

# Motion control enhances a broad spectrum of products

IIS brings state-of-the-art motion control to OEM partners

**W**hat do comforters, newspapers, and aluminum cans have in common? Like wood veneer, plastic zip lock bags, golf balls, and dozens of other products, all are being made more cost-effectively and of higher quality through the use of motion control devices. Single and multi-axis controllers, motors, drives, I/O, operator interfaces, and a full range of software products now make it possible to bring the high-speed and precision previously associated only with high-end CNC machinery to the production of a wide range of goods.

Take comforters for example. In the bedding industry, motion control now allows an artist to design a mattress cover sewing pattern without the need to cut expensive, long-lead-time metal cams. In the production of newspapers, motion control provides a new level of flexibility by enabling publishers to tailor inserts for different regions. The same technology can be used for mail stuffers. As the newspaper or mailer travels along a conveyor belt, the motion controller tracks progress and knows just when to deposit the next insert. Simultaneous communication with a host computer tells the equipment just what that insert should be. With the old mechanical technology, products had to be precisely spaced on the conveyor or the insert would end up in the wrong place, often on the floor or jamming the conveyor. Motion controllers do the job faster and with less waste.

And what about aluminum cans? Production of the latest designs, featuring an embossed logo precisely positioned with the conventional can décor, is not an easy task. Precision embossing depends on state-of-the-art equipment capable of in-feeding the can, registering the label decoration to a known position, embossing, releasing, and outfeeding the can in less than one second. The solution features numerous motion control devices, including a starwheel delivery system that separates previously printed individual cans from an in-feed stream and synchronously delivers the can to one of twenty-four servo controlled lift pads. Today, numerous examples of embossed cans of beer and soda can be found on store shelves throughout North America, Europe, and Japan.



Motion control products bring a wide range of benefits to the manufacturing process. Products can be made with more consistent quality and greater accuracy, increased throughput, and reduced levels of scrap. Programmable motion control devices also provide greater flexibility so that one machine can make many variations of a product. Intelligence in these machines enables them to perform self-diagnostics so that inferior parts can be detected and maintenance performed before a significant amount of waste accumulates. Motion control systems also feature electronic networks that can connect production machinery to enterprise-wide networks to facilitate inventory tracking and quality control.

The future of motion control looks even brighter as more powerful processors become available at lower costs. Communications capabilities will increase as well, enabling production machinery to be linked throughout an enterprise via Ethernet and other networking protocols. Communications will also enable remote diagnostics and analysis of equipment to occur on the shop floor and thereby save on maintenance costs and downtime.

Industrial Indexing Systems is a leader in spreading these benefits of motion control to a broad spectrum of industry. The company offers a range of products including single and multi-axis controllers, motors, drives, and associated hardware. A full range of easy to use software products makes it simple to program IIS products quickly and accurately. The company also offers a systems-engineering capability to help customers add motion control capabilities in a variety of situations, from retrofitting an existing machine through starting from scratch on a brand new product.

## FOR MORE INFORMATION

Visit Industrial Indexing Systems Inc.'s website at [www.iis-servo.com](http://www.iis-servo.com), e-mail [info@iis-servo.com](mailto:info@iis-servo.com), call (585) 924-9181, fax (585) 924-2169, or circle the appropriate number on the Reader Service Card included in this supplement.

**Motion control products ..... circle 1015**