



International

This is a preview of ISO 4885:2026. [Click here to purchase the full version from the ANSI store.](#)

ISO 4885

Ferrous materials — Heat treatments — Vocabulary

Matériaux ferreux — Traitements thermiques — Vocabulaire

**Fourth edition
2026-07**

This is a preview of ISO 4885:2026. Click [here](#) to purchase the full version from the ANSI store.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2026

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

This is a preview of ISO 4885:2026. [Click here to purchase the full version from the ANSI store.](#)

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
3.1 General terms	1
3.2 Terms related to annealing and normalizing	12
3.3 Terms related to quenching	15
3.4 Terms related to tempering and partitioning	19
3.5 Terms related to ageing	21
3.6 Terms related to surface heat treatment	22
3.7 Terms related to thermochemical treatment	23
3.8 Terms related to structure	32
3.9 Terms related to defects	38
Annex A (informative) Equivalent terms	41
Bibliography	56
Index	57

This is a preview of ISO 4885:2026. Click here to purchase the full version from the ANSI store.

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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 17, *Steel*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 459/SC 12, *General issues*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 4885:2018), which has been technically revised.

The main changes are as follows:

- the list of terms has been restructured and classified into 9 categories: general, annealing and normalizing, quenching, tempering and partitioning, ageing, surface heat treatment, thermochemical treatment, structure, defects;
- 66 new terms have been added, such as “continuous austenitization diagram”, “expanded austenite”, “partitioning”, “total thickness of surface hardening depth”, etc.;
- 9 terms have been deleted, such as “acicular structure”, “ferritic steel”, “quenching temperature”, etc.;
- 4 terms have been integrated, namely “baking/ hydrogen removal annealing”, “continuous-cooling-transformation diagram/CCT diagram”;
- 3 terms have been divided into 6 new terms, namely “blank nitriding/ blank nitrocarburizing”, “overheating/ oversoaking”, “sub-zero treatment/ cryogenic treatment (former deep freezing)”;
- 39 terms have been added synonyms, such as “cooling function/ cooling curve”, “blackening/ blacking”, “transformation temperature/ critical point”, etc.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.