



Purpose:

GDS Simulator is intended for practical training in using portable gas detectors for testing atmosphere in ship enclosed spaces.

Configuration

Simulator consists of Instructor WorkPlace (IWP), and Student WorkPlaces (SWP).

IWP is designed to set and control the performance of training tasks.

Instructor' operations:

- to assign a closed space to the student,
- to enter type and concentration of gases and vapours in the enclosed spaces,
- to compare the measurements results made by the student with those given.

Student' operations:

- to study construction, indications and controls of the gas detector,
- to study gas detector calibration principles and prepare it for operation,
- to determine the type and percentage of gases in the enclosed space.

GDS Simulator includes Dräger X-am 5000 portable gas detector, which is widely used on ships, in accordance with its Technical Manual. Gas detector simulator helps determining concentration of O₂, explosive gases and vapours (% LFL), H₂S and CO for maintaining tests, required for enclosed space entry.

Simulator includes the following ship spaces:

- Cargo tank with vapour lock for gas detector hose penetration;
- Ballast Tank with hatch lids for gas detector hose penetration;
- CO₂ station;
- Paint store.

Simulator can be used:

- during tankers personnel training courses in accordance with requirements of Chapter V of SCTW Code,

Target groups

Crewmembers
Tanker personnel

Ship types

All ships
Tankers



- during Advanced Fire Fighting Training courses in accordance with requirements of Chapter VI of SCTW Code,
- during Enclosed Space Entry training courses.

Delivery set

Simulator can be delivered as a separate product, or as part of AFS Advanced firefighting simulator.

Legislation

STCW Code

- Section A-V, Table A-V/1-1-3 - Specification of minimum standard of competence in advanced training for chemical tanker cargo operations
- Section A-V, Table A-V/1-2-1 - Specification of minimum standard of competence in basic training for liquefied gas tanker cargo operations
- Section A-V, Table A-V/1-2-2 - Specification of minimum standard of competence in advanced training for liquefied gas tanker cargo operations
- Section A-VI, Table A-VI/1-2 - Specification of minimum standard of competence in fire prevention and fire fighting

STCW Convention

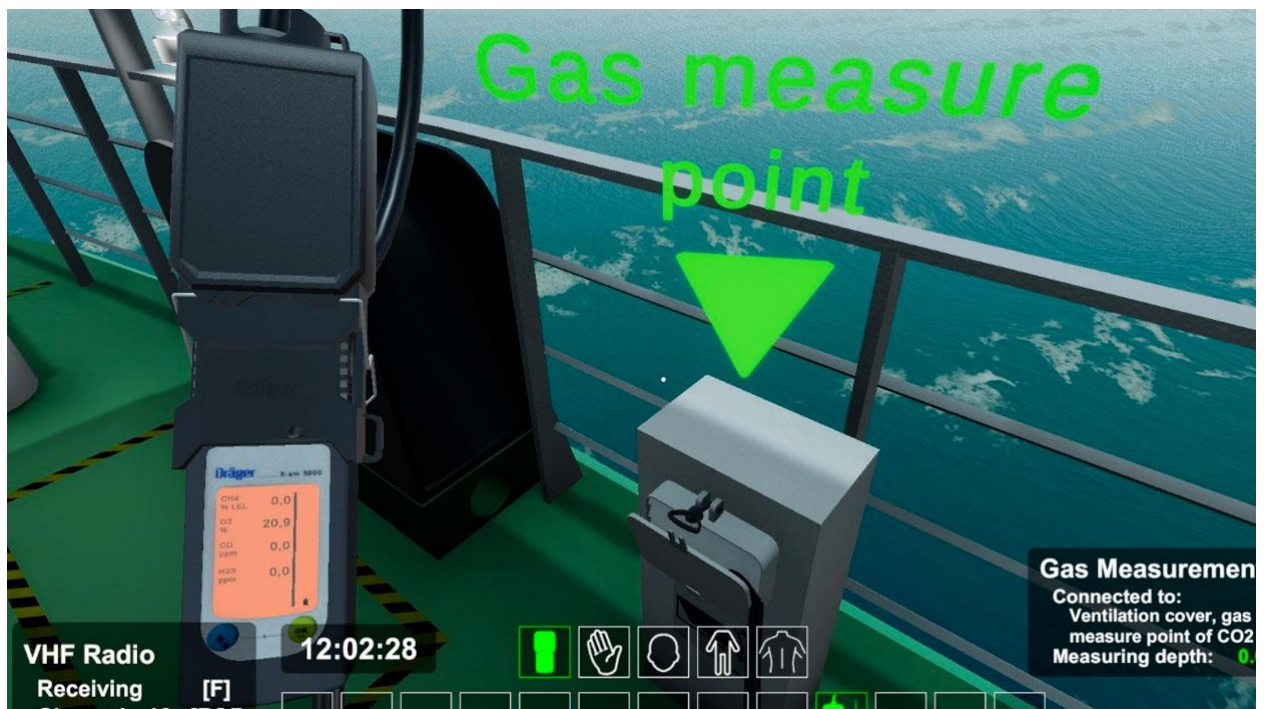
- Regulation V/1-1
- Regulation V/1-2
- Regulation VI/1
- Regulation VI/3



