

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
- Loss of customers

The right solution for your recycling plant



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
- a temperature monitoring:
 - on top of the cyclone
 - on top of the filter
- a spark extinguishment:
 - before, in and after the cyclone
- a water extinguishing system:
 - in the disintegrator
 - in the exhaust duct
 - in the cyclone
 - in the filter
 - in the conveyor
- a record exactly to the millisecond so as to identify the causes of problems

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GreCon

Fire and Explosion
Protection of
Recycling Plants

GreCon

Fire
Protection

GreCon

Measuring
Technology



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Recycling

Fire and explosion protection of recycling plants

In times when raw materials are running low and the demand for consumer goods is increasing, the topic of recycling becomes more and more important. Products made out of wood, metal, paper, plastic, rubber and other materials are already recycled on a large scale and made available again for the processing industries as secondary raw material. However, the almost exclusively mechanical recycling processes hold a high risk of fire. Sparks, glowing embers or particles can be generated which can 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 the recycling industry

The main dangerous spots are in the area of disintegrators and granulators as well as pelletising. Defective machine parts and overheating caused by material build-up can generate ignition sources. Sparks or glowing particles can be created and reach, via extraction and conveying facilities, filters or silos where they can meet explosive dust concentrations, which can quickly lead to fire and explosions.

Danger zones of recycling plants

Fire or explosions in recycling plants can damage or even destroy the facilities.

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

- | | |
|-----------------------------------|---------------------|
| ■ Disintegrator | ■ Extraction system |
| ■ Sieve | ■ Cyclone |
| ■ Mixer | ■ Filter |
| ■ Mechanical conveying facilities | ■ Silo |
| | ■ Storage area |



Diagram of a recycling process showing possible protection areas

