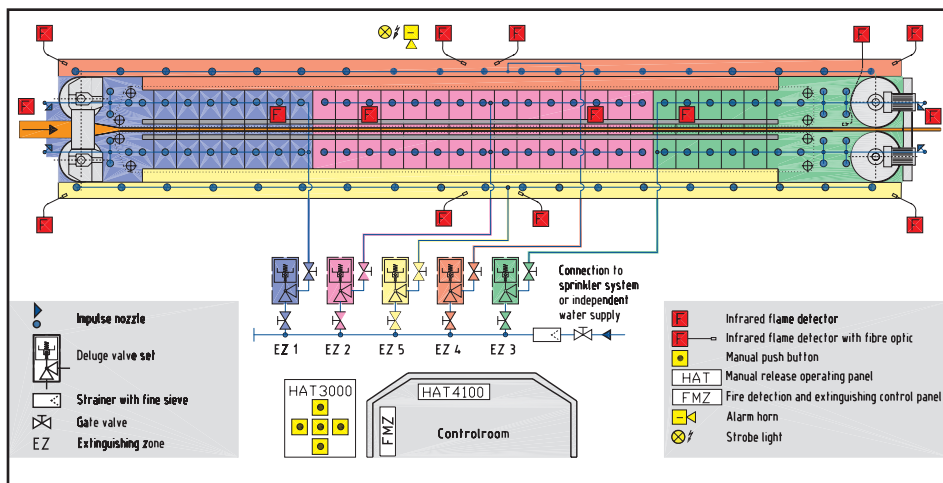


Showcase Of Suppliers For Broken Bow OSB Plant

Fire Protection Engineered To Save Your Press



In the past, fire protection for continuous and multi-opening board presses has been less than adequate. Sprinkler systems high above the press are designed to protect the building, but are rarely effective for protection of the Press. The good news is that finally an effective fire protection system has been specifically engineered by Minimax of Germany to protect board Presses and other large objects from fire with relatively little down time or clean-up required.

Press fires can originate from a number of sources during the manufacture of OSB, particleboard, MDF and other board products. Burning particles imported from upstream processing of the wood, friction, material build-up or hot oil leaks are generally the source. Operator errors have also been known to cause fires.

Huber Engineered Woods in Broken Bow, Oklahoma, manufactures OSB and operates the world's longest continuous board press, which is a ContiRoll® Press from Siempelkamp. They chose the Minifog® Fine Water Spray System from Minimax to detect and suppress any fires that may occur at the press. The Minifog System is a unique, technologically advanced fire protection system, which has the distinct advantage of being able to quell a press fire using water as an extinguishing agent without causing damage to the press such as thermal distortion due to rapid cooling.

The press is basically broken down into

five or six independent protection zones. Other zones of protection might include press exhaust systems, press pits, hot oil tunnels and pump rooms. The typical five press zones are the Press Inlet, Middle Section, Press Outlet, Upper and Lower Heat Tunnels. In this way, a press fire can be detected and suppressed within a particular zone before it can spread further. Because the System protects the press in sections, the water requirement is minimized, as is potential damage to the press. Total water requirement for the Minifog System at Broken Bow is less than 1100 liters per minute per zone.

The Minifog System at Broken Bow features thirty-eight FUX 3200 L1 fast acting flame detectors, which view the upper and lower sections of the press, as well as sections of the press inlet and outlet utilizing a fiber optic probe so that they can function in the high temperature environment. In addition, twenty FMX 3511 flame detectors provide supervision of the press sides so that all angles of the press are carefully monitored. All of the flame detectors feature a lens integrity check so that if a detector lens becomes obscured by oil or dust, the control panel will sound an alarm and maintenance personnel can take immediate corrective action. Once a fire is detected, the system activates the water extinguishment in the zone affected.

Specifically designed Minifog nozzles emit a very small droplet size of water

(.15mm) in a full cone spray pattern. Research has determined the precise size the droplet should be to create a double extinguishing effect. The tiny droplets quickly turn into steam expanding to 1600 times their normal size so the fire is cooled considerably and smothered instead of being deluged with water. A total of 580 Minifog nozzles are strategically located throughout the Siempelkamp Press. It is crucial to keep the nozzles clean. Each nozzle is protected by a small strainer to catch debris in the water and an attached cap, which protects the nozzle from material build-up on the outside. During activation, water pressure removes the cap which is secured by a lanyard for easy re-installation later. Extinguishment can also be activated via manual release stations positioned strategically around the press. In addition, the system can also be activated manually by plant personnel who may wish to override the automatic function of the system in the event of an emergency. This is done by simply opening the appropriate valve stations.

The entire Minifog system is monitored in the control room by the FMZ 4100 GAB 128 Control Panel capable of monitoring up to 64 independent zones of fire protection. The system also features a 24 hour battery back-up in case of power outages. More than 90 presses are protected by Minifog worldwide providing peace of mind.

The Minifog® Fine Water Spray System is manufactured by Minimax in Bad Oldesloe Germany, celebrating one hundred years of fire protection experience. Minimax is a leader in the research and development of innovative fire protection systems including the FLAMEX® Spark Detection and Extinguishing System for the protection of pneumatic conveying systems from fire hazards. Minimax products are distributed in North America by Flamex, Inc. located in Greensboro North Carolina.

For more information, please contact Ole M. Sorensen of Flamex, Inc. at 336-299-2933.