Certificate No: CPH42135-PE001

Type Approval Certificate



[Stainless Steel Pipes and Fittings]

Initial Approval 26 March 2020

Manufacturer Blucher Metal A/S

Pugdalvej 1, 7480 Vildbjerg, Denmark

Product Description BLUCHER® Marine Stainless Steel Sanitary Discharge Pipe and Fittings

- Kind: Push Fit Pipes and Fittings

- Type : BLUCHER® EUROPIPE, DRAIN MARINE and Channel

" See Appendix 1

Approval Condition "See Appendix 1"

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt. 5, Ch. 6, Sec. 1 of the Rules for the Classification of Steel Ships and EN 1124.

This Certificate is valid until 25 March 2030 Issued at Busan, Korea on 4 August 2025



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "http://e-cert.krs.co.kr" by using the tracking No(ME25033816468) and certificate No.(CPH42135-PE001).



KOREAN REGISTER

General Manager of Marine & Ocean Equipment Team

Note: 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.

^{2.} This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.

^{3.} Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.

^{4.} Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Appendix 1 Certificate No: CPH42135-PE001

Product Description and/or Approval Condition

Date of Issue: 4 August 2025

A. Product Description

1. Product Specification

1) BLUCHER® EUROPIPE

	Туре										
Pipes and fittings	837,	820, 838, 855,	839,	840,	841,	842,	843,	844,	847,		
Penetration	490,	866,	867,	868,	870,	872,	875,	878			

2) BLUCHER® DRAIN MARINE

	Туре									
Ship Drains	470,	471,	472,	473,	474,	475,	480,	485,	491,	499
Water Traps	502,	503,	505,	525						
Extension Pipes	611									

3) BLUCHER® CHANNELS

KOREA	Type	R	ĒĠ	15	T E	R		=====	:====
Ship Drain Channels	651,	660,	662,	670,	672,	699			

4) Size (Wall Thickness)

: DN40 (1.0 mm), DN50 (1.0 mm), DN75 (1.0 mm), DN82 (1.0 mm) DN110(1.0 mm), DN125(1.0 mm), DN160(1.25 mm), DN200(1.5 mm)

5) Material specification

- Pipes and fittings

- Seal

AISI316L, AISI304 NBR, EPDM, FPM(penetration fitting between decks, used for

heat resistant and pipe penetrations) 6) Heat resistance of Seal : NBR (-30/+80 °C), EPDM (-40/+100 °C), FPM (-25/+200 °C)

2. Approved Drawings and Documents

1) BLUCHER® marine product catalogue for marine stainless steel sanitary discharge system (Doc. No. 25094 dated on June 2024) approved on 30 May 2025.

3. Test Reports, etc.

- 1) Test report no.1066064 performed under DS/EN1124-1 and DS/EN1124-2 at Danish Technological Institute on 18 Oct. 2002.
- Test report no. 225392 performed under DS/EN1124-4 at Danish Technological Institute on 1 Oct. 2007.
- 3) Test report no. 412491-1 performed under DS/EN1124-1-4 at Danish Technological Institute on 17 Dec. 2010.
- 4) Vibration test report no. DANAK-19/12350 performed at DELTA Denmark on 16 Aug. 2012.
- 5) Test report no. 60175162-002 performed under EN1124-1:2000 at TUVRheinland
- on 20 ~ 21 Aug. 2018. 6) Test report no. 857304 performed under EN1124-1:2000, 2:2014 and 4:2013 at Danish Technological Institute on 15 ~ 27 Feb. 2019.
- 7) Test report no. 267239 performed under EN1124-1:2000, 2:2014 and 4:2013 at Danish Technological Institute on 26 July ~ 5 August 2024.

B. Approval Condition

1. Application & Limitation

1) The pipe system is to be used for non-pressurized and vacuum line;

Waste water systems(Gravity or vacuum discharge systems, garbage disposal systems) above freeboard deck, below in enclosed spaces and machinery spaces without

AC-2A (2021.01)

Certificate No: CPH42135-PE001 Appendix 1

Product Description and/or Approval Condition

Date of Issue: 4 August 2025

- direct overboard connection.
- Food waste system
- Vent pipes for sanitary discharge system
 Outside drainage (scuppers and pipes which are located on weather decks or balconies)
- 2) Pipe penetrations through watertight bulkheads and fire bulkheads are not covered by the approval.
- 3) The pipes are to be installed in accordance with manufacturer's instruction.

2. Individual Product Cert. and Drawing Approval Requirement

1) Individual Product Certification is not required.

3. Marking

1) The product is to be marked with manufacturer's name or trademark, a date of manufacture, size, type designation number at least.

4. Others

[End of Certificate] -N/A

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