
Cevni fittingi za soležne zware - 1. del: Ogljikovo jeklo za splošno uporabo in brez posebnih zahtev kontrole

Butt-welding pipe fittings - Part 1: Wrought carbon steel for general use and without specific inspection requirements

Formstücke zum Einschweißen - Teil 1: Unlegierter Stahl für allgemeine Anwendungen und ohne besondere Prüfanforderungen

Raccords à souder bout à bout - Partie 1: Acier au carbone pour usages généraux et sans contrôle spécifique

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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 10253-1

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ICS 77.140.45

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**Butt-welding pipe fittings - Part 1: Wrought carbon steel
for general use and without specific inspection
requirements**

Raccords à souder bout à bout - Partie 1: Acier au
carbone pour usages généraux et sans contrôle
spécifique

Formstücke zum Einschweißen - Teil 1: Unlegierter
Stahl für allgemeine Anwendungen und ohne
besondere Prüfanforderungen

This European Standard was approved by CEN on 15 June 2026.

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European foreword

This document (EN 10253-1:2026) has been prepared by Technical Committee CEN/TC 459 “ECISS – European Committee for Iron and Steel Standardization”¹, 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of an identical text or by endorsement, at the latest by February 2027, and conflicting national standards shall be withdrawn at the latest by February 2027.

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 EN 10253-1:1999.

EN 10253-1:2026 includes the following significant technical changes with respect to EN 10253-1:1999:

- a) restructuring of Clauses to reflect new layout of EN 10253-2 and EN 10253-4;
- b) revision of introduction;
- c) revision of scope;
- d) update of normative references;
- e) update of terms, symbols and abbreviations;
- f) removal of dished ends;
- g) moved steel grade S265 from Annex A to Clause 9;
- h) update of options;
- i) revision of technical requirements and dimensions to reflect current state of the art;
- j) revision of Figures;
- k) moved dimensions to Annex A;
- l) standard editorially revised.

EN 10253 comprises a series of European Standards about *Butt-welding pipe fittings*, namely:

- *Part 1: Wrought carbon steel for general use and without specific inspection requirements;*
- *Part 2: Non alloy and ferritic alloy steels with specific inspection requirements;*
- *Part 3: Wrought austenitic and austenitic-ferritic (duplex) stainless steels without specific inspection requirements;*

¹ Through its sub-committee SC 10 “Steel tubes, and iron and steel fittings” (secretariat: UNI).

- *Part 4: Wrought austenitic and austenitic-ferritic (duplex) stainless steels with specific inspection requirements.*

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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Introduction

In writing this document the competent committee recognized that there are two broad types of products commonly used, and decided to reflect these in the standard by differentiating between two parts.

EN 10253-1 describes fittings without formal reference to the pressure resistance, which are not intended to be used in applications, covered by the European Legislation for Pressure Equipment.

EN 10253-2 defines fittings that are intended to be used in applications covered by the European Legislation for Pressure Equipment.

The selection of steel type and requirement level depend on many factors; the properties of the fluid to be conveyed, the service conditions, the design code and any statutory requirements should all be taken into consideration. Therefore this document gives no detailed guidelines for the application of different parts. It is the ultimate responsibility of the user to select the appropriate part for the intended application.

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1 Scope

This document specifies the technical delivery requirements for seamless and welded butt-welding fittings (elbows, concentric and eccentric reducers, equal and reducing tees, caps) made of wrought carbon steel without specific inspection requirements.

It specifies:

- a) steel grade and its chemical compositions;
- b) mechanical properties;
- c) dimensions and tolerances;
- d) requirements for inspection and testing;
- e) inspection documents;
- f) marking;
- g) protection and packaging.

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.

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

EN 10021, *General technical delivery conditions for steel products*

EN 10079, *Definition of steel products*

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

EN 10204, *Metallic products — Types of inspection documents*

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)*

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

EN ISO 3166-1, *Codes for the representation of names of countries and their subdivisions — Part 1: Country code (ISO 3166-1)*

EN ISO 4885, *Ferrous materials — Heat treatments — Vocabulary (ISO 4885)*

EN ISO 5817, *Welding — Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) — Quality levels for imperfections (ISO 5817)*

EN ISO 6506-1, *Metallic materials — Brinell hardness test — Part 1: Test method (ISO 6506-1)*