



Marine & Offshore
Division

Certificate number: 02375/H0 BV

File number: ACM 135/0208/001

Product code: 2060H

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
BLÜCHER Metal A/S
Vildbjerg - DENMARK

for the type of product
PIPES & FITTINGS
BLÜCHER Sanitary Discharge System

Requirements:

- BUREAU VERITAS Rules for the Classification of Steel Ships
- BUREAU VERITAS Rules for the Classification of Offshore Units

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 17 Jan 2022

For BUREAU VERITAS,

At BV FREDERICIA, on 17 Jan 2017,

Jesper Jensen



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. 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 Division 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 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 electronic version is available at: <http://www.veristarnb.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=sz0ziwffxg>

BV Mod. Ad.E 530 October 2014

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

BLÜCHER Sanitary Discharge System

1.1 Description

BLÜCHER stainless steel pipe systems are jointed by a spigot and socket type joint. The rubber seal between the socket and the spigot is referred to as a lip seal. The lip seal is also proven to be suitable for use in vacuum systems.

1.2 BLÜCHER products

Ship Drains	Type 470, 472, 473, 474, 475, 480, 485, 491
Water Traps	Type 502, 503, 505, 525
Fittings	Type 611, 811, 812, 820, 821, 825, 830, 831, 832, 833, 834, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 847, 850, 854, 855, 860, 869, 873, 874, 885, 886
Accessories	Type 895
Penetration	Type 866, 867, 868, 870, 871, 872, 878
Group Penetration	Type 490
Pipes size x thickness (mm)	40 x 1; 50 x 1; 75 x 1; 110 x 1; 160 x 1.25; 200 x 1.5

1.3 Material specification

Pipe systems	Stainless steel AISI 316L (AISI 304)
Lip sealing rings	EPDM (-35/+ 100 °C) / NBR (-30/+ 80 °C) / FPM (-25/+ 200 °C) / SI (-50/+230 °C) *

* Only used in BLÜCHER's special fire resistant pipe penetrations

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

2. DOCUMENTS AND DRAWINGS

- Blücher Metal A/S Marine catalogue, stainless steel drainage systems as provided on 20/12/2016
- Operating and maintenance instructions

3. TEST REPORTS

Not applicable.

4. APPLICATION / LIMITATION

4.1 May be used on board for:

- Scupper and sanitary discharge systems above the freeboard deck and below in enclosed spaces and machinery compartments without direct overboard connection.
- Air discharge for water tanks. Not exposed parts of overflow pipe which are led above the freeboard deck and provided in the bend of the overflow pipe above the goose-neck of main horizontal overflow main.

4.2 Penetration in watertight and fire class divisions is not covered by this approval. The drawing examination is subject to the Society's approval in each case.

4.3 The installation on board is to be carried out in compliance with manufacturer's instruction and Bureau Veritas Rules.

4.4 The pipes are to be properly secured and protected from mechanical damages.

5. PRODUCTION SURVEY REQUIREMENTS

5.1 The products are to be supplied by **BLÜCHER Metal A/S** 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 **BLÜCHER Metal A/S** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 **BLÜCHER Metal A/S** has declared to Bureau Veritas the following production site:

BLÜCHER Metal A/S
Pugdølvej 1
DK-7480 Vildbjerg
DENMARK

6. MARKING OF PRODUCT

BLÜCHER drainage discharge products is to be at least marked with:

- Manufacturer's name or logo
- Type designation
- Size

7. OTHERS

It is **BLÜCHER Metal A/S**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

This certificate supersedes the Type Approval Certificate N° 02375/G0 BV issued by the Society.

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