



LifeSense intelligently monitors hydraulic hose conditions and detects failure-related events.

Insurance policy

Preventative measures taken by the team at The Greenbrier reduces the risk of hydraulic hose failure.

The Greenbrier staff uses mowers and rollers to maintain its immaculate greens early in the Sulphur Springs, W. Va., morning while it is still dark and the bentgrass turf is covered in dew.

However, the early hours and light conditions make it a challenge to notice a hydraulic hose failure, leaving the course open to potential damage.

Turf equipment is outfitted with many hydraulic hoses in hard-to-see places – all critical to smooth operation and operator ease. Yet if one of the hoses fails unexpectedly during a course's turf care routine and

goes unnoticed, it can disrupt the operation and create significant costs.

The resulting fluid spill can cause extensive turf damage, including the possibility of a course having to replace a green and close for repair – a costly consequence. To avoid unexpected hose failure, superintendents frequently change hydraulic hoses on equipment before it is necessary.

As part of The Greenbrier's preventive maintenance program, it conducted a comprehensive monthly review of its turf care equipment, including hydraulic hose inspection.

Staff visually checked indi-

vidual hoses for signs of failure. When a potential problem was identified, the hoses would be replaced. Even with this regimen, The Greenbrier was not 100 percent certain it was catching every problematic hose.

SOLUTION

To help The Greenbrier achieve its goal of more efficient course maintenance and ensure ideal playing conditions, Eaton recommended its LifeSense hydraulic hose condition monitoring system for the resort's greens rollers. LifeSense intelligently monitors hydraulic hose conditions and detects

failure-related events to provide advance notification that a hose is approaching the end of its useful life.

During the winter of 2013, each of The Greenbrier's three greens rollers had select hydraulic hoses replaced with LifeSense. Each hose is equipped with a sensor that monitors hose conditions via electrical signals. These signals then transmit to a diagnostic unit that interprets the data. If the system identifies a compromised hose, an alert is generated to warn greens keepers.

"This is one of those solutions you hope you never have to use, much like an insurance policy," says Kelly Shumate, director of golf course maintenance at The Greenbrier. "LifeSense provides a total sense of security that even with our strict and regular maintenance on the rollers, if we miss something, it will alert us before we have a big problem on our hands."

RESULTS

The Greenbrier's course managers have been satisfied with Eaton's LifeSense system, which reinforces its sound maintenance practices and gives them enhanced confidence that greens will remain pristine just as its players have come to expect.

"With LifeSense, course superintendents gain peace of mind knowing their hydraulic hoses are constantly monitored, providing assurance that they are taking steps to avoid turf damage and unexpected and expensive repairs," says Kelly Moore-Floyd, Eaton product manager. "We are pleased The Greenbrier is happy with LifeSense thus a win for them and for Eaton." **GCI**