DNV·GL

Certificate No:
MEDB00005H1

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Penetrations through "A" class divisions: pipe, duct, trunk, etc penetrations

with type designation(s)
ACO PIPE A-60 PIPE PENETRATION

Issued to
ACO Industries k.s.
Pribyslav, Czech Republic

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397,**
item No. MED/3.26b. SOLAS 74 as amended, Regulation II-2/9, IMO MSC.1/Circ.1276, IMO 2010 FTP Code and IMO MSC.1/1488

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

This Certificate is valid until **2025-03-15**.
Issued at **Høvik** on **2020-03-16**

DNV GL local station:
Prague CMC

Approval Engineer:
Helge Bjørnarå

Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
Head of Notified Body

A 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, and amended by Decision No 1/2019 dated February 22nd, 2019.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

NORWEGIAN ACCREDITATION PROD 019

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Product description

"ACO PIPE® A-60 PIPE PENETRATION"
Penetration system for ACO PIPE system pipes. The penetrating pipe comes in six different versions; pipe penetration form T2, toilet penetration, flange penetration, penetration form R1B and AP sleeve penetration. The penetration pipe is welded to the division.

The penetration pipes are fitted with EPDM sealing material (manufactured by GBS srl, Italy) and socket clamps.

For further details, see drawings listed under Type Examination documentation below.

Application/Limitation

Approved for use as pipe penetration system in class A-60 steel bulkheads and steel decks (ref. tables below). Other applications are subject to case-by-case approval.

Approved for use in class A-15 and A-30 when the penetration system is insulated as A-60 and in addition the division is to be insulated with A-60 insulation at least 200 mm around the penetration.

Table 1: A-60 steel deck

Version	Pipe size (OD) [mm]	Insulation*	Rating
Pipe penetration form T2	50 - 200	Ø40: 800 mm along pipe Ø50: 900 mm along pipe Ø75: 1000 mm along pipe Ø110: 1200 mm along pipe Ø160: 1500 mm along pipe Ø200: 1700 mm along pipe	A-60
Toilet penetration	40 - 50		A-60
Flange penetration	40 - 110		A-60
Penetration form R1B	40 - 110		A-60
AP sleeve penetration	50		A-60

* fitted on the underside of the deck

Table 2: A-60 steel bulkhead

Version	Pipe size (OD) [mm]	Insulation	Rating
Pipe penetration form T2	40 - 160	Ø40: 800 mm along pipe Ø50: 900 mm along pipe Ø75: 1000 mm along pipe Ø110: 1200 mm along pipe Ø160: 1500 mm along pipe	A-60
Toilet penetration	40 - 50		A-60
Flange penetration	40 - 110		A-60
Penetration form R1B	40 - 110		A-60
AP sleeve penetration	50		A-60

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 maintenance.

Type Examination documentation

Test report no. Pr-19-2.003n-En dated 4 April 2019 from Pavus, Czech Republic.
Test report no. Pr-19-2.038n-En dated 4 April 2019 from Pavus, Czech Republic.

Pipe penetration form T2:
- dwg No. T1-P014-490-00-00, Rev.004, from maker
- dwg No. T1-P014-492-00-00, Rev.005, from maker
- dwg No. T1-P014-494-00-00, Rev.004, from maker
- dwg No. T1-P014-495-00-00, Rev.003, from maker

Toilet penetration:
- dwg No. T1-P014-697-00-00, Rev.A, from maker
- dwg No. CZ-004434-00-00 from maker

Flange penetration:
- dwg No. CZ-004485-00-00 from maker
- dwg No. T1-P014-3170-00-00, Rev.000, from maker
- dwg No. T1-P014-637-00-00 from maker
- dwg No. T1-P014-653-00-00 from maker
- dwg No. T1-P014-654-00-00, Rev.002, from maker

Penetration form R1B:
- dwg No. CZ-004444-00-00 from maker
- dwg No. T1-P014-1226-00-00, Rev.004 from maker

AP sleeve penetration:
- dwg No. T1-P014-513-00-00, Rev.D, from maker
- dwg No. T1-P014-515-00-00, Rev.D, from maker

Tests carried out
Tested according to IMO 2010 FTP Code Part 3.

Marking of product
The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating, the Mark of Conformity and USCG approval (see first page).