

**נדרש להתמודד עם מעברי הניקוז של המזגן במרקח המזגן ?**

# **פיקוד העורף מסבר אחר ?**



"התקן מאור למזגן" מתוכנן לשמר על שהייה נעימה וממוגנת בזמן התקפה כימית מבל' לפגוע בכישرات של המרחב המזגן. מכוסס שרול קלייטה ושליטה במילוי הניקוז של המזגן למניעת חדירות גזים דרך צינורות הניקוז אל המרחב המזגן. מצידו השני מערכת אטומים מודולרית מסדרת Hawke MCT. מתאים לדרישות תקן 5109 סעיף 3,4 למניעת חדירות מים וגזים לפי 4422 חלק 2 ולעמידות בהדף, פיצוץ, התקפה כימית, ואש לפי קרייטריונים להצלחה בבדיקה - פיקוד העורף, מכון התקנים ורשות הכבאות בישראל. מתיישב עם תקן ח"י 994 חלק 5. וסעיף 58/59/06.01 לפי המפרט הכללי.

لتכונן נכון וחסכו ני ובירורים נוספים - פילו מיגון אש ( בהנהלת חנן פילו ) בע"מ | 0507754883

**ה יתרונות שלנו,**

- עלות תועלת
  - מתוכנן לפתחים עד 8 צול.
  - מעל 1000 בדיוקות בinalgומיות.
  - ניתן להתקנה לפני או אחרי יציקה .
  - ניתן לשלב מערכת משחתית 200 PFR.
  - אפשר מעבר כבילים וצנורות מ 3 מ"מ - 110 מ"מ.
  - יכולת בדיקה ופיקוח ויזואלית מהירה מוחלטת.
- גם קומפקטי, גם חכם, גם מקורי, וגם חסכו ני!**



# אישור פיקוד העורף

הנני מאשר כי מעבר הצנרת מסוכן:

## Hawke

משווק: פילו מיגון אש

יצרן: HAWKE TRANSIT SYSTEM

עומד בדרישות "מפורט לאישור והתקנת מוצר מיגון למרחבים מוגנים"  
המוצר מאשר להתקנה בקיר החיצוני והפנימי של המרחב המוגן.

ה התקן מיועד למעברים עגולים בקוטר 100 מ"מ וויתקן בתוך שרוול מתכת  
בקוטר פנימי 100 מ"מ ובעל עובי דופן 2 מ"מ.

תוקף האישור עד לתאריך: 31.10.2024

תמונה המוצר:



תקף בהצגת אישור ביצוע לחברת פילו מיגון אש (בניהלת חנן פילו) בע"מ בלבד  
טל' לבירורים 050-7754883

יש להתקין בהתאם לדרישות פיקוד העורף ועל פי הוראות היצרן

האישור הינו בהיבט המיגון בלבד

סגן ✎  
קמ"ד מחקך זפיתה  
עthead שיבלי

אישור מס' 010590-3-4050

תאריך מתן אישור: 18.01.2024

דין וחשבון בדיקה מס' 7313227945

## פרטי הזמנה

שם המזמין: פילו מיגון אש (בנהנתן חנן פילו) בע"מ

כתובת: בר כוכבא 74 פתח תקווה

תאריך הזמנה: 18 דצמבר 2023

## תיאור המוצר

התקן מודולרי לאיות מעברים עגולים המיועד להתקינה בקיר פנימי מצדיו החיצוני של המרחב המוגן

מתוכרת היצור: HAWKE TRANSIT SYSTEM

דגם: 100-HRT לمعايير עגולים בקוטר 100 מ"מ.

ההתקן נבדק בתחום שרוול מתכת בקוטר פנימי של 100 מ"מ ובעל עובי דופן של 2 מ"מ (אורך כללי 200 מ"מ).

לצורך שימוש בתחום למוגן " התקן מאור למוגן " נוסך מצדיו הפנימי של המרחב המוגן ברז תלת פתחים לניקוז מי

היעובי של המוגן מעוגן לצינור פלדה עם מרכזי מתכת.

המוצר משופק ע"י מאמון הבדיקה.

לפרטים נוספים באה תיאור מ郎טב של המוצר בעמוד 2.

