

Surface dressing - Test methods - Part 2: Visual assessment of defects

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12272-2:2003 sisaldab Euroopa standardi EN 12272-2:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 14.08.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12272-2:2003 consists of the English text of the European standard EN 12272-2:2003.</p> <p>This document is endorsed on 14.08.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard is applicable to all surface dressings (roads, airfields and other trafficked areas) and specifies qualitative and quantitative methods of the visual assessment of defects of surface dressing.</p> <p>The results of the qualitative evaluation carried out by visual assessment when specified shall be reported in annex A. This is a rapid practical test and may be specified as the primary test so that if the results are obvious or are without any doubt the more time consuming quantitative test method may be avoided</p>	<p>Scope:</p> <p>This European Standard is applicable to all surface dressings (roads, airfields and other trafficked areas) and specifies qualitative and quantitative methods of the visual assessment of defects of surface dressing.</p> <p>The results of the qualitative evaluation carried out by visual assessment when specified shall be reported in annex A. This is a rapid practical test and may be specified as the primary test so that if the results are obvious or are without any doubt the more time consuming quantitative test method may be avoided</p>
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Võtmesõnad: aggregates, appointments, binders : materials, fractures : materials, measuring tec, pavements, pavements (roads), probable errors, road construction, road superstructure, roads, roadstone aggregates, structural failure, surface treatment, testing, wetting, visual

ICS 93.080.20

English version

Surface dressing - Test methods - Part 2: Visual assessment of defects

Enduits superficiels d'usure - Méthodes d'essai - Partie 2:
Evaluation visuelle des défauts

Oberflächenbehandlung - Prüfverfahren - Teil 2: Visuelle
Beurteilung von Inhomogenitäten

This European Standard was approved by CEN on 21 February 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Contents

	Page
Foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Visual assessment of defects	8
4.1 General	8
4.2 Qualitative assessment	8
4.2.1 Procedure	8
4.3 Quantitative assessment	9
4.3.1 Fattening up, tracking, bleeding, scabbing, and tearing	9
4.3.2 Fretting	10
4.3.3 Streaking	11
5 Expression of results	11
5.1 General	11
5.2 Qualitative assessment	11
5.3 Quantitative assessment	11
5.3.1 Fattening up, tracking and bleeding	11
5.3.2 Scabbing and tearing	12
5.3.3 Fretting	12
5.3.4 Streaking	12
6 Test report	12
Annex A (normative) Qualitative assessment	13
Annex B (normative) Quantitative assessment	14
Bibliography	15

Foreword

This document (EN 12272-2:2003) has been prepared by Technical Committee CEN/TC 227 "Road materials", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2003, and conflicting national standards shall be withdrawn at the latest by December 2005.

This European Standard is one of a series of standards as listed below:

EN 12272-1, *Surface dressing — Test methods — Part 1: Rate of spread and accuracy of spread of binder and chippings*

EN 12272-2, *Surface dressing — Test methods — Part 2: Visual assessment of defects*

EN 12272-3, *Surface dressing — Test method — Part 3: Determination of binder aggregate adhesivity by the Vialit plate shock test method*

Annexes A and B are normative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard is applicable to all surface dressings (roads, airfields and other trafficked areas) and specifies qualitative and quantitative methods of the visual assessment of defects of surface dressing.

The results of the qualitative evaluation carried out by visual assessment when specified shall be reported in annex A. This is a rapid practical test and may be specified as the primary test so that if the results are obvious or are without any doubt the more time consuming quantitative test method may be avoided. The quantitative test method shall be carried out when specified and the table of results in annex B reported.

The visual assessment reports for both methods have identical records and thus both may be used to check the specification for visual assessment of defects (prEN 12271-4). The rapid qualitative test methods is dependent on the skill and experience of the operator and therefore the repeatability and the reproducibility values will not be as precise, but the convenience of the method and lack of disruption to traffic will ensure its use.

The national application document may state whether either or both or sequentially the qualitative and quantitative tests are to be used and may relate this to types of site (for example lightly trafficked roads may not be required to be quantitatively assessed).

The test may be used to evaluate the durability or performance of a surface dressing. For example fretting may indicate poor adhesion of the binder to chippings.

2 Normative references

Not applicable.

3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

3.1
mosaic
arrangement of chippings such that they are in shoulder to shoulder contact and are thus supported laterally

NOTE The initial stability of a surface dressing is dependent upon the formation of a close mosaic and the cohesion and adhesion of the binder. Subsequent durability is gained by re-orientation of the chippings by traffic to form a tight mosaic, and sufficient binder to secure the chippings to the existing road surface before the onset of embedment.

3.2
embedment
process whereby chippings are forced into an existing road surface by the action of traffic (see Figure 1) resulting in a reduction of macrotexture with time, which is rapid in the first summer and thereafter stabilises for well designed surface dressings

NOTE Factors affecting embedment are

- increased traffic, especially heavy goods vehicles, increases the rate of embedment;
- road hardness: cement concrete, for example, does not allow embedment;
- summer months, when the average road temperature is higher, results in softer roads with less resistance to embedment;
- size of chippings: large chippings reduce the rate of embedment;