TECHNICAL SPECIFICATION

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English Version

Road and airfield surface characteristics - Part 13: Procedure for determining the skid resistance of a pavement surface by measurement of a sideway force coefficient (SFCO): the Odoliograph

Caractéristiques de surface des revêtements de chaussée des routes et des aérodromes - Partie 13: Mode opératoire de détermination de l'adhérence de la surface d'un revêtement de chaussée par mesurage d'un coefficient de frottement transversal (CFTO): l'odoliographe

Oberflächeneigenschaften von Straßen und Flugplätzen - Teil 13: Verfahren zur Bestimmung der Griffigkeit von Fahrbahndecken durch Messung des Seitenreibungsbeiwerts (SFCS): das Odoliograph-Messgerät

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Foreword

This document (CEN/TS 15901-13:2011) has been prepared by Technical Committee CEN/TC 227 “Road materials”, the secretariat of which is held by DIN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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1 Scope

This Technical Specification describes a method for determining the wet-road skid resistance of a surface by measurement of a sideway force coefficient SFCO. The method provides a measure of the wet-road skid resistance properties of a bound surface by measurement of sideway-force coefficient at a controlled speed. The method has been developed for use on roads but is also applicable to other paved areas such as airport runways.

This Technical Specification covers the operation of the Odoliograph. This is a device developed by the Belgian Road Research Centre that uses the side-force principle to make routine, expertise and research measurements of skid resistance continuously on long lengths of road.

A machine conforming to the general characteristics of the Odoliograph designed by the Belgian Road Research Centre and the specific provisions of this document may also be used for the tests.

The skid resistance of a pavement is determined by friction measurements and measurements of pavement texture. Where measurement of pavement texture is required the standard for this measurement and the device is described in EN ISO 13473-1.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 48, *Rubber, vulcanised or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD)*

ISO 4662, *Rubber, vulcanized or thermoplastic — Determination of rebound resilience*

3 Recommended uses

This method provides a means for the evaluation of the skid resistance of a road surfacing. It is suitable for use for the following situations:

— testing new surfacing materials when installed in a road trial for type approval purposes;

— testing new surfacing materials for contractual compliance purposes;

— for routine determination of the skid resistance of the surface of a road in service;

— research.

4 Terms and definitions

For the purposes of this document, the following terms and definitions apply

4.1
friction
resistance to relative motion between two bodies in contact

NOTE The frictional force is the force which acts tangentially in the contact area