Certificate No: LR23410395SF
Issue Date: 18/12/2023
Expiry Date: 17/12/2028

Certificate Of Cryogenic & Fire Approval

This is to certify that the product(s) detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations for use on offshore units classed with Lloyd's Register, and for use on offshore units and onshore facilities when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer	**ASPEN AEROGELS**
Address	30 FORBES ROAD, BUILDING B, Northbourough, Massachusetts, 01532, United States
Type	Cryogenic (Jet Release) and Jet Fire Resisting Protection Systems
Description	"Flexible Aerogel Blanket – Pyrogel® XTF" Jet Fire Protection System, for cryogenic jet release for up to 60 minutes, followed by jet fire exposures for up to 60 minutes duration, for tubular steel sections, pipework, pipe fittings and valves with an O.D. <500mm
Trade Name	Pyrogel® XTF
Specified Standard	ISO 20088-3:2018 "Determination of the resistance to Cryogenic Spillage of Insulation Materials – Part 3: Jet Release" ISO 22899-1:2007 "Determination of the resistance to Jet Fires of Passive Fire Protection Materials – Part 1: General Requirements"

This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document and its supplementary Type Approval Terms and Conditions form part of this Certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached Design Appraisal Document are complied with and the equipment remains satisfactory in service.

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Keith Taylor

Technical Safety, Electrical & Control Team
Lead to Lloyd's Register EMEA
A member of the Lloyd's Register group

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