
**Industrial automation systems and
integration — Product data representation
and exchange —**

Part 512:
**Application interpreted construct: Faceted
boundary representation**

*Systèmes d'automatisation industrielle et intégration — Représentation
et échange de données de produits —*

*Partie 512: Construction interprétée d'application: Représentation
délimitée des faces*



Reference number
ISO 10303-512:1999(E)

© ISO 1999

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 1999

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 22 734 10 79
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Contents	Page
1 Scope	1
2 Normative references	2
3 Terms, definitions and abbreviations	2
3.1 Terms defined in ISO 10303-1	2
3.2 Terms defined in ISO 10303-42	3
3.3 Terms defined in ISO 10303-202	3
3.4 Other definitions	4
3.5 Abbreviations	4
4 EXPRESS short listing	4
4.1 Fundamental concepts and assumptions	6
4.2 aic_faceted_brep schema entity definition: faceted_brep_shape_representation	7
Annex A (normative) Short names of entities	9
Annex B (normative) Information object registration	10
B.1 Document identification	10
B.2 Schema identification	10
Annex C (informative) Computer-interpretable listings	11
Annex D (informative) EXPRESS-G diagrams	12
Annex E (informative) AIC conformance requirements and test purposes	15
E.1 AIC conformance requirements: faceted B-rep	15
E.2 Test purposes for faceted B-rep AIC	16
E.3 Test cases for faceted B-rep AIC	18
E.3.1 Test case fb1	18
E.3.2 Test case fb2	20
E.3.3 Test case fb3	23
E.3.4 Test case fb4	28
E.3.5 Test case fb5	30