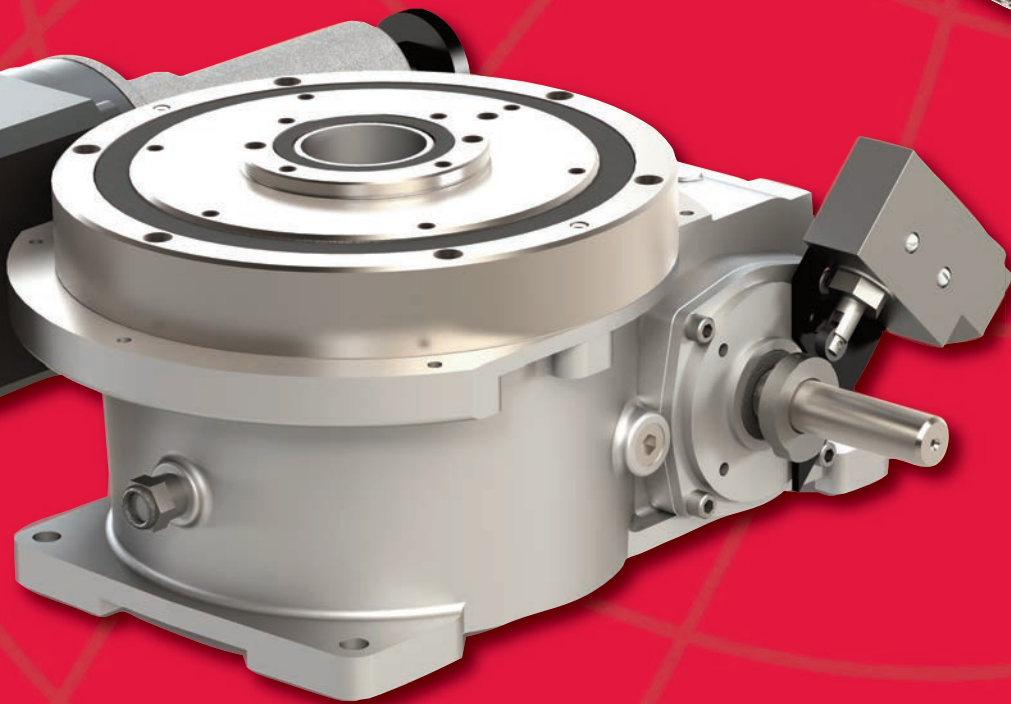
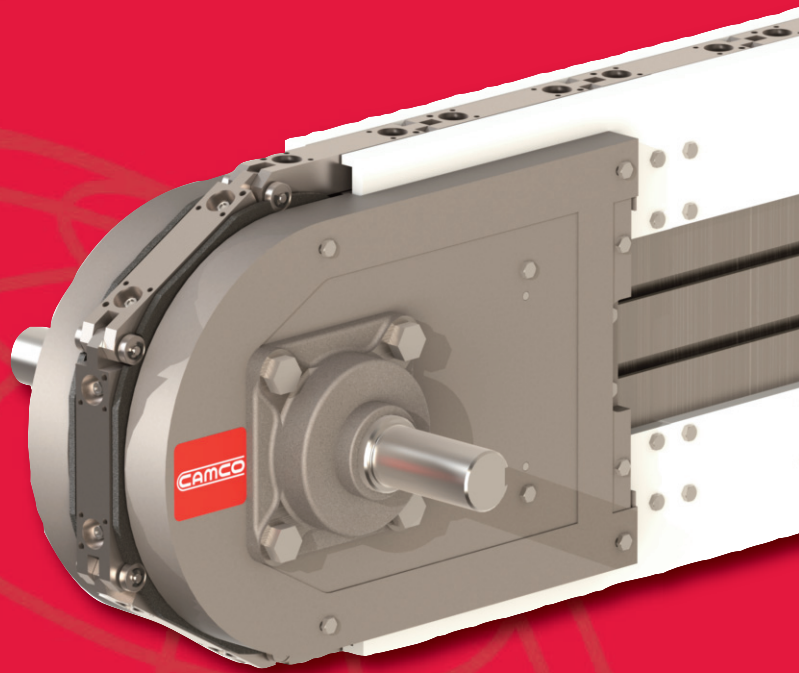


