BUREAU OF INDIAN STANDARDS

DRAFT AMENDMENT NO. 1
TO
IS 18258: 2023
EVALUATION OF TYRES WITH REGARD TO ROLLING SOUND EMISSION ANDOR TOADHESION ON WET SURFACE ANDOR TO ROLLING RESISTANACE

ICS: 83.160.10

Automotive Tyres, Tubes and Rims Sectional Committee, TED 07	Last Date for Comments: **18 December 2024**

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(*Foreword, Para* 2) — Substitute the following for Para 2:

'In recent years, environment has become a prime focus and rolling resistance is directly related tofuel efficiency and hence the CO_2 emissions. This standard specifies the various test methods to evaluate the tyre with respect to rolling resistance, its performance on wet surface and rolling soundemission.'

(*Page* 23, *Annex* D, *clause* D-1.2.3) — Substitute the following for existing:

'The wind conditions shall not interfere with wetting of surface (wind-shields are allowed).The wetted surface temperature and the ambient temperature shall be between:

Category of use	Wetted surface temperature	Ambient Temperature
Normal tyres	12 °C to 35 °C	12 °C to 40 °C
Snow tyres	5 °C to 35 °C	5 °C to 40 °C
Snow tyres for use in severe snowconditions	5 °C to 20 °C	5 °C to 20 °C
Special use tyres	Not applicable	Not applicable

Moreover, the wetted surface temperature shall not vary during the test by more than 10 °C.

The ambient temperature shall remain close to "the wetted surface" temperature, the difference between the ambient and wetted surface temperature shall be less than 10 °C.'

(*Page* 6, *Clause* **6.3**) — Substitute the following for existing:

6.3 Rolling Resistance Coefficient Limits, as measured by the method described in Annex E.

6.3.1 The maximum values for stage 1 for the rolling resistance coefficient shall not exceed the following (value in N/kN is equivalent to value in kg/t):

Tyre class	Max value (N/kN)
C1	10 Inch ≤ for Radial Tyres < 14 Inch 14 Inch ≤ for Radial Tyres ≤ 25 Inch
C2	10 Inch ≤ for Radial Tyres < 14 Inch 14 Inch ≤ for Radial Tyres ≤ 25 Inch 10 Inch ≤ for Bias Tyres < 14 Inch 14 Inch< for Bias Tyres ≤ 25 Inch
C3	10 Inch ≤ for Radial Tyres ≤ 25 Inch 10 Inch ≤ for Bias Tyres ≤ 25 Inch

NOTE — For ‘snow tyre for use in severe now conditions’’, the limits shall be increased by 1 N/KN.

6.3.2 The maximum values for stage 2 for the rolling resistance coefficient shall not exceed the following (value in N/kN is equivalent to value in kg/t):

Tyre class	Max value (N/kN)
C1	10 Inch ≤ for Radial Tyres < 14 Inch 14 Inch ≤ for Radial Tyres ≤ 25 Inch
C2	10 Inch ≤ for Radial Tyres < 14 Inch 14 Inch ≤ for Radial Tyres ≤ 25 Inch 10 Inch ≤ for Bias Tyres < 14 Inch 14 Inch< for Bias Tyres ≤ 25 Inch
C3	10 Inch ≤ for Radial Tyres ≤ 25 Inch 10 Inch ≤ for Bias Tyres ≤ 25 Inch

NOTE — For ‘snow tyre for use in severe now conditions’’, the limits shall be increased by 1 N/KN.

6.3.3 The maximum values for stage 3 for the rolling resistance coefficient shall not exceed the following (value in N/kN is equivalent to value in kg/t):

Tyre class	Max value (N/kN)
C1	10 Inch ≤ for Radial Tyres < 14 Inch 14 Inch ≤ for Radial Tyres ≤ 25 Inch
C2	10 Inch ≤ for Radial Tyres < 14 Inch 14 Inch ≤ for Radial Tyres ≤ 25 Inch 10 Inch ≤ for Bias Tyres < 14 Inch 14 Inch< for Bias Tyres ≤ 25 Inch

C3	10 Inch ≤ for Radial Tyres ≤ 25 Inch 10 Inch ≤ for Bias Tyres ≤ 25 Inch

NOTE — For 'snow tyre for use in severe now conditions'', the limits shall be increased by 1 N/KN.

(*Page* 14, *Clause* **B-5.2,** line 14**)**— Substitute '$a = \frac{\sum_{i=1}^{n}(v_i - \bar{v})(L_i - \bar{L})}{\sum_{i=1}^{n}(v_i - \bar{v})^2}$' for '$a = \frac{\sum_{i=1}^{n}(v_i - \bar{v})(L_i - \bar{L})}{\sum_{i=1}^{n}(v_i - v)}$'

(*Page* 37, *Clause* **D-2.2.2.2.7.5**, *Fig.* **4**) — Substitute the following figure for existing:

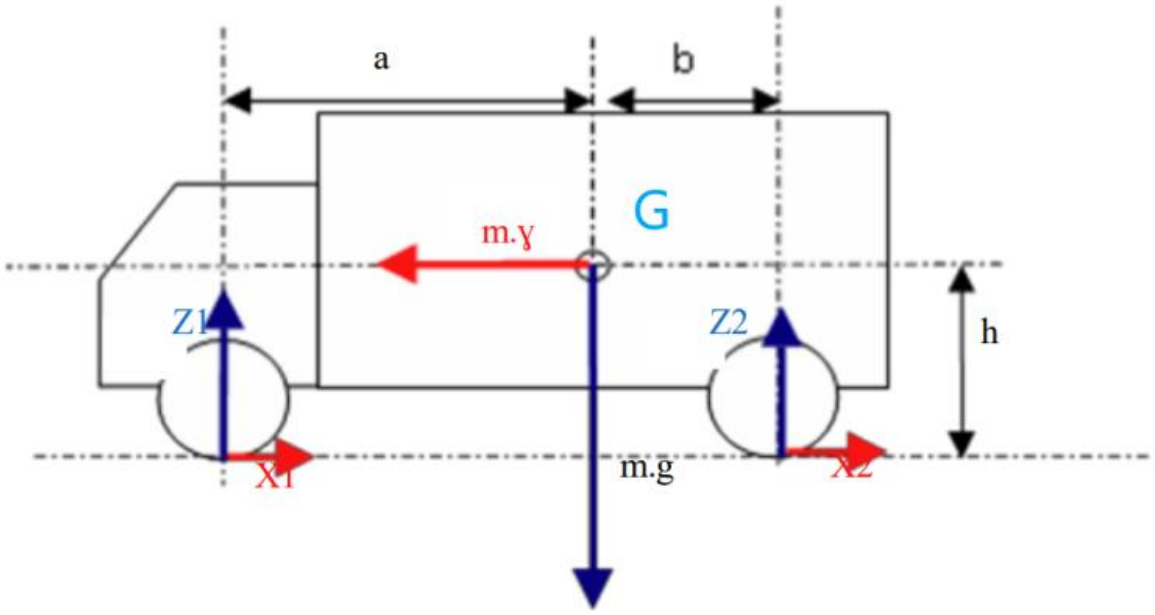

FIG. 4 NOMENCLATURE EXPLANATION RELATED TO GRIP INDEX OF THE TYRE