



PREVENTIVE PROTECTION SYSTEMS FROM

firefly ab  
SWEDEN

Firefly ConveyorGuard™  
Fire protection solution for conveyors



## Why protect a belt conveyor

Every year, fires occur in belt conveyors worldwide. Fires in belt conveyors can spread to surrounding material stacks and could last for weeks, causing major loss of revenue and production downtime. Regardless if you transport wood chips, biomass or other material, a fire in your belt conveyor can occur due to several reasons: friction in bearings, mechanical breakdown or burning material put on the belt are just a few examples.

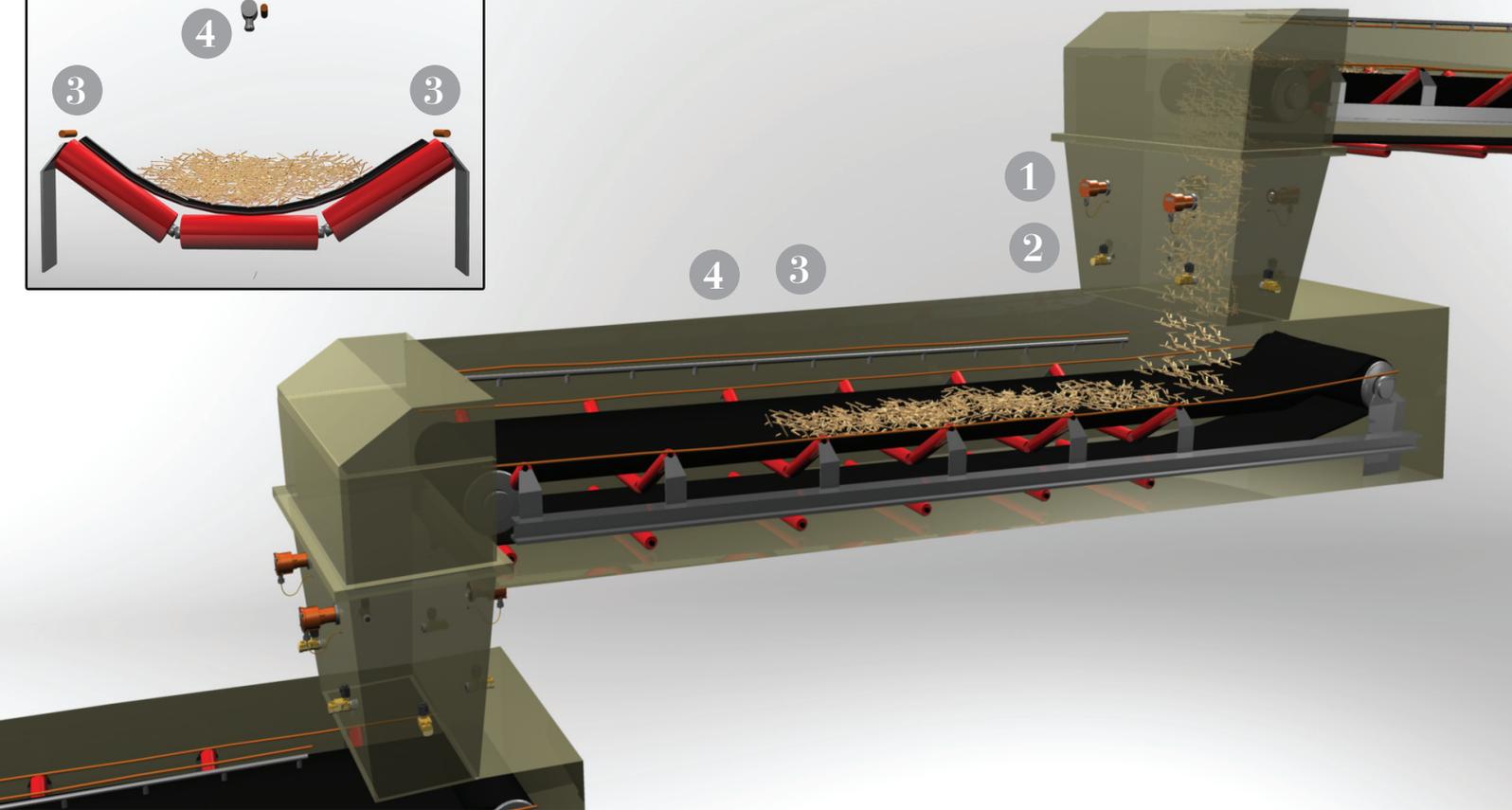
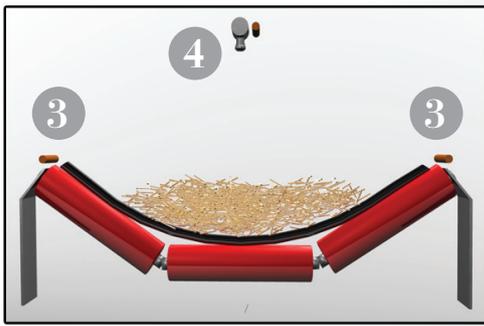
A fire in a belt conveyor can spread very quickly. Therefore, a fast acting fire protection system that also can withstand the tough conditions in and around a belt conveyor is required.

Until today, no one has succeeded to equal the performance and reliability of Firefly's products and solutions. Firefly ConveyorGuard™ is the company's solution to prevent fires in belt conveyors as well as other types of conveyors within the process industry.

### FIRE AT (...) UNDER CONTROL

August 2011 - At its peak, some 50 people from 10 rescue services took part in helping to put out the fire. Five helicopters have been used to drop water on the fire (...).

Intensive work is in progress to recommission the mill, although this process is unlikely to be complete until early September. Cleanup work and inspection of the shaker shoe and belt conveyors is in progress. Damping down and inspection of the sawdust heaps are ongoing, and charred chips damaged by the fire are being removed. The total cost of the fire is estimated to be hundreds of millions (...).



## Firefly ConveyorGuard™ solution

The focus of the Firefly ConveyorGuard™ solution is to detect and suppress a fire and stop the conveyor belt as quickly as possible. This is why a Firefly safety system always consists of three main integrated functionalities: detection, suppression and control.

By integrating different techniques into one solution, Firefly provides optimal safety for the protection of conveyors:

- 1 Patented True IR detectors**  
 Insensitive to daylight. Detecting flames as well as sparks and hot particles from the right ignition temperature and energy. Installed at the inlet and outlet of the belt conveyor.
- 2 Full-cone extinguishing**  
 Powerful extinguishing with a unique nozzle design and placement aimed to penetrate and cover the entire material flow inside the chute. Activated within milliseconds after detection.
- 3 Linear Temperature Sensing (LTS) cable**  
 Detecting the early stages of a fire due to for example overheated bearings. Installed at the sides and above the conveyor belt.
- 4 Water mist suppression**  
 Installed over the conveyor belt and activated automatically by the Firefly True IR detectors and LTS cable. Can be provided as add-on to the system.

## About Firefly

Firefly is a Swedish company that provides spark detection and industrial fire protection systems to the worldwide process industry. Founded in 1973, Firefly has specialized in creating customer adapted system solutions of the highest technical standards and quality. In complement to worldwide sales, Firefly also provides its customers with field service, maintenance and guaranteed long term spare part supply.

Do you have a question about the fire and explosion risk in your plant? Contact us!  
We will be happy to assist you with our knowledge and experience.

*Firefly – Keeps you in production*