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Standards

Irish Standard
I.S. EN 10253-3:2008

Butt-welding pipe fittings - Part 3: Wrought austenitic and austenitic- ferritic (duplex) stainless steels without specific inspection requirements

I.S. EN 10253-3:2008

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English Version

Butt-welding pipe fittings - Part 3: Wrought austenitic and austenitic-ferritic (duplex) stainless steels without specific inspection requirements

Raccords à souder bout à bout - Partie 3: Aciers
inoxydables austénitiques et austéno-ferritiques sans
contrôle spécifique

Formstücke zum Einschweißen - Teil 3: Nichtrostende
austenitische und austenitisch-ferritische (Duplex-) Stähle
ohne besondere Prüfanforderungen

This European Standard was approved by CEN on 18 October 2008.

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Foreword

This document (EN 10253-3:2008) has been prepared by Technical Committee ECISS/TC 29 "Steel tubes and fittings for steel tubes", the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by May 2009, and conflicting national standards shall be withdrawn at the latest by May 2009

.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

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

Part 5: Wrought austenitic and austenitic-ferritic (duplex) stainless steels for use as construction products

In writing EN 10253 the competent committee recognized that there are two broad types of products commonly used for stainless steels, 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 Pressure Equipment Directive (97/23/EC).

EN 10253-2 defines two types of fittings : Type A fittings have the same wall thickness at the welding ends and at the body of the fitting than a pipe having the same specified wall thickness. Their resistance to internal pressure is, in general, less than that of a straight pipe with the same dimensions. Type B fittings showing increased wall thickness at the body of the fitting are designed to resist the same internal pressure as a straight pipe with same dimensions. These two types of fittings are intended to be used in applications covered by the EU Directive 97/23/EC. According to this Directive and further interpretation guidelines (e.g. guideline 7/19), seamless fittings are considered as materials whereas welded fittings are considered as components. Therefore, in some areas of this European Standard, provisions for seamless and welded fittings are different.

The committee recognized the need to provide a basic type in which the minimum wall thickness of the fitting is guaranteed without formal reference to the pressure resistance. This type is considered in Part 3 and includes products not intended for use in applications covered by the Pressure Equipment Directive (97/23/EC) except applications according to Article 3 Paragraph 3.

The application standards for the Pressure Equipment Directive category I - IV will require that the fitting is designed to withstand a defined resistance to internal pressure. This approach is considered in Part 4.

Information about structural dimensions of fittings is given in Annex A and commonly used dimensions and wall thicknesses are given in Annex B.

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 standard 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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