

DIN EN ISO 13473-1:2021-11 (E)

Characterization of pavement texture by use of surface profiles - Part 1: Determination of mean profile depth (ISO 13473-1:2019, Corrected version 2021-06)

Contents	Page
European foreword	4
Foreword	5
Introduction	7
1 Scope	8
2 Normative references	8
3 Terms and definitions	9
4 Test surfaces	11
4.1 Condition of the surface	11
4.2 Amount of data to be collected per field test section	11
4.2.1 Continuous measurements	11
4.2.2 Spot measurements	12
4.3 Amount of data to be collected on laboratory samples	12
5 Measurement instruments	12
5.1 Instruments in general	12
5.2 Vertical resolution	13
5.3 Horizontal resolution	13
5.4 Measurement speed	13
5.5 Alignment of sensor	14
5.6 Bandwidth of sensor and recording system	14
5.7 Performance check	15
5.8 Indication of invalid readings (drop-outs)	15
5.9 Sensitivity to vibrations	15
6 Measurement procedure	15
6.1 Performance checks	15
6.2 Measurements	15
6.3 Continuous or spot measurements	15
7 Data processing procedure	16
7.1 General	16
7.2 Summary of data processing steps	16
7.3 Drop-out correction and interpolation	17
7.4 Resampling to a certain spatial resolution	18
7.5 Spike identification and reshaping the profile	18
7.6 Removal of long-wavelength components and normalization of profile sharpness	18
7.7 Segment limiting	19
7.8 Peak and MSD determination	19
7.9 Extreme MSD value removal (optional)	19
7.10 Averaging of MSD to determine the MPD	19
7.11 Calculation of ETD (optional)	20
8 Measurement uncertainty assessment according to ISO/IEC Guide 98-3	20
9 Safety considerations	22

10	Test report	22
Annex A (informative) Texture ranges		24
Annex B (informative) Problems experienced on special surfaces		27
Annex C (informative) Procedure for sampling of mean segment depth values by spot measurements		29
Annex D (normative) Data quality-enhancing procedures		32
Annex E (normative) Spike removal procedure		36
Annex F (informative) Measurement uncertainty		39
Annex G (informative) Performance check		43
Annex H (informative) Flow charts for determination of MSD and MPD		46
Bibliography		49