

MAKING A DIFFERENCE

Results that Matter

Prep for Peak Season: Tips to Sustain DC Service Levels for Customer Satisfaction

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“Are you ready for the holidays?” It’s a question people commonly hear once December arrives. But for today’s retailers and their logistics partners, that question needs to be asked, and answered well in advance. Up to 75 percent of an entire year’s volume and revenue can be generated during this 8–12 week peak season period. And it has been shown that every 15 hours of stopped or hindered operations during peak season can eliminate one percent of your annual revenue and increase overall costs by 1.25 percent.

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10 QUICK MAINTENANCE TIPS FOR PEAK SEASON READINESS

- 1 Replace damaged or missing components.
- 2 Clean filters and areas where dust builds—lack of ventilation often causes equipment failures.
- 3 Make sure all lamps and annunciators are working properly.
- 4 Lube everything that can be lubed; clean all belts and other moving parts.
- 5 Check and update your critical spare parts inventory.
- 6 Confirm location of equipment documentation; make sure it is up-to-date.
- 7 Back up your systems and data; make sure you can restore them.
- 8 Track down and resolve troublesome noises.
- 9 Confirm that photo eyes are properly aligned and fastened.
- 10 Check your safety devices; make sure they activate and can be reset.

UNDERSTAND THE CHALLENGE AND MANAGE THE RISK

During peak season, distribution centers typically ramp up from single eight-hour shifts, five days a week, to multiple shifts running seven days a week. This strains the operation in three key ways:

- Personnel, particularly supervisor-level associates in both operations and maintenance, are moved to different shifts to oversee and support temporary workers; their experience and problem-solving abilities are distributed, which can affect an operation's ability to correct problems quickly.
- Systems and equipment are run much harder, in some cases up to three times longer than non-peak times during the rest of the year.
- Maintenance and servicing often does not keep the same pace; issues such as bad electrical connections, overheated motors and under-lubricated parts, which would not appear during normal operating conditions, can quickly multiply and interrupt operations.

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No matter how well-engineered or trained your people or systems are, problems and breakdowns are inevitable. A fully prepared and tested peak season plan that's focused on key systems, maintenance, and operational areas is crucial to your center's ability to sustain the service levels it has been designed to deliver, and will ensure that your systems are ready to handle whatever disruptions the season may bring.

LOOK TO THE PAST TO PROTECT THE COMING SEASON

To plan for the future, first look at the past.

Examine and analyze your existing maintenance and operational records to identify previous areas of weakness or bottlenecks, and develop effective action plans to deal with them.

One leading direct-to-consumer facility put two programs into action that dramatically reduced production-related events. First, they identified and prioritized a list of improvement opportunities throughout the facility. They focused on implementing two of these improvements for each area. They also modified their planned maintenance, gearing it toward minimizing unplanned downtime.

To effectively build and use these kinds of plans, you should have established processes in place to document and track everyday events such as equipment failures, unscheduled shutdowns in conveyors or sortation equipment, interruptions in order flow, and reductions in service levels and throughput. This provides a complete portrait of your center's strengths and vulnerabilities.

To identify the critical areas in advance, train your team to track and document details about events, including:

- **Maintenance occurrences/equipment failures**—What failed, how often, what did it take to resolve the issue and how long, what prevented a quicker resolution, and how severe was the impact to service levels?
- **Workforce planning and availability**—Are shifts sufficiently staffed, not only with production associates, but with supervisory personnel, maintenance teams, IT resources and managerial level team members who may be needed to help coordinate and resolve complex issues or set priorities?

• **Problem resolution processes—**

If disruptions occur, is the resolution process fully understood by your organization? Is there an understanding on how to designate and communicate various severity levels within your organization? Were practical troubleshooting steps and escalation processes established and easy to follow? Were contacts with outside service providers and vendors well-organized? How much time did it take to resolve recurring issues, and could that interval be improved?

If you have tracked these items with sufficient detail during past peak seasons, the data provides an effective foundation for preparing your peak season response plan. That plan should include prioritizing action items to be addressed before peak season, such as increased preventative maintenance cycles on key pieces of equipment, refresher training for supervisory personnel, and better documentation and communication of problem escalation processes.

SURGE TESTING: CRUCIAL TO SUCCESSFUL PLANNING

Leading retailers and distribution companies make surge testing an integral part of their planning. Surge testing simulates the typical demand conditions during peak season and should optimally be conducted four to six weeks prior to the season's start. Typically, a distribution center will hold back up to half a normal day's throughput, and then send it all during a compressed three- to four-hour period to replicate peak volume and operating conditions.

