

FIREFLY BakeScan™ & OvenGuard™

Unique fire protection solutions within the baking industry



WHY PROTECTION IS NEEDED

Baked products are exposed to high temperatures from ovens. Taking into account that almost all baked products have ignition temperatures very close to the average oven operation temperature, there is a constant latent risk that products will burn.

This risk increases due to the accumulation of grease, oil, crumbs and dust, as well as potential temperature control failures in ovens and maintenance issues. This can lead to overheated baked products or flames in/around the oven, resulting in potential damage to the process, reduced product quality, and possible fire risks in storage areas.

A preventive protection solution from Firefly helps the baking industry increase safety and reduce costs by avoiding fire-related downtime and efficiently detecting and removing burned products during production.

COMMON PROBLEM AREAS

Accumulation of grease, oil, crumbs and dust in combination with the higher oxygen level can cause a fire in the outlet of the oven. The fire can easily spread through the ducts and to the rest of the building.

Products that stops in the oven due to failure.

Products that are glowing or are on fire can imply problems later in the process, as for example in the cooler and/or in the storage area.

The transport bands can be damaged by overheated, glowing or burning products.

” We installed the Firefly preventive system in the beginning of 2015. We are more than satisfied with the system since it has already avoided several fire incidents.

TOM FABER,
Production Manager,
Boboli, The Netherlands

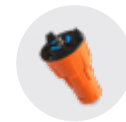


FIREFLY BakeScan™ SOLUTION

Glowing, burning, or overheated products are the first indicators of emerging issues in the oven. The Firefly BakeScan™ solution is designed to detect overheated, glowing, or burning products on conveyor belts carrying baked goods out of the oven, such as biscuits, tortillas, baked crisps, bread, and cereals.

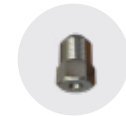
The system can be completed with quick acting water mist suppression. Water mist suppression enables the process to continue without warping the belt and avoids temperature stress on the cooling belts which can be very expensive to replace.

The Firefly BakeScan™-solution is an extremely flexible system and can be adapted to any process within the baking industry.



PATENTED TRUE IR DETECTORS

Insensitive to ambient light. Detecting overheated, glowing or burning products coming from the oven, transported on the belt.



QUICK ACTING WATER MIST SUPPRESSION

Installed above the transport band.



FIREFLY OvenGuard™ SOLUTION

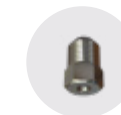
The Firefly OvenGuard™ solution is designed for early detection and suppression of fire hazards at the oven's inlet and outlet, and for extinguishing embers and flames in extraction ducts and reject bins. This by using a full automatic, high speed detection and suppression system. Both quick acting water mist suppression and full-cone water spray extinguishing can be used depending on the system design.

The Firefly OvenGuard™ system is extremely fast and the systems are designed to provide optimal safety against fire with minimal effect on machinery or production. The Firefly system is flexible and from a range of unique products the solutions are customized for each application.



FIREFLY FLAME DETECTORS

Fast-acting flame detectors, highly immune to external disturbances and designed to withstand tough industrial environments.



QUICK ACTING WATER MIST SUPPRESSION

Installed at the outlet of the oven. Can also be installed inside the extraction ducts.



A UNIFIED CONTROL SYSTEM

Enabling a good overview of all protected zones. Operators will control the system via IntuVision™, an intuitive user interface with a colour touch screen, which comes as a standard in every Firefly System.

ABOUT FIREFLY

Firefly is a Swedish company that provides industrial fire prevention and protection systems to the process industry worldwide. Since 1973, Firefly has specialized in creating customized system solutions of the highest technical standards and quality. Based on customer needs and research, Firefly has developed and patented products and solutions, creating a unique portfolio of innovative products and system solutions to increase the level of safety and production output.

The Firefly quality management system is certified according to ISO 9001 and EN ISO/IEC 80079-34. Firefly’s products hold national and international third-party certifications through FM, VdS, CSA, DNV, LCIE Bureau Veritas, Delta, and RISE among others.

For more information on our certifications and approvals, please visit: www.firefly.se/about-us/certifications-approvals/

Please contact us if you have any questions about fire and explosion risks within your process. Our fire preventive team will be happy to share their knowledge and experience.

AS A FIREFLY CUSTOMER YOU RECEIVE



A partnership with our fire prevention teams around the world.



Technical innovation in fire prevention and protection.



Digital progression based on robust safety systems.



Fire prevention and protection through certified technology.

WE HAVE FIREFLY USERS FROM MULTIPLE INDUSTRIES ALL OVER THE WORLD



Firefly users in over 90 countries



■ Firefly users

Firefly's products are available with the following certifications and approvals:



For information on the certifications and approvals each product holds please visit:

www.firefly.se/about-us/certifications-approvals/



Firefly AB
Phone +46 (0)8 449 25 00
info@firefly.se | www.firefly.se

Firefly BakeScan™ & OvenGuard™ 2.0 EN
© Firefly AB (2025)

