

CERTIFICATE OF FIRE APPROVAL

This is to certify that

The product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits

Manufacturer

ISOL.ME.CAR. Srl

Address

Via dei Bagni Nuova, 5 Zona Industriale Schiavetti 34074 - Monfalcone (Gorizia)

Italy

Type

FIRE DAMPER (STANDARD FIRE TEST)

Description

- Types: 1, 2 and 3 for Deck Multi Blade Fire Damper

Applications

Specified Standard

IMO Fire Test Procedures Code, Annex 1, Part 3

The attached Design Appraisal Document forms 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. Register EM

Date of issue

10 August 2006

Expiry date

9 August 2011

Certificate No.

SAS F060288

Signed

Sheet No

1 of 2

Name

M. Farrier

Surveyor to Lloyd's Register EMEA A Member of the Lloyd's Register Group

Note:

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 of any modification or changes to the equipment in order to obtain a valid Certificate.

"Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group 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 Group 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."



Lloyd's Register EMEA

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DESIGN APPRAISAL DOCUMENT

Date	Quote this reference on all future communications
10 August 2006	LDSS/PAS/FITA/MF

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F060288

This Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Laboratorio Rina Studi Anticendio (RINA), Fire Protection Research Laboratory, Genoa, Italy, Fire Test Report Nos. 2000CSTO1453/2, dated 21 February 2001 and 2000/CSTO1453/4, dated 23 February 2001.

CONDITIONS OF CERTIFICATION

- Consisting of: Type 1 Single unit, Type 2 Double unit with independent closing mechanism (joined longitudinally), Type 3 Double unit with common closing mechanism (joined transversely). All fire damper bodies are to be insulated and ventilation ducts insulated for a length of 450mm for A-15, A-30 and A-60 decks. Fire damper blades are of an insulated type, incorporating 20mm thick "Carbowool" insulation. All incorporating "Belimo" type: BF 230T-RI actuators.
- 2. For use in A-15, A-30 and A-60 decks with fire damper and ducting insulated and for use in A-0 Decks with no insulation fitted over fire damper or ventilations ducts.
- 3. Maximum size of fire damper: 2000mm x 1000mm Type 2 or Type 3, 1000mm x 1000mm Type 1.
- 4. Minimum size of fire damper: 200mm x 200mm Type 1.
- 5. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as the approved prototype.

PLACE OF PRODUCTION

ISOL.ME.CAR. Srl Via dei Bagni Nuova, 5 Zona Industriale Schiavetti 34074 – Monfalcone (Gorizia)

Italy

Martin Farrier Lead Specialist

Product Approval Services London Design Support Services

Lloyd's Register EMEA

<u>Supplementary Type Approval Terms and Conditions</u>

oyd's Register

This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s).



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Manufacturer

ISOL.ME.CAR. Srl

Address

Via dei Bagni Nuova, 5 Zona Industriale Schiavetti 34074 - Monfalcone (Gorizia)

Italy

Type

FIRE DAMPER (STANDARD FIRE TEST)

Description

Multi Blade Fire Damper - Types: 1, 3 and 4 for Bulkhead

Applications

Specified Standard

IMO Fire Test Procedures Code, Annex 1, Part 3

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Laboratorio Rina Studi Anticendio (RINA), Fire Protection Research Laboratory, Genoa, Italy, Fire Test Report Nos. 2000CSTO1453/5, dated 20 February 2001, 2000CSTO1453/3, dated 23 February 2001 and 2000/CSTO1453/1, dated 19 February 2001.

CONDITIONS OF CERTIFICATION

- Consisting of: Type 1 Single unit, Type 4 Double unit with independent closing mechanism (joined longitudinally), Type 3 Double unit with common closing mechanism (joined transversely). All fire damper bodies are to be insulated and ventilation ducts insulated for a length of 450mm for A-15, A-30 and A-60 bulkheads. Fire damper blades are of an insulated type, incorporating 20mm thick "Carbowool" insulation. All incorporating "Belimo" type: BF 230T-RI actuators.
- 2. For use in A-15, A-30 and A-60 bulkheads with fire damper and ducting insulated and for use in A-0 bulkheads with no insulation fitted over fire damper or ventilations ducts.
- 3. Maximum size of fire damper: 2000mm x 1000mm Type 3 or Type 4, 1000mm x 1000mm Type 1.
- 4. Minimum size of fire damper: 200mm x 200mm Type 1.
- 5. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as the approved prototype.

PLACE OF PRODUCTION

ISOL.ME.CAR. Srl Via dei Bagni Nuova, 5

Zona Industriale Schiavetti

34074 - Monfalcone (Gorizia) Italy

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