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Road and airfield surface characteristics

Part 6: Procedure for determining the skid resistance of a pavement surface
by measurement of the sideways force coefficient (SFCS): SCRIM®

National foreword

This Draft for Development is the UK implementation of CEN/TS 15901-6:2009.

The UK participation in its preparation was entrusted to Technical Committee B/510/5, Surface characteristics.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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English Version

Road and airfield surface characteristics - Part 6: Procedure for determining the skid resistance of a pavement surface by measurement of the sideway force coefficient (SFCS): SCRIM(r)

Caractéristiques de surface des routes et aéroports - Partie 6: Mode opératoire de détermination de l'adhérence d'un revêtement de chaussée en procédant au mesurage du coefficient de frottement transversal (CFTS): le SCRIM

Oberflächeneigenschaften von Straßen und Flugplätzen - Teil 6: Verfahren zur Bestimmung der Griffigkeit von Fahrbahndecken durch Messung des Seitenreibungsbeiwerts (SFCS): das SCRIM-Griffigkeitsmessgerät

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Foreword

This document (CEN/TS 15901-6:2009) has been prepared by Technical Committee CEN/TC 227 "Road materials", the secretariat of which is held by DIN.

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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 the sideway force coefficient SFCS.

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 Sideway-force Coefficient Routine Investigation Machine SCRIM®. This is a device developed by W.D.M. Limited, Bristol, England from original research by the Transport Research Laboratory in the United Kingdom. It uses the side force principle to make routine measurements of skid resistance continuously on long lengths of road. SCRIM test equipment has been built onto a number of different vehicle chassis and functions independently of vehicle choice.

A machine conforming to the general characteristics of the SCRIM and the specific provisions of this Technical Specification 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, vulcanized or thermoplastic – Determination of hardness (hardness between 10 IRHD and 100 IRHD)*

ISO 4662, *Rubber – Determination of rebound resilience of vulcanizates*

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;
- routine determination of the in-service skid resistance of the surface of a road or airport runway;
- 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.