



BSI Standards Publication

Specification and qualification of welding procedures for metallic materials — Welding procedure test

Part 2: Arc welding of aluminium and its alloys

National foreword

This British Standard is the UK implementation of EN ISO 15614-2:2025. It is identical to ISO 15614-2:2025. It supersedes BS EN ISO 15614-2:2005, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee WEE/36, Qualification of welding personnel and welding procedures.

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

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UK Government is responsible for legislation. For information on legislation and policies relating to that legislation, consult the relevant pages of www.gov.uk.

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Descriptif et qualification d'un mode opératoire de soudage pour les matériaux métalliques - Épreuve de qualification d'un mode opératoire de soudage - Partie 2: Soudage à l'arc de l'aluminium et de ses alliages (ISO 15614-2:2025)

Anforderung und Qualifizierung von Schweißverfahren für metallische Werkstoffe - Schweißverfahrensprüfung - Teil 2: Lichtbogenschweißen von Aluminium und seinen Legierungen (ISO 15614-2:2025)

This European Standard was approved by CEN on 8 August 2025.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN ISO 15614-2:2025) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 "Welding and allied processes" 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of an identical text or by endorsement, at the latest by March 2026, and conflicting national standards shall be withdrawn at the latest by March 2026.

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 ISO 15614-2:2005, EN ISO 15614-2:2005/AC:2009.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA or ZB, which is an integral part of this document.

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

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Endorsement notice

The text of ISO 15614-2:2025 has been approved by CEN as EN ISO 15614-2:2025 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 2014/68/EU (PED) aimed to be covered

This European Standard has been prepared under a Commission's standardization request M/601 to provide one voluntary means of conforming to Essential Safety Requirements of the New Approach Pressure Equipment Directive 2014/68/EU.

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in [Table ZA.1](#) and application of the edition of the normatively referenced standards as given in [Table ZA.2](#) confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Safety Requirements of that Directive and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Annex I of the Directive 2014/68/EU (PED)

Essential Requirements of Directive 2014/68/EU (PED)	Clauses of this EN	Remarks/Notes
3.1.2, paragraphs 3, 4 and 5	<u>Clauses 4, 5, 6, 7, 8, 9</u>	Permanent joining. For pressure resistant components of pressure equipment in the categories II, III and IV the examiner/examining body is a competent third party.

Table ZA.2 — Normative references from Clause 2 of this document and their corresponding European publications

Column 1 Reference in Clause 2	Column 2 International Standard Edition	Column 3 Title	Column 4 Corresponding European Standard Edition
ISO 2107	ISO 2107:2007	<i>Aluminium and aluminium alloys — Wrought products — Temper designations</i>	None For applicable standard edition see Column 2
ISO 3452-1	ISO 3452-1:2021	<i>Non-destructive testing — Penetrant testing — Part 1: General principles</i>	EN ISO 3452-1:2021
ISO 4136	ISO 4136:2022	<i>Destructive tests on welds in metallic materials — Transverse tensile test</i>	EN ISO 4136:2022
ISO 5173	ISO 5173:2023	<i>Destructive tests on welds in metallic materials — Bend tests</i>	EN ISO 5173:2023
ISO 6520-1	ISO 6520-1:2007	<i>Welding and allied</i>	EN ISO 6520-1:2007

Column 1 Reference in <u>Clause 2</u>	Column 2 International Standard Edition	Column 3 Title	Column 4 Corresponding European Standard Edition
		<i>processes — Classification of geometric imperfections in metallic materials — Part 1: Fusion welding</i>	
ISO 6947	ISO 6947:2019	<i>Welding and allied processes — Welding positions</i>	EN ISO 6947:2019
ISO 9017	ISO 9017:2017	<i>Destructive tests on welds in metallic materials — Fracture test</i>	EN ISO 9017:2018
ISO 10042	ISO 10042:2018	<i>Welding — Arc-welded joints in aluminium and its alloys — Quality levels for imperfections</i>	EN ISO 10042:2018
ISO 10863	ISO 10863:2020	<i>Non-destructive testing of welds — Ultrasonic testing — Use of time-of-flight diffraction technique (TOFD)</i>	EN ISO 10863:2020
ISO 13588	ISO 13588:2019	<i>Non-destructive testing of welds — Ultrasonic testing — Use of automated phased array technology</i>	EN ISO 13588:2019
ISO 14175	ISO 14175:2008	<i>Welding consumables — Gases and gas mixtures for fusion welding and allied processes</i>	EN ISO 14175:2008
ISO 15607	ISO 15607:2019	<i>Specification and qualification of welding procedures for metallic materials — General rules</i>	EN ISO 15607:2019
ISO 15609-1	ISO 15609-1:2019	<i>Specification and qualification of welding procedures for metallic materials — Welding procedure specification — Part 1: Arc welding</i>	EN ISO 15609-1:2019
ISO 15613	ISO 15613:2004	<i>Specification and qualification of welding procedures for metallic materials — Qualification based on pre-production welding test</i>	EN ISO 15613:2004

