

SMARTSPIRAL[®]

MONITORING SYSTEM



BUSINESS CHALLENGE

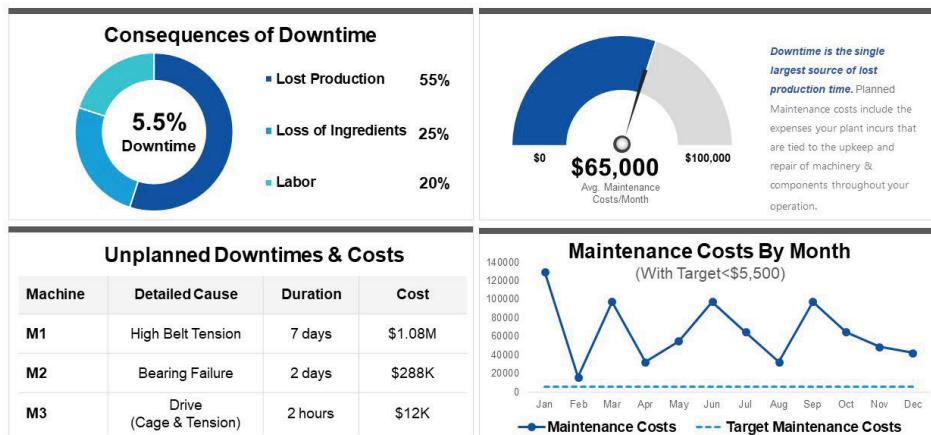
Downtime in manufacturing wreaks havoc on production standards. In fact, it is estimated that almost every factory loses at least 5% of productivity and experiences as much as a 20% loss due to downtime. A manufacturer's bottom line can include up to 800 hours of downtime which translates into millions of dollars in lost revenue. Minimizing downtime in manufacturing is just as pivotal as maximizing quality and output to maintain contribution margins.

INDUSTRY RESEARCH

According to a study conducted by analyst firm Aberdeen Research, unplanned manufacturing downtime results in loss of customer trust and productivity:

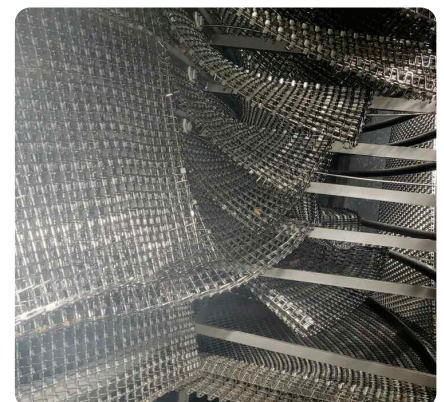
- **46%** could not deliver services to customers
- **37%** lost production time on a critical asset
- **29%** were unable to service or support specific equipment or assets

Manufacturing KPI Dashboard Showing Consequences of Downtime



The average cost per hour of equipment downtime is \$6,000

When a spiral conveyor fails, repairing the problem needs to be addressed immediately because it can cost as much as \$6,000 per hour in lost productivity, unplanned outages, and downtime. It is interesting to note that the bearing replacement itself is almost always the least expensive aspect of the failure. Additionally, what might start out as a small failure could result in a catastrophic event ranging from a stub shaft failure to loss of a spiral gear box that creates a belt crash, resulting in up to 3 weeks of downtime. In other words – the failure of a \$50 bearing can take down a multi-million dollar process.



TAKING THE DOWNTIME OUT OF PRODUCTION

PRE-SMARTSPIRAL CUSTOMER

This South Carolina-based company experienced a catastrophic downtime event when its operation suffered a bearing failure which caused major damage to the main shaft of the company's spiral system.

Cost: \$20,000 in repair expense only (Not including production/labor loss costs)
SmartSpiral Monitoring System Solution: \$500 a month / \$6,000 a year

SOLUTION

The SmartSpiral Monitoring System provides piece-of-mind by providing early insight into potential system failures. Ashworth offers the technology to monitor equipment and predict oncoming failures before they occur.

ASHWORTH'S SMARTSPIRAL PROVIDES

- Real-time spiral performance data anytime, anywhere
- Continuous monitoring of spiral temperature, belt tension, cage power and the industry's first bottom bearing wear sensor
- Secure stand-alone wireless web app, independent of plant's network
- Access to multiple spirals and plant locations from one screen
- Easy-to-see user alerts and system feedback

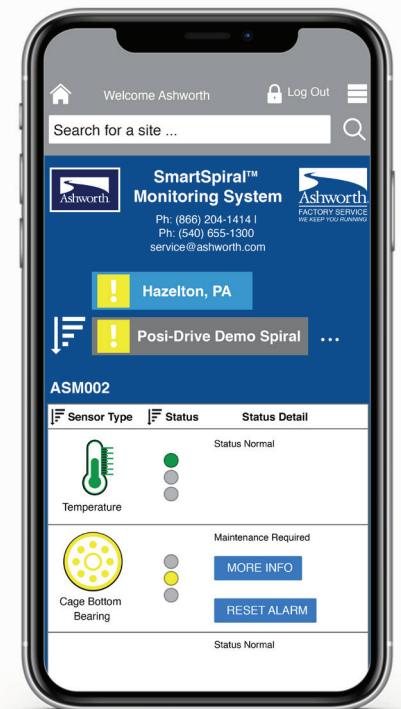
CUSTOMER THAT USES SMARTSPIRAL

Since 2015, this Minnesota-based company has been using Ashworth's SmartSpiral Monitoring System and received several notifications over the years warning of impending failures which allowed for planned downtime and no damage to their spiral systems.

Example of impending failure notifications:

- Bearing grease issues
- Bearing failure
- Refrigeration failure
- Outfeed motor bearing failure
- Gearbox failure

Data recorded and analyzed through Ashworth's SmartSpiral allows customers to receive instant alarms, trend data and implement predictive maintenance.



THE SMARTSPIRAL ADVANTAGE

- Increases production efficiency
- Identifies performance issues
- Prevents system failures
- Minimizes downtime
- Reduces maintenance costs
- Extends equipment life

