



## TYPE APPROVAL CERTIFICATE

**Certificate No.** : SDN39207-NS001                      **Initial Approval** : 14th May, 2018  
**Product** : Marine Seat  
**Manufacturer** : UES Seating  
10 Birmingham Street, Alexandria NSW 2015 Australia

**Product Description** : Type: Force Series Seating (Fold Up, Static and Reclining)  
(Model: Sea Force, G-Force and Luxform)  
- Design Level 1 : Force Series Seating (Fold up)  
- Design Level 1 & 2 : Force series Seating (Static and Reclining)  
  
See " Appendix 1 & 2"

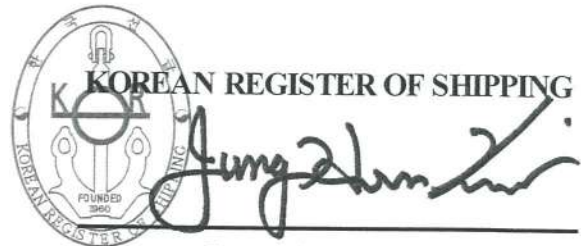
**Approval Condition** : See " Appendix 2"

**THIS IS TO CERTIFY** that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

International Code of Safety for High-Speed Craft 2000, Ch.4 and Annex 10

This Certificate is valid until 13th May, 2023

Issued at Busan, Korea on 14th May, 2018



General Manager of  
Marine & Ocean Equipment Team

*Note : 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.  
2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.  
3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.  
4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.*

## Appendix 1

# Product Description and/or Approval Condition

Certificate No : SDN39207-NS001

Date of Issue : 14 May, 2018

## A. Product Description

### 1. Product Specification

【 Design Level 1 : gcoll less than 3g 】

Model(Type) : Sea Force(Static, Fold-Up), G-Force(Static, Reclining), Luxform(Static, Reclining)

- 1) Seat is approved for following conditions relative to the craft.
  - 《 Forward or Aftward facing 》
    - Static and Reclining seat: up to 4 seats in row placed on 2 legs(standard or HD leg) or up to 5 seats in row placed on 3 legs(standard or HD leg)
    - Fold-Up seat: single seat
  - 《 Transverse facing 》
    - Static and Reclining seat : up to 4 seats in row placed on 2 legs(HD leg) or up to 5 seats in row placed on 3 legs(HD leg)
    - Fold-Up seat: single seat
- 2) Seat is to be mounted to deck as tested :
  - Standard Leg setup: fixation by 2 of M10 304SS bolts with strut nut for each leg and rivets spaced 50mm for deck-rails or welded 45% for deck-rails.
  - HD Leg setup: fixation of 4 of M10 304SS bolts with strut nut for each HD leg and rivets spaced 50mm for deck-rails or welded 45% for deck-rails.
  - FUS Leg setup: fixation by 2 of M10 (or 3/8" ) 304SS bolts for each leg to deck or to 'leg bridge' with strut nut, with leg bridge fixation by 6x rivets or welded 45% or greater.
- 3) Static or Reclining Seat is mounted with beam and leg assembly in base rails fixed to the deck of the craft.
- 4) Fold Up seat is mounted with cast leg assembly either on 'leg bridge' fixed to deck of craft, or fixed directly to deck of craft.
- 5) Configurations should be listed as:
  - Fold Up Seat is available with 15 configurations based on 5 heights (Low Back/Medium Back Straight/High Back/High Back Extended/High Back Headrest) & 3 widths (450/480/500).
  - Static or Reclining seat is available with 20 configurations based on 5 heights (Low Back /Medium Back Straight/High Back/High Back Extended/High Back Headrest) & 4 widths (450/480/500/550).
- 6) Basic construction consists of bottom/back/beam/legs/deck track or individual seat mounting of legs.
- 7) Basic materials are aluminium-profiles/plates and steel bolts/details.

【 Design Level 2 : gcoll from 3 to 6g 】

Model(Type) : Sea Force(Static), G-Force(Static, Reclining), Luxform(Static, Reclining)

- 1) Seat is approved for following conditions relative to the craft.
  - 《 Forward facing 》
    - Up to 3 seats in row placed on 2 legs(HD leg) or up to 5 seats in row placed on 3 legs(HD leg)
- 2) Seat is to be mounted to deck as tested :
  - HD Leg setup: fixation of 4 of M10 304SS bolts with strut nut for each HD Leg and rivets spaced 50mm (with 2 extra spaced 25 mm aft of leg) for deck-rails.
- 3) Seat is mounted with beam and leg assembly on base rails fixed to the deck of the craft.
- 4) Seat is available with 20 configurations based on 5 heights (Low Back/Medium Back Straight/High Back/High Back Extended/High Back Headrest) & 4 widths (450/480/500/550).
- 5) Basic construction consists of bottom/back/beam/legs/deck track or individual seat mounting of legs.
- 6) Basic materials are aluminium-profiles/plates and steel bolts/details.

### 2. Approved Drawings and documents

- Drawing No. TD-FSC-001, TD-DMA-001, TD-EXT-7050-R, TD-EXT-7130, UES-002, TD-EXT-7111 TD-EXT-7300 and TD-DMA-002 (Total 13 pages)

< To be continued >

## Appendix 2

# Product Description and/or Approval Condition

Certificate No : SDN39207-NS001

Date of Issue :14 May, 2018

### 3. Test Reports, etc.

- 1) Static Test
  - Inspection report 11914161 dated 2012-03-01, 12914017 dated 2011-03-01 and 13914071/2 dated 2013-07-22 issued by DNV.
  - Inspection report A0274543 dated 2016-03-18 and A0346783 dated 2016-12-02 issued by DNV GL.
- 2) Dynamic Test
  - Test Report No. 21059 dated 28/06/2017 issued by APV-T Tech Centre.

## B. Approval Condition

### 1. Application & Limitation

- 1) This approval cover the strength of seat and mounting with respect to collision only.
- 2) The upholstery for seat, if applied, shall be of type approved by this society.
- 3) Any changes which may influence the strength or safety of the Seat, shall be reported for revision of the approval.

### 2. Individual Product Cert. and Drawing Approval Requirement

- Individual Product Certification is not required.

### 3. Marking

- The product or packing is to be marked with manufacturer name and type designation on a suitable position.

### 4. Others

- 1) One-hand-release safety belts of three-point type or with shoulder harness shall be provided for all seats from which the craft may be operated for all craft with the gcoll acceleration from the collision design acceleration exceeding 3 and the safety belts shall be approved according to relevant standard separately.
- 2) Safety belts according to relevant standard, if necessary, shall be provided on passenger seats and crew seats as one-hand-release safety belt of three-point type, shoulder harness or lap-belt.

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