

This is a preview of "ISO 643:2012". Click here to purchase the full version from the ANSI store.

Third edition 2012-12-15

Steels — Micrographic determination of the apparent grain size

Aciers — Détermination micrographique de la grosseur de grain apparente



Reference number ISO 643:2012(E)

ISO 643:2012(E)

This is a preview of "ISO 643:2012". Click here to purchase the full version from the ANSI store.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2012

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

This is a preview of "ISO 643:2012". Click here to purchase the full version from the ANSI store.

Contents Foreword		Page	
		iv	
1	Scope	1	
2	Normative references	1	
3	Terms and definitions	1	
4	Symbols and abbreviated terms	2	
5	Principle	2	
6 6.1 6.2 6.3	Selection and preparation of the specimen Test location Revealing ferritic grain boundaries Revealing austenitic and prior-austenitic grain boundaries	4 5	
7 7.1 7.2	Characterization of grain size Characterization by an index Characterization by the intercept method	9	
8	Test report	14	
Anne	x A (informative) Summary of methods for revealing ferritic, austenitic or prior-austenitic grain boundaries in steels	15	
Anne	x B (normative) Determination of grain size — Standard charts taken from ASTM E112		
Anne	x C (normative) Evaluation method	31	

This is a preview of "ISO 643:2012". 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 643 was prepared by Technical Committee ISO/TC 17, Steel, Subcommittee SC 7, Methods of testing (other than mechanical tests and chemical analysis).

This third edition cancels and replaces the second edition (ISO 643:2003), of which it constitutes a minor revision. A note was added after the first paragraph of 7.1.2.