

Printing and business paper - Determination of toner adhesion

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12283:2003 sisaldab Euroopa standardi EN 12283:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12283:2003 consists of the English text of the European standard EN 12283:2002.</p> <p>This document is endorsed on 18.02.2003 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 specifies the determination of the adhesion of dry toner on paper sheet, printed with imaging machines such as copier machines and printers. The chosen measuring range allows discrimination of toner adhesion around the level found with many common paper and machine combination</p>	<p>Scope:</p> <p>This European Standard specifies the determination of the adhesion of dry toner on paper sheet, printed with imaging machines such as copier machines and printers. The chosen measuring range allows discrimination of toner adhesion around the level found with many common paper and machine combination</p>
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ICS 85.080

Võtmesõnad: adhesion, copying papers, definitions, measurement, paper, photocopying, printing papers, properties, testing, toners

English version

Printing and business paper - Determination of toner adhesion

Papier d'impression et de bureau - Détermination de
l'adhésion du toner

Druck- und Büropapier - Bestimmung der Tonerhaftung

This European Standard was approved by CEN on 17 August 2002.

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Foreword

This document (EN 12283:2002) has been prepared by Technical Committee CEN/TC 172 "Pulp, paper and board", 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of an identical text or by endorsement, at the latest by April 2003, and conflicting national standards shall be withdrawn at the latest by April 2003.

This document supersedes ENV 12283:1996.

With regard to ENV 12283:1996 the following changes have been made:

- a) the scope is described more precise;
- b) "internal reference paper" is defined and definition is added in clause 3;
- c) more precise explanations on the "procedure" are given in clause 6;
- d) deletion of the calculation of the optical density in clause 8;
- e) transformation from a European Prestandard (ENV) in a European Standard (EN) is intended;
- f) editorial updating.

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, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

Toner adhesion is an important print quality factor that depends on paper properties as well as printing machine characteristics. A quick qualitative impression can be obtained by folding a fully toned image area and inspecting for a loss of toner. Another qualitative test method is to press adhesive tape on to such an image, slowly separate the adhesive tape from the print and examine the detached toner. However, the IGT method described in this European Standard yields quantitative and reproducible results.

1 Scope

This European Standard specifies the determination of the adhesion of dry toner on paper sheet, printed with imaging machines such as copier machines and printers. The chosen measuring range allows discrimination of toner adhesion around the level found with many common paper and machine combinations.

Since divers imaging processes give different toner adhesion, the described method at constant IGT speed is not advised to compare degree of toner adhesion between different types of machines.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 20187, *Paper, board and pulps — Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples (ISO 187:1990)*.

EN ISO 186, *Paper and board - Sampling to determine average quality (ISO 186:2002)*

EN ISO 216, *Writing paper and certain classes of printed matter - Trimmed sizes - A and B series (ISO 216:1975)*

ISO 3783, *Paper and board — Determination of resistance of picking — Accelerating speed method using the IGT tester (Electric model)*.

3 Terms and definitions

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

3.1

dry toner imaging process

imaging method using dry toner, that is generally fixed on paper by heat and/or pressure

3.2

dry toner

ink powder used for imaging in printers and copier machines

3.3

toner adhesion

property that measures the bonding strength of a toner image to paper

NOTE Toner adhesion is dimensionless.