Column 1 Reference in <u>Clause 2</u>	Column 2 International Standard Edition	Column 3 Title	Column 4 Corresponding European Standard Edition
ISO 17636-1	ISO 17636-1:2022	<i>Non-destructive testing of welds — Radiographic testing — Part 1: X- and gamma-ray techniques with film</i>	EN ISO 17636-1:2022
ISO 17636-2	ISO 17636-2:2022 Corrected version 2023-02	<i>Non-destructive testing of welds — Radiographic testing — Part 2: X- and gamma-ray techniques with digital detectors</i>	EN ISO 17636-2:2022
ISO 17637	ISO 17637:2016	<i>Non-destructive testing of welds — Visual testing of fusion-welded joints</i>	EN ISO 17637:2016
ISO 17639	ISO 17639:2022	<i>Destructive tests on welds in metallic materials — Macroscopic and microscopic examination of welds</i>	EN ISO 17639:2022
ISO 17640	ISO 17640:2018	<i>Non-destructive testing of welds — Ultrasonic testing — Techniques, testing levels, and assessment</i>	EN ISO 17640:2018
ISO 18273	ISO 18273:2015	<i>Welding consumables — Wire electrodes, wires and rods for welding of aluminium and aluminium alloys — Classification</i>	EN ISO 18273:2015
ISO 18491	ISO/DIS 18491:	<i>Welding and allied processes — Measurement of arc energies</i>	None For applicable standard edition see Column 2
ISO/TR 25901-1	ISO/TR 25901-1:2016	<i>Welding and allied processes — Vocabulary — Part 1: General terms</i>	None For applicable standard edition see Column 2
ISO 25901-2	ISO 25901-2:2022	<i>Welding and allied processes — Vocabulary — Part 2: Health and safety</i>	EN ISO 25901-2:2023
ISO/TR 25901-4	ISO/TR 25901-4:2016	<i>Welding and allied processes — Vocabulary — Part 4: Arc welding</i>	None For applicable standard edition see Column 2

The documents listed in the Column 1 of Table ZA.2, in whole or in part, are normatively referenced in this document, i.e. are indispensable for its application. The achievement of the presumption of conformity is subject to the application of the edition of Standards as listed in Column 4 or, if no European Standard Edition exists, the International Standard Edition given in Column 2 of Table ZA.2.

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WARNING 2 Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

Annex ZB
(informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 2014/29/EU (SPVD) aimed to be covered

This European Standard has been prepared under a Commission’s standardization request M/602 to provide one voluntary means of conforming to Essential Safety Requirements of the New Approach Simple pressure vessels Directive 2014/29/EU.

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in [Table ZB.1](#) and application of the edition of the normatively referenced standards as given in [Table ZA.2](#) confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Safety Requirements of that Directive and associated EFTA regulations.

Table ZB.1 — Correspondence between this European Standard and Annex I of the Directive 2014/29/EU (SPVD)

Essential Requirements of Directive 2014/29/EU (SPVD)	Clauses of this EN	Remarks/Notes
3.2, paragraph 2	Clauses 4, 5, 6, 7, 8, 9	Welds on pressurized parts The examiner/examining body is a notified body.

The documents listed in the Column 1 of [Table ZA.2](#), in whole or in part, are normatively referenced in this document, i.e. are indispensable for its application. The achievement of the presumption of conformity is subject to the application of the edition of Standards as listed in Column 4 or, if no European Standard Edition exists, the International Standard Edition given in Column 2 of [Table ZA.2](#).

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WARNING 2 Other Union legislation may be applicable to the products falling within the scope of this standard.

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