DIN EN 14584:2013-07 (E)

Non-destructive testing - Acoustic emission testing - Examination of metallic pressure equipment during proo f testing - Planar location of AE sources

Contents

Page

Foreword 3

1 Scope 4

2 Normative references 4

3 Terms and definitions 4

4 Qualification of personnel 4

5 General 5
5.1 Initial considerations 5
5.2 Application of load 5
5.3 Sensors 5
5.4 Location 5
5.5 Preliminary information 6
5.6 Written instruction requirements 6

6 Instrumentation 7

7 Testing 7
7.1 Pre-test measurements 7
7.1.1 Wave propagation 7
7.1.2 Determination of maximum allowed sensor spacing 8
7.2 Test steps 10
7.2.1 General guidelines 10
7.2.2 In situ verification 10
7.2.3 Background noise 10
7.2.4 Pressurisation 11

8 Interpretation of results 11
8.1 Grading criteria 11
8.2 Real-time control 12
8.3 AE source location cluster severity grading 13

9 Test documentation 13

10 Test report 14

Annex A (normative) Procedure for the correction of peak amplitude with distance 15