

**Terastorud täppisseadmetele.  
Tehnilised tarnetingimused. Osa 6:  
Keevitatud külmtõmmatud torud  
hüdraulilistele ja pneumaatilistele  
elektrisüsteemidele**

Steel tubes for precision applications - Technical  
delivery conditions - Part 6: Welded cold drawn  
tubes for hydraulic and pneumatic power systems

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 10305-6:2005 sisaldab Euroopa standardi EN 10305-6:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 22.06.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 10305-6:2005 consists of the English text of the European standard EN 10305-6:2005.</p> <p>This document is endorsed on 22.06.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This Part of EN 10305 specifies the technical delivery conditions for welded cold drawn tubes of circular cross section for use in hydraulic and pneumatic power systems.</p>	<p><b>Scope:</b> This Part of EN 10305 specifies the technical delivery conditions for welded cold drawn tubes of circular cross section for use in hydraulic and pneumatic power systems.</p>
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**Võtmesõnad:** fire hoses, mechanical properties, order indications, pipelines, pipes, pneumatics, precision steel tubes, pressure pipes, seamed pipes, specification (approval), specifications, steel pipes, steel tubes, surface roughness, testing, tubes, welded tubes

ICS 77.140.75

English version

**Steel tubes for precision applications - Technical delivery conditions - Part 6: Welded cold drawn tubes for hydraulic and pneumatic power systems**

Tubes de précision en acier - Conditions techniques de livraison - Partie 6 : Tubes soudés étirés à froid pour circuits hydrauliques et pneumatiques

Präzisionsstahlrohre - Technische Lieferbedingungen - Teil 6: Geschweißte kaltgezogene Rohre für Hydraulik- und Pneumatik-Druckleitungen

This European Standard was approved by CEN on 28 February 2005.

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## Foreword

This document (EN 10305-6:2005) has been prepared by Technical Committee ECISS/TC 29 “Steel tubes and fittings for steel tubes”, the secretariat of which is held by UNI/UNSIDER.

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 November 2005, and conflicting national standards shall be withdrawn at the latest by November 2005.

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 (97/23/EC).

For relationship with EU Directive (97/23/EC), see informative Annex ZA, which is an integral part of this document.

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

This document includes a bibliography.

EN 10305 consists of the following parts under the general title *Steel tubes for precision applications - Technical delivery conditions*:

- Part 1: Seamless cold drawn tubes
- Part 2: Welded cold drawn tubes
- Part 3: Welded cold sized tubes
- Part 4: Seamless cold drawn tubes for hydraulic and pneumatic power systems
- Part 5: Welded and sized square and rectangular tubes
- Part 6: Welded cold drawn tubes for hydraulic and pneumatic power systems

## 1 Scope

This Part of EN 10305 specifies the technical delivery conditions for welded cold drawn tubes of circular cross section for use in hydraulic and pneumatic power systems.

Tubes according to this Part of EN 10305 are characterized by having precisely defined tolerances on dimensions and a specified surface roughness.

The allowed pressure rates and temperatures are the responsibility of the customer in accordance with the state of the art and in the application of the safety coefficients specified in the applicable regulations, codes or standards.

## 2 Normative references

This European Standard 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 those 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 (including amendments).

EN 10002-1, *Metallic materials – Tensile testing – Part 1: Method of test at ambient temperature.*

EN 10020, *Definition and classification of grades of steel.*

EN 10021, *General technical delivery requirements for steel and iron products.*

EN 10027-1, *Designation systems for steels – Part 1: Steel names, principal symbols.*

EN 10027-2, *Designation systems for steels – Part 2: Numerical system.*

EN 10052, *Vocabulary of heat treatment terms for ferrous products.*

EN 10168, *Steel products – Inspection documents – List of information and description.*

EN 10204, *Metallic products – Types of inspection documents.*

EN 10246-1, *Non-destructive testing of steel tubes – Part 1: Automatic electromagnetic testing of seamless and welded (except submerged arc-welded) ferromagnetic steel tubes for verification of hydraulic leak-tightness.*

EN 10256, *Non-destructive testing of steel tubes – Qualification and competence of level 1 and 2 non-destructive testing personnel.*

EN 10266, *Steel tubes, fittings and structural hollow sections – Symbols and definitions of terms for use in product standards.*

EN ISO 377, *Steel and steel products – Location and preparation of samples and test pieces for mechanical testing (ISO 377:1997).*

EN ISO 2566-1, *Steel - Conversion of elongation values – Part 1: Carbon and low-alloy steels (ISO 2566-1:1984).*

EN ISO 8492, *Metallic materials - Tube - Flattening test (ISO 8492:1998)*

EN ISO 8493, *Metallic materials - Tube - Drift-expanding test (ISO 8493:1998)*

CR 10260, *Designation systems for steel - Additional symbols.*

## 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 10020, EN 10021, EN 10052, EN 10266 and the following apply.