

Printing and business paper - Requirements for copy paper for dry toner imaging processes

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paper for dry toner imaging processes

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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| <p>Käesolev Eesti standard EVS-EN 12281:2002 sisaldab Euroopa standardi EN 12281:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 13.12.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN 12281:2002 consists of the English text of the European standard EN 12281:2002.</p> <p>This document is endorsed on 13.12.2002 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 performance requirements for uncoated cut-size paper for dry toner imaging processes (i.e. copy paper), in 80 g/m² and in A4 format based on EN ISO 216. Other grammages and sizes of the ISO-A series are covered by this European Standard, as long as the requirements specified in this European Standard are fulfilled</p> | <p>Scope:</p> <p>This European Standard specifies the performance requirements for uncoated cut-size paper for dry toner imaging processes (i.e. copy paper), in 80 g/m² and in A4 format based on EN ISO 216. Other grammages and sizes of the ISO-A series are covered by this European Standard, as long as the requirements specified in this European Standard are fulfilled</p> |
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Võtmesõnad: copying papers, definition, definitions, dimensions, gsm substances, impurities, migration, packages, packing, paper, photocopying, printing papers, properties, specification (approval), specifications, testing, toners

English version

Printing and business paper - Requirements for copy paper for dry toner imaging processes

Papier - Papier d'impression et de bureau - Spécifications pour papier pour photocopie pour procédés de reproduction par toner sec

Druck- und Büropapier - Anforderungen an Kopierpapier für Vervielfältigungen mit Trockentoner

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

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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.

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Foreword

This document (EN 12281:2002) 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 12281:1996.

With regard to ENV 12281:1996 the following changes have been made:

- a) deletion of clause 4 "Principle";
- b) table 1 "Requirements for copy paper" includes now more precise data;
- c) procedure for the "determination of cutting quality" was exchanged and replaced by practical procedure;
- d) transformation from a European Prestandard (ENV) in a European Standard (EN) is intended;
- e) editorial updating.

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

Introduction

Paper for use in dry toner imaging processes, the common copy paper, represents one of the major grades of the world's paper market. Most copier machines, laser-printers and similar machines work with dry toner imaging. For simplification only the terms "copy paper" and "copier machine" are used.

It is not possible to define performance of a copy paper by physical properties alone. Therefore, CEN/TC 172 has put aside several technical paper characteristics and focused on defining and specifying the equivalents of "printability" and "runnability", as well as those paper properties that appeal directly to the end-user.

Since a standard copier machine does not exist and customer demands on some accommodating and aesthetic aspects will vary, several characteristics were not given a required value. In such cases, though, test methods are provided that will facilitate the making of adequate agreements between supplier and customer.

1 Scope

This European Standard specifies the performance requirements for uncoated cut-size paper for dry toner imaging processes (i.e. copy paper), in 80 g/m² and in A4 format based on EN ISO 216. Other grammages and sizes of the ISO-A series are covered by this European Standard, as long as the requirements specified in this European Standard are fulfilled.

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 12283:2002, *Printing and business paper — Determination of toner adhesion.*

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).*

EN ISO 536, *Paper and board — Determination of grammage (ISO 536:1995).*

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 20287, *Paper and board — Determination of moisture content — Oven drying method (ISO 287:1985).*

EN 20534, *Paper and board — Determination of thickness and apparent bulk density or apparent sheet density (ISO 534:1988).*

ISO 2471, *Paper and board — Determination of opacity (paper backing) — Diffuse reflectance method.*

ISO 11475, *Paper and board — Determination of CIE whiteness, D 65/10 degrees (outdoor daylight).*

ISO 14968:1999, *Paper and board — Cut-size office paper — Measurement of curl in a pack of sheets.*

ISO 15359:1999, *Paper and board - Determination of the static and kinetic coefficients of friction - Horizontal plane method.*

IEC 60093, *Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials*

DIN 53109, *Testing of paper and board — Determination of abrasion by the abrasion wheel method.*

NF Q03-055, *Paper and board tests — Determination of abrasion resistance of paper and board (by the taber method).*

3 Terms and definitions

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

3.1

cut size paper sheet

sheets, cut according to the ISO-A series standard

3.2

dry toner imaging process

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

[EN 12283:2002]

3.3

dry toner

ink powder used for imaging in printers and copier machines

[EN 12283:2002]

3.4

paper jam

paper induced failure in the copy process path, causing a copier machine shut-down requiring corrective action by the operator. Included are failures in sorter-bins and/or collection-trays, when operating below 80 % of each single bin's maximum capacity, as stated by the copier machine manufacturer. Excluded are control panel actions

3.5

curl

3.5.1

curl

deviation from a flat surface which has three major components: magnitude, direction of curl axis and the side towards which the paper curls

[ISO 14968:1999]

3.5.2

curl in paper machine direction (MD)

curl axis which is parallel to the paper's machine direction

[ISO 14968:1999]

3.5.3

curl in paper cross direction (CD)

curl axis which is perpendicular to the paper's machine direction

[ISO 14968:1999]

3.5.4

diagonal curl

curl axis which is neither parallel nor perpendicular to the paper's machine direction

[ISO 14968:1999]

3.5.5

curl before copy

curl measured directly after opening the package