## פרטי הנעילה

יציקת הקירות בזאתה ב-08.06.2023 במבנה רחוב הרצל 120, הנוטל: המזמין

בדיקות עמידות ללחץ 20 מ' מים לעמוד 120 מ' מים, אמירות בלוח רגעי של 12 בר

בזאתה بتاريخ 11 דצמבר 2023

כמויות במדגם: 2

**תוקף בהציגת אישור ביצוע חיבור פילו אש (בנהנתן חנן פילו) בע"מ כלבך**  
טל' לבירורים 050-7754883

## מהות הבדיקה, לפי בקשה המזמין

בדיקות אטימותים למים לפי שיטת הבדיקה שבסתיי 4422 חלק 2 תת-סעיף 4.3.1.2 ובנוסף בדיקת עמידות ההתקן ללחץ

רגעי 12 בר בשופרת הלם, בהתאם למסמך: "עדכו שיטות הבדיקה למעברי צנרת למורחים מוגנים", סימכיון:

2918-3-2918 של פק"ר מТАרך ט' סיון תשפ"ב (8 יוני 22).

|  |  |                          |
|--|--|--------------------------|
| מסמך זה מכיל 6 דפים<br>ומAIN להשתמש בו אלא במלואו. | תוצאות הבדיקה במסמך זה<br>מתיחסות רק פריט שנבדק. | מסמך זה אינו היתרתו תוקן |
|--|--|--------------------------|

## סיכום

פרוטו תוצאות הבדיקה ראה בהמשך הדוח'ת.

שם הבודק: שרון פור תפקיד: בודק

שם הבודק: יניב אדוריאן תפקיד: בודק

שם המאשר: דודו וארום תפקיד: רע"ן חלונות ומע' מיגון  
ט"ז בטבת תשפ"ד (28 דצמבר 2023)  
תאריך הפקת הדוח'ת



BUREAU  
VERITAS

Bureau Veritas Certification

ANNEX

# Certification

Awarded to

## HAWKE TRANSIT SYSTEM, S.L.

P.E. TANOS - VIÉRNOLES, C/ LA ESPINA, 44 – 39300 –  
TORRELAVEGA – CANTABRIA – ESPAÑA

Bureau Veritas Certification certifies that the Management System has been audited  
and found to be in accordance with the requirements of standard:

STANDARD

## ISO 9001:2015

Scope of certification:

תקף בהצגת אישור ביצוע חברת פילו מיג'ן אש (בניהול תכנון וproduktion) מטעם בלבד  
טל' לבירורים 050-7754883  
DESIGN, MANUFACTURE, COMMERCIALIZATION  
AND IN SITU INSPECTION OF A CABLE AND  
PIPE SEALING SYSTEM.

Certificate Number:

ES131977-D-1

Original Approval Date with other Certification Body:

11-07-1996

Original approval date:

03-08-2022

Effective date:

03-08-2022

Certificate expiration date:

31-10-2024

The existence and validity of this certificate are subject to those of the main certificate n°: ES131977-1



Bureau Veritas Iberia S.L.  
C/ Valportillo Primera 22-24, Edificio Caoba, 28108 Alcobendas - Madrid, España

ENAC  
CERTIFICACION  
Nº 041/C - SC 004



# WARRINGTON FIRE RESEARCH CENTRE

Holmesfield Road, Warrington, Cheshire WA1 2DS.  
Tel: (0925) 55116 Telex: 628743 WARRES G Telefax: (0925) 55419

## CONFIDENTIAL REPORT

### FIRE RESISTANCE TEST UTILISING THE HEATING CONDITIONS OF BS 476: PART 20: 1987, ON TWO EXAMPLES OF FIRE PENETRATION SEALING SYSTEMS INCORPORATED WITHIN A MASONRY WALL CONSTRUCTION

תקף בהצעת אישור ביצוע חברת פילו מילן אונטario (קנדה) חנן פילו בע"מ בלנדס  
טל' לריבוטס סטreet 5489 West  
Ashton-under-Lyne  
Lancashire  
HAWKE CABLE & SPLINGS LIMITED  
050-7754883

#### SUMMARY

A fire resistance test, which utilised the heating conditions and performance criteria specified in BS 476: Part 20: 1987, has been performed on a masonry wall construction which included a total of eight examples of fire penetration sealing systems. This report covers two of these systems, referenced G and H, each of which incorporated a cable transit assembly. The remaining six systems are reported separately. The wall was built from common brick and was of 225 mm thickness and it incorporated mild steel transit frames of the same dimensions into which the fire penetration sealing systems were mounted. Both specimens sealed apertures of size 232 mm high by 262 mm wide. Each was penetrated by several plastics coated electrical cables, and the seals were effected using mild steel transit frames which contained intumescent sealing blocks and steel pressure plates.

