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Nickel and nickel alloy forgings

Pièces forgées en nickel et alliages de nickel

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 155, *Nickel and nickel alloys*.

This second edition cancels and replaces the first edition (ISO 9725:1992), Clause 2 and Table 2 of which have been technically revised.

Nickel and nickel alloy forgings

1 Scope

This document specifies requirements for nickel and nickel alloy forgings for general purposes.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 204, *Metallic materials — Uniaxial creep testing in tension — Method of test*

ISO 6372, *Nickel and nickel alloys — Terms and definitions*

ISO 6892-1, *Metallic materials — Tensile testing — Part 1: Method of test at room temperature*

ISO 6892-2, *Metallic materials — Tensile testing — Part 2: Method of test at elevated temperature*

ASTM E112, *Standard test methods for determining average grainsize*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6372 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
heat
molten metal poured from a single furnace or molten metal from two or more furnaces poured into a single ladle

3.2
lot
forgings of the same cross-sectional dimensions, from the same *heat* (3.1), heat treated together or sequentially heat treated in a continuous furnace, but in no case for no longer than 16 h of production

Note 1 to entry: For forgings not identified by heat, the lot either consists of one piece or is less than 500 kg.

4 Alloy identification

For the purposes of this document, the principles for alloy identification are given in Annex A.

5 Information to be supplied by the purchaser

The purchaser shall give clear information in the enquiry and order, in particular, on the following:

a) the number of this document, i.e. ISO 9725;

b) quantity (mass or number of pieces) of forgings required;