Faster processing, faster payback

The new FlexPicker from ABB – the IRB 360 – not only picks and packs faster and more efficiently, the smaller footprint makes it suitable for an even wider range of applications.

Picking products – anything and everything from pastries to pharmaceuticals – is one of the fastest growing applications when it comes to automation and consumer products. “There has been a phenomenal rate of 33 percent annual growth between 2000 and 2007,” says Klas Bentsson, technical manager at ABB. “And the rate doesn’t appear to be slowing down any time soon.”

The needs are great for new automation solutions that will improve business for companies producing consumer products. And ABB has responded with the new FlexPicker IRB 360, a stainless-steel robot that can be cleaned according to industrial standards. The new robot can carry a higher payload and takes up minimal floor space, and is easy to use by workers with average skills who are easily intimidated by complicated solutions and programming that isn’t user-friendly.

The IRB 360 represents the latest in picking and packing automation technology. Its stainless-steel parts with wash-down capability provide the maximum in hygiene and washability. The speed and small footprint mean maximum flexibility combined with high cycle times – in short, it saves time, space and money. Updated QuickMove technology software gives maximum acceleration and speed, and the industrial design is made for easy use with even the most demanding of applications.

The new robot has the shortest cycle times available for picking and packing. Optimized for a 3 kilogram payload, throughput is improved from 30 to 60 percent over the IRB 340.

Key to the improvements is the new QuickMove software. With QuickMove, cycle times can be improved by up to 20 percent. The software allows for maximum acceleration and speed over the entire work cycle via automatic acceleration optimization. The speed or acceleration is reduced only if a system or user limits otherwise would be exceeded. In addition, QuickMove provides protection against overloading.

Another key feature is the small footprint of the robot – it is 35 percent smaller than the footprint of the IRB 340 – meaning it can work in tight areas. By requiring only a small work area, there is the possibility of installing many robots in one small area and working together. No additional programming due to the smaller footprint is needed either.

The IRB 360 robot also features all metal parts made of stainless steel: Delta plate, theta axis, arm system parts and spring unit are all stainless. There are also fewer small components that require extra care and the ball joints are lubricant-free. Plus, the cable entrance from the side means the robot can be cleaned like other equipment in the plant with minimal risk of water getting into the robot.

In addition, the robot is calibrated with an integrated tool instead of externally and there is a new ISO tool interface.

All of these features ultimately mean easier cleaning and maintenance, and the result is better hygiene, plus less downtime as there are fewer problems, and ultimately, a longer life for the robot.