



• PB • OSB • MDF



SPARK DETECTING AND EXTINGUISHING SYSTEM

SDS-4

IMMEDIATE SPARK DETECTION TO REDUCE FIRE RISKS

The SDS series spark detection and extinguishing system has been designed and developed to achieve spark detection in real time in all those environments where there is risk of fire (conveyors, filters, silos, screens etc.).

The system consists of an I/O module that receives signals from the sensors and controls the opening of the extinguishing valves.

The detectors are sensitive to infrared radiation and have been purposely studied for use in pneumatic conveying systems. Fibre optic sensors may be used in extremely hot environments, consenting the control of conveyors where temperatures can be as high as 290 °C. The sensor auto test ensures that each sensor is functioning properly.

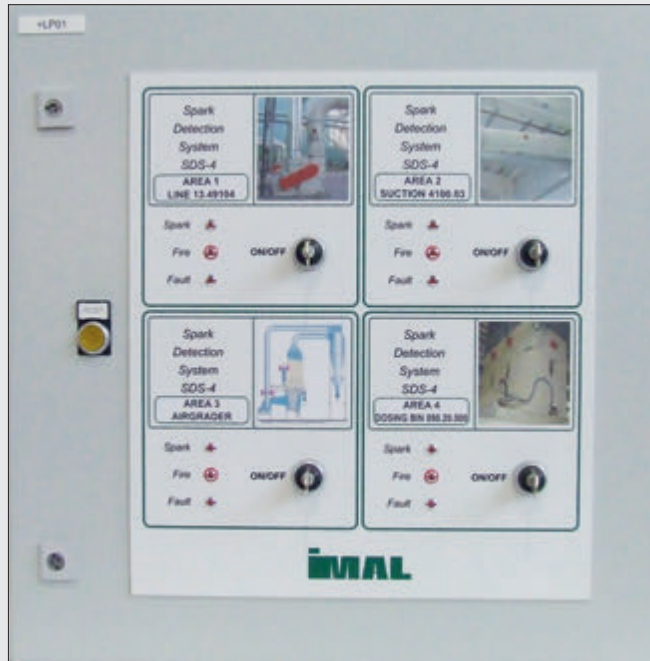
It is possible to disable a single area without affecting the other extinguishing areas.

The extinguishing nozzles spray pressurized water into the conveyor, and are located downstream of the spark sensors, this allows each spark to be extinguished with a timed spray, thus reducing the amount of water required and minimizing damage to production. If the production plant does not have pressurized water (about 7 bar), IMAL may supply a pump and tank system in order to reach and maintain operating pressure during functioning.

MAIN FEATURES

The SDS spark detectors conform to the requirements of ATEX directive 2014/34/UE for use as intended in potentially explosive atmospheres due to the presence of combustible dust (zones 20, 21 or 22) with EU-type Examination Certificate.

- Compliance with European Standards EN 13463-1; EN 60079-0; EN60079-31
- Extremely rapid system response
- Efficient functioning irrespective of temperature or light present in the ducts controlled
- Easy to install and use
- Set up configuration by computer
- Self-test function to search for breakdowns or failures
- Spark sensors do not require calibration.



AREA 1

up to 4 spark detectors

up to 4 extinguishing nozzles with electrovalves

AREA 2

up to 4 spark detectors

up to 4 extinguishing nozzles with electrovalves

AREA 3

up to 4 spark detectors

up to 4 extinguishing nozzles with electrovalves

AREA 4

up to 4 spark detectors

up to 4 extinguishing nozzles with electrovalves