



**CETTO INDUSTRIES**

INNOVATIONEN FÜR DIE STAHLINDUSTRIE

Monitoring systems for radioactivity  
measurements in grabs

ConRaD  
GrabScan II



since 1922  
made in Germany



Grab  
monitoring systems

ConRaD  
GrabScan II

## 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 grab monitoring systems ▶



- » Highly sensitive crystal detectors for the identification of the "radioactive fingerprint"
- » Energy specific alarm thresholds (channel alarm)
- » Differentiation between natural and artificial radioactivity
- » 1024 channel fine measurement with nuclide identification
- » Editable nuclide database
- » Real time alarm without delay
- » Forwarding of alarms by e-mail to responsible personnel
- » Logging of all measurement results
- » One or two crystal detectors applicable per grab
- » Search mode for rapid area scanning
- » Different sensitivity levels (special development for unloading ships)
- » Warning in case of fluctuating background
- » Self-monitoring system
- » Expert mode, password protected
- » Optimized measurement reports including all measurement information
- » Possible use of permanent power supply from the Grab
- » Wireless data transmission
- » Highest mechanical resistance against shocks
- » Connection to central monitoring system I-Server

## Advantages towards stationary detection systems ▶

- » Less distance between radioactive source and detector
- » Less shielding by surrounding material
- » Longer measuring time
- » Higher sensitivity due to special threshold reduction

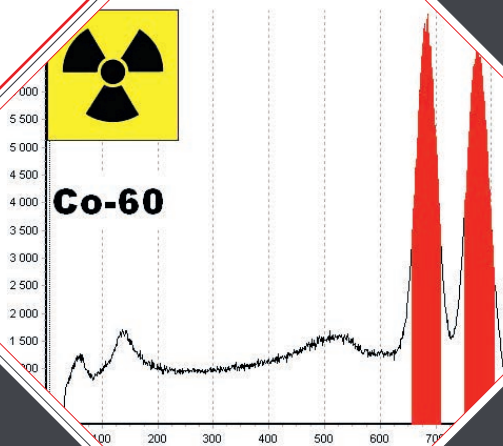


## Technical specifications

- » Detector: crystal detector CsI(Na)
- » Detector dimensions: Ø 51 x 357 mm or Ø 76mm x 76mm
- » Radiation type: gamma radiation
- » Energy range: 50 keV ... 2 MeV
- » Multichannel analyser: MCA-1024
- » Detector communication: LAN, RS-485
- » Temperature range: -35 ... 70 °C
- » Evaluation unit: Panel-PC 7" with touch display
- » Maximum number of detectors: 2

## 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
- » Assistance in case of alarm
- » Establishing contact with authorities
- » Transfer to experts
- » Development of emergency plans



Ask for our national and international reference lists!



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