

**Halvfabrikat för smide av stål – Dimensions-
toleranser, form och vikt**

**Semi-finished products for forging – Tolerances
on dimensions shape and mass**

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English version

Semi-finished products for forging - Tolerances on dimensions shape and mass

Demi-produits pour forgeage - Tolérances sur des
dimensions, la forme et la masse

Halbzeug zum Schmieden - Grenzabmaße,
Formtoleranzen und Grenzabweichungen der Masse

This European Standard was approved by CEN on 28 November 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 10031:2003) has been prepared by Technical Committee ECISS/TC 28 "Steel forgings", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by September 2003, and conflicting national standards shall be withdrawn at the latest by September 2003.

It is based on and replaces EURONORM 31:1969.

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.

EN 10031:2003 (E)**1 Scope**

This European Standard specifies the tolerances on dimensions, shape and mass for semi-finished products intended to undergo hot forming by forging, i.e. blooms, slabs and billets made of:

- general purpose steels, in accordance with EN 10250-1 to 4;
- steels for pressure purposes, in accordance with EN 10222-1 to 5.

It does not cover semi-finished products intended for drop forging which are covered by EN 10243-1.

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 applies (including amendments).

EN 10079:1992, *Definition of steel products*.

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 10079:1992 apply.

4 Appearance and soundness**4.1 General**

The semi-finished products shall be sound and free from defects such as segregation, cracks, laminations and other imperfections that preclude their intended use.

4.2 Removal of surface defects

Surface defects shall be removed by dressing in order to conform with 4.1. Dressing may be carried out by chipping and/or grinding or by any suitable method providing:

- the resulting depression for a single face shall not fall below a value equal to a maximum of 2% of the nominal size or 3 mm, whichever is the greater;
- in the case of removal of defects from various faces of the same cross section, the residual transverse dimensions shall remain within the specified tolerances;
- in order to ensure adequate blending, the width of the removed area shall be ≥ 6 times its depth and the resulting depression shall not undercut the surface.