Installation of Fire Shutters in Würzburg University Hospital

Fire protection is one of the fundamental requirements a public building has to fulfil. This applies particularly to hospitals.

Combustible substances are resent in every room, irrespective of this type, purpose and current use. So the only protective measure that can be taken is to design the installations surrounding an endargered room in such a way that fire is hinderes from spreading.

For this reason, fire shutters were installed in the new surgical departments building of the University Hospital in Würzburg (South Germany), using a fire-protection mortar certified in accordance with the respective DIN Standard.

Thanks to a modern air-conditioning and ventilating system, the surgical departments of the hospital could be connected to all necessary supply lines through only one central supply shaft running vertically through the building.

However, suitable technical solutions had to be found to prevent flames and smoke from spreading through this shaft in the case of a fire. When a ventilation duct is connected to several areas that have to be protected by fire shutters. These shutters, equipped with a thermal release mechanism, prevent fire and harmful gases from spreading. Schmück GmbH, based in Arnshausen near Würzburg, was charged with the installation of the fire shutters. After sonsulting PFT partner trader Stöcker, Mainstockheim, and PFT field engineer Otto Iff, Schmück performed this task with the aid of a PFT MONOJET 3.35 mixing pump in a very short time.

A clean building site: Bag material is fed directly to the hopper of the PFT MONOJET 3.35, mixed with water and pumped to the site of application.

The special fire-protection mortar Promastop, manufactures by Promat, was mixed in this continuously working type of mixing pumps. A PFT JETSET bonfing gun was used to embed the fire shutters in the masonry accurately to size. The PFT TWISTER D 4–3 spiral pump within the mixing pump provided the desired conveying capacity of approx. 12 l/min, which considerably facilitated the exact installation of the shutters using the pasty fire-protection mortar.

Thanks to the efficient use of a PFT mixing pump, the fire shutters could quickly be installed without causing excessing soiling or hindering the other building activities.

With the aid of the PFT JETSET bonding gun, difficult-to-reach areas could be easily be filled with fire-protection mortar.

Fire shutters in the supply shaft of Würzburg University Hospital – a minor investment giving long-lasting protection to a major investment.