Simulator

GDS GAS DETECTOR SIMULATOR

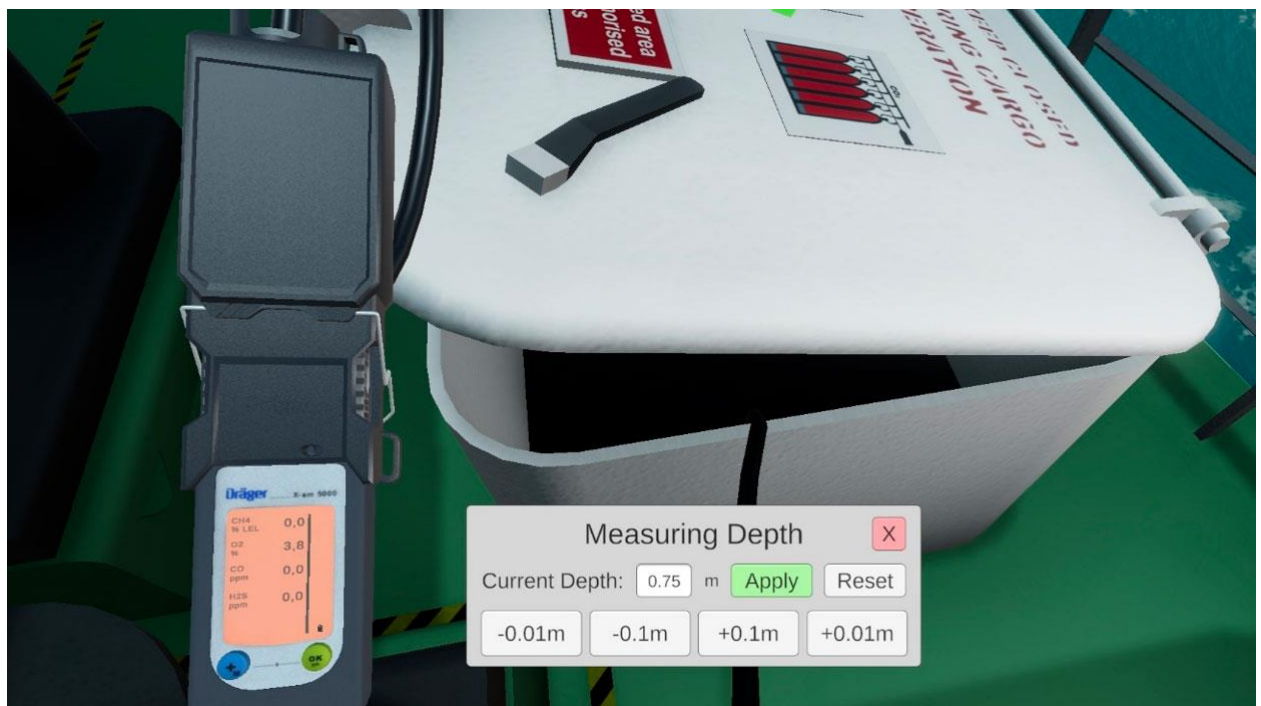
(version 1.2)





GDS GAS DETECTOR SIMULATOR

(version 1.2)





Simulator

GDS GAS DETECTOR SIMULATOR

(version 1.2)





