

Case Study: RS Industrial, Inc. Helps Customer Eliminate Adhesion Failure and Decrease Costs with High-Strength Product

Challenge: A leading fastening solutions manufacturer was experiencing carton sealing failure in its warehousing conditions. Its current hot melt adhesive was unable to withstand the heat stress, so the customer was seeking a solution with increased heat resistance. Adhesion failure is a serious production issue that can cost a company thousands of dollars in downtime – from diagnosing the issue to the cost associated with resealing boxes.



RSI's technical service team worked closely with its inhouse lab to perform testing and identify the best solution for the customer.



Technical analysts simulated the customer's process parameters to conduct off-the-line testing in addition to on-the-line testing.

Solution: After gathering all application-specific information, RS Industrial's technical service team worked alongside its in-house lab to perform testing and identify the best solution for the customer's case and carton sealing application. A superior hot melt that offered increased heat stress was recommended.

RSI's technical service team performed two on-site trials with the customer to test the new product. The initial trial was performed off-the-line and allowed production to continue as technical analysts mimicked the process parameters for each line (tank, line and nozzle temperatures, open time, and compression time), using a portable hot melt dispensing system with the customer's substrates in the plant. Simulating the customer's process allowed the technical team to create real life results off the line. Following successful off-the-line testing, technical service trialed the new hot melt on the line. The product's performance once again met the customer's needs, demonstrating improved adhesion and a much deeper fiber tear compared to the previous hot melt.

RS Industrial helped to show improved adhesion in high heat conditions experienced in warehousing, decreasing costs and increasing productivity.