



IRB 340 FlexPicker packing candy at Zaini's in Italy.

## "Don't touch my food"

Increased pace of life has made processed food acceptable with people demanding more hygienic and healthy packaged food

If you're involved in the Food and Beverage industry you know quite well that it has undergone some dramatic changes in the recent past—and have likely experienced them firsthand. Whereas once it was commonplace to have long production runs and a relatively limited group of standard package sizes, end-users are now more interested in on-demand packaging, short production runs, mix-

and-match variety packs and individualized packaging configurations.

In addition, the time between ordering a new production line and the start of production is shrinking while the containers are becoming more intricate and portions more uniform in order to be pleasing to consumers.

About a century ago the nascent automotive industry started out by



**IRB 260 and IRB 660 robots packing and palletizing canned food at SPC Armona in Australia.**

producing electric vehicles. Even big names such as Porsche started their business on a pure-electric basis. In the hundred-year hiccup that followed we have burned billions of tons of fossil fuel, but the clean times of pure electric are returning.

### **Packaged Food but healthy**

Around the world, many more people are happy to eat packaged foods and buy consumer goods in association with an increased standard of living and population growth. Lifestyle changes associated with this increase mean people are cooking less and depending more on processed or premade items. Consumers are also becoming more health conscious and demanding fresher products, which require shorter delivery times.

At the same time competition between food and beverage brands, as well as distributors and retailers, is fierce, and packaging plays a greater role in this battle for consumer eyeballs and loyalty. Food safety is also an increasing concern, so much so that the desire for food and beverage products that have been untouched by human hands during their processing is rising.

When all of these factors are taken together, it's enough to make even the most hardened production supervisors lose sleep – or even hair.

### **Flexible and smart**

Equipment manufacturers are realizing the truly profound impact they can have on the profitability of a Food and Beverage operation by the way in which they design a solution – and the smart ones

are responding by thinking outside of the conventional box.

By replacing conventional machines with industrial robots, the headaches associated with the demands of the modern Food and Beverage industry can be met head-on. Six-axis robots provide the flexibility needed for incredibly dynamic production environments, while sacrificing none of the speed or accuracy of conventional equipment.

With robotic automation it becomes an easy task to change package styles and configurations as the market demands, as well as change production lines quickly to remove unpopular products and introduce new ones. In fact, some processors these days may only have 20-40 minute runs or very short contracts to produce a particular item.

### **Helps fresh product sale**

A common misperception is that robots are only suitable for long runs of the same product when in reality a robot typically has the fastest changeover once programmed and can adapt quickly to changing production contracts. Robots can also drastically shorten the time between production and delivery to a retailer, thereby allowing for the sale of fresher products. Food safety concerns regarding contamination and tracking products as they move through the system are also addressed by robotics due to the nature of automated systems and the lack of human hands touching the product.

### **Helping remain competitive**

To this point, the Food and Beverage

industry has operated on a fairly low level of technology and the thought of employing robotics has remained a daunting task. To automate these kinds of operations it is a must to have tools that enable more integrators and end customers to incorporate and maintain robotic systems. Increasing ease of use and developing standardized function packages are therefore essential for the industry.

At ABB, we have addressed these issues with many new products, including PC-based programming and simulation tools such as Pickmaster 3, our Picking PowerPac and our Palletizing PowerPac, as well as standardized solutions such as our Integrated Vision, RacerPack flow packaging solution, and other plug-and-play function packages. We have also increased the flexibility of our robots with an entire family of IRB 360 FlexPickers, a family of palletizing robots and 6-axis articulated robots to meet virtually any requirement.

ABB's aim is to decrease the perception that robots are a specialized piece of production equipment that requires too much training and effort to integrate. In reality, they are the masters of flexibility and should be seen as a standard item for those operations that want to remain competitive.

### **Fits into small spaces**

Over time, robots have proven themselves critical to creating the flexible, agile and speedy solutions that today's Food and Beverage operations need to remain competitive. Modern robotic systems from ABB and its partners can deal with speeds and situations that humans simply can't, as well as handle things that were previously thought to be impossible to automate. They can fit into very small footprints and eliminate the conventional equipment that typically needs large, fixed spaces to work. In short, industrial robots can now handle almost any task required by the Food and Beverage industry, but it takes a team of knowledgeable experts to help your operation make the leap. With ABB at your back, you know that expertise is available anytime and anywhere – for any type of project.

**For more on ABB's robotics solution, log on to [new.abb.com/products/robotics](http://new.abb.com/products/robotics)**