Precision Indexing

CAMCO®



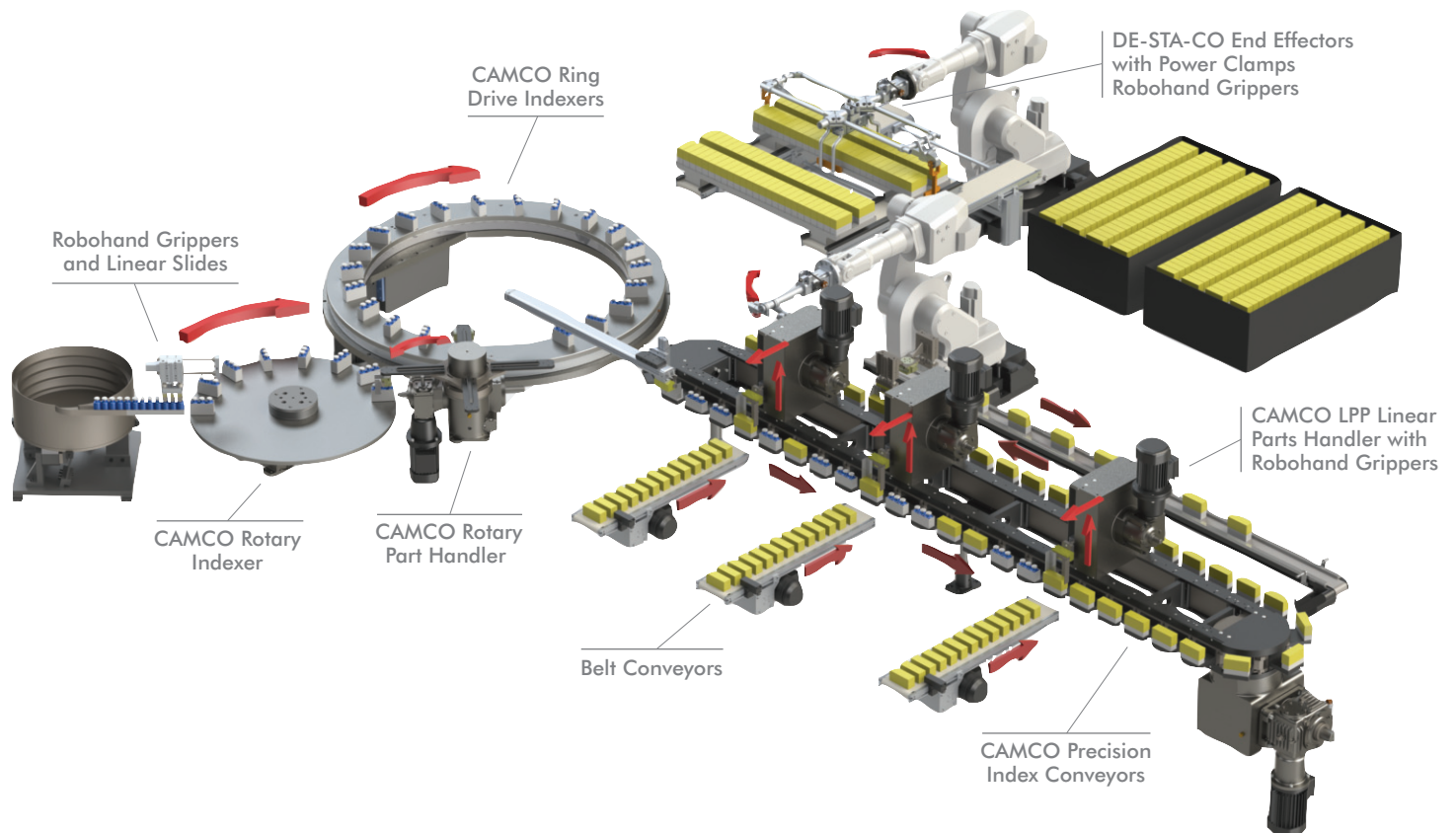
Indexers
Actuators
Conveyors





THE BEST PRODUCTS. UNMATCHED SERVICE. WORLDWIDE.

