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

DET NORSKE VERITAS 1864 MUMBAI

Vernon Sequeira
Principal Surveyor

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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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