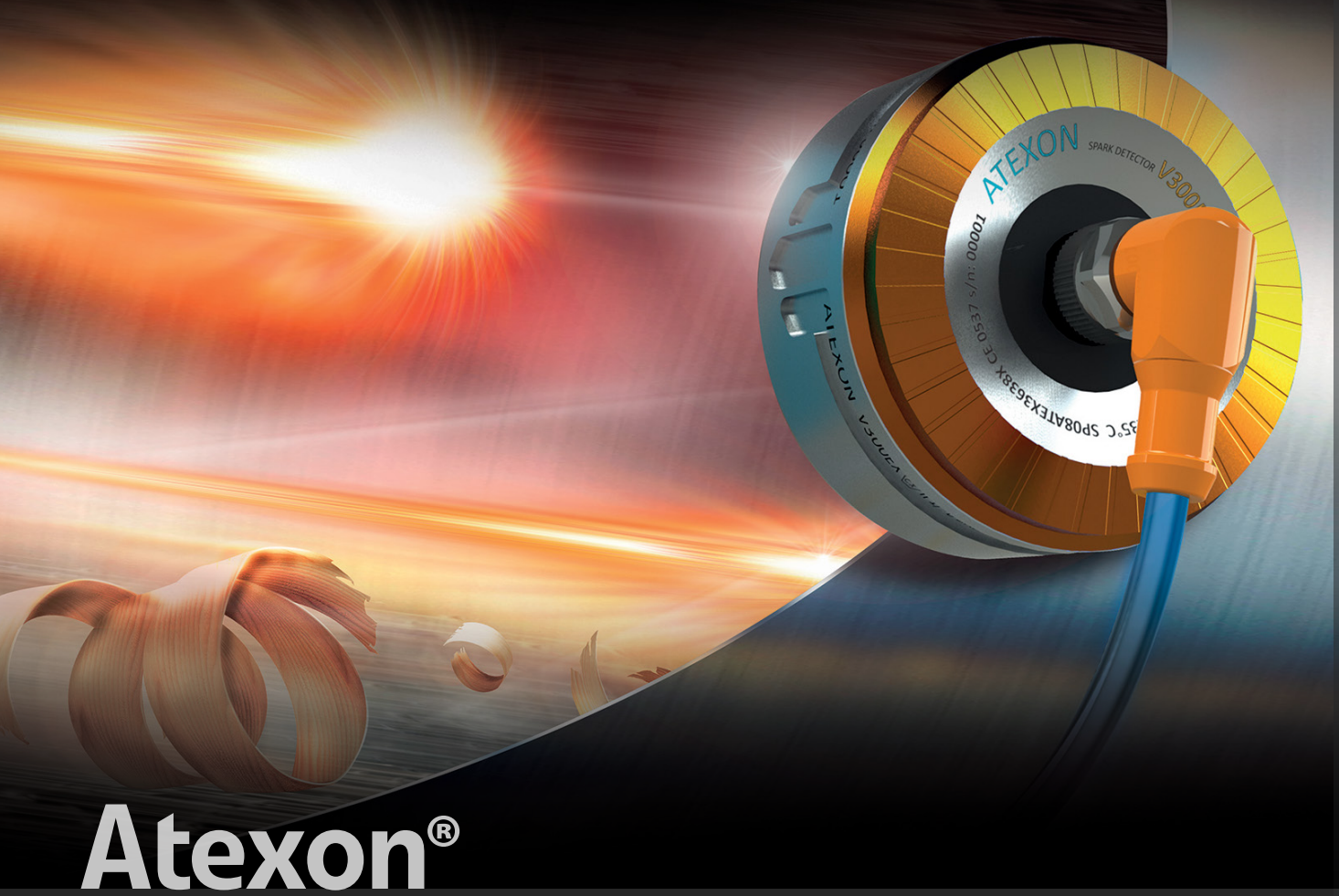


Atexon®

Automatic Spark Detection and Extinguishing System

catering marine industrial property data protection transport

Nobel Fire Systems has built on over 30 years of reliable, proven technology to develop fire suppression technologies aimed at special risk environments.

Underpinning the product development programme is a certain conviction that early fire detection and fast effective suppression saves lives, assets and the environment. The Company offers a complete range of services from risk based analysis, consultation and design through to distribution and installation. As no single suppression medium or application method covers all fire risk scenarios, our range of fire suppression systems covers all class of fires, and systems can be tailored to meet individual needs.

