



Marine & Offshore
Division

Certificate number: 03456/G0 BV

File number: ACM 171/0202/001

Product code: 2262H

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
Vilbjerg - DENMARK

for the type of product
MUD BOXES
BLÜCHER® Marine drains

Requirements:

- BUREAU VERITAS Rules for the Classification of Steel Ships

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: 14 May 2020

For BUREAU VERITAS,

At BV FREDERICIA, on 14 May 2015,

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.

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BV Mod. Ad.E 530 October 2014

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

BLÜCHER® Marine drains

1.1 Technical description

- Series 470 for stainless steel deck - Vertical or horizontal outlet - With welding sleeve or welding flange or non-welded penetration - With or without water traps	- Series 475 for stainless steel deck - Side outlet - With welding sleeve or welding flange or non-welded penetration	- Series 480 for aluminium deck - Vertical or horizontal outlet - With cylindrical and rectangular strainers
- Series 480.150 for steel deck - Side outlet - Vacuum drain	- Series 491 for cabin drain - Side outlet - With or without removable water trap	

1.2 BLÜCHER products

Lower parts

Type	Outlet Dia. (mm)	Design
470.000.050 / 075 / 110 S	50, 75, 110	Vertical / with welding sleeve
470.200.050 / 075 / 110 S	50, 75, 110	Vertical / with welding flange
470.900.050 / 075 / 110 S	50, 75, 110	Vertical / non-welded
475.000.050 / 075 S	50, 75	Horizontal / with welding sleeve
475.100.050 S	50	Horizontal / with welding sleeve / high model
475.200.050 / 075 S	50, 75	Horizontal / with welding flange
475.900.050 / 075 S	50, 75	Horizontal / non-welded
480.200.050 / 075 / 110 S	50, 75, 110	Vertical / with bi-metal flange / aluminium deck
485.200.050 / 075 S	50, 75	Horizontal / with bi-metal flange / aluminium deck
491.200.050 S	50	Horizontal / without removable trap
491.200.050 VS	50	Horizontal / with removable trap

Upper parts

Type	Outlet Dia. (mm)	Design
471.300.110 S	110	Vertical / with side inlets / for tiled and wooden floors
472.300.110 S	110	Vertical / for tiled and wooden floors
472.320.110 S	110	Vertical / for resin floors
473.300.110 S	110	Vertical / for vinyl floors
473.301.110 S	110	Vertical / for vinyl floors

Accessories

Type	Outlet Dia.	Design
474.300.110 S	135 mm	Grating circle vienna with supporting ring for water trap
502.025.075 S	75 mm	Water trap for cabin drain
502.050.110 MS	108 mm	Removable two-part water trap
502.052.110 CRS	108 mm	Removable water trap with CR sealing ring
503.000.110 CR	110 mm	Removable multi water trap
505.032.050 S	1-1/4"	Bottle water trap
505.040.050 S	1-1/2"	
525.032.050 S	5/4"	P-water trap
525.040.050 S	1 1/2"	
525.050.050 S	2"	
525.090.050 / 075 / 110 / 125 S	50, 75, 110, 125 mm	P-water trap 87,5 °
525.180.050 / 075 / 110 S	50, 75, 110 mm	S-water trap

610.100.430 S	82 x 82	Grating square
610.155.421 / 426 / 427 / 428 / 429 / 521	140 x 140	Grating square
611.300.001 S	110 mm	Extension pipe
620.135.021 /028 S	135 mm	Grating circle

1.3 Material

- Stainless steel AISI 304 or AISI 316L
- Lip sealing ring for pipes EPDM (-35 °C / +100 °C), NBR (-30 °C / +80 °C), FPM (-25 °C / +200 °C)

2. DOCUMENTS AND DRAWINGS

- BLÜCHER Marine - Product catalogue
- Technical information - Maintenance

3. TEST REPORTS

Not applicable.

4. APPLICATION / LIMITATION

4.1 The stainless steel ships drains may be used for :

- Sanitary installation located above the freeboard deck on board ships classed with the Society.

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

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 and in compliance with the requirements stated on the front page of this certificate. This type of product is within the category HBV of Bureau Veritas Rule Note NR 320.

5.2 **BLÜCHER Metal A/S** has to make the necessary arrangements to have its works recognized by BUREAU VERITAS in compliance with the requirements of NR 320 for HBV products.

5.3 No Bureau Veritas Certificate is required.

Place of production

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

6. MARKING OF PRODUCT

All Blücher floor drains have triple three digit type numbers:

- Product type
- Plan size
- Outlet pipe diameter (mm)

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 method of fitting and general maintenance of the BLÜCHER Metal A/S Drainage Systems.

This certificate supersedes Type Approval Certificate N° 03456/F0 BV issued on 08/03/2010 by the Society

*** END OF CERTIFICATE ***