Packaging and Palletizing of meat
ICA AB and Swisslog

Robots pack and palletize meat crates for food retailer ICA in Sweden.

It isn’t easy supplying meat to Scandinavia and the Baltic States. For Sweden-based food retailer ICA AB, it means smart logistics and proper handling to make sure the stores, restaurants and institutions the company supplies get what they need.

Modern automated facility
Since the end of 2004, about 70 percent of ICA stores in Sweden have been receiving meat ready-packed from an ultramodern facility in the city of Västerås. The facility includes eight large ABB robots and four gantry robots from Cimcorp, which have a combined capacity of as many as 65,000 returnable crates per day. That is the equivalent of 270 metric tons of meat. Each robot cell must be highly flexible and able to cope with a number of different tasks. All of the crates are equipped with machine-readable codes that allow the robots to “know” where they are to be sent. The robot places filled crates of meat at set places within the cell, which can accommodate a total of 60 stacks.

Profitable investment
“Twenty-four people are employed at the facility, carrying out the types of tasks not suitable for robots,” says Christer Käll, supervisor for the facility where the robots are located.

“I don’t think it would be humane to have people doing the robots’ tasks. They would have major problems with work-related injuries due to all the heavy lifting in the chilly environment. But with an investment of 50 million Swedish kronor in robots and related equipment, we can do the work that would otherwise have required more than 100 people.” In other words, it’s a profitable investment, both economically and ergonomically.
Automation = Quality
ICA’s database stores all information about the packages, from the raw material to the store. This means that all of the meat can be traced throughout its journey from the farm to the dinner table. With short transports at the right temperature, the quality of the goods is maintained, while the whole handling process becomes rational and cost-efficient. “We want to ensure that consumers get value for their money. For this reason, we seek to safeguard our brands and our customers,” says Käll.

The fully-automated sorting system was designed by logistics company Swisslog, which secured the assignment from ICA despite fierce international competition. The robots, supplied by ABB, are easy to integrate into complex logistics environments. This means it is easy to define interfaces and good connectivity to peripheral equipment. “Following a brief period of testing, we were able to turn over the entire facility as planned at the end of 2004,” says Swisslog’s project manager Jan Fagerberg. “We were responsible for light goods conveyors, robot cells, control systems, labeling, software and start-up.”

Facts
Key benefits — ICA has received a number of benefits after installing eight IRB 6600 robots:
• Huge cost-savings with robots doing the work of 100 people
• Health and safety of workers no longer at risk due to heavy lifting and working in a cold environment
• Flexibility of robots means they can handle a variety of tasks

Swisslog facts
Supply chain system provider Swisslog’s headquarters are in Switzerland. Its main office for northern Europe is in Gothenburg, Sweden. The company employs 1,850 worldwide, including 130 people in Sweden, Norway and Denmark. Swisslog has installed logistics and integrated supply chain solutions for customers in 50 countries. http://www.swisslog.com/