



NSAI
Standards

Irish Standard
I.S. EN ISO 20168:2021

Resistance welding - Locking tapers for electrode holders and electrode caps (ISO 20168:2016)

I.S. EN ISO 20168:2021

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National Foreword

I.S. EN ISO 20168:2021 is the adopted Irish version of the European Document EN ISO 20168:2021, Resistance welding - Locking tapers for electrode holders and electrode caps (ISO 20168:2016)

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 20168

January 2021

ICS 25.160.20

English Version

**Resistance welding - Locking tapers for electrode holders
and electrode caps (ISO 20168:2016)**

Soudage par résistance - Cônes de serrage pour porte-
électrodes et pointes d'électrodes (ISO 20168:2016)

Widerstandsschweißen - Selbsthemmende Kegel für
Elektrodenhalter und Elektrodenkappe (ISO
20168:2016)

This European Standard was approved by CEN on 6 December 2020.

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EN ISO 20168:2021 (E)

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European foreword

The text of ISO 20168:2016 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 20168:2021 by Technical Committee CEN/TC 121 "Welding and allied processes" 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of an identical text or by endorsement, at the latest by July 2021, and conflicting national standards shall be withdrawn at the latest by July 2021.

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.

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Endorsement notice

The text of ISO 20168:2016 has been approved by CEN as EN ISO 20168:2021 without any modification.

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INTERNATIONAL STANDARD

**ISO
20168**

First edition
2016-09-01

Resistance welding — Locking tapers for electrode holders and electrode caps

*Soudage par résistance — Cônes de serrage pour porte-électrodes et
pointes d'électrodes*



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ISO 20168:2016(E)

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).

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The committee responsible for this document is ISO/TC 44, *Welding and allied processes*, Subcommittee SC 6, *Resistance welding and allied mechanical joining*.

Requests for official interpretations of 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.

Resistance welding — Locking tapers for electrode holders and electrode caps

1 Scope

This document specifies the dimensions and tolerances for electrode holders and of spot welding electrode caps, where a locking taper is used.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 5182, *Resistance welding — Materials for electrodes and ancillary equipment*

ISO 5821, *Resistance welding — Spot welding electrode caps*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 17677-1 and the following apply.

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

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

3.1

locking taper

taper allowing for a tight fit between an electrode holder and the electrode cap as their taper angles differ by $0^{\circ} 2' 60''$, ensuring the electrode cap engagement point is at the skirt of the cap and electrode holder

Note 1 to entry: See [Figure 1](#).

Note 2 to entry: Traditionally called “Fisher taper”.

Note 3 to entry: During welding, the electrode cap tightens further on the electrode holder.



Figure 1 — Principle of a locking taper

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