When you plan a surge test, key supervisory and management team members should identify possible risk areas as well as goals for the operational elements you are assessing: product and communication flow, pick modules, conveyor operation, wave transitions, throughput rates per area, order accuracy and other key distribution center metrics.



It's important to have knowledgeable observers at all the key areas you are assessing, with instructions on how to observe and capture information. In particular, you can use surge testing to assess and resolve "choke points" in the way your people interact with the distribution center's technology.

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The opportunity to troubleshoot and resolve operational and technical issues in advance is a major benefit of surge testing. For example, if you experience an increased rate of bad reads at sortation induction, you can assess if operators are positioning the product improperly, or if the quality of labels has been compromised. Surge testing can help you identify these issues and give you the opportunity to implement improvements or training.

PREVENTATIVE MAINTENANCE: ADJUST CYCLES FOR PEAK DEMAND

Today's distribution center technologies are engineered to be robust, reliable and operate at peak performance under demanding conditions. Nevertheless, these systems operate best with preventive maintenance (PM) programs that follow manufacturer's recommendations, which are normally based upon a standard number of operating hours.

“The peak season preventive maintenance schedule should be based on the results of both surge testing and an analysis of equipment failure and repair issues from past peak seasons.”

For the peak season, distribution center and maintenance management should assess their standard preventative maintenance schedule and identify critical areas where maintenance intervals should be increased. Inspections and audits should be conducted, focusing on the following critical equipment aspects and those components that will be subject to increased wear and tear as utilization surges:

- Alignment and fastening of critical photo eyes and sensors
- Power transmission elements, motors, belt alignment of equipment
- Power and communications cabling, connections and interfaces that are loose or can be accidentally disconnected due to continuous vibration
- Conveyor switch points that require frequent lubrication
- Critical parts inventory planning

The peak season PM schedule should be based on the results of both surge testing and an analysis of equipment failure and repair issues from past peak seasons.

With the preventative maintenance aspects examined, it's also crucial to review your response plan for emergency maintenance to ensure you have the expertise, partners and parts necessary to handle the increased operating hours and multiple-shift conditions of peak season.

For example, at one plant with a BEUMER sortation system there was a sudden mis-sorting of product at the start of the first shift. The rework was dramatically affecting operations and service levels. Even though hotline support and maintenance staff were troubleshooting the issue, a BEUMER service technician visited the site and found that a scanner photocell bracket had been knocked out of position.

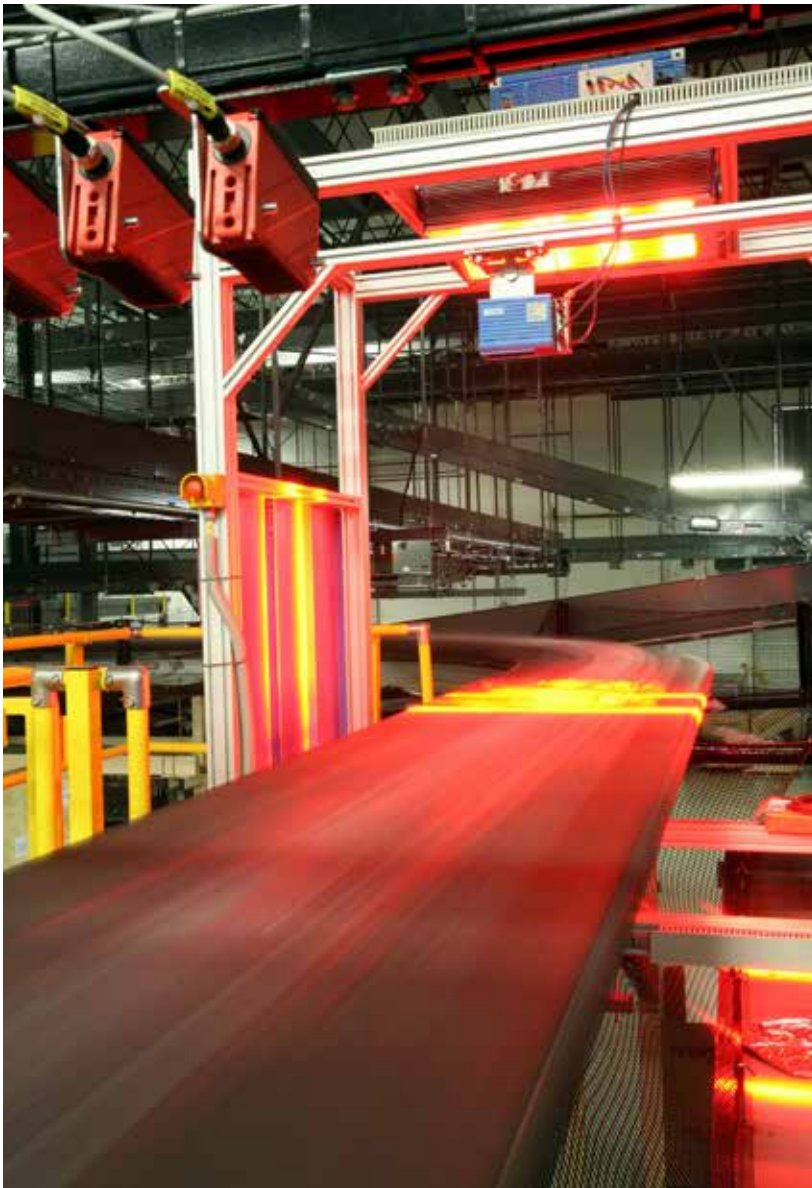
The distribution center maintenance person had tried to realign the bracket; however, the problem had never been reported. Improved knowledge, communication and tracking of issues would have resolved this issue within 15 minutes.

