



## Fire and Explosion Protection in Power Plants

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The electric current which is permanently produced by power plants is indispensable for the maintenance of industry as well as public and private life. The thermal energy released by the combustion of biomass, coal or other fuels mechanically drives generators that produce electric energy. However, such an energy conversion chain holds various risks of fire. Sparks and glowing particles, which can cause serious fire and explosions, can be generated in the individual processes. A GreCon spark detection and extinguishment system significantly increases the safety and protection of the production facilities. It detects dangerous ignition sources in time and automatically extinguishes them without interrupting production – and has done so successfully for more than 35 years.

### THE RIGHT SOLUTION

- ✓ a fast, reliable spark extinguishing system which is especially adapted to your production
- ✓ the detection of sparks and glowing particles in the areas at risk
- ✓ protection without interrupting production

## RISKS

Foreign bodies, defective machines and high temperatures can be the cause of sparks, glowing embers and overheating. If these ignition sources reach the plant areas via extraction systems or conveying facilities, they can suddenly and unforeseeably trigger off fire or explosions. The parallel feed of wood and biomass pellets (co-firing) often represents an additional risk of fire and explosion.

## DANGER ZONES

Fire or explosions in power plants can damage or even destroy the facilities. A GreCon spark detection and extinguishment system monitors and protects the following areas at risk:

- ✓ Mill/crusher
- ✓ Furnace backfire protection
- ✓ Smoke gas filter
- ✓ Silo
- ✓ Extraction system
- ✓ Cyclone
- ✓ Conveyor belts

## DIAGRAM OF PROTECTION CONCEPT

