



Improve Uptime and Efficiency with Redundancy

By Michael Mora

EFFICIENCY WITH REDUNDANCY

When batch cycle times do not align with the validated packaging line rate, it's crucial to evaluate the production time loss for material loading. In a one-piece flow packaging line, each piece of equipment follows a unique loading procedure for the materials that create the product packaging. Ideally, the equipment operates continuously, allowing materials to be loaded while the machine runs.

Systems designed for high-speed continuous production often require dynamic or redundant material loading features to prevent production interruptions and maintain quality standards. The decision to include these features is left to the manufacturer, who must assess whether the cost to increase material capacity for the reduction of downtime outweighs the potential losses incurred due to material loading.

Zero Downtime Labeling with Redundant Labeling Heads

PACKAGING LINE EXAMPLE

Consider a packaging line with a one-piece inline labeling system equipped with a single label head operating at 450 parts per minute. Each label reel contains approximately 20,000 labels. On average, an operator stops for 5 minutes to change to a new reel. Consequently, when running a 24-hour schedule, the machine experiences roughly 140 minutes of daily downtime due to material loading or an unutilized manufacturing capacity of 63,000 units.



REDUNDANT LABELING HEADS

IMPROVE UPTIME

We recommend that manufacturers consider investing in a second label head, which allows for continuous operation with immediate support from a secondary web handling, printing, and inspection system. This approach offers an additional layer of assurance for manufacturers aiming to achieve true zero-downtime labeling.

In conclusion, the incorporation of redundancy into any packaging process presents manufacturers with the opportunity to mitigate expensive downtime and establish a seamless, uninterrupted packaging operation.



FOR QUESTIONS

To explore the potential advantages of redundant label heads for your specific packaging needs, please reach out to WLS for further information.

ABOUT WLS

Weiler Labeling Systems is an industry-leading designer and manufacturer of high-speed rotary and in-line trunnion labeling machines and serialization and coding solutions for the pharmaceutical and medical packaging markets. With nearly three decades of experience in providing labeling, coding, inspection, and precision-manufactured systems, WLS is at the forefront of delivering customized solutions backed by a culture of unwavering customer care. As part of the ProMach Pharma business line, WLS helps our packaging customers protect and grow the reputation and trust of their consumers. ProMach is performance, and the proof is in every package.