Open die steel forgings for general engineering purposes - Part 3: Low alloy special steels

Open die steel forgings for general engineering purposes - Part 3: Low alloy special steels



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 10250-3:2000 sisaldab Euroopa standardi EN 10250-3:1999 ingliskeelset teksti.

Käesolev dokument on jõustatud 17.03.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 10250-3:2000 consists of the English text of the European standard EN 10250-3:1999.

This document is endorsed on 17.03.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This part of prEN 10250 gives the technical delivery requirements for open die forgings and products pre-forged and finished in ring rolling mills, manufactured from low alloy special steel and supplied in the quenched and tempered condition.

Scope:

This part of prEN 10250 gives the technical delivery requirements for open die forgings and products pre-forged and finished in ring rolling mills, manufactured from low alloy special steel and supplied in the quenched and tempered condition.

ICS 77.140.20, 77.140.85

Võtmesõnad:

Hinnagrupp F

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 10250-3

October 1999

ICS 77.140.20; 77.140.85

English version

Open die steel forgings for general engineering purposes Part 3: Alloy special steels

Pièces forgées en acier pour usage général – Partie 3: Aciers spéciaux alliés Freiformschmiedestücke aus Stahl für allgemeine Verwendung – Teil 3: Legierte Edelstähle

This European Standard was approved by CEN on 1999-09-09.

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

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Contents

	Page
Foreword	2
1 Scope	3
2 Normative references	3
3 Chemical composition	3
4 Heat treatment	4
5 Mechanical properties	4
Annex A (informative) Heat treatment	11

Foreword

This European Standard 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 April 2000, and conflicting national standards shall be withdrawn at the latest by April 2000.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association. This European Standard is considered to be a supporting standard to those application and product standards which in themselves support an essential safety requirement of a New Approach Directive and which make reference to this European Standard.

The titles of the other Parts of this European Standard are:

Part 1: General requirements

Part 2: Non-alloy quality and special steels

Part 4: Stainless steels

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.

1 Scope

This Part of this European Standard specifies the technical delivery requirements for open die forgings, forged bars and products pre-forged and finished in ring rolling mills, manufactured from alloy special steel and supplied in the quenched and tempered condition.

NOTE: The majority of steels listed in this Part of EN 10250 are identical to steels specified in EN 10083-1 and more extensive information on hardenability and technological properties is given in that European Standard.

General information on technical delivery conditions is given in EN 10021.

2 Normative references

This Part of EN 10250 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 10021 General technical delivery requirements for iron and steel products

EN 10083-1 Quenched and tempered steels – Part 1: Technical delivery conditions for special steels

EN 10050-1 Open die steel foreings for general engineering purposes – Part 1: General

EN 10250-1 Open die steel forgings for general engineering purposes – Part 1: General requirements

3 Chemical composition

3.1 Cast analysis

The chemical composition of the steel shall be determined by cast analysis and shall conform to the analysis given in table 1 (see A.7 and A.8, of EN 10250-1).

Measures should be taken to prevent the addition from the scrap, or other material used in the manufacture of the steels, of such elements which affect the hardenability, mechanical properties and applicability of the steel.

3.2 Product analysis

The product analysis shall not deviate from the specified cast analysis (see table 1) by more than the values specified in table 2. (see 9.2 to EN 10250-1).