With a support network spanning the globe, DE-STA-CO offers consistent, comprehensive service to any location in the world. Whether your operations are localized or span multiple continents, you will always have access to the highest levels of customer service and technical support.





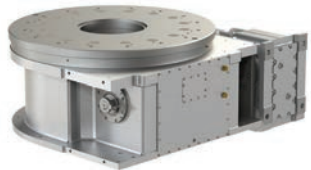
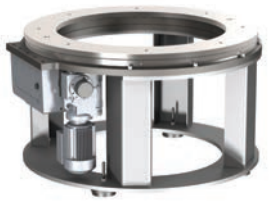

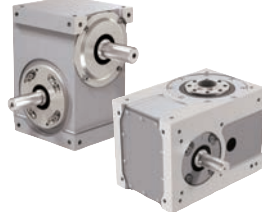
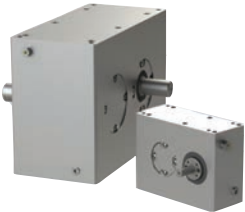








Dimensions and technical information are subject to change without notice.



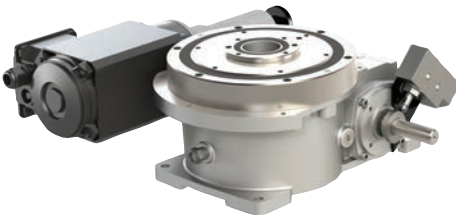
For more than 50 years, CAMCO global products have been the industry standard for the highest quality cam-actuated motion control products available. DE-STA-CO manufactures a wide range of motion control products including:

- Indexing Drives with right angle or parallel shaft orientation, and shaft or flange outputs, ranging from large index drives which can rotate several tons of automotive body parts in seconds to smaller index drives which can accurately index pharmaceutical or electronic components.
- Precision Link Conveyors provide precision positioning for linear transfer applications in table top and heavy-duty sizes. Combine with CAMCO Rotary or Linear Parts Handlers for a complete parts handling system.
- RSD Servo-Mechanical Drives provide zero-backlash speed reduction combined with a large flanged output and through hole for use with industry standard servo motors.

Product/Application Overview 4
Engineering Overview 9

			
RDM 39 Dial Indexer	RD 55 Heavy Duty Dial Indexer	E-Series 67 Heavy Duty Index Drive	RNG 79 Easy Access Indexer
			
RSD 88 Flexible Dial Indexer	DX 91 DX Servo Actuator	RGS/RGD 117 Shaft/Flange Indexer	Parallel 137 Shaft/Flange Indexer
			
RA 149 Right Angle Index Drive	Rite-Link 158 Conveyor	Table Top 161 Modular Conveyor	Heavy Duty 171 Modular Conveyor
			
LPP 181 Linear Parts Handlers	RPP 187 Rotary Parts Handlers	Overload Clutches .. 197 Output and Input	Custom Cams 208 Output and Input

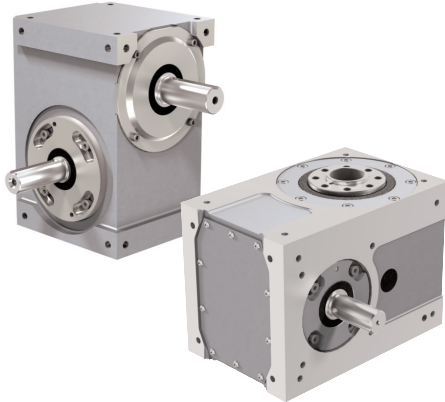
RDM Roller Dial Index Drives



The RDM Series Index Drive is ideal for rotary dial applications with features including:

- Low profile
- Large center thru hole
- Large output mounting surface supported by 4-point contact bearing, offering superior thrust and moment capacity
- Complete motorized drive packages and option overload clutch

RGD/RGS Roller Gear Index Drives



Roller Gear Index Drives are robust, versatile units suitable for a wide variety of applications. Roller Gear Index Drives feature:

- Universal mounting with mounting holes on all six sides
- Flange or shaft output
- Center thru hole (flange version)
- Custom motions such as oscillating motions, or short index periods, available

RD Roller Dial Index Drives



Roller Dial Index Drives offer superior load capabilities, making them ideal for medium to high torque applications.

