# Oceľové výkovky na tlakové zariadenia Časť 4: Zvariteľné jemnozrnné ocele s vysokou medzou pevnosti STN EN 10222-4+A1

Steel forgings for pressure purposes - Part 4: Weldable fine grain steels with high proof strength

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/21

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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## **English Version**

# Steel forgings for pressure purposes - Part 4: Weldable fine grain steels with high proof strength

Pièces forgées en acier pour appareils à pression -Partie 4 : Aciers soudables à grains fins avec limite d'élasticité élevée Schmiedestücke aus Stahl für Druckbehälter - Teil 4: Schweißgeeignete Feinkornbausstähle mit hoher Dehngrenze

This European Standard was approved by CEN on 25 December 2016 and includes Amendment 1 approved by CEN on 2 May 2021.

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

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

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# **European foreword**

This document (EN 10222-4:2017+A1:2021) has been prepared by Technical Committee ECISS/TC 459/SC 11 "Steel castings and forgings", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by December 2021, and conflicting national standards shall be withdrawn at the latest by December 2021.

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

This document supersedes A EN 10222-4:2017 A.

This document includes Amendment 1 approved by CEN on 11 April 2021.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $\boxed{\mathbb{A}}$   $\boxed{\mathbb{A}}$ .

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2014/68/EU.

For relationship with EU Directive 2014/68/EU, see informative Annex ZA, which is an integral part of this document.

EN 10222 consists of the following parts under the general title "Steel forgings for pressure purposes":

- Part 1: General requirements for open die forgings
- Part 2: Ferritic and martensitic steels with specified elevated temperature properties
- Part 3: Nickel steels with specified low temperature properties
- Part 4: Weldable fine grain steels with high proof strength
- Part 5: Martensitic, austenitic and austenitic-ferritic stainless steels.

#### $A_1$ deleted sentence $A_1$ .

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This European Standard specifies the technical delivery conditions for forgings for pressure purposes, made of weldable fine grain steels with high proof strength.

NOTE Once this standard is published in the EU Official Journal (OJEU) under Directive 2014/68/EU, presumption of conformity to the Essential Safety Requirements (ESRs) of Directive 2014/68/EU is limited to technical data of materials in this standard and does not presume adequacy of the material to a specific item of equipment. Consequently, the assessment of the technical data stated in this material standard against the design requirements of this specific item of equipment to verify that the ESRs of Directive 2014/68/EU are satisfied, needs to be done. The series EN 10222–1 to EN 10222–5 is structured so that the data related to different materials is in the part allocated for that material. The presumption of conformity to the Essential Safety Requirements of Directive 2014/68/EU depends on both the text in part 1 and the data in part 2, 3, 4 or 5.

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

#### 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 10222-1:2017, Steel forgings for pressure purposes — Part 1: General requirements

koniec náhľadu – text ďalej pokračuje v platenej verzii STN