Certificate No: LR2002452SF
Issue Date: 11/03/2020
Expiry Date: 10/03/2025

Certificate Of 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, MA, 01532, United States
Type	Cryogenic (Jet Release) and Jet Fire Resisting Protection Systems
Description	Steel protected with "Flexible Aerogel Blanket – Cryogel® Z" insulation system, for cryogenic jet release for up to 35 minutes followed by jet fires for up to 30 minutes
Trade Name	Cryogel® Z
Specified Standard	ISO 20088-3:2018 "Determination of the resistance to Cryogenic Spillage of Insulation Materials – Part 3: Jet Release"; ISO22899-1:2007 "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.

Downloaded Copy

Keith Taylor

Team Lead Fire & Safety to Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, UK

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Certificate No: LR2002452SF
Issue Date: 11/03/2020
Expiry Date: 10/03/2025

Certificate Of Fire Approval

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.

Downloaded Copy

71 Fenchurch Street, London, EC3M 4BS, UK

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.