

ISO 20088-3:2018 (E)

Determination of the resistance to cryogenic spillage of insulation materials — Part 3: Jet release

Contents

| | |
|----------|---|
| | Foreword |
| | Introduction |
| 1 | Scope |
| 2 | Normative references |
| 3 | Terms and definitions |
| 4 | Test configurations |
| 4.1 | General |
| 5 | Construction of the test apparatus and substrates |
| 5.1 | General |
| 5.2 | Material |
| 5.3 | Release nozzle |
| 5.3.1 | Nozzle construction |
| 5.3.2 | Nozzle position |
| 5.4 | Specimen support |
| 5.5 | Recirculation chamber |
| 6 | Cryogenic spill protection materials |
| 6.1 | General |
| 6.2 | Wet applied coating systems |
| 6.3 | Preformed system testing |
| 7 | Instrumentation for test specimens |
| 7.1 | General |
| 7.2 | Thermocouple location |
| 8 | Test environment |
| 9 | Test procedure |
| 10 | Repeatability and reproducibility |
| 11 | Uncertainty of measurement |
| 12 | Test report |
| 13 | Practical applications of test results |
| 13.1 | General |
| 13.2 | Performance criteria |
| 13.2.1 | General |
| 13.2.2 | Coatings and spray-applied materials |
| 13.2.2.1 | Substrate temperature |
| 13.2.3 | Systems and assemblies |
| 13.2.3.1 | Substrate temperature |
| 13.2.3.2 | Impairment of protection integrity |
| 13.3 | Factors affecting the validity of the test |
| 13.3.1 | General |
| 13.3.2 | Failure at nozzle |

13.3.3 Failure of thermocouples

Annex A (normative) Methods of fixing thermocouples

- A.1 General**
- A.2 “Quick Tip” attachment**
- A.3 Capacitive discharge welding**
- A.4 Drilling and peening**
- A.5 Front face attachment**

Annex B (normative) Complete set-up

Annex C (informative) Classification

- C.1 General**
- C.2 Type of exposure**
- C.3 Type of application**
- C.4 Limiting temperature drop**
- C.5 Period of resistance**
- C.6 Examples**
- C.7 Application of classification to design**

Page count: 23