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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Stainless steel tubes suitable for screwing in accordance with ISO 7-1

Tubes en acier inoxydable filetables selon l'ISO 7-1

Reference number
ISO 7598 : 1988 (E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 7598 was prepared by Technical Committee ISO/TC 5, *Ferrous metal pipes and metallic fittings*.

This second edition cancels and replaces the first edition (ISO 7598 : 1982) and ISO 7598 : 1982/A1 : 1984, of which it constitutes a minor revision.

Annex A of this International Standard is for information only.

Stainless steel tubes suitable for screwing in accordance with ISO 7-1

1 Scope

This International Standard specifies the dimensions and characteristics of seamless and welded austenitic stainless steel tubes with dimensions corresponding to the medium series of ISO 65.

The tubes may be delivered with plain ends or threaded in accordance with ISO 7-1 and fitted with one screwed socket. The limits of application for these tubes may be laid down on a national basis in accordance with the regulations in force in each country.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 7-1 : 1982, *Pipe threads where pressure-tight joints are made on the threads — Part 1 : Designation, dimensions and tolerances.*

ISO 404 : 1981, *Steel and steel products — General technical delivery requirements.*

ISO 2604-2 : 1975, *Steel products for pressure purposes — Quality requirements — Part 2 : Wrought seamless tubes.*

ISO 2604-5 : 1978, *Steel products for pressure purposes — Quality requirements — Part 5 : Longitudinally welded austenitic stainless steel tubes.*

ISO 4144 : 1979, *Stainless steel fittings threaded to ISO 7-1.*

ISO 9302 : —¹⁾, *Seamless and welded (except submerged arc welded) steel tubes for pressure purposes — Electromagnetic testing for verification of hydraulic leak-tightness.*

3 Calculation of masses

The values for masses per unit length for plain end tubes have been calculated on the basis of the mean of the maximum and minimum diameters given in table 2 and using the basis for calculation as given in ISO 4200 and have been modified for screwed and socketed tubes by an amount based on the mean mass of a tube of length 7 m with a socket.

4 General requirements

4.1 The tubes shall be made by a seamless or welded process.

4.2 The tubes shall be supplied in the heat-treated condition. The heat-treatment procedure shall consist of heating the tubes at 950 °C to 1 100 °C and rapidly cooling.

4.3 The tubes shall be suitable for fabrication and shaping by normal techniques.

5 Material

The steel shall have a chemical composition and mechanical properties in accordance with ISO 2604-2 and ISO 2604-5.

These standards cover the following steels :

TS 46, TS 47, TS 58, TS 61;

TW 46, TW 47, TW 58, TW 61.

6 Appearance

6.1 The tubes shall have smooth internal and external surfaces, the degree of smoothness depending on the method of manufacture. Unless otherwise agreed in the order, the internal weld bead shall not be removed.

The tubes shall have a workmanlike finish but small imperfections are permissible provided that the thickness remains within the lower tolerance limit.

1) To be published.