Car Show Room, Poland

Project Outline

Contractor	D+H Polska
Location	Poland
Sector	Retail
Disciplines Covered	Fire Alarm Aspirating Detection

Project Overview

Jaguar, BMW and Land Rover – three of the finest brands under one roof. A Polish contractor approached our network partner D+H Polska to install a compliant fire alarm system within a modern car showroom.

The car showroom would be home to prestigious high-value cars meaning the fire alarm system would protect high-value property. In addition to the exhibition area, the building has a car wash, welding bays, and vehicle repair workshop, so different environmental constraints would also be considered. Hence, a robust and reliable solution is critical.

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The Challenge

As the use of the building was to be home to some prestigious high-value cars combined with elements of high fire risk areas, the project calls for a specialist type of system. Various areas are home to high temperature and humidity, where airborne dust can lead to false alarms. The system must offer an early warning of fire and reduce any risks of false alarms due to the challenging indoor conditions while meeting the country-specific fire regulations.

The Solution

Fire Alarm – A fully compliant fire alarm system protects the building meeting the country fire regulations and client's specification requirements. The fire alarm system installed features Protec 6000PLUS series automatic smoke detection, manual call points and alarm devices installed within the car showroom and garage facility.

Aspirating Detection - The car showroom and garage facility boasts a series of Protec's ProPoint PLUS aspiration smoke detectors. The ProPoint PLUS aspirating detectors utilise aspirating detection technology for very early warnings of smoke.

Within the garage/workshop areas, ProPoint PLUS proves to be the ideal solution to the environmental constraints. The Scatter Chamber Detection (SCD) is superb at differentiating between different air particles, be it air, dust, exhaust fumes or smoke. The SCD technology drastically reduces the chance of a false alarm compared to a point detection alternative.

Independent and integrated alarm decision-making technology applies complex algorithms to determine a real fire or a false alarm scenario. The air is drawn in by the aspirating detector; then, optical components analyses the various particle to confirm if the particle is a smoke particle. If the ProPoint PLUS proves a smoke particle, it puts the associated fire alarm system into a fire condition.

The benefit of aspirating detection over that of the traditional type of smoke detection is the maintenance of an aspirating detector is less labour intensive. Only the detector in an aspirating system requires to be maintained rather than each detector head in a point detection type system. An aspirating system benefits from the detector being mounted at mounted at a serviceable height on a wall unlike a point detector which is mounted on a ceiling, it reduces the need for a specialist plant for repair or replace devices which can prove troublesome in a busy workshop or garage scenario.

The Standards Met

All Protec Fire Detection PLC equipment in the Jaguar, BMW and Land Rover showroom is certified to EN 54 and carry the European standard CE mark. Holding various worldwide accreditations across our product range ensures that Protec equipment is an ideal life safety solution for projects across Europe.