

METALSETE MATERJALIDE KEEVISÕMBLUSTE
PURUSTAV KATSETAMINE. PAINDEKATSE

Destructive tests on welds in metallic materials - Bend
tests

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 5173:2010 sisaldab Euroopa standardi EN ISO 5173:2010 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 5173:2010 consists of the English text of the European standard EN ISO 5173:2010.
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English Version

**Destructive tests on welds in metallic materials - Bend tests
(ISO 5173:2009)**

Essais destructifs des soudures sur matériaux métalliques -
Essais de pliage (ISO 5173:2009)

Zerstörende Prüfungen von Schweißnähten an
metallischen Werkstoffen - Biegeprüfungen (ISO
5173:2009)

This European Standard was approved by CEN on 18 March 2010.

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Foreword

The text of ISO 5173:2009 has been prepared by Technical Committee ISO/TC 44 “Welding and allied processes” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 5173:2010 by Technical Committee CEN/TC 121 “Welding” the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by October 2010, and conflicting national standards shall be withdrawn at the latest by October 2010.

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Endorsement notice

The text of ISO 5173:2009 has been approved by CEN as a EN ISO 5173:2010 without any modification.

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Destructive tests on welds in metallic materials — Bend tests

1 Scope

This International Standard specifies a method for making transverse root, face and side bend tests on test specimens taken from butt welds, butt welds with cladding (subdivided into welds in clad plates and clad welds) and cladding without butt welds, in order to assess ductility and/or absence of imperfections on or near the surface of the test specimen. It also gives the dimensions of the test specimen.

In addition, this International Standard specifies a method for making longitudinal root and face bend tests to be used instead of transverse bend tests for heterogeneous assemblies when base materials and/or filler metal have a significant difference in their physical and mechanical properties in relation to bending.

This International Standard applies to metallic materials in all forms of product with welded joints made by any fusion arc welding process.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1

transverse face bend test specimen for a butt weld **TFBB**

specimen for which the surface in tension is the side that contains the greater width of the weld or the side from which the welding arc was first applied, applicable to transverse butt weld specimens

See Figure 1.

2.2

transverse root bend test specimen for a butt weld **TRBB**

specimen for which the surface in tension is the side opposite to that of the face butt weld bend test specimen, applicable to transverse butt weld specimens

See Figure 2.

2.3

transverse side bend test specimen for a butt weld **SBB**

specimen for which the surface in tension is a cross-section of the weld

See Figure 3.

2.4

longitudinal face test specimen for a butt weld **root bend test specimen for a butt weld** **LFBB** **LRBB**

specimen whose direction is parallel to butt weld direction, applicable to face and root bend specimens

See Figure 4.