ISO 4773:2023-10 (E)

Non-destructive testing - Ultrasonic guided-wave testing using the phased-array technique

Contents

Page

Foreword ... **iv**

Introduction ... **v**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Personnel requirements ... **1**

5 Principles of phased-array guided-wave testing ... **2**

6 Test equipment ... **2**
6.1 General ... 2
6.2 Test instrument ... 3
6.3 Probe ... 3
6.4 Environmental requirements ... 3

7 Periodical check of the test equipment ... **4**
7.1 Periodical check of the instrument ... 4
7.2 Periodical check of probe ... 4
7.3 Check of the complete system setting ... 4
7.4 Recording level ... 4

8 Test procedure ... **4**
8.1 General ... 4
8.2 Pre-requisites for object ... 5
8.3 Setting of the equipment ... 5
8.3.1 Coating removal process for probe setup ... 5
8.3.2 Setting of sensitivity and range ... 5
8.3.3 Setting of DAC and TCG ... 6
8.4 Classification of signals ... 6
8.5 Periodical check of settings ... 7
8.6 Performing the test ... 7

9 Evaluating the test results ... **8**
9.1 General ... 8
9.2 Procedure ... 8

10 Test report ... **8**

Annex A (normative) **Checklist for the testing with ultrasonic guided-waves** ... **10**

Bibliography ... **18**