



NIPPON KAIJI KYOKAI

COPY

Certificate

Certificate No.
TA21161E(N)

OF

APPROVAL

Item	:	A-0 / 30 / 60 class pipe penetration (deck)
Product name	:	Penetration type 870
Specifications	:	See the drawings in Annex.
Applicant	:	BLÜCHER Metal A/S Pugdølvej 1, DK-7480 Vildbjerg, Denmark
Manufacturer	:	The same as the Applicant.
Testing standards	:	2010 FTP Code Annex1 / Part 3
Test reports	:	See Annex.
Limitations	:	See Annex.

THIS IS TO CERTIFY that the above type of products has been approved by Nippon Kaiji Kyokai with type approval No. 21FPA13DA, and that the products of the above type will be accepted for use onboard ships classed with the Society as complying with the relevant requirements of the Society's *Rules for the Survey and Construction of Steel Ships* and those of the *International Convention for the Safety of Life at Sea, 1974, as amended*, subject to conditional upon the manufacturers having a quality control system audited by a competent authority to ensure continuous compliance with the type approval conditions.

This certificate is valid until 15 February 2026.

Issued at Tokyo on 16 February 2021.

NIPPON KAIJI KYOKAI



Y. Takao

General Manager

Material and Equipment Department



1. Test reports

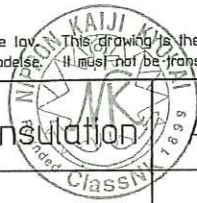
Test laboratory (Test place)	Report number	Date of issue
Danish Institute of Fire and Security Technology (Jernholmen 12, DK-2650 Hvidovre, Copenhagen, Denmark)	PGA11316A	8 July 2020
	PGA11317A	12 March 2019
	PGA11554A	15 November 2019
	PGA11555A	19 November 2019

2. Limitations

1. In case that A-60 class penetration is used as A-15/A-30 class penetration, such penetration is to be applied to the specification for A-60 class penetration described in the attached drawing.
2. In case that A-60 class penetration is used as A-0 class penetration, any insulation fitted (on the penetration itself and 200 mm around) to be fitted also for A-0 class penetration.

Annex to the Certificate No. TA21161E(N)

Denne tegning tilhører BLÜCHER Metal A/S, Danmark og er beskyttet af gældende lov. This drawing is the property of BLÜCHER Metal A/S, Denmark and is protected by pending law. Den må ikke afhændes, udlånes eller kopieres uden firmaets udtrykkelige skriftlige tilladelse. It must not be transferred, lent or reproduced without an explicit written permission from the company.



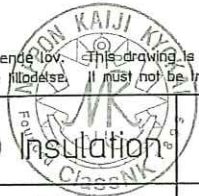
Dimension	Penetration	A-0 Insulation	A-30 Insulation	A-60 Insulation
<p>Ø50 870.000.050</p>				
<p>Ø75 870.000.075</p>				
<p>Ø110 870.000.110</p>				

SI

Less insulation	New dim										
0604081 JO	191118 JO										
Ikke angivne tolerancer ifølge : Not stated tolerances according to :		DS/ISO 2768-c						Overflade/Surface		Areal/Area 0.00000 m ²	
Materiale/Material		Målestok/Scale		Tegnet/Drawn		Kontrolleret/Checked		Ersatlet af/ Replaced by		123% Rev. A	
Werkst. Nr. 1.4301				051108 JO				Ersatning for/ Replacement for		123% Rev. A	
Titel/Designation								Tegning Nr./Drawing No.		Rev.	
Insulation dimensions on Blücher penetrations type 870								S-0377-302		B	

Annex to the Certificate No. TA21161E(N)

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Dimension	Penetration	A-0 Insulation	A-30 Insulation	A-60 Insulation
<p>Ø 40 870.000.040</p>				
<p>Ø 125 870.000.125</p>				
<p>Ø 160 870.000.160</p>				
<p>Ø 200 870.000.200</p>				

SI

New sizes	(A) (B) (C) (D) (E) (F) (G) (H) (I)						
191118 JD							
Ikke angivne tolerancer ifølge : Not stated tolerances according to :		DS/ISO 2768-c		BLÜCHER		Overflade/Surface	Area/Area 0.00000 m ²
Material/Material		Målestok/Scale	Tegnet/Drawn	Kontrolleret/Checked	Erstillet af/ Replaced by	1234	Rev. A
Werkst. Nr. 4301			110308 JO		Erstatning for/ Replacement for	1234	Rev. A
Titel/Designation		Insulation dimensions on Blücher penetrations type 870			Tegning Nr./Drawing No.		Rev.
					S-0377-331		A