

DET NORSKE VERITAS

EC TYPE-EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2009/26/EC, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by Det Norske Veritas under the authority of the Government of the Kingdom of Norway.

CERTIFICATE NO. **MED-B-6857**

This is to certify that the
Penetrations through "A" class divisions: pipe, duct, trunk, etc penetrations

with type designation(s)
BLÜCHER CLASS A PIPE PENETRATION (SI SEALING)

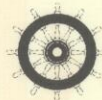
Manufacturer
Blücher Metal A/S
VILDBJERG, Denmark

is found to comply with the requirements in the following Regulations/Standards:
Annex A.1, item No. A.1/3.26b and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2/9, IMO MSC/Circ.1276 and IMO FTP Code

Further details of the equipment and conditions for certification are given overleaf.

Høvik, 2011-05-06
for **Det Norske Veritas AS**

Eivind Mykland
Head of Department



Notified Body No.: **0575**

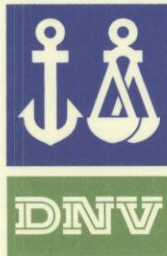
DNV local office:
Aalborg

This Certificate is valid until
2016-05-06

Rolf Emilsen
Surveyor



The Certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or Standards referenced above may render this Certificate invalid. The product liability rests with the manufacturer or his representative in accordance with Council Directive 96/98/EC, as amended. The Mark of Conformity may only be affixed to the product and a Declaration of Conformity may only be issued when the production/product assessment module referred to in the council directive, is fully complied with.



Certificate No.: MED-B-6857
Item No.: A1/3.26b
Job Id.: 344.1-000332-7

Product description

"Blücher Class A Pipe Penetration (SI Sealing)"

Penetration system for Blücher pipes type 866 (ϕ 40-200), 868 (ϕ 40-110), 870 (ϕ 40-110), 871 (ϕ 40-110) and 872 (ϕ 40-110), composed of steel sleeves/scuppers of length 100 mm and thickness 5 mm welded to the bulkhead/deck and Blücher pipes welded to the sleeve.

Pipes to be insulated with approved insulation (e.g. Paroc Wired Mat 100 or Rockwool Marine Wire Mat 105) according to drawings S-0377-300, 301, 302 Rev. A, 303, 304, 308 Rev A, 330, 331 and 332.

Applications/Limitations

Approved for use as a pipe penetration system in class A-0 to A-60 in bulkheads and decks.

The insulation material used has to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

Each product is to be supplied with its manual for installation and use.

Type Examination documentation

Test report Nos. GH01/1576.1 dated 11 December 2001, GV01/1577.1 dated 11 December 2001 and GH02/1754.1 dated 18 February 2002 from TÜV Brandversuchshaus, Hamburg, Germany.

Test reports Nos. GH01.36.1, GH01.36.1F, GH01.42.1 dated 8 August 2001 and GV01.54.1 dated 9 August 2001 from TÜV Brandversuchshaus, Hamburg, Germany.

Test reports Nos. GV01/1316.1 dated 12 October 2001 and GH01317.1 dated 16 October 2001 from TÜV Brandversuchshaus, Hamburg, Germany

Test reports No. GH05/4523.1 and GH05/4524.1 dated 20 December from TÜV Brandversuchshaus, Hamburg, Germany

Test report No. PG11600, Serial No. 10557 dated 17 May 2006 from DIFT, Denmark.

Test reports No. PG12302, Serial No. 12829 and No. PG12303, Serial No. 12841 both dated 27 January 2011 from DIFT, Denmark.

Assessment report No. PH13466 dated 2 March 2011 from DIFT, Denmark.

Drawing Nos. S-0377-300, 301, 302 Rev.A, 303, 304, 308 Rev. A, 330,331 and 332 (insulation) and S-0377-310 Rev. A, 311, 312 Rev. A, 313 Rev. A, 314, 315, 316 Rev. A, 317, 318, 319 Rev. A, 320, 321, 322 and 333 (types) from Blücher Metal A/S.

Tested according to IMO FTPC Part 3 (IMO Res. A.754(18)).

Marking of product

The product or packing is to be marked with name of manufacturer, type designation, fire-technical rating, Mark of Conformity and USCG approval (see below).

Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.

USCG Approval

An U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of certificates of conformity for marine equipment" signed 17 October 2005.