Specimen H was uninsulated but Specimen G was insulated on one face only, within the aperture formed by the brickwork using loosely packed mineral fibre insulation to a nominal depth of 165 mm.

The performance criteria for integrity and insulation (maximum temperature rise only) specified in the aforementioned Standard were used as a basis for the evaluation of the specimens. The results obtained were as follows:

| <u>Sponsors Ref.</u> | <u>Integrity</u> | <u>Insulati<br/>on</u>    |
|----------------------|------------------|---------------------------|
| Specimen G           | HCX 6X2          | 360 minutes               |
| Specimen H           | HCX 6X2          | 333 minutes<br>68 minutes |

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Warrington Fire Research Centre Limited  
Registered In England No. 1247124



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Tel: (0925) 55116 Telex: 628743 WARRES G Telefax: (0925) 55419

## CONFIDENTIAL REPORT

FIRE RESISTANCE TEST UTILISING THE  
HEATING CONDITIONS OF BS 476: PART 20: 1987,  
ON SIX EXAMPLES OF FIRE PENETRATION SEALING  
SYSTEMS INCORPORATED WITHIN A MASONRY  
WALL CONSTRUCTION

תקף בהציג אישור ביצוע מחברת פילו מיג'ן אש (ניהולת חנן פילו) בע"מ בלבד  
 Tel: ליבורן 050-7754883 HAWKE CABLE GRIDS LIMITED  
 33 Street West Ashton-under-Lyne Lancashire

### SUMMARY

A fire resistance test, which utilised the heating conditions and performance criteria specified in BS 476: Part 20: 1987, has been performed on a masonry wall construction which included a total of eight examples of fire penetration sealing systems. This report covers six of these systems, referenced A, B, C, D, E and F, each of which incorporated a cable transit assembly. The remaining two systems are reported separately. The wall was built from common brick and was of 225 mm thickness and it incorporated mild steel transit frames of different dimensions into which the fire penetration sealing systems were mounted. Specimen A sealed an aperture of size 112 mm high by 132 mm wide and Specimen C sealed an aperture of 70 mm diameter. Specimens B and E sealed apertures of size 200 mm diameter and specimens D and F sealed apertures of size 292 mm high by 132 mm wide. Each aperture was penetrated by several plastics coated electrical cables and the seals were effected using mild steel transit frames which contained intumescence sealing blocks and steel pressure plates.

Specimens A, C, E and F were not insulated in any way but Specimens B and D were each insulated on one face only by a layer of mineral fibre insulation which was nominally 100 mm thick and extended nominally 150 mm beyond the perimeter of the aperture. Specimen B was mounted into the wall such that the insulation faced the heating conditions of the test whilst Specimen D was mounted such that the insulation was on the opposite side.

Cont. ....

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Warrington Fire Research Centre Limited

# CONFIDENTIAL

## TECHNICAL REPORT

### SMOKE AND TOXICITY MEASUREMENTS OF A HALOGEN FREE MATERIAL



תקף בהציגת אישור ביצוע חברת פילו מיגנש אש (בנהלת חנן פילו) בטל' לבירותם 050-7754883

RAPRA TECHNOLOGY LTD



## (1) EC-TYPE EXAMINATION CERTIFICATE

- (2) Equipment or protective system intended for use in potentially explosive atmospheres  
Directive 94/9/EC

(3) EC-Type Examination Certificate nr. **LOM 08ATEX2048 X**

(4) Equipment or protection system      Cable entries  
Types H...Ex

(5) Applicant      HAWKE TRANSIT SYSTEM, S.L.

