

CUSTOMER SUCCESS STORY – FOOD MANUFACTURING IPG HELPS TO IMPROVE THROUGHPUT 42% AND REDUCE DOWNTIME 95%

Customer Overview

A key co-packer for a leading processed snack manufacturer had been dealing with significant operational issues with their packaging lines that contributed to downtime and poor throughput that includes upstream operations. These packaging lines had issues with boxes not being taped properly, tape not adhering to the boxes, as well as other similar issues.

The Challenge

The snack manufacturer required the packaging company to use a specific case packer, which comes standard with competitive tape heads and are configured for 2.2 mil carton sealing tape. The combination of the equipment, tape head, and tape were leading to the tape failures and associated downtime. In response, the co-packer has been using thicker tape on the equipment to try to combat the problem. Furthermore, the equipment manufacturer claims that switching to a different tape head would invalidate their warranty, which is not always the case.

Proposed Solutions

IPG offered several solutions to address the tape failure and downtime issues*:

- 1. Test IPG 2.2 mil hot melt carton sealing tapes (CST) with the competitive tape heads to reduce downtime.
- 2. Test IPG 1.9 mil hot melt carton sealing tape using the IPG ET Xtreme (ETX) Tape Head to eliminate tape failures.

IPG's hot melt tapes routinely have a higher adhesion force to kraft than competitive tapes in the field. Additionally, our ETX tape head has a patented wipe down mechanism that forces the tape to marry to the corrugated flaps. The trials were conducted on production lines at their facility, revealing the following results:

Process Efficiency Gains:

- 1. With the IPG 2.2 mil tape and competitive tape head, customer had throughput of 57 boxes/hr
- 2. With the IPG 1.9 mil tape and ETX heads, customer had throughput of 81 boxes/hr

In summary, the customer was able to see significant improvement in throughput when coupling the IPG ETX tape head with IPG 1.9 mil tape.

Downtime Improvement:

The ETX tape head coupled with the 1.9 mil hot melt tape brought the total downtime from 7% to 0.30% compared to competitive equipment and tape on two other production lines during the same period.

Results:

The trial results indicated that the IPG ETX tape head combined with the 7100 1.9 mil CST experienced less than 1% tape failures, compared to 8% failures with the competitive tape head. Using the ETX tape head, the co-packer achieved a 42% increase in packaging throughput, and reduced downtime by nearly 95%, while also saving the customer on their tape spend by using a lighter tape.

Conclusion

In conclusion, the packaging company was pleased with the improved efficiency and reduced downtime achieved by using the 7100 1.9 mil tape with the ETX tape head. Implementing across the facility would allow for the site to significantly increase throughput, providing other gains to the facility such as higher customer fill rate and lower labor and overhead costs, while also saving the customer on their tape spend.

Product was provided to manufacturer through IPG Distribution partner.





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