



PRESSGUARD™

Press & hot Oil Pump Room Protection

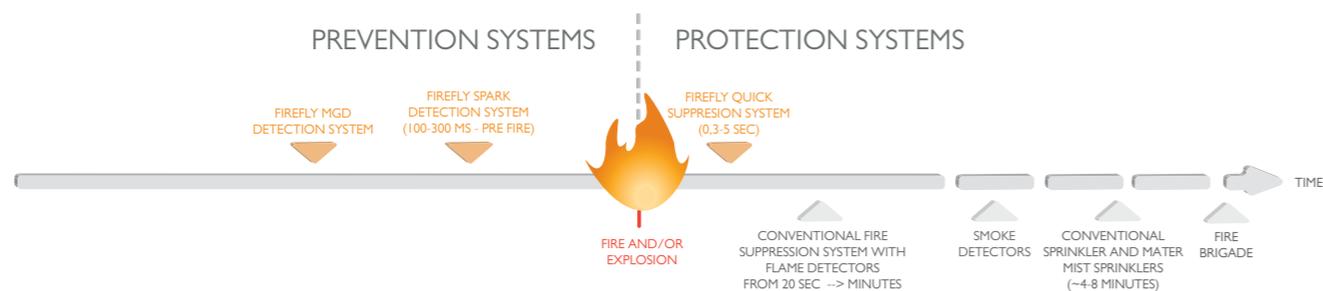




PressGuard™

It is well-known in the wood panel industry that a fire in a press spreads extremely quickly. A small flame can, in just a couple of seconds, develop into a large-scale press fire. Production downtime and damage to the press are costly consequences.

The demand for increased press productivity has led many factories to make customer specific modifications and additions to their presses. As a result, this has had a negative effect on particularly maintenance and cleaning procedures. Press protection systems relying on standard solutions often prove to be inadequate. Firefly offers a tailor made solutions for both fire prevention and protection in high risk areas in presses.



EXIMIO™ – Intelligent System Architecture

Firefly EXIMIO™ is an intelligent system with a decentralized and modular system architecture. Detectors and extinguishing equipment is connected to local hubs, making cabling and installation easy. It is also easy to extend the system for future needs.

Operators will control the system via a colour touch screen with an IntuVision™ - operators interface, that comes as standard in every Firefly Eximio™ System. IntuVision™ is easy to use and includes lots of features and functions, for example ApplicationView™ where a drawing of the zone will be shown on the screen. By using IntuVision™ - Desktop, the customer can even connect the system to an external computer, for example in the control room.

The Eximio™ System can be connected via an Ethernet cable or a modem, to enable remote help and service.

“It must be said, even in front of the supplier, that I would recommend any wood working factory not to save money on this type of equipment. I will install a Press-Guard™ system on all presses we have. It should be an industry standard.”

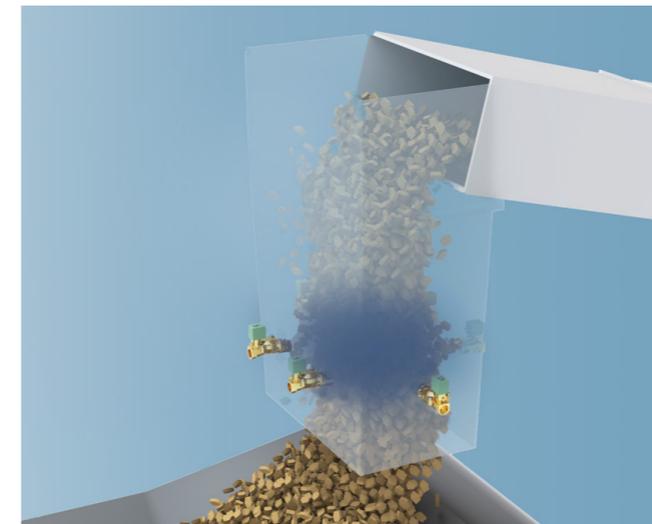
Mr. Piya Piyasombatkul, President of the Metro Group MDF and Particle Board producer in Thailand



