Industry giant ABB seeks operational efficiencies in small as well as large-scale manufacturing lines

The Swedish-Swiss multinational corporation ABB is headquartered in Zürich, Switzerland, and manufactures a wide variety of specialized products. Focusing on advanced robotics, electrification gear, heavy electrical equipment, and industrial automation technology, it is ranked by Fortune magazine among The World’s Most Admired Companies. With operations in around 100 countries, and approximately 134,800 employees, ABB has been listed on the Fortune 500 roster of leading global companies for 23 years. It is one of the largest industrial conglomerates in the world. ABB is big.

ABB is a global innovation leader and automation is in their DNA. While renown for their robotics and large-scale power transmission equipment, the company manufactures many smaller, but no less important, industrial products. A case in point is the ubiquitous plastic electrical junction box – which the company manufactures and sells by the millions. ABB electrical junction boxes are offered in a wide number of configurations – each is designed to save time in installation and to make installation process on the jobsite easier. The junction boxes are essentially a commodity product and thus demand extreme efficiency to protect margins.

The company was searching for a machine that could bag and seal a predetermined number of junction boxes in a LDPE poly bag with a printed white square. The machine would need to be integrated into an assembly line populated by robotic devices picking and assembling the product. The minimum required packaging speed was two bags (measuring 270mm x 500mm, and containing several junction boxes each) per minute. The bagger would have to be at least as efficient as the rest of the highly automated line.

ABB found a solution: The Rollbag R3200. The highly versatile R3200 is capable of using pre-opened bags on a roll - but it also offers a bag-making function that makes bags of virtually any length from tubular roll stock. The machine could fit nicely into the compact production line.

As customary, a visit to the production plant enabled everyone on the integration team to survey the physical space, discuss the desired results, uncover potential difficulties and work as a team toward a practical solution. With all the variables considered, a Rollbag R3200 was chosen and configured with the easy load bag opener, bagmaker assembly, bag open sensor, and handshake tied to the central safety circuit. A conveyor transports packaged plastic products to storage bins. One operator, who runs the entire production line, monitors the package process as well. The R3200 was configured to order, reflecting the versatility and customization potential of this unique machine.
ABB production facility

The compact Rollbag R3200 is integrated in an efficient production line that begins with the injection molder and ends with the products counted and packaged.

Watch the Rollbag R3200 in action:
https://www.youtube.com/watch?v=jAvX8RL_B0I

More details on the Rollbag R3200 Automatic Bagger:
https://www.pacmachinery.com/clamcopackaging/product/rollbag-r3200-automatic-bagger