DNV·GL

TYPE EXAMINATION CERTIFICATE

Certificate No:
TALB0000013

This is to certify:

That the Immersion suits and anti-exposure suits designed to be worn in conjunction WITHOUT a lifejacket: Immersion suit with inherent insulation

with type designation(s)
Sea Arctic (N6-suit)

Issued to
Hansen Protection AS
MOSS, Norway

is found to comply with
SOLAS 74 as amended, Regulation III/4, III/7, III/22, III/32, III/34 & X/3, LSA Code and 2000 HSC Code 8

Application :

Immersion suit satisfying Norwegian Maritime Directorate Regulation 02 February 2016 nr. 90 concerning life-saving appliances and evacuation on mobile offshore units §25

Issued at **Høvik** on **2016-06-30**

for **DNV GL**

This Certificate is valid until **2021-06-29**.
DNV GL local station: **Sandefjord**

Approval Engineer: **Tessa Biever**

Petter Langnes
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 Examination Certificate and not to the approval of equipment/systems installed.

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Job Id: **262.1-011239-6**
Certificate No: **TALB0000013**

Product description
The "Sea Arctic (N6-suit) is an insulated immersion suit which has buoyancy and is designed to be worn without a lifejacket. The suit is provided with an integrated self-righting unit. The suit and glove are made of waterproof neoprene and is fitted with a lifting loop, lifejacket light and lifeline.

Application/Limitation
The immersion suits shall be in compliance with the EC Type Examination Certificates MED-B-7295 and bear the mark of conformity (wheelmark).

The integrated self-righting unit consists of an elastic cover attached to the immersion suit and an automatic inflatable floatation compartment mounted inside the cover. See the technical file from Hansen Protection (referenced below) for details. A mouth inflation tube, a dump valve and an auto inflation mechanism are fitted to the floatation chamber.

Material used in the floatation compartment:	N4230
Dump valve type:	A10 or A5
Auto inflation mechanism type:	Model MA1

Type Approval documentation
Certification in accordance with Class Programme DNVGL-CP-0338, October 2015.
This certificate replaces LB-390.

The following documentation is basis for the DNV approval:
- EC Type Examination Certificate MED-B-7295 issued by DNV
- Report from prototype testing in Trondheim dated 2005-12-14, 2005-12-15, 2006-04-06, 2006-04-07 and 2006-04-25 witnessed by DNV
- Report from prototype testing in Moss dated 2006-06-01 witnessed by DNV
- Report from prototype testing in Southampton dated 2006-07-27 witnessed by DNV
- Report No. 2006-3365 from salt spray test, dated 2006-08-08 from DNV Certification
- Report from material tests dated 2001-06-13 from SGS, UK
- Technical file for HH Self-righting unit stamped 2006-07-11 by DNV
- Drawing No. 00490 COMP0001, issue 4, dated 2006-10-16 from Crewsaver
- Test report No. 804021.68, dated 2007-06-28 from SINTEF
- Test report No. HH 288/2005, dated 2005-09-21 from Hansen Protection

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(81), IMO Res. MSC 226(82) and IMO Res. MSC 323(89).
- Norwegian Maritime Directorate – Rundskriv 05-2013 Procedure for testing of the self righting function when certifying immersion suits to be used on mobile offshore units.

Marking of product
The product is to be indelibly marked with name of manufacturer, type designation, dimensions and date of manufacture. The marking shall comply with the LSA Code (IMO Res. MSC 48(66)), item 1.2.2.9.

Periodical assessment
DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNVGL-CP-0338, Section 4.