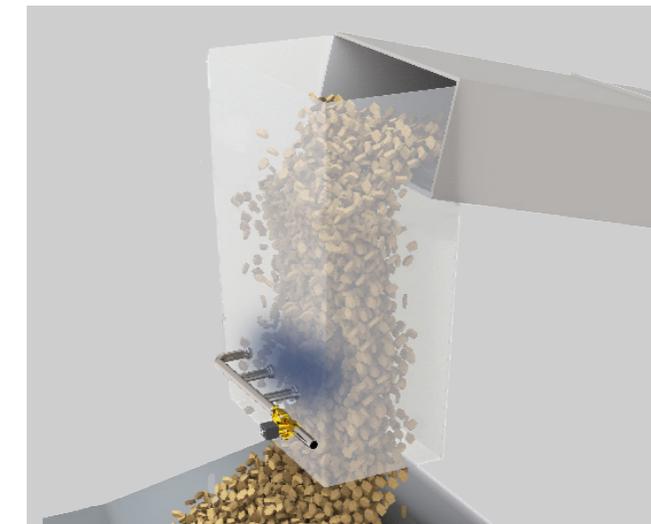
Quick Suppression System

The Firefly PressGuard® is a Quick Suppression System that consists of a detection- and water mist suppression system. The detection system is built upon a range of different detectors suitable for usage in different areas of a press, this to ensure the best possible accuracy and reaction time.

Firefly's Quick Suppression System system is designed for extremely fast detection and suppression of flames and fires in and around critical machinery. It operates with high performance flame detectors and efficient water mist suppression nozzles. The purpose of the Quick Suppression System is to detect and extinguish a fire quick enough to avoid or significantly reduce damages.



FIREFLY EXTINGUISHING SYSTEM



CONVENTIONAL EXTINGUISHING SYSTEM

PressGuard™ extinguishing

When conventional sprinklers are activated they can cause damages to the press due to the extensive use of water. A deluge of cold water on hot steel may result in a deformation for example of the steel belt or create electrical problems. After extinguishing with sprinklers, a time consuming clean-up follows due to the large amount of water used.

Suppress the fire with minimal interruption

High flows of compact material demand a powerful extinguishing which is able to penetrate large production flows. Firefly provides powerful extinguishing using full-cone water spray as opposed to conventional systems with extinguishing using small water droplets divided in the periphery.

The PressGuard™ uses water mist around the press. This is a safe and efficient suppression of fire with a minimum interruption of your process.

Harmless suppression is essential

When using water mist on a hot press, the water vaporises into steam. The steam effectively quenches the fire and gradually cools down the press.

The water mist has a specific droplet size especially designed for suppression on hot surfaces. If the droplets are too small they will be swept away by the thermal air flow. If they are too big, the risk for rapid cooling and structural damages of the press increases.



PressGuard™ detection

The design of a press manufacturing processes can be very different depending on machine types and technologies used. Hence, the risks must be evaluated and the solutions must be designed specifically for each process. Firefly has a wide range of detectors to meet specific requirements.

Open areas

The area around a press contains many different disturbances that can affect regular flame detectors. The unique detector used for flame detection around a press is a two-channel UV/IR detector. By combining IR and the UV wavelength, the detector will efficiently recognise flames but discriminate other energy sources such as lamps, sunlight and even arc welding.

