DNV·GL

Certificate No:
TAS00002G8

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Seats

with type designation(s)
Nautic Star CCS021-01-E00-1-9G

Issued to
CLEEMANN Chair-Systems GmbH
Ense, Nordrhein-Westfalen, Germany

is found to comply with
International Code of Safety for High-Speed Craft, 2000 - Annex 10

Application :

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

Issued at **Hamburg** on **2020-05-27**
This Certificate is valid until **2025-05-26**.
DNV GL local station: **Essen**

Approval Engineer: **Mark-Oliver Wobig**

for **DNV GL**

Andree Orth
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.

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Job Id: **262.1-033571-1**
Certificate No: **TAS00002G8**

Product description

Wheelman's and Operational Seat

Single seat mounted on a base column in longitudinal direction of craft, fixed to the deck of craft by means of 12 bolts M10 grade 10.9.

Main parts consist of seat bottom/back with upholstery of foams/fabrics composed of different types and quality. Basic construction is made from normal strength steel tubes/plates.

The height adjustment (range 160 mm) is integrated in the base column.

The seat is equipped with adjustable backrest, headrest and armrest, as well as a footrest. The occupant is secured by a shoulder harness (four-point safety belt).

Application/Limitation

Deck structure/ legs are not part of this approval, but is assumed separately approved, if applicable.

Any changes which may influence the strength or safety of seat shall be reported for evaluating the need of further documentation/testing and updating of approval.

Fire test of combustible materials in accordance with HSC-Code Section 7.4.3 is not part of this approval.

The approval covers the strength of seat and mounting with respect to a collision acceleration gcoll of max. 12 g for Design Level 2.

Type Approval documentation

CCS021-01-E00-1-9G Nautic Star Aufbau for den 9G mit 4-Punktgurt

Materials used are specified/referred in drawings/documents above.

Tests carried out

Dynamic test in accordance with 2000 HSC Code (2008 Edition), Annex 10, Section 3 was undertaken by IWW, Trier.
Test report : IWW Prüfbericht Cleemann 20/02 dated 2020-03-19

Marking of product

Seats are to be marked with type/model designation and name of manufacturer.

Periodical assessment

For retention of the Type Approval, a DNVGL surveyor shall perform a survey after 2 and 3.5 years, to verify that the Type Approval is complied with.
The arrangement is to be in accordance with scopes described in the DNV GL Class Programme CP-0140 Passenger and crew seats.