



Fire and Explosion Protection of Particleboard Productions

Especially for the construction of furniture and interior work, the particleboard 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 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

The main dangerous spots are in the area of chippers, 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

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

DIAGRAM OF PROTECTION CONCEPT