A peak season maintenance plan can also help you identify which spare parts you and your partners should have available to enable fast repairs. To develop the right plan for your facility, consult with your key systems suppliers who can provide insight on where to focus your increased PM intervals and spare parts planning, and can even provide refresher training for maintenance personnel on troubleshooting and efficient repair practices.

PROBLEMS HAPPEN... BE READY FOR THEM

No distribution center system is perfect; flexibility is key because no peak season plan has an answer for every possibility. That is why having a process to document, communicate and respond to issues is so essential; it's the best tool you have for handling the unexpected.

In today's IT-driven distribution center, around-the-clock IT support and clear processes for troubleshooting and problem escalation are essential. In a recent peak season, a busy distribution facility was unable to start the next sortation wave and contacted BEUMER hotline support.



❖ *For the peak season, it is important to assess standard preventative maintenance schedules and identify critical areas where these maintenance intervals should be increased.*

BEUMER could not connect to the facility's servers for troubleshooting and it took almost four hours to re-establish remote access. The root cause: the VPN router had been "borrowed" by the IT staff one week before and could not be located. The lesson learned: identify crucial personnel and support avenues and ensure the process is understood and working. Also, document scheduled "on-call" personnel availability and all contact numbers.

Review your response and escalation steps and clarify any misunderstandings about how, when and who to contact before the peak season begins. If there is a group of supervisors who typically work together on one shift during the

rest of the year, but who may be scheduled separately across multiple shifts during peak season, documented response plans are invaluable tools to ensure continuous coverage.

ANALYZE, TEST, PREVENT AND PREPARE

Being "ready for the holidays" starts by taking simple proactive steps to identify and respond to operational and system issues prior to your peak season. Eliminate issues that can dramatically impact service levels and profitability by following these key items:

- Have a process to track and document your events.
 - Log issues, downtime events and emergency repairs.
- Evaluate and regularly review these events with maintenance and operations personnel.
 - Ask for root cause and empower them to improve.
 - Assess previous peak season issues and the lessons learned.
- Plan and conduct surge testing to determine and correct any issues.
 - Evaluate with the teams, make them responsible for action plans, and then test again.
- Adjust preventative maintenance cycles to accommodate increased system usage and its wear and tear.
- Make sure all personnel are well-trained on best practices for using distribution center technology, to ensure accuracy and productive flow.
- Review troubleshooting and problem escalation processes and confirm all resources are properly scheduled and up-to-date.

BEUMER Corporation has in-depth experience designing, building and integrating sortation and distribution systems to provide maximum distribution center throughput and productivity. Our Service and Support Team can provide a customized Peak Season Audit for your distribution operation.

We will investigate your current operations and peak season plans and provide proactive recommendations to improve preventative maintenance practices, conduct refresher training, and analyze and enhance your distribution center's troubleshooting and resolution practices. Contact BEUMER today to schedule your Peak Season Audit; the sooner we can complete it, the sooner you can implement our recommendations and be fully prepared for the holidays.

To ensure availability when our customers need us, BEUMER has implemented a comprehensive, practice-oriented service capability that adjusts smoothly and flexibly to your individual requirements. Our worldwide service network provides fast and reliable assistance, maximizes operational security and helps reduce downtime to a minimum.

For more information on BEUMER service visit www.beumergroup.com/customer-support/customer-care. For complete service details, download our **BEUMER Service brochure**; for details on improving your existing Crisplant distribution center technology, download our **Crisplant Upgrades and Enhancements brochure**.



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