Success Story: The Greenbrier®

Eaton helps The Greenbrier achieve maintenance efficiency and peace of mind

Location:
White Sulphur Springs, West Virginia

Segment:
Golf

Challenge:
The challenge was to identify hydraulic hoses on its greens rollers that were failing before the equipment would get to the golf courses and potentially cause extensive, costly damage to the greens.

Solution:
LifeSense® Hydraulic Hose Condition Monitoring System

Results:
The Greenbrier has been extremely satisfied with Eaton’s LifeSense system, reinforcing its sound maintenance practices and providing enhanced confidence that its greens will remain pristine just as its players have come to expect.

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“‘This is one of those solutions that you hope you never have to use, much like an insurance policy. LifeSense provides a total sense of security...’”
Kelly Shumate, Director of Golf Course Maintenance at The Greenbrier

Background
Since The Greenbrier was established in 1778 in White Sulphur Springs, West Virginia, it has become a National Historic Landmark and an award-winning resort. When West Virginia entrepreneur Jim Justice bought The Greenbrier in 2009, he recognized that the future profitability of the world-renowned resort hinged on its ability to provide the ultimate guest experience while simultaneously implementing reduced costs and improved efficiency.

Surrounded by the Allegheny Mountains, The Greenbrier sits on 6,759 acres. With 710 rooms, including 33 suites and 96 guest and estate houses, The Greenbrier has 10 lobbies, more than 40 meeting rooms, a complete conference center facility, spa, gun club, and four golf courses.

The Greenbrier recognizes that one of the greatest assets of its golf courses is the greens. Keeping putting greens pristine means meticulously caring for turf equipment, including greens mowers and rollers.

Challenge
At The Greenbrier, staff uses mowers and rollers to maintain its immaculate greens early in the morning while it is still dark and the bent grass turf is covered in dew. The early hours and light conditions make it a challenge for equipment operators to notice if a hydraulic hose failure occurs, leaving the course open to potential damage of its most prized real estate.

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—in terms of dollars and reputation.

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, many 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, which included hydraulic hose inspection.

Staff visually checked individual 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, so it looked to Eaton for a solution.

Solution
To help The Greenbrier achieve its goal of more efficient course maintenance and ensure guests enjoy perfect 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 early 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 continuously monitors hose conditions via electrical signals. These signals then transmit to a diagnostic unit that interprets the data. If the system identifies a hose that has been compromised, an alert is generated to warn greens keepers.

“We are always working to provide innovative solutions that will push the boundaries of what is possible and technology that meets customer needs head on. LifeSense is a game changer for golf course maintenance.”

Kelly Moore-Floyd, Eaton Product Manager

Results
The Greenbrier’s course managers have been extremely 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.

“We are always working to provide innovative solutions that will push the boundaries of what is possible and technology that meets customer needs head on. LifeSense is a game changer for golf course maintenance,” said Kelly Moore-Floyd, Eaton product manager. “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. We are pleased The Greenbrier is happy with LifeSense thus a win for them and for Eaton.”