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Resistance welding — Overview of standards for resistance welding

*Soudage par résistance — Vue d'ensembles des normes de soudage
par résistance*

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 6, *Resistance welding and allied mechanical joining*.

Any feedback, question or request for official interpretation related to any aspect of this document should be directed to the Secretariat of ISO/TC 44/SC 6 via your national standards body. A complete listing of these bodies can be found at www.iso.org/members.html. Official interpretations, where they exist, are available from this page: <https://committee.iso.org/sites/tc44/home/interpretation.html>.

Resistance welding — Overview of standards for resistance welding

1 Scope

This document gives an overview of ISO documents for resistance welding. It covers the following processes:

- resistance spot welding;
- projection welding;
- seam welding;
- flash welding;
- upset (resistance butt) welding.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

4 Overview of standards for resistance welding

[Table 1](#) shows an overview of standards for resistance welding.

Table 1 — Overview of standards for resistance welding

Standard topic	Resistance spot welding	Projection welding		Resistance welding		Flash welding	Upset (resistance butt) welding
		ISO 9000 series	ISO 9000 series	ISO 9000 series	ISO 9000 series		
Quality management	ISO 9000 series	ISO 9000 series	ISO 9000 series	ISO 9000 series	ISO 9000 series	ISO 9000	ISO 9000 series
Vocabulary for quality management	ISO 9000	ISO 9000	ISO 9000	ISO 9000	ISO 9000	ISO 9000	ISO 9000
Welding symbols/Graphical symbols	ISO 2553	ISO 2553	ISO 2553	ISO 2553	ISO 2553	ISO 2553	ISO 2553
ISO 7000/IEC 60417	ISO 7000/IEC 60417	ISO 7000/IEC 60417	ISO 7000/IEC 60417	ISO 7000/IEC 60417	ISO 7000/IEC 60417	ISO 7000/IEC 60417	ISO 7000/IEC 60417
Quality requirements for welding/joining	ISO 14554-1	ISO 14554-1	ISO 14554-1	ISO 14554-1	ISO 14554-1	ISO 14554-1	ISO 14554-1
	ISO 14554-2	ISO 14554-2	ISO 14554-2	ISO 14554-2	ISO 14554-2	ISO 14554-2	ISO 14554-2
Specification and qualification standards							
General rule							
Joining procedure specification	ISO 15609-5	ISO 15609-5	N/A	ISO 15609-5	ISO 15609-5	ISO 15609-5	ISO 15609-5
Qualification based on consumable, experience, standard welding procedure, and pre-production testing	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Joining procedure test	ISO 15614-12	ISO 15614-12	ISO 15614-12	ISO 15614-12	ISO 15614-12	ISO 15614-12	ISO 15614-12
Joining procedures (guideline)	ISO 14373	ISO 14373	ISO 14373	ISO 14373	ISO 14373	ISO 14373	ISO 14373
	ISO 18594	ISO 18594	ISO 18594	ISO 18594	ISO 18594	ISO 18594	ISO 18594
ISO 18595	ISO 18595	ISO 18595	ISO 18595	ISO 18595	ISO 18595	ISO 18595	ISO 18595
Testing procedures and test specimens	ISO 10447	ISO 10447	ISO 10447	ISO 10447	ISO 10447	ISO 14270	ISO 14270
	ISO 14270	ISO 14270	ISO 14270	ISO 14270	ISO 14270	ISO 14271	ISO 14271
	ISO 14271	ISO 14271	ISO 14271	ISO 14271	ISO 14271	ISO 14273	ISO 14273
	ISO 14272	ISO 14272	ISO 14272	ISO 14272	ISO 14272	ISO 14329	ISO 14329
	ISO 14273	ISO 14273	ISO 14273	ISO 14273	ISO 14273	ISO 17654	ISO 17654
	ISO 14323	ISO 14323	ISO 14323	ISO 14323	ISO 14323		
	ISO 14324	ISO 14324	ISO 14324	ISO 14324	ISO 14324		
	ISO 14329	ISO 14329	ISO 14329	ISO 14329	ISO 14329		
	ISO 17653	ISO 17653	ISO 17653	ISO 17653	ISO 17653		
	ISO 18592	ISO 18592	ISO 18592	ISO 18592	ISO 18592		