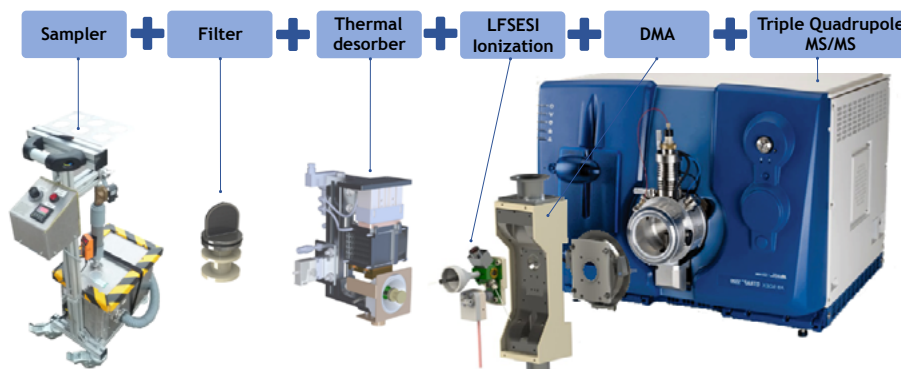


SEADM DMA-MS/MS for Second Stage (Explosive, Chemical and Biological Detection)

Introduction

SEADM's Air Cargo Explosives Screener (ACES), is able to screen explosives while cargo is in "bulk" form, in particular complete trucks at a port entrance.

New improvements have been applied to the Detector, allowing the identification of certain chemical and biological substances.

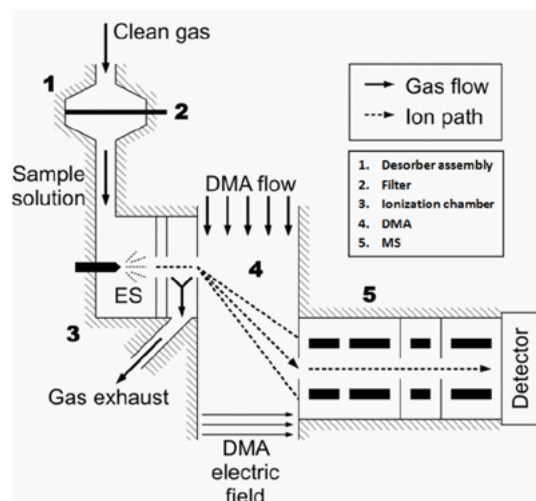


System Architecture

SEADM Vapour Explosive Detector (ACES) is based on Explosives Trace Detection (ETD) in vapour phase, based on the integration of Multi-temperature Thermal Desorption (MTD), Secondary Electrospray Ionization (SESI), Differential Mobility Analysis (DMA), and Triple Quad Tandem Mass Spectrometry (TQ-MS/MS).

Main benefits of Explosive, Chemical and Biological Detection by DMA-MS/MS technology:

- ❖ Increased security through a higher Probability of Detection (PoD) than current technologies.
- ❖ Reduced sampling time due to the high analyser sensitivity.
- ❖ Reduced screening costs and delays



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