



POWER GENERATION

Vital fire protection for critical power generation infrastructure

Power stations and power generation facilities incorporate a wide range of critical and ancillary services and buildings to ensure continued operations and plant uptime. Away from the primary power circuit, boiler and turbine system, vital facilities such as; Sub stations, cable voids, control rooms, data communications and back systems must be effectively protected against fire risk. Selecting the right solution to protect this critical plant infrastructure is key.

Challenge

Protecting; Sub stations, electrical switch rooms, control rooms, data communications and other critical areas.

Solution

SAPPHIRE 25 or 42 bar systems.

Application

Protecting critical operational infrastructure in cramped conditions with SAPPHIRE systems.

The SAPPHIRE system is an environmentally friendly clean agent system, with zero ozone depletion (ODP) and negligible global warming potential (GWP). It uses 3M™ Novec™ 1230 Fire Protection Fluid, a clear, odourless fluid that vaporises upon discharge and absorbs heat to suppress the fire rapidly. This results in less damage to critical equipment, facilitating a much shorter recovery time, and therefore reduced downtime. Safe for use in occupied areas, the SAPPHIRE system protects occupants, critical infrastructure and delivers effective asset protection for power generation facilities.

The 42 bar SAPPHIRE system offers greater flexibility in layout as the higher pressure systems allows for containers to be placed further from the hazard area and with the additional option of selector valves to protect multiple areas from one bank of containers. Further benefits in using a higher pressure system are the opportunity to reduce pipe size and combined this with the ability to design a systems around selector valves, space that is often at a premium can be used for more valuable purposes.

SAPPHIRE 42 bar systems are LPCB and VdS approved and carry several Marine approvals. 25 bar systems carry all major approvals including UL, FM, LPCB, VdS, CNPP as well as Marine approvals. The systems can be designed to meet the requirements of EN 15004, ISO 14520 and NFPA 2001 and components are approved according to EN 12094 to ensure the highest quality fire suppression system.