
**Determination of the resistance
to cryogenic spillage of insulation
materials —**

**Part 3:
Jet release**

*Détermination de la résistance des matériaux d'isolation thermique
suite à un refroidissement cryogénique —*

Partie 3: Émission sous forme de jet

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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Test configurations	2
4.1 General	2
5 Construction of the test apparatus and substrates	2
5.1 General	2
5.2 Material	3
5.3 Release nozzle	3
5.3.1 Nozzle construction	3
5.3.2 Nozzle position	4
5.4 Specimen support	4
5.5 Recirculation chamber	6
6 Cryogenic spill protection materials	6
6.1 General	6
6.2 Wet applied coating systems	10
6.3 Preformed system testing	10
7 Instrumentation for test specimens	10
7.1 General	10
7.2 Thermocouple location	10
8 Test environment	10
9 Test procedure	12
10 Repeatability and reproducibility	13
11 Uncertainty of measurement	13
12 Test report	13
13 Practical applications of test results	14
13.1 General	14
13.2 Performance criteria	14
13.2.1 General	14
13.2.2 Coatings and spray-applied materials	15
13.2.3 Systems and assemblies	15
13.3 Factors affecting the validity of the test	15
13.3.1 General	15
13.3.2 Failure at nozzle	15
13.3.3 Failure of thermocouples	15
Annex A (normative) Methods of fixing thermocouples	17
Annex B (normative) Complete set-up	18
Annex C (informative) Classification	21
Bibliography	23

Foreword

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Introduction

The test is intended to be, as far as practicable, representative of a potential accidental pressurized release of cryogenic liquid natural gas (LNG) manufactured in industrial plants. The test includes:

- a) an initial enhanced cooling effect due to the momentum driven liquid contact with the substrate;
- b) a localized force that may be expected in a cryogenic jet release.

This test is designed to give an indication of how cryogenic spill protection systems will perform when subjected to a sudden cryogenic jet release.

The dimensions of the test specimen might be smaller than typical items of structure and plant. The liquid cryogenic jet mass flow rates can be substantially less than that which might occur in a credible event. However, the thermal and mechanical loads imparted to the cryogenic spill protection systems from the cryogenic jet release, described in this document, are representative of a cryogenic LNG jet release with hole size 20 mm or less and release pressure less than or equal to 6 barg.

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