GateSync® & Solaris®

A GREX Solution

Synchronized Gate System
The right amount of ballast. Right where it’s needed.

Streamline ballast placement and save time, materials and capital.

The GateSync® synchronized gate system and Solaris® remote controlled gates work in tandem to automate your ballast delivery. Together they take labor out of the ballast placement process, minimize the amount of ballast you need to place and cut down on the amount of track time you need to devote to the process.

The brain behind this automated ballast placement system is the patented GateSync software solution. GateSync takes data from BallastSaver® automated ballast assessments and uses it to precisely synchronize the opening and closing of gates on your ballast cars, delivering ballast exactly where it’s needed. From 2 cars to 100, GateSync provides continuous ballast unloading at up to 10 miles per hour, making light work of even the longest stretches of ballast unloading. GateSync can even communicate with diagnostic sensors on each car to monitor proper offloading and notify the operator if anomalies occur.

If you have cars that are manually operated, Solaris provides a quick and easy upgrade to make them GateSync compatible. The solar-powered electric over hydraulic conversion kit is easy to install and highly reliable. You can also operate Solaris by joystick actuators or by handheld remote control to boost productivity for a wide range of other applications. Plus, adding remote capability to your car also enhances safety by allowing workers to remain farther away from the gates as they’re unloading.

Utilizing a BallastSaver scan, GateSync allows you to place ballast right where it’s needed to keep your rails running smoothly.

- Place ballast with pinpoint accuracy
- Use only the ballast you need

GateSync and Solaris leverage your existing equipment and manpower investments, allowing you to work more efficiently.

- Utilize existing ballast cars
- Only one operator required

Two advanced technologies. One integrated solution.

GateSync delivers ballast with highest degrees of both accuracy and flexibility. The system bases offloading on actual footage of your track using known mileposts and other benchmarks. Pre-dump surveys from BallastSaver not only identify ballast deficiencies, but they also take into account crossings, switches and other “no dump” zones so GateSync can avoid and protect them from coverage. Its 2.4 GHz two-way wireless communications protocol provides the ability to closely monitor gate status, temperature, battery voltage and more to ensure proper offloading.

Solaris uses an ultra-reliable and rugged 24-volt electric hydraulic pump and hydraulic cylinders to produce the force needed to open and close the gates on ballast cars. Solar panels recharge the system when not in operation, creating a low-maintenance system with no need for auxiliary air lines. Each gate can be operated remotely from up to 300 feet (91 meters) away, providing a boost to safety that manually operated gates cannot.