



NIPPON KAIJI KYOKAI

Certificate No. 15 -034

**Statement
of
Product Quality**

THIS IS TO CERTIFY that the below-mentioned simulator is found
to comply with the NK Standard for Certification of Maritime Education & Training
Simulator Systems and the following applicable standards:

**Product description:
Engine Room Simulator**

**Type designation:
ERS 5000 TechSim**

**Manufacture:
Transas Marine Limited
10 Eastgate Avenue, Eastgate Business park, Little Island, Cork, Ireland**

Applicable Standards:

- | | |
|--------------------------------|-------------------------------------------------------|
| 1) STCW 2010 Manila amendments | Regulation I/12 |
| 2) STCW 2010 Manila amendments | Code A / Table A- III |
| 3) IMO model course 2.07 | Engine Room Simulator |
| 4) IMO model course 7.02 | Chief Engineer Officer and
Second Engineer Officer |
| 5) IMO model course 7.04 | Officer in Charge of an Engineering Watch |

Date of Initial Registration : 3 June, 2015
Validity : 2 June, 2021
Issued at Tokyo on 3 June, 2018

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APPENDIX-A Simulator System

Simulator system specification

Documentation (identity)	<p>General Product Guidelines:</p> <ul style="list-style-type: none"> ■ TechSim 5000 Installation and Configuration Guide for version 8.8 ■ TechSim 5000 version 8.8 Instructor Manual ■ e-Tutor 5000 Transas Evaluation and Assessment System ■ TechSim 5000 version 8.8 General Trainee Manual ■ Standard Hardware Recommendations Specification for Transas simulators for version 1.101 ■ TechSim 5000 version 8.8 Visual Tuning User Guide <p>Ship Model Product Guidelines:</p> <ul style="list-style-type: none"> ■ MAN B&W 6S50MC-C Diesel Engine - Product Tanker ■ MAN B&W 6S60MC-C Diesel Engine - Tanker LCC (Aframax) ■ MAN Diesel 32/40 Twin Medium Speed Engine + CPP - Ro-Pax Ferry ■ AZIPOD Diesel-Electric Cruise Ship ■ Steam Turbine (Kawasaki UA-400) LNG Carrier ■ Dual Fuel Diesel-Electric LNG Carrier ■ ANZAC 2 Frigate ■ Offshore Patrol Vessel (OPV) ■ Patrol Vessel PV3000 - 4 x MTU 20V 1163 TB93 and 2 x PTI Propulsion Electric Motor ■ Wärtsilä V46F Diesel-Electric Royal Princess ■ MAN B&W Cam-Less Electronic Engine - Containership ■ MAK M43C - Azipod DE Eurodam
Documentation reviewed (date)	<p>Initial: 15 May, 2015 Renewal: 18 April, 2018</p>
Tests and physical inspection performed (date)	<p>Initial: 21 and 22 May, 2015 (at Portsmouth in UK) Renewal: 15 May, 2018 (at Portsmouth in UK)</p>

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APPENDIX-B

Application/Limitation (1/2)

Application/Limitation

The simulator system, as described above, gives the capability to simulate a realistic environment for all of the following competencies:

STCW-2010 Manila amendments	Competence
Table A-III/1.1	Maintain a safe engineering watch
Table A-III/1.3	Use internal communication systems
Table A-III/1.4	Operate main and auxiliary machinery and associated control systems
Table A-III/1.5	Operate fuel, lubrication, ballast and other pumping systems and associated control systems
Table A-III/1.6	Operate electrical, electronic and control systems
Table A-III/1.11	Maintain seaworthiness of the ship
Table A-III/2.1	Manage the operation of propulsion plant machinery
Table A-III/2.2	Plan and schedule operations
Table A-III/2.3	Operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery
Table A-III/2.4	Manage fuel, lubrication and ballast operations
Table A-III/2.5	Manage operation of electrical and electronic control equipment
Table A-III/2.8	Detect and identify the cause of machinery malfunctions and correct faults
Table A-III/2.10	Control trim, stability and stress
Table A-III/2.11	Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea and protection of the marine environment
Table A-III/2.14	Use leadership and managerial skills
Table A-III/4.2	For keeping a boiler watch: Maintain the correct water levels and steam pressures
Table A-III/6.1	Monitor the operation of electrical, electronic and control systems
Table A-III/6.2	Monitor the operation of automatic control systems of propulsion and auxiliary machinery
Table A-III/6.3	Operate generators and distribution systems
Table A-III/6.4	Operate and maintain power systems in excess of 1,000 Volts
Table A-III/6.5	Operate computers and computer networks on ships
Table A-III/6.6	Use internal communication systems

APPENDIX-B
Application/Limitation (2/2)

Transas Engine Room Simulator (ERS 5000 TechSim) contains the following ship models:

- MAN B&W 6S50MC-C Diesel Engine - Product Tanker
- MAN B&W 6S60MC-C Diesel Engine - Tanker LCC (Aframax)
- MAN Diesel 32/40 Twin Medium Speed Engine + CPP - Ro-Pax Ferry
- AZIPOD Diesel-Electric Cruise Ship
- Steam Turbine (Kawasaki UA-400) LNG Carrier
- Dual Fuel Diesel-Electric LNG Carrier
- ANZAC 2 Frigate
- Offshore Patrol Vessel (OPV)
- Patrol Vessel PV3000 - 4 x MTU 20V 1163 TB93 and 2 x PTI Propulsion Electric Motor
- Wärtsilä V46F Diesel-Electric Royal Princess
- MAN B&W Cam-Less Electronic Engine - Containership
- MAK M43C - Azipod DE Eurodam

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