

## Consequences of fire and explosions

A fire or explosion can have serious consequences for your company:

- Injury and loss of human life
- Damage to machines, transport facilities and storage space
- Production interruptions
- Loss of income
- Repair costs owing to damaged machines
- Replacement costs owing to destroyed machines
- Increase in insurance premiums

### The right solution for your particleboard production

To protect your production, your staff and your machines against fire and explosions, GreCon offers you...

- 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
- the immediate extinguishment of sparks and glowing particles – in 99 percent of cases without production interruption
- a record exactly to the millisecond so as to identify the causes of problems

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# GreCon

Fire and  
Explosion Protection  
of Particleboard  
Productions

**GreCon**

Fire  
Protection

**GreCon**

Measuring  
Technology

**GreCon**

Service



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# Particleboard

## Fire and explosion protection of particleboard productions

Particleboard is the wood based panel type which is used the most worldwide. Especially for the construction of furniture and interior work, the panels, that consist of three to five layers of different chip sizes, have constituted the standard wood based panel type for a long time. However, the production processes, such as the processing of the wood into chips as well as the drying and pressing of the combustible materials to particleboard, hold various risks of fire. Sparks, glowing embers or particles, generated in different plant areas, can easily cause serious fire and explosions.

A GreCon spark detection and extinguishment system significantly increases the safety and protection of the production facilities. It detects sparks in time and automatically extinguishes them – and has done so successfully for more than 35 years.

## Risks of particleboard productions

The main dangerous spots are in the area of chipper, dryers, mills, saws and sanders where the material is processed. Defective machine parts and overheating caused by material densifications can generate ignition sources. Sparks or glowing particles can be created and reach, via extraction and conveying facilities, filters, silos or bins where they can meet explosive wood dust concentrations, which can quickly lead to dust explosions and consequential fire.

## Danger zones of particleboard productions

Fire or explosions in particleboard productions can damage or even destroy the facilities.

A GreCon spark detection and extinguishment system monitors and protects the following areas at risk:

- Chipper
- Mill
- Dryer
- Dryer cyclone
- Air separator
- Dosing bin
- Forming station
- Press
- Cut-off saw
- Sander
- Extraction system
- Filter
- Silo
- Sieve



**Diagram of a particleboard production process showing possible protection areas**

