ISO 3452-1:2013-06 (E)

Non-destructive testing - Penetrant testing - Part 1: General principles

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Safety precautions 1

5 General principles 2
5.1 Personnel 2
5.2 Description of the method 2
5.3 Process sequence 2
5.4 Equipment 3
5.5 Effectiveness 3

6 Products, sensitivity and designation 3
6.1 Product family 3
6.2 Testing products 3
6.3 Sensitivity 3
6.4 Designation 3

7 Compatibility of testing materials with the part(s) to be tested 4
7.1 General 4
7.2 Compatibility of penetrant testing products 4
7.3 Compatibility of penetrant testing materials with parts under examination 4

8 Test procedure 5
8.1 Written test procedure 5
8.2 Precleaning 5
8.3 Temperature 5
8.4 Application of penetrant 5
8.5 Excess penetrant removal 6
8.6 Application of developer 7
8.7 Inspection 9
8.8 Postcleaning and protection 10
8.9 Retesting 10

9 Test report 10

Annex A (normative) Main stages of penetrant examination 12

Annex B (normative) Process and control tests 13

Annex C (informative) Example test report 21

Bibliography 22