DIN EN ISO 20088-1:2017-01 (E)

Determination of the resistance to cryogenic spillage of insulation materials - Part 1: Liquid phases (ISO 20088-1:2016)

Contents

Page

European foreword ... **3**

Foreword ... **4**

Introduction ... **5**

1 Scope ... **6**

2 Normative references ... **6**

3 Terms and definitions ... **7**

4 Test configurations ... **7**
4.1 General ... 7
4.2 Sample holder ... 7

5 Construction of the test items and substrates ... **8**
5.1 General ... 8
5.2 Material ... 8
5.3 Release tank ... 8
5.4 Specimen support ... 9
5.5 Sample holder ... 10
5.6 Test method ... 10

6 Cryogenic spillage protection materials ... **12**
6.1 General ... 12
6.2 Wet applied coating systems ... 12
6.3 Pre-formed system testing ... 12

7 Instrumentation ... **12**
7.1 General ... 12
7.2 Thermocouple location ... 12

8 Test apparatus and conditions ... **13**
8.1 Injection point and position ... 13
8.1.1 General ... 13
8.1.2 Injection point position ... 13
8.2 Test environment ... 13

9 Test procedure ... **14**

10 Repeatability and reproducibility ... **15**

11 Uncertainty of measurement ... **15**

12 Test report ... **15**

13 Practical applications of test results ... **16**
13.1 General ... 16
13.2 Performance criteria ... 16
13.2.1 General ... 16
13.2.2 Coatings and spray-applied materials ... 16
13.2.3 Systems and assemblies ... 16
13.3 Factors affecting the validity of the test ... 17
13.3.1 General ... 17
13.3.2 Leakage of the release tank ... 17
13.3.3 Failure of thermocouples ... 17
13.3.4 Loss of sample integrity/loss of containment ... 17

Annex A (normative) **Methods of fixing thermocouples** **18**
Annex B (normative) **Complete set-up** **19**
Annex C (normative) **Thermocouple positioning inside the sample holder** **22**
Annex D (informative) **Classification** **24**