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.
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.
- Tissue: Tissue Converting & Manufacturing and Air-laid.
- Power Generation: Coal, Power Plants, Turbines and Wind Mills.
- Food: Animal Feed, Food Processing, Cocoa, 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
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.

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.