



## CASE STUDY: FIRE SUPPRESSION SYSTEM – OSB WOOD MILL

### APPLICATION: FORKLIFT

Equipment fires can be devastating to an operation. In some cases, like in this wood mill, the risk of fire is higher because of the flammable nature of materials within the environment in which the equipment is operating. To combat this risk, organizations across the globe are using vehicle fire suppression systems (FSS) – the only reliable method to quickly and efficiently extinguish a fire when it does inevitably occur.

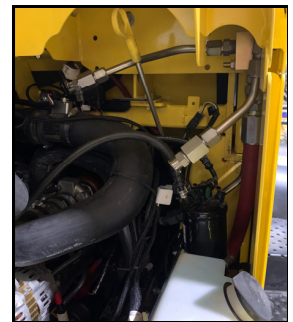
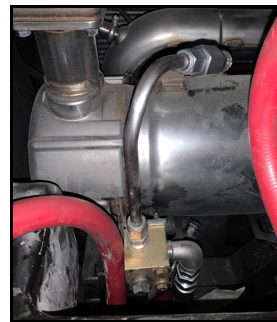
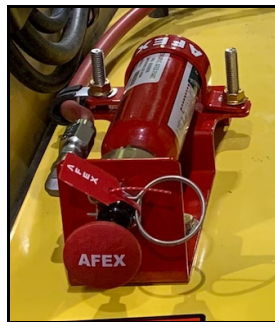
### THE FLO SOLUTION

Fire-detecting linear wire is placed around the forklift. When the high heat of a fire penetrates the linear wire, a signal is sent to the control panel in the cab. The control panel alerts the driver to quickly evacuate the forklift and at the same time, automatically initiates the electric actuator, which discharges the fire-fighting agent inside the onboard tank and sends it through a tubing distribution network. At the end of the distribution network, the dry chemical agent is disbursed into the forklift's protected areas via nozzles aimed at its high-hazard components, like starter, fuel filter, batteries, alternator, transmission and hydraulics, to extinguish the fire quickly and efficiently.



#### Fire Suppression System Features:

- Cone spray nozzles are used to provide protected areas with a broad distribution of a dry chemical powder to extinguish a fire quickly and efficiently.
- The automatic discharge nature of the FSS eliminates the forklift operator's involvement in discharging the system manually, allowing him to exit the machine safely and promptly.
- 2 manual actuators, 1 inside of the cab and 1 outside, are also included as a back-up and for ease of system activation.
- A 30lb tank comes complete with dry chemical agent, gas tube, cap, and bursting disc. The tank is non-pressurized, with the introduction of nitrogen gas for pressurization at the time of actuation. A fitted mounting bracket for the tank and two metal straps keeps the tank properly secured during operation of the forklift.
- Each nitrogen cartridge consists of 99.99% nitrogen with a dew point of -73 °C, guaranteeing pressurization when actuation of the system is required during the coldest months.
- Spring loaded, hinged caps at the nozzle openings block foreign materials that could possibly clog the nozzle and prevent or diminish the system discharge.
- Stainless steel tubing and hydraulic hose is used for the supply lines that distribute the dry chemical agent, as well as for system actuation and agent tank pressurization.
- The firing mechanism houses the electric actuator and nitrogen cartridge and includes a manual knob as a secondary method of discharging the system. Spring loaded check valves control the direction of the nitrogen gas.



**For Fire Suppression Solutions,  
GO WITH THE FLO!**

**FLO Components Ltd.,** 50 Admiral Blvd., Mississauga, ON, L5T 2W1  
1.800.668.5458 • sales@flocomponents.com • www.flocomponents.com