



Marine & Offshore

Certificate number: 41955/B0 BV

File number: ACM 135/2208/09

Product code: 2161H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Victaulic Company
Easton - UNITED STATES OF AMERICA

for the type of product

PIPE FITTINGS

FireLock Fittings

Requirements:

- BUREAU VERITAS Rules for the Classification of Steel Ships

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate is a renewal of certificate N° 41955/A1 BV expiring on 12/11/2020

This certificate will expire on: 12 Nov 2025

For Bureau Veritas Marine & Offshore,

At BV PORT EVERGLADES CENTRE, on 23 Jul 2020,

Flavio Rosas



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

FireLock™ Fittings

1.1 Models

No 001 (90° Elbow), No 002 (Straight Tee), No 003 (45° Elbow), No 006 (End Cap)

FireLock fittings are designed for use with approved Victaulic Couplings Style 07 (BV Type Approval No. 04498/F2 BV) and Style 75 & 77 (Type Approval No. 03114/G1 BV)

1.2 Ratings

Tube Size range: 2" (DN 50) to 8" (DN 200)

Max Design Pressure: 232 psi (16 bar)

Design Temperature: See BV Type Approvals No. 04498/F2 BV and No. 03114/G1 BV for coupling seal ratings

The temperature ratings are based on the elastomer (gasket) material provided with the couplings.

1.3 Materials

Fittings: Ductile iron ASTM A-536, grade 65-45-12

When other choices of materials are used per manufacturer's recommendations, the BV agreement is to be obtained.

2. DOCUMENTS AND DRAWINGS

- Manufacturer's documentation N° 10.03 1539 Rev.M dated 12/2014

- Drawings No:

D-F-020-001-001 Rev.AA dated 15/11/2017

D-F-020-002-001 Rev.AB dated 20/11/2017

D-F-020-003-001 Rev.H dated 20/11/2017

D-F-020-006-004 Rev.K dated 19/08/2010

D-F-024-006-005 Rev.N dated 19/08/2010

D-F-030-006-006 Rev.H dated 19/08/2010

D-F-040-006-007 Rev.H dated 02/01/2018

D-F-050-006-008 Rev.E dated 19/08/2010

D-F-060-006-009 Rev.E dated 19/08/2010

D-F-080-001-001 Rev.E dated 15/11/2017

D-F-080-002-001 Rev.D dated 16/11/2017

D-F-080-006-010 Rev.G dated 19/08/2010

No departure from the above documents shall be made without the prior consent of the Society. The manufacturer must inform the Society of any modification or changes to these documents and drawings.

3. TEST REPORTS

- Tightness test at 1.5 times the design pressure and Burst test at 4 times the design pressure, test report dated 30/09/2015 witnessed by a BV Surveyor.

4. APPLICATION / LIMITATION

4.1 May be used on board for the sea water services - Fire Main & Water Spray, coupled with the approved Victaulic Couplings Style 07 and Style 75 & 77.

4.2 In all cases, the associated pipes are to be suitably supported and anchored. The joints are to be at any time accessible, except inside tanks where permitted by the BUREAU VERITAS Rules.

4.3 The wall thickness and material of the tubes are to be in accordance with BUREAU VERITAS Rules.

4.4 The selection of pipes, fittings and seals must be compatible with the fluid to be conveyed and the maximum working temperature according to the manufacturer's recommendations.

4.5 Assembly instructions given by the manufacturer are to be complied with.

5. PRODUCTION SURVEY REQUIREMENTS

5.1 The products are to be supplied by **Victaulic Company** in compliance with the type described in this certificate.

5.2 This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 **Victaulic Company** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

For information, **Victaulic Company** has declared to Bureau Veritas the following production sites:

Victaulic Company
4901 Kessler'sville Road
18040 Easton
USA

Victaulic Alburdis Facility
8023 Quarry Road, Alburdis
PA 18011
USA

Victaulic Polska Facility
STR Niepodleglosci 8
66-530 Drezdenko
Prov-Gorzow
Poland

Dalian Bingshan Metals Technology Co Ltd.,
No 9 Northeast 7th Street
Dalian Economy & Technology Developing Zone
Dalian, 116600
China

6. MARKING OF PRODUCT

Each fitting shall be marked with at least:

- Manufacturer' name or logo
- Type designation
- Size

7. OTHERS

This approval is given on the understanding that the manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper methods of fitting and general maintenance of the products and of the conditions of this approval.

This certificate supersedes the Type Approval Certificate N° 41955/A1 BV issued on 07/10/2019 by the Society.

***** END OF CERTIFICATE *****