



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. **S-7605**

This is to certify that the
Seats

with type designation(s)
Prestige, Evolution, Cruiser

Manufactured by
Transport Seating Technology
STAPYLTON QUEENSLAND, Australia

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

Application
Passenger seat for design level 1 and 2

This Certificate is valid until **2015-12-31**.

Issued at **Høvik** on **2013-08-01**

DNV local station: **Sydney**

Approval Engineer: **Marcus Gustafsson**

for **Det Norske Veritas AS**

.....
Erlend Moe
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.
If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.

Product description

Passenger Seats mounted to beam on legs in floor-tracks fixed to deck of craft.

Type designation: "Evolution", "Prestige" and "Cruiser"

- Models included: "Evolution Fixed", "Cruiser Fixed" and "Prestige Fixed and Reclining".

Main parts consist of Seat-Bottom/Back with upholstery, Beam, Legs and Floor-Tracks.
Basic construction is made of aluminium-profiles/plates/cast and steel bolts/details.

Upholstery consists of foams/fabrics composed of different types and quality.

Application/Limitation

The approval covers *the strength* of Seat and mounting with respect to *collision* for:

- *Design level 1* as specified by HSC-Code, covering collision acceleration/ g_{coll} up to 3g.
- *Design level 2* as specified by HSC-Code, covering collision acceleration/ g_{coll} of 3 to 12g.

Seats are approved for the following arrangement and conditions relative to the craft:

Forward facing and G_{coll} up to 8g.

Maximum 4 seats in row when placed on 2 legs attached to weldable track and lap belt fitted.

Forward facing and G_{coll} up to 8g.

Maximum 4 seats in row when placed on 2 legs attached to weldable track.

Rearward facing and G_{coll} up to 6g.

Maximum 4 seats in row when placed on 2 legs attached to weldable track.

Seats are to be mounted to deck as tested, reference:

- Drawing MARINE-SEAT-TEST-001/002/003.

Deck structure of craft is *not* part of this approval, but is assumed separately approved.

Other deck materials, mounting and g_{coll} -limitation may be separately approved case by case.

Seat/Lap- belts:

- Belts are to be installed when no protection structure/seats in front of Seats.
- Belts are *not* required to be installed for *Design level 1* (g_{coll} less than 3g).

Approval conditions

Type Approval is issued based on Program 3-499.50-1 in DNV's Certification Note 2.9.

The approval covers requirements to Seats/Tables in Ch. 4.4, Ch. 4.5 and Appendix 10 of the "International Code of Safety for High-Speed Craft, 2000", as referred (Pt.3 Ch.7) in DNV's: "Rules for Classification of High Speed, Light Craft and Naval Surface Craft" at date of issue.

The approval covers the *strength* of Seats/Tables and mounting with respect to *collision* only.

Note: Restricted use of combustible material according to HSC-Code sec.7.4.3 is not part of this approval.

Any Seat/Lap-belts shall be separately approved according to relevant/recognised standard.

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

Additional fittings to the basic Seat/Table may be accepted based on documentation or/and survey prior to installation, showing the strength and safety of Seat/Table is not influenced.

Type Approval documentation

Seat/mounting is covered by the following main drawings/documents with references:

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

Seat/Lap- belts are assumed separately approved according to relevant/recognised standard.

Tests carried out

Dynamic test in accordance with HSC-Code Annex 10 section 3 was undertaken by APV Engineering and Test Services. Pty. Ltd. see:
- Report 20821 Issue No. 01, date 20.06.2013;
test 20821-01 to 03.

Static test with relevance to HSC-Code Annex 10 section 2 was undertaken by Transport Seating Technology, reference:
- Report/email 'Ferry Seat Base - Test Load', date 22.11.2005.

Note: Fire test of combustible material in accordance with HSC-Code sec. 7.4.3 is not part of this approval.

Marking of product

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

Note: MED-marking (acc. to Maritime Equipment Directives 96/98/EC) does not apply for strength of Seats, but may applies to fire safety of combustible materials, which are not part of this approval.

Certificate retention survey

Det Norske Veritas is to be given permission to perform Certification Retention Surveys at any time during the validity period of this certificate. The arrangement is to be in accordance with scopes described in item 2.6.4 of Certification Note 2.9.

END OF CERTIFICATE