(6) Address      Paseo del Niño, 4, nave B2  
39300 TORRELAVEGA (Cantabria)  
SPAIN

(7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) Laboratorio Oficial J.M. Madariaga (LOM), notified body number 0163 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.  
The examination and test results are recorded in confidential report nr. **LOM 07.456 UP**

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
- Standards      EN 60079-0:2006      EN 60079-7:2007  
                      EN 61241-0:2006      EN 61241-20:2004

(10) If the sign X is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.  
**050-7754883 (ברנולטן טון פילט) בע"מ כלבך**

(11) This EC-Type Examination Certificate relates only to the design and construction of this specified equipment or protective system in accordance with the Directive 94/9/EC. Further requirements of the Directive apply to the manufacture and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following:

A composite image showing the CE marking (Ex II 2 GD) and the official stamp from the Spanish National Testing and Certification Center (CETECA). The stamp includes the text 'OFICIAL', 'CETECA', 'CONSELLERIA D'INDUSTRIAS', and 'GENERALITAT DE CATALUNYA'. A large blue signature is overlaid on the stamp.

Madrid, 22<sup>nd</sup> September 2008

Angel Vega Reimesal  
Head of the ATEx

This Certificate is a translation from the original in Spanish. The LOM liability applies only on the Spanish text.

(This document may only be reproduced in its entirety and without any change) Page 1 / 3

RCP CER 07 3/2  
Rev. 3

UNIVERSIDAD POLITÉCNICA DE MADRID  
ENSAYOS E INVESTIGACIONES DE MATERIALES Y EQUIPOS PARA ATMÓSFERAS EXPLOSIVAS Y MINERÍA  
( Real Decreto 334/1992 de 3 de Abril - BOE 1992-04-29)





HAWKE TRANSIT SYSTEM, S.L  
P.E. TANOS-VIÉRNOLES. C/ LA ESPINA 44.  
39300 TORRELAVEGA. SANTANDER.  
ESPAÑA/SPAIN  
E-mail: [saleshawke@fjove.com](mailto:saleshawke@fjove.com)

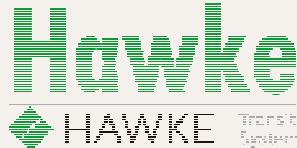
DOCUMENT: PREDICTED LIFE TIME  
DOC REF: HTS-EN-GI-I-O-2015-HTS0796-016-LIFETIME-01

Pages 3

# PREDICTED LIFE TIME

תקף בהציג אישור ביצוע מהברת פילו מיגון אש (בניהול חנן פיל) בע"מ בלבד  
טל' לבירורים 050-7754883

| Rev | Date       | Description            | Pages | Prepared | Checked | Approved    |
|-----|------------|------------------------|-------|----------|---------|-------------|
| 01  | 15/06/2015 | Update address & fomat | 3     | I.Llano  | P.Serna | J.Fernández |
| 00  | 19/05/2014 | Edition                | 3     | I.Llano  | P.Serna | J.Fernández |



HAWKE TRANSIT SYSTEM, S.L  
P.E. TANOS-VIÉRNOLES. C/ LA ESPINA 44.  
39300 TORRELAVEGA. SANTANDER.  
ESPAÑA/SPAIN  
E-mail: [saleshawke@fjove.com](mailto:saleshawke@fjove.com)

DOCUMENT: REACH REGULATION DECLARATION

DOC REF: HTS-EN-GI-I-O-2014-HTS0796-009-REACH DECLARATION -01

Pages 2

# REACH REGULATION DECLARATION

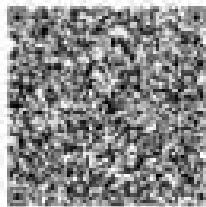
תקף בהצעת אישור רגולציה איחוד האיחודים פילו מיגון אש (ברנרגיה חנק פילו) בע"מ בלבד  
טל' לבירורים 050-7754883

| 01  | 20/04/2015 | Update company address | 2     | I.Llano  | P.Serna | J.Fernández |
|-----|------------|------------------------|-------|----------|---------|-------------|
| 00  | 19/05/2014 | Edition                | 2     | I.Llano  | P.Serna | J.Fernández |
| Rev | Date       | Description            | Pages | Prepared | Checked | Approved    |

1

[www.hawke-hts.com](http://www.hawke-hts.com)

[www.fjove.com](http://www.fjove.com)



Maryam A. Olfatian

Certificate number: 54094/AD BV

File number: ACI4010/054/002

Product code: B301H

This certificate is not valid when presented without the full attached schedule  
(composed of 7 sections).