Atexon Spark Detection

www.nobel-fire-systems.com

Nobel fire systems

ATEXON®

ATEXON®

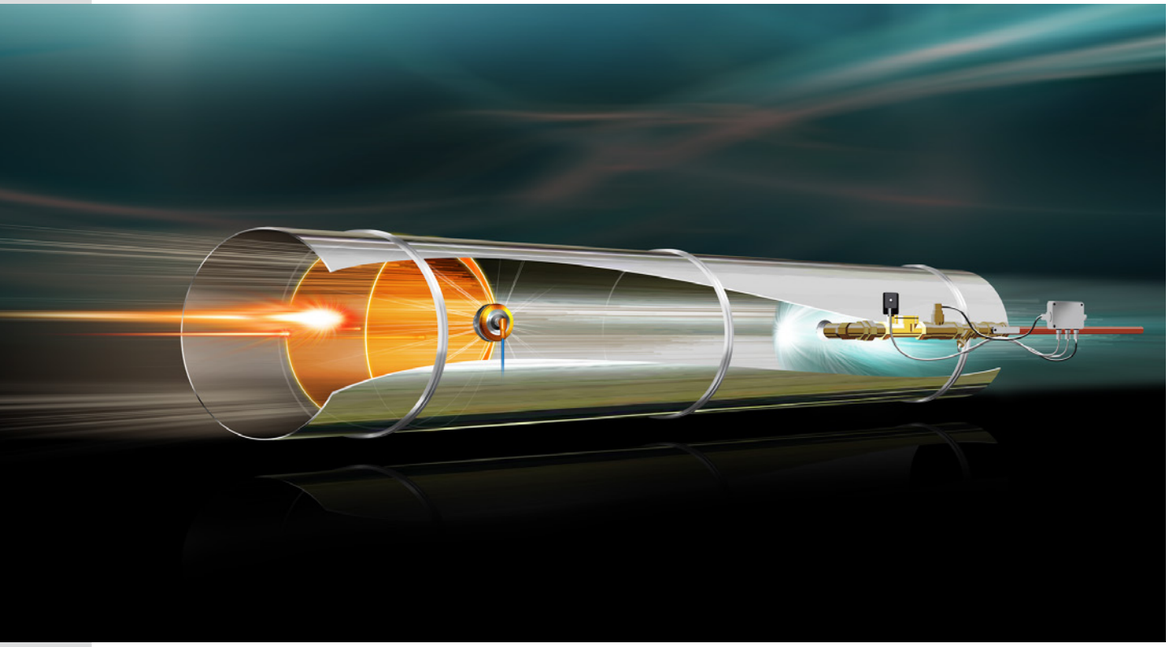
The Spark Detection System

Seldom does a new player enter a market armed with a combination of superior product quality and better economics, but that is exactly what **Atexon's** innovative technology can deliver against the competition. Nobel Fire Systems is proud to be the exclusive distributor in the UK.

Atexon® is an innovative spark detection and environmentally friendly extinguishing system for industrial processes, designed to stop ignition sources from getting into dust explosion hazardous areas, such as silos and filters. Extremely fast and sensitive spark detectors detect ignition sources in a millisecond and start the extinguishing agent.

Globally, Atexon® has fire proofed 2,500+ industrial processes over 15 years from several different industrial sectors that routinely handle explosive dust or powders. Customers include manufacturing companies that work in wood, metal, paper, food, bioenergy, recycling, textile and fibre-reinforced plastic industries.

Spark extinguishing is most commonly achieved using water but other potential solutions include watermist, carbon dioxide, condensed aerosols and/or various other electronically controlled devices.



Market Segments

Wood Panel
MDF, OSB, Particle Board and Plywood.

Woodworking
Flooring, Furniture and Sawmills.

Metal
Manufacturing, Processing and Metalworking.

Pulp and Paper
Packaging, Paper and Pulp.

Tissue
Tissue Converting & Manufacturing and Air-laid.

Hygiene
Nappies, Incontinence and Sanitary Pads.

Recycling
Metal, Paper, Sludge Drying, Waste and Wood.

Bioenergy
Heat & Power Plants and Pellet Production.

Power Generation
Coal, Power Plants, Turbines and Wind Mills.

Food
Animal Feed, Food Processing, Cacao, Cereal, Coffee, Grain and Sugar.

Tobacco
Cigarettes, Cigarette Filters, Moist Snuff and Tobacco Dryers.

Port Facilities
Ports & Logistics Terminals.

