

ICS 93.080.20

English Version

**Road and airfield surface characteristics - Part 4: Procedure for determining the skid resistance of pavements using a device with longitudinal controlled slip (LFCT): Tatra Runway Tester (TRT)**

Caractéristiques de surface des routes et aéroports - Partie 4 : Mode opératoire de détermination de l'adhérence d'un revêtement de chaussée à l'aide d'un dispositif à frottement longitudinal contrôlé (CFLT): le Tatra Runway Tester (TRT:Voiture d'essai de piste)

Oberflächeneigenschaften von Straßen und Flugplätzen - Teil 4: Verfahren zur Bestimmung der Griffigkeit von Fahrbahndecken durch Verwendung eines Geräts mit geregelter Schlipf in Längsrichtung (LFCT): das Tatra-Fahrbahnmessgerät (TRT)

This Technical Specification (CEN/TS) was approved by CEN on 27 June 2009 for provisional application.

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## Foreword

This document (CEN/TS 15901-4:2009) 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 skid resistance of pavements by measurement of the longitudinal friction coefficient LFCT.

The method provides a measure of the skid resistance properties of a bound surface by measurement of the longitudinal friction coefficient using a continuous reading braked test wheel with a slip ratio of 25 % (standard) or a variable slip between 0 % to 100 % (for research measurements).

The test tyre is dragged over a pre-wetted pavement under controlled load and constant speed conditions. The measured values can be affected by the test speed.

This Technical Specification covers the operation of the Tatra Runway Tester (TRT).

The acronym Tatra Runway Tester (TRT) applies to a device, developed by Tatra Kopřivnice in the Czech Republic to perform routine, continuous measurements of friction for long road sections or punctual measurements at different speeds to characterise a particular section. It is not manufactured under license.

A machine conforming to the general characteristics of the TRT 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 Fields of application**

The TRT is used in the following fields of application:

- network monitoring (Pavement Management);
- approval of new surfacing;
- investigation of surface skid resistance;
- comparative measurements among different devices;
- research measurements.