

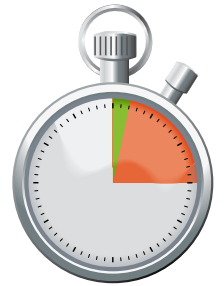
Packaging Leader Greif Drives Operational Efficiency with Automated Performance Management

Greif Omaha, Nebraska: Multiwall Packaging Facility

Getting to the Bottom of a Speed Loss Issue

At Greif's Omaha, Nebraska Multiwall Packaging facility, management was working on improving OEE by focusing their efforts on their perceived speed loss issues. After installing Plantnode®, the data collected revealed that the line was actually running at higher than expected speeds but the plant was losing on downtime with their paper roll changes during shift. According to Greif's manual data, roll changes averaged two minutes, but Plantnode data showed that each roll change actually lasted from three to fifteen minutes per shift. After pinpointing the problem, Omaha nailed down the average roll change to two minutes.

Plantnode also detected registration problems with the plant's Pinchbottom machine, which seals bags. The registration problems totalled 140 per shift, lasting 30 seconds each, which added up to a significant loss of time. With the installation of Plantnode Enterprise, the plant has **eliminated 112 hours per month of downtime** and realized **\$80,000 of annual labour savings**.



112 Hours of
Downtime
Eliminated

•
\$80,000
Annual Savings

“USING THE SHOPLOGIX SOLUTION, THE COMPANY HAS ALREADY SEEN A SIGNIFICANT IMPROVEMENT IN OEE (OVERALL EQUIPMENT EFFECTIVENESS) AND INCREASED RUN SPEED AT A NUMBER OF ITS PLANTS.”

TRAVIS GROFF, VICE PRESIDENT OF OPEX WORLDWIDE, GREIF (WWW.GREIF.COM)

Greif Gent, Belgium: Steel Drum Plant

Belgium Plant Uncovers Sensor Issues Contributing to Speed Loss

At Greif's Gent, Belgium plant, managers couldn't understand why their production of 50-gallon drums was falling short of the standard level of 720 drums per hour. Plantnode data showed that a simple sensor loading lids onto the drums was preventing the lids from going into the line and responsible for a 6.6% speed loss. By resolving the sensor problem, the plant increased their speed immediately, eliminating the speed loss and increasing production to 725 drums per hour.

725 drums
per hour

Increased
Production

Greif Sao Paolo, Brazil: Steel & Plastic Drum Plant

Greif Brazil Plugs the Leak on Minor Stoppages

Greif's Sao Paolo Brazil plant also yielded immediate results and return on investment (ROI) after Plantnode was implemented. A number of small minor stoppages were identified that had previously gone undetected. Within one month of installation, OEE improved by 6% on the drum line and 3.5% on the plastic drum line and output increased from 293 to 309 units per hour. As a result, annual labour savings at the Sao Paolo plant totalled \$115,000USD.

Greif has experienced the value of using Plantnode Enterprise to help them isolate problems, set new targets and measure performance to drive further continuous improvement.



Increases within one
month of installation

Minor Stoppages
Eliminated

"WE WANTED TO TAKE OUR OPERATIONAL EFFICIENCY TO THE NEXT LEVEL. OUR CURRENT MANUAL METHOD OF DRIVING IMPROVEMENT DIDN'T PROVIDE VISIBILITY INTO ALL LOSSES OF EFFICIENCY BUT PLANTNODE ENTERPRISE PROVIDES AN UNBIASED WAY TO MEASURE EFFECTIVENESS AND CAPACITY PLANNING ACROSS OUR ENTIRE NETWORK OF PLANTS."

TRAVIS GROFF

VICE PRESIDENT OF OPEX
WORLDWIDE, GREIF
(WWW.GREIF.COM)

Greif Deploys Plantnode Enterprise across 90 Plants and 20 Countries

Greif is now deploying Plantnode Enterprise company-wide in 90 plants across 20 countries. Plantnode Enterprise collects real-time data across multiple lines, plants and geographies, enabling standardization and comparison of efficiencies from job to job, plant to plant or employee to employee.



Plantnode Enterprise:
90 Plants Across 20 Countries