

A Ten-Step Process to Better Inserting System Performance

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The demands on print/mail finishing centers are constantly escalating. Mail volumes are increasing as the business expands, applications grow more varied and complex as 1:1 marketing initiatives take hold, and the pressure to accomplish work in less time and to higher standards of quality is constant.

All these factors place enormous pressures on print/mail finish managers to keep productivity high. But in their efforts to boost yields and keep costs low, too many managers overlook the key guidelines that help ensure that high speed inserting systems achieve a consistent level of performance—which leads to increased uptime—and superior levels of throughput.

One solution is to implement a simple ten-step plan to achieve better performance. This plan focuses on both the unique characteristics of specific sites and includes procedures that have proven effective in scores of high speed print/mail finishing centers throughout the U.S. and the rest of the world.

Step 1: Look for 'Lost Opportunities'

The key first step is the creation of a 'Lost Opportunities Task Force'. This group should include operators, service technicians and representatives of vendors supplying materials and should:

- Identify every instant that the equipment is not cycling, and
- Determine the precise cause for the non-performance or downtime.

The review should span at least a two-week time period to ensure that infrequent applications or random events are identified and evaluated. The review may uncover factors such as lack of or poor quality materials, excessive set-up procedures, inattentive or inadequately trained operators, or downtime due to a hardware failure or software glitch. Armed with this information, managers can prioritize and focus on the most severe or recurring problems first, and achieve meaningful improvements quickly. As the major problem areas are identified, analyzed and eliminated, managers can proceed to address the items of lesser importance.

Step 2: **Use Key Measurements**

Key measurements that managers can use as guidelines to help assess performance and evaluate efforts to improve include:

- Machine throughput - this is defined as the number of mail pieces processed per hour, measured over the total time the machine is operating.
- Machine utilization - this is expressed as the percentage of time a machine is processing mail over total machine operating time.
- Machine stoppage - this is the number of machine stops per hour, or the number of cycles between stops.

Since every print/mail/finishing center is different and each possesses a unique combination of technologies, applications, materials and operator skill levels; a focused analysis of these and other measurements is critical to ensure that corrective measures are carefully targeted and address the needs of the specific site.

However, there are several common factors that account for the vast majority of problems related to diminished throughput, and managers should watch for these as steps are taken to improve performance.

Step 3: **Ensure Quality of Materials**

At higher cycling speeds, inserting systems are far more sensitive to variability in materials, and machine stoppages are far more costly in terms of lost throughput. Therefore, managers should consider implementing a materials inspection and quality improvement process to ensure that all paper-related material, such as envelopes, inserts and forms, are produced to exact specifications for dimensions and other quality characteristics.

This effort should encompass inspecting for damage due to improper packaging, palletizing, handling and staging, and should also focus on the need for “climatizing” materials prior to processing. Ideally, all paper supplies should be stored in areas with temperature and humidity conditions that are identical to those encountered during high speed processing. If that is not possible, then the materials need time to ‘climatize’ or adapt to the processing environment.

Envelopes and inserts generally require one week to ‘climatize’, while roll materials need two weeks.

Step 4: **Boost Training for Operators**

Applications evolve, new ones emerge and employees change jobs. Therefore, training of equipment operators is a priority and should be ongoing. But, too frequently, it is overlooked in the rush to complete the daily workload. This omission is short-sighted because it hampers the ability to eliminate common problems, to ensure a minimum level of work force competence, and capitalize on the knowledge and experience that operators accrue over time.

Step 5: **Create a ‘Key Operator’ Position**

One way to take advantage of the knowledge and experience of veteran operators is to create a new position called “Key Operator.” This person functions as an advisor to operators—particularly the less experienced ones—and is expert in equipment configuration and application set-up.

Their job is to train operators, answer questions, troubleshoot problems, and help operators switch applications quickly to speed set-up and achieve a higher and more consistent level of uptime.

This type of position also offers operators a better chance for career advancement, and allows the vendor's service representative to focus on the task of keeping the equipment up and running rather than training new operators or helping set-up difficult applications.

The Key Operator should also manage the flow of materials throughout the center and allocate specific jobs to specific equipment to keep processing high and help assure peak levels of production.

Step 6: Focus the Role of Supervisors

Supervisors need to be visible on the floor and thoroughly knowledgeable about the capabilities of the equipment and the requirements of the various applications.

The visibility serves two purposes. It helps underscore the importance of the processing activity and makes the supervisor quickly available to answer questions and provide direction, which helps keep productivity high.

A key responsibility is to assess situations and prescribe remedial actions, so the supervisors' need to be able to set goals and evaluate superior and inferior performance among operators, applications and equipment.

Step 7: Set Performance Goals

Every shift should have performance goals for each operator, application and piece of equipment. The goals should specify expected outcomes for both total volume and overall quality and should be visible to all.

The goals also need to be attainable, and based on realistic expectations. For example, if an operator is handling the most complex applications, the goal for the total volume processed should reflect the difficulty of the task.

Each goal should consider key factors such as the experience of the operator, the capability of the equipment, the difficulty of the application, the number of enclosures, the type of scanning employed, and even the envelope style and end clearances involved.

The goals should also reflect the individual needs of the unit. If start-ups at the beginning of a shift are slow, then a goal might require that every machine be in full operation with 30 minutes of the beginning of a shift.

Step 8: Offer a Reward and Recognition Program

In spurring performance, organizations can choose to either reward positive behavior and effort, or penalize inadequate effort and results.

Reward and recognition programs are far more effective in driving employee behavior toward desired results and should be utilized whenever possible.

Step 9: Adhere to a Maintenance Schedule

High speed inserting systems require regular maintenance to assure peak levels of performance. When preventative maintenance is delayed or deferred, system performance erodes and may result in lower throughput due to stoppages or jams. Plus, deferred maintenance increases the risk of a more serious problem and the downtime needed to correct it.

There is also a domino effect. When one machine is deferred, the delay often extends to a second or third machine, making it more difficult to catch-up without incurring costly overtime charges.

Proper capacity planning and management can help alleviate the problem of “not enough time for maintenance.” And whenever possible, maintenance should be scheduled during the regular work week to keep costs low and avoid “burn-out” of service personnel.

Step 10: Talk to Customers

Both processing and service personnel should be part of the decision to launch new applications and should help customers understand how applications can be designed or modified to optimize productivity. For example, a marketing manager may want to distribute a new enclosure, but is unaware of how the design can impact processing. A slight change in the dimension of the insert or a less glossy finish may make the piece easier to grip and process and yet won't distract from the overall message.

Or, it might be possible to relocate a barcode on a new control document to improve processing and not alter the look or effectiveness of the mail piece. Some aspects of the mail piece can't be changed. But, by meeting with customers, and helping them understand what can be processed easily, and what is more challenging, the print/mail finish manager can help ensure that the more difficult applications have a sound business rationale and are not the result of incomplete information.

The success of any high-speed inserting system hinges on a thorough operations analysis that encompasses processes, materials and people and assures that all are aligned for optimum performance.

But, the analysis can also result in overall efficiency improvements as processes become more precise, operators better trained and motivated, and the selection and handling of materials less prone to error.

Summary

These ten steps will position the organization to be highly competitive in both performance and costs with its customers. Continuing focus on these ten key areas will allow leverage of the economies of scale gained through a focused approach and the attention paid to the consistent level of performance achieved by the production floor.

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