Other Market Segments:
Chemicals / Oil Refineries / Pharmaceutical / Powder Coating / Printing / Rubber and Plastics / Textiles

Protecting Dust Collection Systems

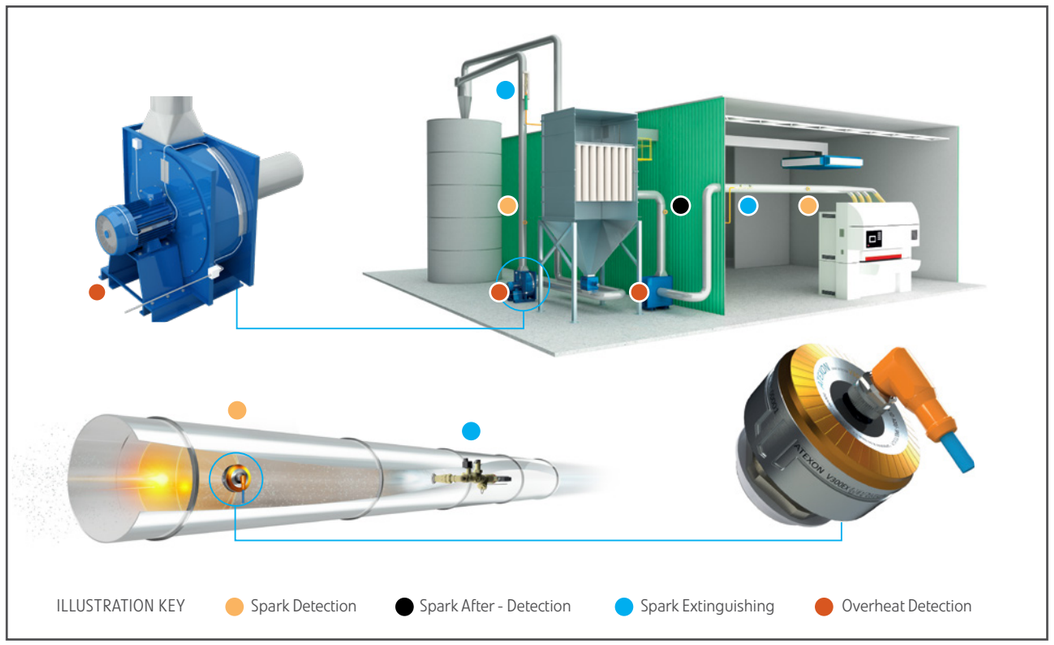
Dust collection systems are the archetypal application for spark detection protection. Explosive dust-air mixtures often form inside dust extraction systems. Such mixtures can be ignited by sparks, embers, hot objects or static electricity.

Usually these ignition sources are caused by a damaged blade, a wedged foreign object, resin collected on the fan blades or poor machine grounding. In the mechanical wood working industry, as many as half of all fires are caused by an overheated machine due to bearing failures or blocked ducts in the fan.

A dust explosion and burning material can advance into a dust silo or travel backwards through a return air duct into the production area. All dust collection system fires pose a grave danger to employees and usually cause a lengthy production outage. Large factory fires are also a concern for insurance companies, who indicate that filters, dust collection bins and silos are the areas at greatest risk.

Additional applications where Atexon® can provide protection include wood processing planers, sawmill trimmers, pellet pressing, crushers, and the conveyors and elevators found at ports that handle large volumes of material flow.

Unique Properties	Key Advantages
Decentralised, Bus-based system (Atexon VR18Z Control Panel)	Provides extra safety level by redundant operation for each protection area
	Efficient installation; control panel comes with 18 zones as standard, therefore no additional system costs with future expansion
	Installation is less costly owing to reduced cabling and labour
	Ease of use; no programming needed
	Ease of maintenance; all critical parts are at the protection zone (decentralised)
Wide viewing angle/range of detection (Patented 300EX model)	180˚ viewing angle
	Eliminates blind spots
	Ideal for high material flow applications
Broad detection spectrum (Patented 300EX model)	Detection of different ignition sources, including sparks and hot particles, i.e. detection of Visible, Infrared and Near Infrared
Superior detector design	Small and durable detector; vibration insensitive, housing made of stainless steel therefore less abrasion and greater protection of the lens window
	Ease of installation; no welding necessary
	Ease of maintenance; no tools needed
Superior water extinguishing system	Water flow monitoring, water temperature monitoring and ball valve monitoring
	Fast, spring-loaded water nozzles
Fan overheat monitoring (measures over 3-4 metres)	Eliminates other risk sources
	More reliable than single point temperature measurement
	Can be used for any other equipment
Stainless steel tanks	Long life
	Lower product life time costs
High quality materials	Extremely low maintenance costs
	Long product life time
	Automatic system self-tests



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Nobel Fire Systems Ltd
7 Quest Park, Moss Hall Road
Heywood Lancashire BL9 7JZ
United Kingdom

T +44 (0)1706 625 777
F +44 (0)1706 625 325
E sales@nobel-fire-systems.com
www.nobel-fire-systems.com

Nobel fire systems

ATEXON®
IEP TECHNOLOGIES
HOERBIGER Safety Solutions