ISO 18489:2015-09 (E)

Polyethylene (PE) materials for piping systems - Determination of resistance to slow crack growth under cyclic loading - Cracked Round Bar test method

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Principle 3

5 Apparatus 3
5.1 Test machine 3
5.1.1 Loading system 3
5.1.2 Load-cycle frequency 4
5.1.3 Grips 4
5.1.4 Temperature chamber 4
5.2 Microscope 4
5.3 Notching apparatus 4

6 Test specimen 4
6.1 Specimen geometry and dimensions 4
6.2 Test specimen preparation 5
6.3 Specimen notching 5
6.4 Specimen conditioning 6

7 Test procedure 6
7.1 Measurement of specimen dimensions 6
7.2 Specimen mounting 6
7.3 Test atmosphere 6
7.4 Calculation of test load 6
7.5 Load application 7
7.6 Notch depth measurement 7

8 Data treatment 7

9 Test report 9

Annex A (informative) Comparison of different test specimen diameters 10

Bibliography 11