[www.star.com](http://www.star.com)

## **TYPE APPROVAL CERTIFICATE**

[This certificate is issued to]  
**HAWKE TRANSIT SYSTEM-HTS**  
TORRELAVEGA (CANTABRIA) - SPAIN

*for the type of product*  
**PIPE PENETRATIONS IN FIRE DIVISIONS**

A-60 class divisions pipe penetrations, type: HR Series (aluminium bulkhead & deck)  
\*\* See §1 for details of certified products \*\*

#### **Requirements**

Bureau Veritas Rules for the Classification of Steel Ships Part C Chapter 4  
SOLAS 74, as amended; SOLAS 2000 Regulations II-299.3.1  
IMO Resolution MSC.207(88)–(IFTP Code 2010)

תק"ה ברכת אישע ביצוע חברת פילו פזען אש (ברשותה חון פילו) בע"מ מלבד  
טל' לבירורים 050-7754883

This certificate is issued to attest that ~~Veritac~~ Veritac Marine & Offshore 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: 10 Nov 2025

For Bureau Veritas Marine & Offshore,  
At BV BILBAO, on 10 Nov 2020,  
Juan Jose GUTIERREZ GARCIA

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 Maritime & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) have 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 Maritime & Offshore available on the Internet site [www.veristar.com](http://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 Maritime & Offshore 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.

The electronic version is available at: <http://www.veristamp.com/veristamp/jsp/viewPublicPdfType.jsp?id=wpinkp003>  
BV Med. Ad E 530 June 2017 This certificate consists of 4 pages/1

## TYPE APPROVAL CERTIFICATE

This is to certify:

That the Class A and B Penetration

with type designation(s)

Hawke Transit System - HR

Issued to

**HAWKE TRANSIT SYSTEM, S.L.**  
**TORRELAVEGA, Spain**

is found to comply with

**DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS Interpretations**

**DNV GL rules for classification – Ships**

**DNV GL offshore standards**

**Application :**

Approved for use as a cable penetration system in class A and B bulkheads and decks.

This certificate is recognized by Transport Canada

Product(s) approved by this certificate: 050-7754883 accepted for installation on all vessels classed by DNV GL.

Issued at Haugesund on 2020-11-24

This Certificate is valid until 2025-11-23.

DNV GL local station: Area NB/CMC Iberia

Approval Engineer: Karolina Kuśmider

for DNV GL



Digital Signed By: Schei-Nilsson, Märten  
Location: DNV GL Haug, Norway

**Märten Schei-Nilsson**  
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

**LEGAL DISCLAIMER:** Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: TA 251

Revision: 2020-02

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## TYPE APPROVAL CERTIFICATE

This is to certify:

That the Class A and B Penetration

with type designation(s)  
Hawke Transit System - HRT and HRST

Issued to

**HAWKE TRANSIT SYSTEM, S.L.**  
**TORRELAVEGA, Spain**

Is found to comply with  
DNV GL statutory interpretations DNVGL-ST-0364 – SOLAS interpretations  
DNV GL rules for classification – Ships  
DNV GL offshore standards

Application :

Approved for use as a pipe penetration system in class A bulkheads and decks

This certificate is recognized by Transport Canada

Product(s) approved by this certificate is accepted for installation on all vessels classed by DNV GL.

Issued at Hawke on 2020-11-26

for DNV GL

This Certificate is valid until 2025-11-25.

DNV GL local station: Area NB/CMC Iberia

Approval Engineer: Karolina Kušmíder

Mårten Schei-Nilsson

Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Form code: TA 251

Revision: 2020-02

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HAWKE TRANSIT SYSTEM

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**DOCUMENT: TEMPERATURE RANGE INFORMATION**  
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# TEMPERATURE RANGE<sup>תנאי</sup>

## INFORMATION

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