

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Coated Fabrics for Inflatable (Chambers of) Rescue Boats**

with type designation(s)

**HYPAIR PLUS 1670 DTEX ORANGE TT3031G,
HYPAIR PLUS 1100 DTEX ORANGE TT3032G**

Issued to

**NOVURANIA S.p.A.
Tione di Trento, TN, Italy**

is found to comply with

ISO 15372:2000 "Ships and marine technology – Inflatable rescue boats – Coated fabrics for inflatable chambers"**Application :****Coated fabrics for use in the construction of inflatable (chambers of) (SOLAS) rescue boats.**Issued at **Høvik** on **2019-09-12**This Certificate is valid until **2024-09-11** .for **DNV GL**DNV GL local unit: **Venice**Approval Engineer: **Gisle Hersvik**

**Rikard Törnqvist
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.



Product description

Coated fabrics for use in the construction of inflatable (chambers of) (SOLAS) rescue boats:

HYP AIR PLUS 1670 DTEX ORANGE TT3031G
HYP AIR PLUS 1100 DTEX ORANGE TT3032G

HYP AIR PLUS 1670 DTEX ORANGE H150 TT3031G

Basic fabric	Polyester high tenacity 1670 dtex – 10x10
Coating, exterior	Chlorosulfonated Polyethylene (CSM)
Coating, interior	Polychloroprene (CR)
Color	Orange
Fabric weight	1400 g/m ²

HYP AIR PLUS 1100 DTEX ORANGE H150 TT3032G

Basic fabric	Polyester high tenacity 1110 dtex – 12x12
Coating, exterior	Chlorosulfonated Polyethylene (CSM)
Coating, interior	Polychloroprene (CR)
Color	Orange
Fabric weight	1300 g/m ²

Application/Limitation

This Type Approval certificate is not valid for designs, components, equipment, systems or products which are subject to classification by DNV GL.

The application and maintenance of the products shall be as per manufacturer's recommendations. Adhesives and/or thermal-welding techniques consistent with the fabric manufacturer's recommendations shall be used.

The certificate covers the range of colours stated above.

Any significant changes in design and / or quality of the material will render the approval invalid.

Type Approval documentation

Tests carried out

Approval Testing carried out in accordance with **Type Approval documentation**, as per ISO 15372.

Routine production testing shall be carried out as per ISO 15372.

Marking of product

Product/package shall be marked with:

- manufacturer's name,
- place of production
- type designation/trade name
- batch number/serial number
- date of manufacture

The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the DNV GL Type Approval Certificate.

Periodical assessment



Job Id: **262.1-030090-1**
Certificate No: **TAK00001SA**

The scope of the Retention/Renewal Survey is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

Periodical assessments (for Certificate Retention and Certificate Renewal) shall be performed according to DNVGL-CP-0338.

This certificate is only valid if required Periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnvgl.com>

END OF CERTIFICATE