

# CoMo-170 SIM

Training set for the simulation of alpha and beta/gamma contamination



The new training devices DoIMo SIM (dose and dose rate meter) and CoMo-170 SIM (contamination detection instrument) make the practice-oriented training of radiation protection officers and first responders possible. The technically modified devices respond to radio waves (DoIMo SIM) or to magnetic fields (CoMo SIM) and can therefore also be used for training scenarios without radioactive sources.

## Advantages

- Realistic display of measured values
- Display of contamination spread over a wide area (CoMo SIM) or large areas with a high dose rate (DoIMo SIM)
- No radioactive sources required
- No handling permit required
- No transportation of radioactive sources

## Key figures

2 Types of contamination  
 ↳  $\alpha$  and  $\beta/\gamma$  can be simulated

8 Different  
 ↳ Training sources available

>5 Training scenarios  
 ↳ Possible

## CoMo SIM technical data

The CoMo-170 SIM largely has the same features as an ordinary CoMo-170. Depending on the required firmware version, the CoMo-170 SIM corresponds to the ZS, CoMo-170 F or the standard detector for the fields of nuclear power and medicine. This measuring instrument is only suitable for training purposes. It can only be used in combination with the RAD PCS alpha and beta/gamma simulation sources or commercially available magnets. A remote control is used to switch the instrument between the alpha and beta/gamma channels.

## Simulation source

There are 8 types of magnet pouches (RAD PCS) in a variety of sizes. They are also colour-coded.



Person with beta/gamma magnetic sources.



Checking for radioactive contamination in the area of the wheel arch.

## Suggestions for training

**Identification of contaminated emergency services personnel** - Hide the pouch with the magnet in the gloves or pockets of emergency services personnel.

**Identification of different contamination levels** - Prioritise the urgency levels of decontamination. Severely contaminated persons must be given priority for decontamination. The object of the exercise is the prioritised decontamination of a large number of people after an attack (a dirty bomb) or accident in a nuclear power station.

**Locating and packaging contaminated objects** - Hide weak magnet pouches under door mats, in cushions, handkerchiefs and other objects. The task of the trainees is to detect and securely package contaminated items after an attack with polonium.

**Identify and cordon off contaminated areas** - Hide strong magnets under turf to simulate a contaminated area. The emergency services personnel must survey the area and cordon it off.

**Demolition/dismantling** - Hide powerful and weak magnets on fittings and valves, in moderately-sized containers or under steel plates. The trainee must identify whether the contamination is above or below the local release levels (e.g. 1 Bq/cm<sup>2</sup>).

## CoMo-170 SIM training set for the simulation of alpha and beta/gamma contamination

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The measuring instrument is only suitable for training purposes. It can only be used in combination with the RAD PCS alpha and beta/gamma simulation sources or commercially available magnets. A remote control is used to switch the instrument between the alpha and beta/gamma channels.

Button	Use	Function
1	Press 4 times quickly	Activates the alpha channel
2	Press 4 times quickly	Activates the beta/gamma channel
1	Press once quickly	High measured value or reset ready for measuring after detector error
2	Press once quickly	Reduced measured value (e.g. after defective decontamination)
3	Press once quickly	Zero (e.g. after successful decontamination)
4	Press once quickly	Detector error