Patol cable at heart of fire safety for new solvent recovery facility

A new solvent recovery unit at one of the world’s largest multinational pharmaceutical companies is to be protected from the threat of fire by a detection system from Patol.

Patol have been awarded the contract to manufacture, supply and commission an analogue linear heat detection cable (LHDC) fire detection system for the new unit at the Avlon site of AstraZeneca, a FTSE 100 company and the world’s fifth largest manufacturer of prescription drugs.

The contract for Patol was from the Boulting Group and is part of a 12 month project awarded to the multi-disciplined engineering solutions provider to install the new solvent recovery process at the site near Bristol, the manufacturing home of the Active Pharmaceutical Ingredients (APIs) for two of AstraZeneca’s key medicines.

Solvents are widely used in the drugs manufacturing process. Given their highly flammable nature, providing effective early warning of overheating or fire was a critical requirement in the construction of the solvent recovery unit. Patol’s LHDC is both chemically and UV stable, featuring a nylon over sheath, making it particularly suited for use in external hazardous environments. The LHDC is installed at each level of the unit’s steel skid which reaches a height of 19 metres. Included within the system is an LDM-519-LP controller which is SIL 2 approved. Located in the solvent recovery unit’s control room, the controller has an ATEX approved I.S. barrier to further ensure the safety of the detection system for a hazardous area. The controller monitors a zonal length of the analogue re-settable LHDC, generating an alarm output to the site’s fire alarm system if a short length of the cable is elevated in temperature above the set trip point.

The new unit is part of an ongoing environmental improvement programme by AstraZeneca in which the company has set targets to increase the amount of waste sent for reuse, recycling and material /more
recovery and to reduce the amount of non-hazardous waste sent to landfill. The Bristol site is one of eight AstraZeneca facilities across the UK which collectively employ around 6,700 people in research and development, manufacturing and supply, sales and marketing, environmental research and biologics.

Kelvin Miller is Sales Director at fire safety equipment and systems manufacturer Patol and recognises this as an excellent example of the market development potential for LHDC, particularly in hazardous environments. “Currently the majority of Patol’s sales are in export, mainly outside Europe, but opportunities now exist for developing business within Europe, including the UK. One of the main areas of significant growth is the power generation market where Patol are already particularly strong. As the transition continues from coal fired power stations to bio-mass based facilities, there are significant opportunities for us to supply our linear heat detecting systems and IR-Heat detectors. Biomass power plants are dusty environments and Patol’s systems are approved to the two ATEX European Directives applicable to explosive atmospheres in the working environment. This project for AstraZeneca is another example of how LHDC provides effective fire detection in hazardous environments which would otherwise prove difficult to protect with other technologies.”