
**Ductile iron products for sewerage
applications**

Produits en fonte ductile pour l'assainissement



Reference number
ISO 7186:2011(E)

© ISO 2011



COPYRIGHT PROTECTED DOCUMENT

© ISO 2011

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

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Technical requirements	7
4.1 General	7
4.2 Pressure classification	9
4.3 Dimensional requirements	9
4.4 Material characteristics	13
4.5 Coatings and linings for pipes	14
4.6 Coatings for fittings and accessories	14
4.7 Systems design requirements	15
4.8 Leaktightness of pipeline components	15
4.9 Marking	15
5 Performance requirements	16
5.1 Leaktightness of joints	16
5.2 Diametral stiffness	17
5.3 Chemical resistance	18
5.4 Abrasion resistance	18
6 Test methods and test frequencies	18
6.1 Dimensions	18
6.2 Straightness of pipes	19
6.3 Tensile test	19
6.4 Brinell hardness	21
6.5 Works leaktightness test of pipes and fittings for pressure applications	21
6.6 Works leaktightness test of pipes and fittings for vacuum applications	22
7 Type tests	22
7.1 Leaktightness of gravity pipeline components	22
7.2 Leaktightness of joints to internal pressure	22
7.3 Leaktightness of joints to external pressure	23
7.4 Leaktightness of joints to negative internal pressure	24
7.5 Diametral stiffness of pipe	24
7.6 Chemical resistance to effluents	26
7.7 Abrasion resistance	27
8 Tables of dimensions	28
8.1 Socket and spigot pipes	28
8.2 Fittings for gravity applications	30
8.3 Fittings for pressure and vacuum applications	32
Annex A (informative) External protection	33
Annex B (informative) Internal protection	34
Annex C (normative) Allowable pressure for pressure sewers	35
Bibliography	36