

TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MERB00002D5
Revision No:
0

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

That the Immersion suits and anti-exposure suits designed to be worn in conjunction WITH a lifejacket: (a) Immersion suit without inherent insulation

with type designation(s)
SeaWind - uninsulated

Issued to

Hansen Protection AS
MOSS, Norway

is found to comply with the requirements in the following Regulations/Standards:

Regulation **MSN 1874 Amendment 6**,

item No. UK/1.5a. SOLAS 74 as amended, Regulation III/4, III/7, III/22, III/32, III/34 & X/3, LSA Code and 2000 HSC Code 8, IMO MSC/Circ.1046.

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

This Certificate is valid until **2027-05-11**.

Issued at **London** on **2022-12-15**

DNV local unit:
East & South Norway CMC



for **DNV UK Ltd.**

Approval Engineer:
Timo Linn

Approved Body No.: **0097**

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Christine Mydlak-Röder

MER Service Responsible



**Maritime &
Coastguard
Agency**

UK Approved Body Authorised
by the MCA

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-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. The product liability rests with the manufacturer or his representative in accordance with the Merchant Shipping (Marine Equipment) Regulations 2016.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV UK Ltd. of any changes to the approved equipment. 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. This certificate remains valid unless suspended, withdrawn, re-called, or cancelled.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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.



Product description

“SeaWind -uninsulated”

SeaWind is a non-insulated immersion suit. The suit is made of watertight breathable material with neoprene hood, cuffs and gloves. The suit is manufactured in two versions:

1. A suit with integrated socks without any thermal insulations and shall therefore be used in combination with relevant boots.
2. A suit with integrated boots.

The colour of the suit may be yellow/black or orange/black.

Material	Type	Manufacturer
Main fabric	GoreTex	By Gore
Hood, cuffs, gloves, pen pocket	Neoprene	by NamLiong Ent.
Main zipper	TIZIP	by TITEX Vertriebs GmbH
Reflective patches	Reflexite	by Reflexite Corp.

Application/Limitation

Immersion suit is to be worn with a lifejacket approved in accordance with the Marine Equipment Directive.

Retro-reflective materials shall be approved in accordance with the Marine Equipment Regulation and bear the Mark of Conformity.

The design assessment is based on IMO Res. MSC.48(66) as amended by IMO Res. MSC.207(81) and IMO Res. MSC.218(82).

Production and installation testing shall be carried out according to IMO Res. MSC. 81(70), part 2.

Type Examination documentation

The following documentation is basis for the DNV approval:

Drawings	Date
Dwg. “SeaWind with Boots” - front, Version 1 from Hansen Protection AS	2013-03-08
Dwg. “SeaWind with Boots” - back, Version 1 dated from Hansen Protection AS	2013-03-08
Technical file “Marine Equipment Directive Module B Technical Documentation” for SeaWind, version 5, by Hansen Protection AS;	2012-04-02
- Suit description	
- Materials and components	
- Illustrations	
Test reports	Date
Test report No. 60F069, version 1, from SINTEF, Trondheim, Norway	2011-09-06
Test report No. F21911, version 1, from SINTEF (Boots - SeaWork), Trondheim, Norway	2012-01-11
Other	Date
List of Materials “SeaWind with Boots” from Hansen Protection AS	2013-03-08
E-mail from SINTEF, Trondheim, Norway	2012-04-24
Letter from SINTEF, Trondheim, Norway	2011-11-14
Letter from Hansen Protection AS, Norway	2012-07-05

Tests carried out

Tests are documented in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC.81(70) part 1, including IMO Res. MSC.200(80), IMO Res. MSC.226(82) and IMO Res. MSC.323(89).

Marking of product

The product is to be indelibly marked with name and address of the manufacturer, type designation, dimensions, date of manufacture and the Mark of Conformity (see page 1). Further, that it is to be worn in conjunction with a lifejacket and warm clothing. The marking shall comply with the LSA Code (IMO Res. MSC.48(66)) item 1.2.2.9, 2.3.1.7 and 2.3.2.1.1.