ISO 4987:2010-03 (E)

Steel castings - Liquid penetrant inspection

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Ordering information 1

4 Method of inspection 2
4.1 Operating mode 2
4.2 Qualification of the operators 2
4.3 Surface preparation 2
4.4 Conditions of inspection 2

5 Acceptance criteria 2
5.1 Definition of liquid penetrant indications 2
5.1.1 General 2
5.1.2 Non-linear indications (SP) 2
5.1.3 Linear indication (LP) 3
5.2 Severity levels 3
5.2.1 General 3
5.2.2 Non-linear indications 3
5.2.3 Linear indications 3
5.2.4 Selection of the severity level 4
5.2.5 Designation of severity levels 4

6 Classification of the indications and interpretation of results 4
6.1 Classification of the indications using Tables 1 and 2 4
6.1.1 General 4
6.1.2 Non-linear indications 4
6.1.3 Linear indications 4
6.2 Interpretation of results 5

7 Retesting 5

8 Post-examination cleaning procedures 5

9 Inspection documentation 5

Annex A (informative) Recommended surface finish for liquid penetrant inspection 8

Annex B (informative) Reference figures -- Non-linear isolated indications (SP) 9

Annex C (informative) Reference figures -- Linear indications (LP) 14

Annex D (informative) Model of a liquid penetrant inspection document 29

Bibliography 31