# GDS GAS DETECTOR SIMULATOR

## 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 $O_2$, explosive gases and vapours (% LFL), $H_2S$ 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;
- $CO_2$ 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,
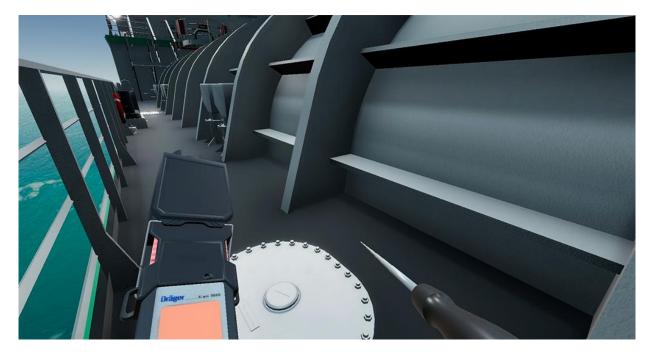- during Enclosed Space Entry training courses.

Development completion is planned for January 2024.

**Delivery set**

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

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