

This is a preview of "BS EN ISO 4136:2012". [Click here to purchase the full version from the ANSI store.](#)

BS EN ISO 4136:2012



BSI Standards Publication

Destructive tests on welds in metallic materials — Transverse tensile test (ISO 4136:2012)

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

raising standards worldwide™



This is a preview of "BS EN ISO 4136:2012". [Click here to purchase the full version from the ANSI store.](#)

This British Standard is the UK implementation of EN ISO 4136:2012. It supersedes BS EN ISO 4136:2011 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee WEE/46, Non-destructive testing.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2012. Published by BSI Standards Limited 2012

ISBN 978 0 580 79570 1

ICS 25.160.40

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2012.

Amendments issued since publication

Date	Text affected
------	---------------

This is a preview of "BS EN ISO 4136:2012". [Click here to purchase the full version from the ANSI store.](#)

EUROPÄISCHE NORM

November 2012

ICS 25.160.40

Supersedes EN ISO 4136:2011

English Version

Destructive tests on welds in metallic materials - Transverse tensile test (ISO 4136:2012)

Essais destructifs des soudures sur matériaux métalliques -
Essai de traction transversale (ISO 4136:2012)

Zerstörende Prüfung von Schweißverbindungen an
metallischen Werkstoffen - Querzugversuch (ISO
4136:2012)

This European Standard was approved by CEN on 31 October 2012.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

This is a preview of "BS EN ISO 4136:2012". [Click here to purchase the full version from the ANSI store.](#)

Foreword

This document (EN ISO 4136:2012) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with 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 May 2013, and conflicting national standards shall be withdrawn at the latest by May 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 4136:2011.

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

Endorsement notice

The text of ISO 4136:2012 has been approved by CEN as a EN ISO 4136:2012 without any modification.

This is a preview of "BS EN ISO 4136:2012". [Click here to purchase the full version from the ANSI store.](#)

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Principle	1
4 Symbols and abbreviated terms	1
5 Preparation of test specimens	2
5.1 Location.....	2
5.2 Marking.....	2
5.3 Heat treatment and/or ageing.....	2
5.4 Extraction.....	3
5.5 Machining.....	3
6 Test procedure	7
7 Test results	7
7.1 General.....	7
7.2 Location of fracture.....	7
7.3 Examination of fracture surfaces.....	7
8 Test report	7
Annex A (informative) Example of a test report	9

This is a preview of "BS EN ISO 4136:2012". [Click here to purchase the full version from the ANSI store.](#)

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 4136 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 5, *Testing and inspection of welds*.

This third edition cancels and replaces the second edition (ISO 4136:2001), which has been technically revised.

This is a preview of "BS EN ISO 4136:2012". [Click here to purchase the full version from the ANSI store.](#)

Destructive tests on welds in metallic materials — Transverse tensile test

1 Scope

This International Standard specifies the sizes of test specimen and the procedure for carrying out transverse tensile tests in order to determine the tensile strength and the location of fracture of a welded butt joint.

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

Unless otherwise specified for specific points in this International Standard, the general principles of ISO 6892-1 and ISO 6892-2 apply.

2 Normative references

The following referenced documents are indispensable for the application 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.

ISO 4063:2009, *Welding and allied processes — Nomenclature of processes and reference numbers*

ISO 6892-1, *Metallic materials — Tensile testing at ambient temperature — Part 1: Method of test at room temperature*

ISO 6892-2, *Metallic materials — Tensile testing at ambient temperature — Part 2: Method of test at elevated temperature*

3 Principle

An increasing tensile load is continuously applied until rupture occurs in a test specimen taken transversely from a welded joint.

Unless otherwise specified, the test shall be carried out at ambient temperature (23 ± 5) °C.

4 Symbols and abbreviated terms

The symbols and abbreviated terms to be used for the transverse tensile tests are specified in Table 1 and represented in Figures 1 to 3.