



- Operating temperature is -20°C to 45°C
- The instrument is portable (about 4.5 kg)
- Battery operating time 4hrs

Application GDA-F

Protection from harmful components in containers



Comprehensive equipment of the German customs authorities with GDA-Fumigation to comply with occupational safety

Overseas shipping containers might contain toxic gases that are harmful to workers who open or unload them. Cargo containers and wooden packing material are fumigated using gases like Phosphine or Methyl Bromide to control the spread of pests and micro-organisms. Fumigant gases are toxic and can endanger human health even in low concentrations.

Additionally, products shipped in containers and their packaging may release VOCs such as Styrene, Acrylamines, Chloro-Hydrocarbons and many more.

These are emitted by the solvents, coatings and glues used in the manufacturing processes, and the concentrations of these vapors in the confined space of the container may cause a severe health risk .



Customs



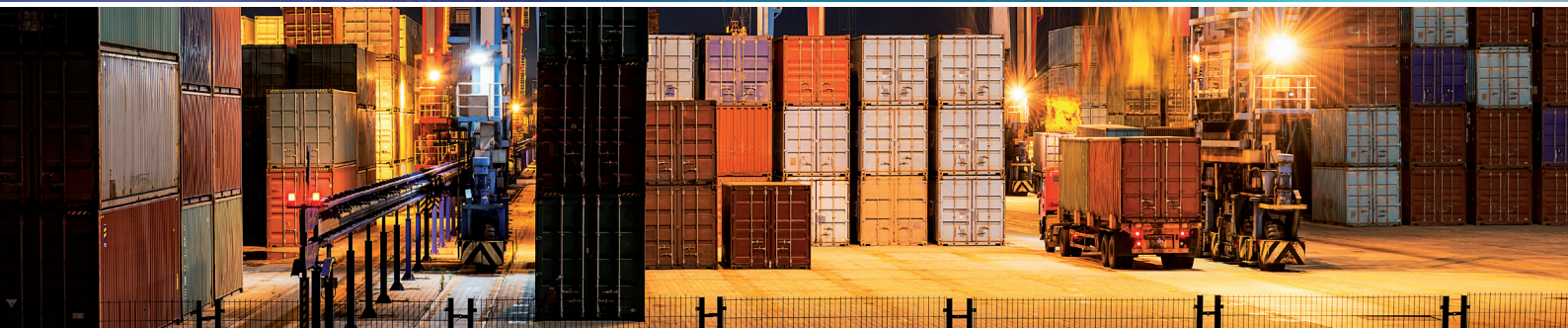
Logistic



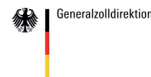
Container
Port authorities



Hamburg, Germany. 21 March, 2019. The customs proof with the GDA-F gas level and measure the inside of sea freight container at Zollamt Waltershof in Hamburg Harbour.



THE TASK



Gas measurements are required to protect the health of all persons involved in the inspection procedure and the unloading process of the container. A complete gas supervision measurement over a wide range of toxic substances must be taken from outside the closed container to clarify the potential risk within seconds.

THE SOLUTION

After an intense evaluation phase with several thousand containers investigated side by side with laboratory results the GDA-technology was optimized in terms of analytical capability and operational aspects.

- Wide range coverage of toxic and health-risky substances (high level safety)
- Speed of analysis (15 seconds)
- Easy result and handling and on going advice for the operator on the container treatment
- Reliability of instruments under rough operating conditions

Based on the solution, German customs decided to procure more than 250 GDA-Fumigation make it a part of their standard operating procedures.

The customs, being a governmental institution that puts safety at the forefront of its responsibilities, rapidly became a reference in safety measures and the proper handling of containers during import and export operations. GDA results are often taken to reveal safety related hints on shipped goods being potentially contaminated. Consider a contaminated shipment of toys made of polymer right before Christmas time.

THE PROCEDURE

The measurements are carried out from the outside of the container by using a steel lance connected to the sample inlet of the GDA-Fumigation and entered between the container doors.

In the event of an alarm, the customs officer responds according to a specified procedure either by ventilating or degassing the container. During the inspection of the container, the customs officer switches to continuous monitoring mode in order to be alerted whenever residual gases show increasing concentrations. If the device triggers an alarm, the officer must leave the container immediately.

The customs authorities describe the use of the GDA as very simple and without problems. The biggest advantage of the GDA is the possibility to use it continuously and the detect any danger within seconds. **The customs authorities feel safe when working inside the container because results are given immediately.**

