



# Fire and Explosion Protection for Filter Systems

In filter systems there is a permanently existing fire potential. Basic precondition for such danger potentials are combustible raw materials which are processed to small pieces, such as chips or dust in the wood based panel industry or finely ground food and animal feed. Especially in filters, these materials form an explosive atmosphere in connection with oxygen in the air, which is merely awaiting an appropriate ignition source to cause a damaging fire or explosion. 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**

Smoke caused from casting metals is removed from the workstations. This smoke can condense in the exhaust ducts. The deposits are flammable, easily ignited and can lead to pipe fire. The rest of the outgoing air and solids mixture reaches the filter and is separated. The separated solids can add up to a high fire load. Additionally, the filter media itself represents a high fire load. If sparks or hot particles reach the filter, embers can form in the filter trough or the filter media that can ignite a fire. Fire in the filter leads to a long interruption of your production.

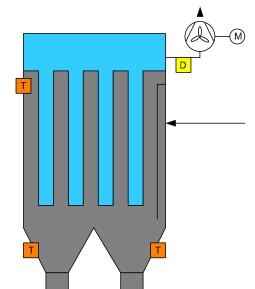
#### **DANGER ZONES**

A filter fire can cause long production downtimes or totally destroy production facilities. A GreCon spark detection and extinguishment system monitors and protects the following areas at risk

- Foundries
- Sand recycling
- Hardening shops
- ✓ Forges

- Welding facilities
- Blasting plants
- ✓ Laser machining
- Machining centres
- Minimal quantity lubrication
- Transport and disposal of pyrophorous dust

### DIAGRAM OF PROTECTION CONCEPT



- Day Light Spark Detector DLD
- Thermo Detector

