

Industrial risk monitoring in dusty environments

CBR – Belgium



Securing areas of risk in the factory – Antoing Plant

CBR, part of HeidelbergCement Group, is the world's first producer of granulates and the major player in cement and concrete sectors, has awarded Fives the implementation of a solution capable of detecting operational incidents and the risks of explosions in dusty areas of a cement plant.

Fives secured the coal storage, conveying and grinding facilities thanks to a specific version of its Opastop® Opacimeter well known for the application of stack emission and road tunnel atmosphere monitoring.

Project scope

- CBR wanted to secure areas with dusty atmosphere that could present a risk of explosion in the plant.
- Fives has designed a solution able to detect an incident in real time to all the identified risk areas of the plant, in particular the extraction & conveying workshop, the grinding zone and the coal storage silo.
- One device is available in stock on site, to be installed in case of immediate need.



SOLUTIONS

- An Opastop® GP3000T installed on the coal extraction and conveying workshop:
 - Two parameterized thresholds: an incident threshold and a security threshold
 - An air treatment and filtration system as well as a calibration block to check possible measurement drift
 - In case of alarm triggered, it is possible to plan a machine break
- An Opastop® GP3000T installed on the coal storage silo:
 - Two parameterized thresholds: an incident threshold and a security threshold
 - An air treatment and filtration system as well as a calibration block to check possible measurement drift
 - In case of alarm triggered, the operator can program an interruption of loading operations
- An Opastop® GP3000T installed on a wall in the coal mill. This area is critical because coal is reduced to fine particles during grinding:
 - Two parameterized thresholds: an incident threshold and a security threshold
 - An air treatment and filtration system as well as a calibration block to check possible measurement drift
 - In case of of alarm triggered, an interruption of the machine can be initiated

BENEFITS OF FIVES

- Increase safety in such sensible zones
- Detect sooner any need for maintenance therefore limit costly downtime
- Easy and in situ installation

Until Today, the base ARIA identified more than 32,000 accidents or incidents which occur in France or abroad

Source : INRS Report "Dust explosion in workplaces".

5,000

Monitoring equipment installed over 40 years

7th

generation of opacimeter for multi purpose applications

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