

ISO/TS 13471-2:2022-08 (E)

Acoustics - Temperature influence on tyre/road noise measurement - Part 2: Correction for temperature when testing with the pass-by methods

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
3.1	Acoustics	1
3.2	Measured noise quantities	2
3.3	Tyre and vehicle classes	2
3.4	Road surface	3
3.5	Temperatures	3
4	Principles of the correction procedures	4
5	Temperature measurement equipment	5
6	Measurement methods	5
6.1	General	5
6.2	Measurement of air temperature	5
6.3	Measurement of road surface temperature (optional)	6
6.4	Measurement of tyre temperature (optional)	6
7	Temperature range	6
7.1	General	6
7.2	Temperature range within which the correction procedure is valid	6
8	Temperature correction procedure	6
8.1	Correction to noise levels	6
8.2	Temperature coefficient	7
8.3	Spectral correction	8
9	Compensation for the effect of power unit noise	9
10	Measurement uncertainty assessment according to ISO/IEC Guide 98-3	9
10.1	General	9
10.2	Potential uncertainties	10
10.3	Uncertainty estimation of temperature correction	10
10.4	Sources of uncertainty	10
10.4.1	Temperature coefficients (t), 1	10
10.4.2	Temperature measurements (T), 2	10
10.4.3	Road surface category (rs), 3	11
10.4.4	Vehicle effect, 4	11
10.4.5	Solar radiation and warming of tyres, 5	11
10.4.6	Tyre effect, 6	11
10.5	Estimation of uncertainties	11
11	Test report	12

Annex A (informative) Information about road surface types	13
Annex B (informative) Selection of temperature for normalization	15
Bibliography	17