Simulator

GDS GAS DETECTOR SIMULATOR

(version 1.2)





Simulator

GDS GAS DETECTOR SIMULATOR

(version 1.2)





Simulator

GDS GAS DETECTOR SIMULATOR

(version 1.2)



Gas measuring report

Enter description:

Select room:

Enter gas values:

CH4: %LEL O2: Vol%

CO: ppm H2S: ppm

Training

Events

Logbook

License

Dangers

Malfunctions

Gas-filled ballast tank

Event name: New

Gassed area in ballast tank

H2S (0...200 [ppm])

Layer points

Height

Value

5.00

5.00

5.00

15.00

CO (0...2000 [ppm])

Layer points

Height

Value

5.00

5.00

5.00

5.00

CH4 (0...100 [% LEL])

Layer points

Height

Value

5.00

5.00

5.00

10.00

Preparation

0/1 In progress...

00:08:21

Measure

Complete!

00:10:09

VHF

Broadcast

T

M

13:11:19

SYSTEM

TCP Client disconnected: CID 1

12:05:29

Central control room: 1

Gas-detector pump 1 (Dräger X-am 5000) was dequipped

12:05:27

Central control room: 1

Gas-detector pump 1 (Dräger X-am 5000) was equipped to Slot 10

12:05:24

Central control room: 1

Gas-detector pump 1 (Dräger X-am 5000) was dequipped

12:04:58

Central control room: 1

Gas-detector 1 (Dräger X-am 5000) was dequipped

12:04:55

Central control room: 1

Gas-detector pump 1 (Dräger X-am 5000)

12:04:55

Central control room: 1

Back side connect to: Unknown

12:04:55

Central control room: 1

Connected to: Unknown

12:04:50

Simulator

Report by atmosphere gasses concentrations in Main gas measure point of ballast tank; Gassed area in ballast tank:
Correct: CH4 Measured 10.0 / Fact 10.0
Correct: O2 Measured 20.9 / Fact 20.9
Correct: CO Measured 5.0 / Fact 5.0
Correct: H2S Measured 15.0 / Fact 15.0
Conclusion: Report 06/02/24

12:02:52

Simulator

Gas-detector 1 (Dräger X-am 5000)

12:02:52

Simulator

Gas sensor 4 -> Measured value: 15

12:02:52

Simulator

Gas sensor 3 -> Measured value: 5

12:02:52

Central control room: 1

Measure depth 0.00 (height: 5.00)

12:02:52

Simulator

Gas-detector 1 (Dräger X-am 5000)

12:02:52

Simulator

Gas sensor 1 -> Measured value: 10

12:02:50

Simulator

Gas-detector 1 (Dräger X-am 5000)

12:02:50

Simulator

Gas sensor 3 -> Measured value: 4.75

12:02:50

Simulator

Gas-detector 1 (Dräger X-am 5000)

12:02:50

Simulator

Gas sensor 4 -> Measured value: 14.25

12:02:50

Central control room: 1

Measure depth 0.25 (height: 4.75)

12:02:50

Simulator

Gas-detector 1 (Dräger X-am 5000)

12:02:50

Simulator

Gas sensor 1 -> Measured value: 9.5

12:02:10

Simulator

Gas-detector 1 (Dräger X-am 5000)

12:02:10

Simulator

Gas sensor 3 -> Measured value: 5

12:02:10

Simulator

Gas-detector 1 (Dräger X-am 5000)

12:02:10

Simulator

Gas sensor 4 -> Measured value: 15

12:02:10

Simulator

Gas-detector 1 (Dräger X-am 5000)

12:02:10

Simulator

Gas sensor 4 -> Alarm: A1

12:02:10

Simulator

Gas-detector 1 (Dräger X-am 5000)

12:02:10

Simulator

Gas sensor 1 -> Measured value: 10

12:02:02

Central control room: 1

Gas-detector pump 1 (Dräger X-am 5000)

12:02:02

Central control room: 1

Connect to: GasAndBallastTankVolumePort

Group: Default

Task state: Task running

Current time: 12:06:38

Elapsed: 00:06:38



Simulator

GDS GAS DETECTOR SIMULATOR

(version 1.2)





Simulator

GDS GAS DETECTOR SIMULATOR

(version 1.2)

