

Ameridrives

Bauer Gear Motor

Bibby Turboflex

Boston Gear

Delroyd Worm Gear

Formsprag Clutch

Guardian Couplings

Huco

Industrial Clutch

Inertia Dynamics

Kilian

Lamiflex Couplings

Marland Clutch

Matrix

Nuttall Gear

Stieber

Stromag

Svendborg Brakes

TB Wood's

Twiflex

Warner Electric

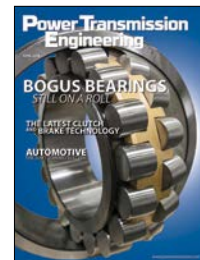
Warner Linear

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Cost-Effective Precision in Packaging and Labeling



As seen in
Power Transmission Engineering
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Cost-Effective Precision in Packaging and Labeling

With many industries embracing the latest technology trends found in the Internet of Things (IoT) and Industry 4.0, it can be easy to overlook some of the simpler and more cost-effective solutions. For packaging and labeling, maintaining precision and product positioning is extremely important for high-quality results and does not necessarily require the latest in servomotor design.

The inevitable march of progress brings with it many innovations and solutions that save time and energy. However, adopting new technology at face value may not always be the most cost-effective solution. One good example is the introduction of servomotors and variable speed drives into assembly and packaging lines; while certain applications will benefit, others are better suited to a simpler approach.

Keep it simple

Wrap spring clutches and brakes offer a simple and effective means of providing accurate, non-accumulative error indexing and positioning. Furthermore, for their physical size, wrap spring clutches can transmit considerable amounts of static torque.

The most common applications involve multiple starts and stops within a single revolution: such as printing presses, postage machines, conveyors and packaging machines. Operating continuously, these machines rely on the product position being exactly the same, week after week, without the need for compensating actions or adjustments.

By working closely with a manufacturer, it is possible to determine the most suitable dimensions and configuration for the wrap spring clutch, thus creating a solution that will deliver not only accuracy and repeatability, but also reliability and lower running costs. However, they are not a panacea, and each application should be carefully assessed to ensure the most-effective operation.

Think it through

Original equipment manufacturers (OEMs) and end users can all benefit from making the most appropriate choices when it comes to building and installing a new commercial processing machine. The initial costs of technology using the latest innovations are much higher and will directly affect the price point of the new equipment. In contrast, given the right operational parameters, a more simplistic approach can deliver significant cost savings as well as a far less complicated maintenance routine.



Solenoid-activated wrap spring clutches are much simpler to repair or replace, and the process can be completed with minimal downtime.

In addition, once the machine has been installed, the customer will be responsible for carrying out any repairs. Repairs to servo motors and their drive systems require highly skilled maintenance staff, and replacement parts can be quite costly. In contrast, solenoid-activated wrap spring clutches are much simpler to repair or replace, and the process can be completed with minimal downtime. In these circumstances, the maintenance costs associated with simple technology are a fraction of those attributed to the latest drives and their associated controls.

Assessing the application

Processing systems that have a high cycle rate, above 10 per minute for instance, will satisfy the first step of the assessment process. From this point, it is necessary to analyze the load inertias and speeds as well as identifying potential sources of friction that will affect cycle rates and repeatability.

At this stage, OEMs and end users can benefit from the expert advice that is available from Warner Electric, which is part of the Altra Industrial Motion Corporation. From individual components to complete processing lines, Warner's technical support team can offer experienced advice on the best solution in terms of reliability and cost effectiveness.

Industries such as packaging and labeling are cost-conscious and, as such, require the equipment that they use to be cost-effective and reliable with minimal running costs. By assessing each component within a process, it is possible to determine the most suitable design and integrate it into the finished product.



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About Altra Industrial Motion

Altra is a leading global designer and manufacturer of quality power transmission and motion control products utilized on a wide variety of industrial drivetrain applications. Altra clutches and brakes, couplings, gearing and PT component product lines are marketed under the industries' most well known manufacturing brands. Each brand is committed to the guiding principles of operational excellence, continuous improvement and customer satisfaction. Highly engineered Altra solutions are sold in over 70 countries and utilized in a variety of major industrial markets, including food processing, material handling, packaging machinery, mining, energy, automotive, primary metals, turf and garden and many others.

Altra's leading brands include Ameridrives, Bauer Gear Motor, Bibby Turboflex, Boston Gear, Delroyd Worm Gear, Formsprag Clutch, Guardian Couplings, Huco, Industrial Clutch, Inertia Dynamics, Kilian, Lamiflex Couplings, Marland Clutch, Matrix, Nuttall Gear, Stieber, Stromag, Svendborg Brakes, TB Wood's, Twiflex, Warner Electric, Warner Linear and Wichita Clutch.



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