A World Leading Pulp and Paper Company Installs Object Detection Systems to Mitigate Lumber Yard Accidents
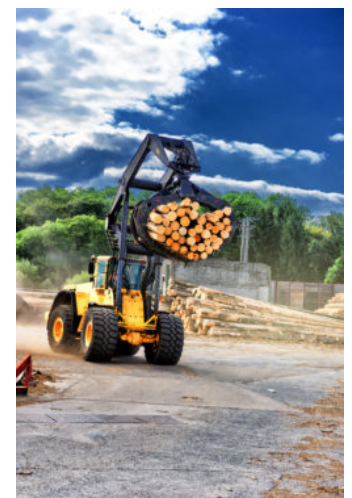

PRECO Electronics® – Object Detection System Mitigates Lumber Yard Accidents

When a world leading lumber mill saw the repair cost of a collision between a front loader and a truck, they started looking for a way to prevent such accidents. Their immediate solution was to adapt a radar detection sensor from a passenger vehicle. When they saw that the technology might work on heavy-duty equipment, they set out to find an industrial-grade solution, and found PRECO.

A previous incident at one of the company's lumber yards took place when a front loader filled with full-length logs backed into a truck. After it picked up a load of logs, it started moving in reverse and backed into a truck causing about $30,000 in repairs. That prompted them to start looking for an object detection system to install on the loaders so that wouldn't happen again.

An Ad Hoc Solution Leads to the Real Thing

Starting with a prototype of a blind spot detection system from a car, they kept searching online because the team believed there had to be a system available to heavy-duty industries. That's how they found out about PRECO's PreView Sentry™ radar sensors.

After a successful pilot, installation of PRECO's systems began on equipment at the mill site, and continued on to another nearby yard.

Integrating Cameras to Radar to Improve Operator Vision

The equipment and loads at the yard are different than at the mill because the facility deals mainly with green lumber in eight-foot lengths instead of full-length trees. As such, the site has many more forklifts and fewer front-end loaders but the work is much the same.

At the yard, they use a lot of forklifts to move bundles of studs around. They also use some front-end loaders to unload what amount to the leftovers from the plywood-manufacturing process that takes place in a different part of the plant. These loads usually consist of 8-foot-long round logs that can be anywhere from 4-6 inches in diameter.

Because of the distance equipment operators at the site must travel—in reverse—to move loads around the mill, they have also equipped some of the large forklifts with PRECO's PreView Plus systems, which integrate a camera and monitor with PRECO's radar sensors to provide equipment operators with a single visual point they can use to monitor the space around them. (PreView Plus supports up to 4 cameras and 24 sensors for 360° vehicle coverage.)

The large forklifts go from one side of the mill to the other in reverse hauling these large packets of studs. Having the cameras mounted on the back of the equipment gives the operators a 180-degree view of what's ahead as they back up. Giving operators just a little extra warning gives them time to slow down, stop, or maneuver their way out of danger.

Object Detection Systems Suitable for Small Space

Loading LumberThey have also equipped smaller compact loaders with PRECO's PreView Sentry™ radar-based collision avoidance sensors.

The company agrees that if there are a lot of blind spots on the equipment, then you should definitely have some kind of objection detection system. Even if an operator is diligently paying attention to everything that's around them, they might miss something and get into trouble. And as they found out, if you can avoid even one accident, the PRECO systems pays for themselves many times over.

Summary of Benefits:

- Significant reduction in blind spot backing incidents at lumber yards
- Immediate return on investment (ROI) after installing PRECO's collision avoidance systems
- PRECO's Object Detection Systems provide operators with audible and visual alerts to create better situational awareness

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