

Metallivalu. Pinna ebatasasuste visuaalne kontroll. Teraseliivvormvalu

Founding - Visual examination of surface
discontinuities - Steel sand castings

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12454:2000 sisaldab Euroopa standardi EN 12454:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12454:2000 consists of the English text of the European standard EN 12454:1998.</p> <p>This document is endorsed on 11.01.2000 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>Standard määrab kindlaks visuaalse kontrollimeetodi, mida kasutatakse tavalistes liivvormides valmistatud terasvalandite pinna ebatasasuste hindamiseks. Hinnatakse visuaalsete komparaatorite komplekti abil. Komplekt sisaldab tegeliku valandi ebatasasuste täpseid jäljendeid.</p>	<p>Scope:</p>
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ICS 77.140.80

Võtmesõnad: defekti lubatud piirhälbed, liivvormvalu, pinnaomadused, terastooted, valutehnoloogia, valuterased, vastuvõetavus, visuaalne kontroll

ICS 77.140.80

Descriptors: Steel, castings, surface discontinuities.

English version

Founding

**Visual examination of surface discontinuities –
Steel sand castings**

Fonderie – Examen visuel des
discontinuités de surface – Pièces en
acier moulées en sable

Gießereiwesen – Visuelle Bestimmung
von Oberflächenfehlern – Stahl-
Sandgußstücke

This European Standard was approved by CEN on 1998-04-09.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

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

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 190 "Foundry technology", 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 November 1998, and conflicting national standards shall be withdrawn at the latest by November 1998.

Within its programme of work, Technical Committee CEN/TC 190 requested CEN/TC 190/WG 4.20 "Surface inspection" to prepare the following standard:

EN 12454

Founding – Visual examination of surface discontinuities – Steel sand castings

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

Agreement between the manufacturer and the purchaser on the required surface quality of steel sand castings has frequently been hindered by the absence of suitable specifications. This standard is aimed at avoiding misunderstandings arising from imprecise information at the enquiry and/or order stage.

There are two points to consider when examining the surface of a casting:

- surface roughness;
- surface discontinuities.

EN 1370 deals with surface roughness inspection.

Assessment with visual surface examination of castings is by the use of visual comparators.

1 Scope

This standard specifies the method to be used for visual examination to assess surface discontinuities of steel castings produced in conventional sand moulds. A set of visual comparators [1] comprising replicas of actual casting discontinuities forms the basis of the assessment.

This standard does not apply to steel castings made by the resin-shell, investment and other precision moulding techniques.

This standard defines several categories of discontinuities and severity levels within each of these categories.

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.

EN 1370

Founding – Surface roughness inspection by visual tactile comparators

EN 1559-1

Founding – Technical conditions of delivery – Part 1: General

prEN 1559-2

Founding – Technical conditions of delivery – Part 2: Additional requirements for steel castings

NOTE: Informative references to documents used in the preparation of this standard, and cited at the appropriate places in the text, are listed in a bibliography, see annex A.

3 Description

The set of comparators [1] comprises nine categories.

For the purposes of this standard, six categories have been selected. Within these categories, 2, 3 or 4 severity levels, increasing in severity from 1 to 4, have been chosen.

NOTE: The categories not included ¹⁾ in the standard relate to surface roughness and are therefore included in EN 1370.

¹⁾ The categories not included in this standard are:

- A surface roughness: the natural surface of the casting after shot-blasting (4 severity levels);
- G surface finish: thermal dressing (4 severity levels);
- H surface finish: mechanical dressing (4 severity levels).