Aerospace series - Steel X4CrNiMo16-5-1 (1.4418) - Air melted - Hardened and tempered - Forgings - De ≤ 200 mm - 1 150 MPa ≤ Rm ≤ 1 300 MPa

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 4627:2014 sisaldab Euroopa standardi EN 4627:2014 inglisekeelset teksti.	This Estonian standard EVS-EN 4627:2014 consists of the English text of the European standard EN 4627:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 30.04.2014.	Date of Availability of the European standard is 30.04.2014.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 49.025.10

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 4627

April 2014

ICS 49.025.10

Supersedes EN 4627:2007

English Version

Aerospace series - Steel X4CrNiMo16-5-1 (1.4418) - Air melted - Hardened and tempered - Forgings - De ≤ 200 mm - 1 150 MPa ≤ Rm ≤ 1 300 MPa

Série aérospatiale - Acier X4CrNiMo16-5-1 (1.4418) - Élaboré à l'air - Trempé et revenu - Pièces forgées - De ≤ 200 mm - 1 150 MPa ≤ Rm ≤ 1 300 MPa

Luft und Raumfahrt - Stahl X4CrNiMo16-5-1 (1.4418) - Lufterschmolzen - Gehärtet- und angelassen - Schmiedestücke - De ≤ 200 mm - 1 150 MPa ≤ Rm ≤ 1 300 MPa

This European Standard was approved by CEN on 27 December 2013.

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 CEN-CENELEC Management Centre or to any CEN member.

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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 4627:2014 E

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Foreword

This document (EN 4627:2014) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

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 October 2014, and conflicting national standards shall be withdrawn at the latest by October 2014.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document will supersede EN 4627:2007.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This standard is part of the series of EN metallic material standards for aerospace applications. The general organization of this series is described in EN 4258.

This standard has been prepared in accordance with EN 4500-005.

1 Scope

This standard specifies the requirements relating to:

Steel X4CrNiMo16-5-1 (1.4418)
Air melted
Hardened and tempered
Forgings
$D_e \leq 200$ mm
1 150 MPa ≤ R_m ≤ 1 300 MPa

for aerospace applications.

NOTE Other common designation:
AIR: Z 8 CND 17-04.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 2950, *Aerospace series - Test method - Wrought heat resisting alloys Semi-finished products and parts - Conditions for macrographic and micrographic examination - Atlas of structures and defects*

EN 2951, *Aerospace series — Metallic materials — Test method — Micrographic determination of content of non-metallic inclusions* [1)]

EN 4050-4, *Aerospace series - Test method for metallic materials - Ultrasonic inspection of bars, plates, forging stock and forgings - Part 4: Acceptance criteria*

EN 4258, *Aerospace series - Metallic materials - General organization of standardization - Links between types of EN standards and their use*

EN 4500-005, *Aerospace series - Metallic materials - Rules for drafting and presentation of material standards - Part 005: Specific rules for steels*

EN 4629, *Aerospace series - Steel X4CrNiMo16-5-1 (1.4418) - Air melted - Softened - Forging stock - De ≤ 300 mm*

EN 4700-006, *Aerospace series - Steel and heat resisting alloys - Wrought products - Technical specification - Part 006: Pre-production and production forgings*

EN ISO 643, *Steels - Micrographic determination of the apparent grain size (ISO 643:2012)*

AMS 2315, *Determination of delta ferrite content* [2)]

1) Published as ASD-STAN Prestandard at the date of publication of this standard (www.asd-stan.org).

2) Published as SAE National (US) Society of Automotive Engineers (http://www.sae.org/).