

## Consequences of fire and explosions

A fire or an 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 / Replacement costs due to damaged machines
- Loss of customers

### The right solution for your tyre recycling plant



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

- a fast, reliable **spark detection system, including additional measures**, that is especially adapted to your production
- the detection of sparks and glowing particles in the areas at risk (e.g. **transport ducts from mills to silos and storage space**)
- the immediate automatic diversion of sparks and glowing particles out of the conveying system with following water or gas extinguishment – in 99 percent of cases without production interruption
- recording of events down to the millisecond to help identify the cause of a problem

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# GreCon

Fire and Explosion  
Protection in  
Tyre Recycling Plants

GreCon  
Fire  
Protection

GreCon  
Measuring  
Technology



EN | R.01 | 2014.04  
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# Tyre Recycling

## Fire and explosion protection in tyre recycling plants

Due to their quantity, form, structure, non-decomposability and easy inflammability, scrap tyres are a difficult waste material. Due to the additives contained in tyres, the **dumping** of scrap tyres is prohibited in Germany and many other countries. Scrap tyres have to be recycled. In the recycling process of scrap tyres, **metal, rubber and textiles** are separated. The **comminution, milling, separation and screening** processes hold a high risk of fire. Machines and material transport are to be monitored.

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 in tyre recycling plants

When **comminuting and milling the mostly combustible materials**, individual sparks or glowing particles are sufficient for an ignition. Defective machine parts, foreign bodies or high process temperatures can cause overheating, sparks or glowing embers that can cause fire and dust explosions in the mechanical and pneumatic conveying facilities and downstream filters, silos and bins.

## Danger zones in tyre recycling plants

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

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

- Granulators
- Mills
- Extraction systems
- Filters
- Silos



Diagram of protection concept for the tyre recycling industry