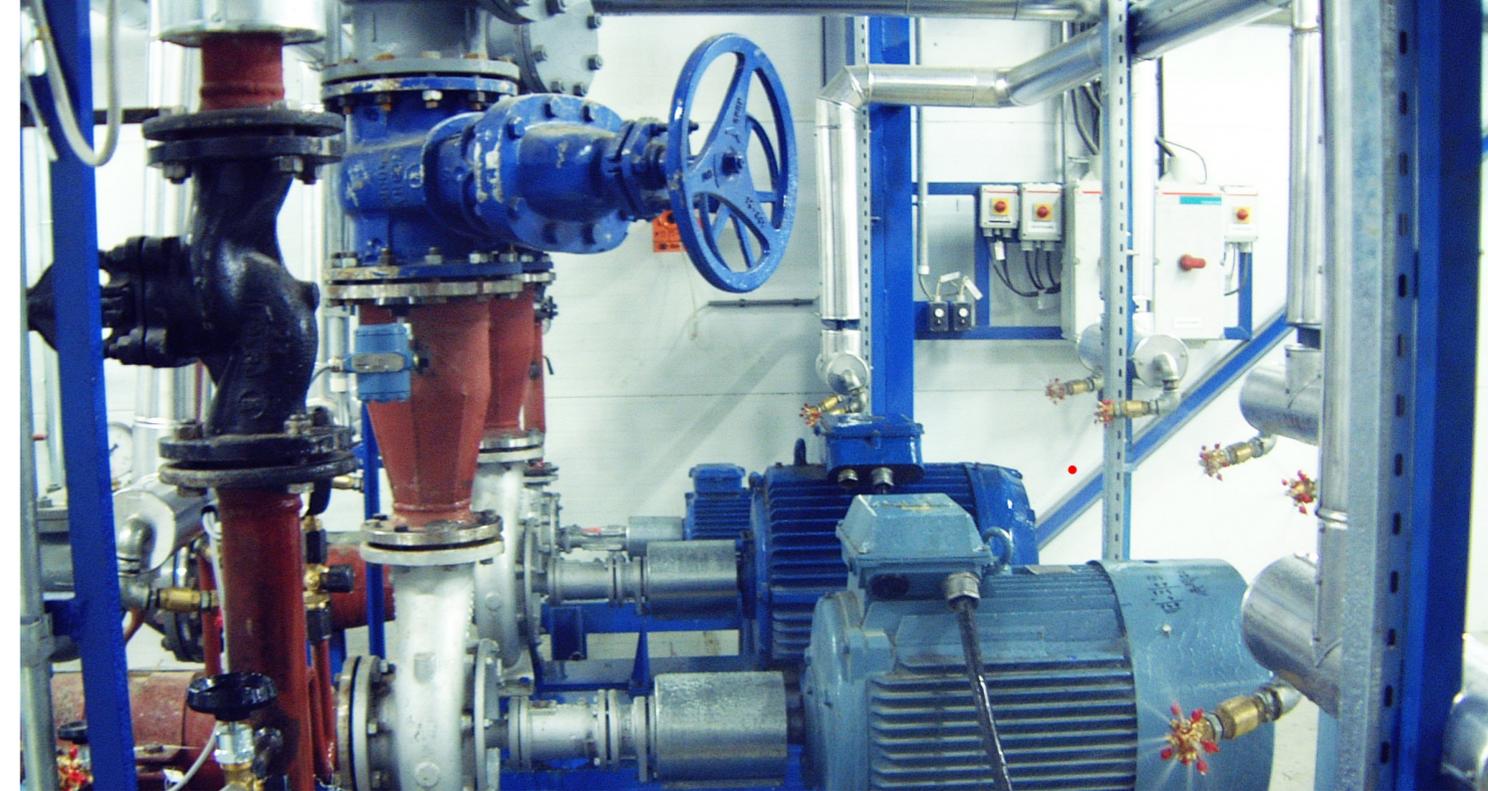
Enclosed volumes

In enclosed volumes such as heat tunnels, infeed and outfeed boxes, fire can easily become a problem if time is given for the fire to develop. Firefly uses fast acting IR flame detectors that will detect flames at a very early stage without the common problem of being daylight sensitive.

Hot particle detection

Firefly uses IR hot particle detectors in extraction ducts from the press. Detecting sparks and overheated material gives early warning of an incipient fire. This will also minimise the risk of fires in cyclones or in other process areas downstream in the extraction system.

Firefly's unique IR detectors are able to recognise sparks as well as hot particles from 250°C (482°F). Conventional detectors available on the market are unlikely to detect particles at temperatures below 700°C (1292°F).



Hot Oil Pump Room protection

A system combining flame detection and water mist is installed inside the hot oil pump room. Firefly's solution is designed to quickly indicate flames in the area around the hot oil pumps. At an early stage of a fire, the water mist system is activated to suppress the flames around the oil pumps and to minimise the risk of fire spreading into other areas.

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.

The company is noted on the OMX/NASDAQ First North Exchange in Stockholm, Sweden and holds national and international approvals on its products. In complement to worldwide sales, Firefly also provides its customers with field service, maintenance and a guaranteed long-term spare part supply.

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-GL, LCIE Bureau Veritas, Delta and RISE among others.

For more information on our certifications and approvals please visit: www.firefly.se/en/company/approvals

Do you have a question about the fire and explosion risk in your plant?
Contact us, we are happy to assist you with our knowledge and experience.

Firefly - Keeps you in production



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

Système de détection d'étincelles Firefly- Ver 1.2 | FR
© Firefly AB (2020)



ProDetec
Measure . Prevent . Protect . Control

ProDetec Pty.Ltd.
P. +61 (02) 9620 8700
F. +61 (02) 9620 8755
E. info@prodetec.com.au
A. 17/38 Powers Rd,
Seven Hills NSW 2147
www.prodetec.com.au