



## 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 installations classed with Lloyd's Register, and for use on offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

<b>Manufacturer</b>	Deansteel Manufacturing Company
<b>Address</b>	111 Merchant Street San Antonio Texas 78204-1496 United States of America (USA)
<b>Type</b>	<b>H-60 DOOR SINGLE LEAF HINGED</b>
<b>Description</b>	Fire Resisting Single Leaf Hinged Door – Type: "H-60 Blast Door -5.5"
<b>Specified Standard</b>	UK Department of Energy Hydrocarbon Time/Temperature Relationship and IMO Resolution A.754(18) Performance Criteria

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.

Date of issue                      7 January 2011                      Expiry date                      6 January 2016

Certificate No.                      SAS F110006

Signed



Sheet No                      1 of 3

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.\*

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**DESIGN APPRAISAL DOCUMENT**

Date 7 January 2011	Quote this reference on all future communications LDSO/SFS/TA/JE/SA
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**ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F110006**

This Design Appraisal Document forms part of the Certificate.

**APPROVAL DOCUMENTATION**

Southwest research Institute, 6220 Culebra Road, San Antonio, Texas, United States of America; Test Report No.01.15210.01.601 dated 16 October 2009.

**CONDITIONS OF CERTIFICATION**

1. When fitted in a standard steel bulkhead insulated with an approved H-60 Class insulation system; the door frame to be either bolted to the bulkhead using M10 steel bolts at 305mm maximum centres or continuously welded on at least one side.
2. Door leaf is constructed with 2mm (14 gauge) thick steel door skins and filled with (128kg/m<sup>3</sup> density) 'Insulfrax Marine Blanket Insulation', with a total thickness of 144mm.
3. May be fitted with a vision panel of maximum clear opening size: 254mm x 254mm, comprising 85.7mm thick multi-layered type: "H120-20 Pilkington Pyrostop glazed unit".
4. Maximum door leaf size: 1205 mm wide x 2122 mm high x 144 mm thick.
5. Maximum door clear opening size: 1120mm wide x 2056mm high.
6. Door frame to be fitted with type: 'Blaze Seal #66555' intumescent strips on all four sides.
7. Door leaf to be attached to the frame using a continuous hinge and be fitted with a 3 point locking system.
8. 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.

**NOTE**

No blast test data for the subject door was submitted for appraisal.

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
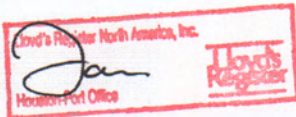
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**PLACE OF PRODUCTION**

DeanSteel Manufacturing Company  
111 Merchant Street  
San Antonio  
Texas  
TX 78204  
United States of America

Martin Farrier  
Lead Specialist  
Statutory Fire & Safety  
London Design Support Office  
Lloyd's Register EMEA

**Supplementary Type Approval Terms and Conditions**

*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).*