



DNV Id No.: 10137219  
Certificate number: 002/140228

# DET NORSKE VERITAS

## PRODUCT CERTIFICATE

This Certificate consists of 2 pages

This is to Certify that the product  
**Machinery Operation Simulator**

and type designation  
**Offshore Vessel Engine Room Simulator**

Manufactured by  
**ARI Simulation**  
New Delhi India

In use for simulation at  
**NUSI Offshore Training Institute**

is found to comply with  
Class A- Standard for Certification of Maritime Simulators No. 2.14 January 2011

### Application

The above Standard is based on requirements in the STCW Convention, Regulation I/12.

This Certificate is valid until **2019-02-28**, provided the requirements for the retention of the Certificate will be complied with.

Issued at **Mumbai** on **2014-02-28**

for Det Norske Veritas AS

**Kamal Kumar**  
Country Manager



**Vernon Sequeira**  
Principal Surveyor

This Certificate is subject to terms and conditions overleaf. Any significant change in simulation performance may render this Certificate invalid. 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.

### Application/Limitation

The simulator is capable of simulating a realistic environment for selected STCW competence requirements referred to in the column for Class A in Table B1.

Table B1 Competencies addressed by machinery operation simulator class002-140228 - ENG.docx					
STCW reference	Competence	Class A (ENG)	Class B (ENG)	Class C (ENG)	Class S (ENG)
Table A-III/1.1	Maintain a safe engineering watch	A	B		(S)
Table A-III/1.3	Use internal communication systems	A	B		(S)
Table A-III/1.4	Operate main and auxiliary machinery and associated control systems	A	B	C	(S)
Table A-III/1.5	Operate fuel, lubrication, ballast and other pumping systems and associated control systems	A	B	C	(S)
Table A-III/1.6	Operate electrical, electronic and control systems	A	B	C	(S)
Table A-III/1.11	Maintain seaworthiness of the ship	A	B		(S)
Table A-III/2.1	Manage the operation of propulsion plant machinery	A	B		(S)
Table A-III/2.2	Plan and schedule operations	A	B		(S)
Table A-III/2.3	Operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery	A	B		(S)
Table A-III/2.4	Manage fuel, lubrication and ballast operations	A	B	C	(S)
Table A-III/2.5	Manage operation of electrical and electronic control equipment	A	B		(S)
Table A-III/2.8	Detect and identify the cause of machinery malfunctions and correct faults	A			(S)
Table A-III/2.10	Control trim, stability and stress	A	B		(S)
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	A	B		(S)
Table A-III/2.14	Use leadership and managerial skills	A			
Table A-III/4.2	For keeping a boiler watch: Maintain the correct water levels and steam pressures	A	B	C	(S)
Table A-III/6.1	Monitor the operation of electrical, electronic and control systems	A	B		(S)
Table A-III/6.2	Monitor the operation of automatic control systems of propulsion and auxiliary machinery	A	B		(S)
Table A-III/6.3	Operate generators and distribution systems	A	B		(S)
Table A-III/6.5	Operate computers and computer networks on ships	A	B		(S)
Table A-III/6.6	Use internal communication systems	A	B		

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