characteristics:

For C1 and C2 tyres:
1. A tread depth ≥ 11 mm
2. A void-to-fill ratio ≥ 35%
3. A maximum speed rating of ≤ P (with sticker on dashboard for vehicle having a max speed above 150 km/h)

For C3 tyres:
1. A tread depth ≥ 16 mm
2. A void-to-fill ratio ≥ 35%
3. A maximum speed rating of ≤ K (with sticker on dashboard for vehicle having a max speed above 110 km/h)

**Marking:** “POR”

**Rational:**

As per spare tyres’ types that are type approved at the min speed of 120 km/h (L) even if the in use max vehicle speed is fixed at 80 km/h, for C1/C2 is proposed P (150 km/h) and for C3 is proposed K (110 km/h) in order that the speed rating for tyre type approval is above the in use avg. max vehicle speed defined at National level, assuring an appropriate level of safety in case of misuse.
M+S marked tyres

COM 316

No definition proposed.

ETRTO proposal:

Marking: The inscription M+S or M.S or M&S in the case of tyre designed to ensure in mud and fresh or melting snow a performance better than that of a normal tyre.

Notes:
1. This definition of marking should be added to § 3.1.5 in Reg. 30 and 54.
2. § 6.1.5.4 in R30 should say: for tyres marked M+S, the overall diameter (Dmax) established in conformity with the above may be exceeded by 1%.
3. For R 54, § 6.1.5.3.3 should say: for tyres marked M+S, the overall diameter (Dmax) established in conformity with the above may be exceeded by 1%.
4. For R117, § 4.2.5 should be deleted or amended.

Rational:
The proposal is to combine the definition that it is already available in Reg.30 and 54 with the inscription M+S for clarity. Moreover, currently all tyres bearing the M+S inscription and designed in compliance with Reg30 and 54 have an allowance on the Overall Diameter (Dmax) as indicated in the notes above.

Comments
The proposal is an arrangement of existing prescription in Reg.30 and 54. The combination of the “Alpine” symbol & near by M+S inscription is an international recognized and referred marking for SNOW TYRES