CETTO INDUSTRIES
INNOVATIONEN FÜR DIE STAHLINDUSTRIE

Stationary monitoring systems for radioactivity measurements

Monitoring Systems

ConRaD C4 / C5
ConRaD Combi

since 1922
made in Germany

About radioactive sources and monitoring systems from Cetto

Various technical and medical applications use radioactive sources. If these sources enter the recycling or melting process, non-foreseeable damages may occur. To minimise this potential threat to employees, environment and population, monitoring systems for the detection of radioactivity are used at different locations.

Cetto offers a comprehensive range of stationary and portable radioactivity monitoring systems, modular in design and applicable in many ways, depending on the local conditions at the customer's site. Operators of the systems are e.g. steel works, rolling mills, scrapyards, recycling plants, foundries, waste incinerators, hospitals and ports.

Cetto monitoring systems are in operation since more than 30 years and in four continents. The medium-size structure of Cetto ensures short reaction times, flexible decisions and customised solutions.

A special feature of Cetto monitoring systems is the application of different detector types:

• Crystal detectors in compact size and with highest sensitivity, suitable for nuclide identification. These detectors are installed in stationary and mobile systems, e.g. in grabs with limited space.

• Large area plastic detectors for the application in stationary systems, for the monitoring of lorry and waggon loads. These detectors are also suitable in applications with enhanced vehicle speeds.

Moreover, Cetto provides the exceptional opportunity to combine and operate both detector types in one measuring system. Thus, the advantages of both materials can be used in an optimum way, to reach the highest detection safety.

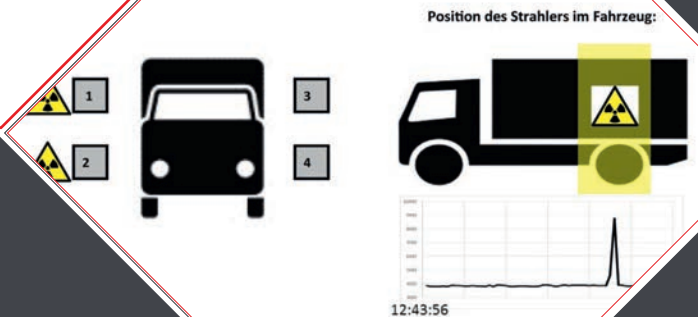# Particularities of our lorry and waggon measurement systems ▶

» Highly sensitive crystal detectors for the identification of the "radioactive fingerprint"

» Large area plastic detectors for applications with enhanced vehicle speed

» Combination of both detector types, to use the advantages of both materials

» Energy specific alarm thresholds (channel alarm)

» Differentiation between natural and artificial radioactivity (with crystal detector)

» 1024 channel fine measurement with nuclide identification (with crystal detector)

» Editable nuclide database (with crystal detector)

» Real time alarm without delay

» Display of the position of a radioactive source in a lorry or waggon

» Forwarding of alarms by e-mail to responsible personnel

» Logging of all measurement results

» Integrated lead shielding to reduce background radiation

» Warning in case of fluctuating background

» Velocity measurement

» Generation of sum spectra

» Self-monitoring system

» Expert mode, password protected

» Optimised reports including all measurement information

» Detector stanchions in different versions

System options ▶

» Compact evaluation unit with integrated 10″ touch display

» Neutron detectors

» Traffic light, warning light and signal horn applicable

» Network camera (vehicle photo on measurement report)

» Interfaces for weighbridges, databases, control signals etc.

» Documentation of the measurement result directly on the weighing protocol

» Connection to central monitoring system I-Server

Do you have another wish? Talk to us! We do almost anything for the satisfaction of our customers.

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Technical specifications

» Detectors: crystal detectors CsI(Na) or plastic detectors

» Dimensions: crystal detectors Ø 51 x 357 mm, plastic detectors 250 x 1000 x 50 mm

» Radiation type: gamma radiation

» Energy range: 50 keV ... 2 MeV

» Multichannel analyser: MCA-1024

» Detector communication: LAN

» Lead shielding: 10 mm

» Crystal detector housing: PC 700 x 500 x 300 mm

» Temperature range: -35 ... 70 °C

» Evaluation unit: Panel-PC 19″ with touch display

» (Option: compact evaluation unit with integrated 10″ touch display)

» Maximum number of detectors: 12 (maximum 4 detectors with compact evaluation unit)

» Speed measurement: 2 pcs laser distance sensors

» I/O-Ports: RS-232, RJ45, USB2.0, VGA, Audio, HDMI, Wi-Fi, Bluetooth

Our service for you:

» Efficient consulting on site

» Attractive financing schemes (leasing and hire purchase)

» Individual detector assembly according to local conditions

» Free online support and remote maintenance

» Assistence in case of alarm

» Establishing contact with authorities

» Transfer to experts

» Development of emergency plans

Ask for our national and international reference lists!