Other features include:

- Universal mounting, including horizontal mounting, ideal for trunion applications
- Center thru hole facilitates passage of electrical wiring, pneumatic lines or mechanical linkages
- Short camshaft motion periods are well-suited to continuous running applications or for special motion requirements
- Available with custom motions such as oscillating motions

Rite-Link Conveyor



The CAMCO Rite-Link Conveyor is a thin profile, preassembled, precision link system that offers maintenance free accuracy and durability for industrial conveying applications.

Other features include:

- Fully designed, assembled and tested for your application
- Slim, compact design with narrow link accommodates oversized tooling
- More accurate and stable than roller chain with high operating speed capabilities
- Servo-friendly for flexible indexing with CAMCO RSD rotary servo drive



DX Rotary Servo Actuator

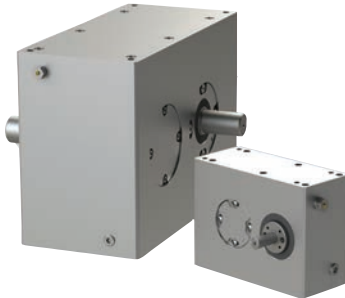
The DX Series Drive is a programmable direct drive servo actuator with Safe Torque Off (STO) designed for small flexible dial applications.



RSD Rotary Servo Drive

SMARTER INDEXING: The CAMCO RSD Rotary Servo Drive is a zero-backlash, cam-actuated drive compatible with industry-standard servo motors for precise control, efficiency and flexibility.

- Designed to accept a variety of servo motors
- Preloaded for zero backlash, high accuracy, and smooth motion
- Indexing flexibility
- 4:1 to 18:1 ratio in single state



Parallel Index Drives

Parallel Index Drives are ideal for high-speed applications or for actuation-type applications such as driving a linkage or a conveyor.

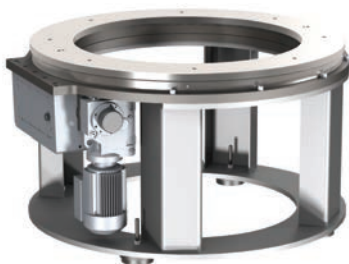
- High-speed and high-load capability
- Whole or fractional stops, oscillating and complex custom motions are available
- Long transfer distances achieved with simple linkages
- Rigid and backlash free operation



Precision Link Conveyor Modular Table Top

Precision link conveyors provide designers and engineers with a multiple-station chassis for the assembly of more complicated products. Lengths from 3 feet to 40 feet, with link pitch of 3, 4.5 or 6 inches, are available to suit any requirement.

- Modular frame design in 18" increments for quick assembly and delivery
- Precision positioning of parts
- Open frame design for pass through of belting, linkages, and electric and air supply components
- Metric links also available, upon request

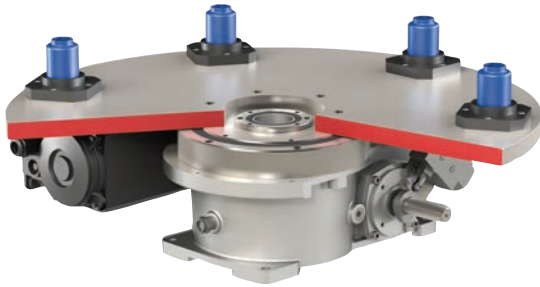


RNG Ring Index Drives

Ring Index Drives have a large center opening ideal for mounting auxiliary equipment within the center space, freeing floor space and providing operator access. The Ring Drive is ideally suited for pad printing and decorating equipment and for automatic assembly machinery applications that require a large number of workstations.

- Up to 60 station capability, ideal for multiple part automatic assembly machines
- Sealed 4-point contact output bearing for superior accuracy and load capability
- Modular shaft-mounted reducers for application flexibility and easy maintenance

Fixed and Flexible Dials, Conveyors and Parts Handlers



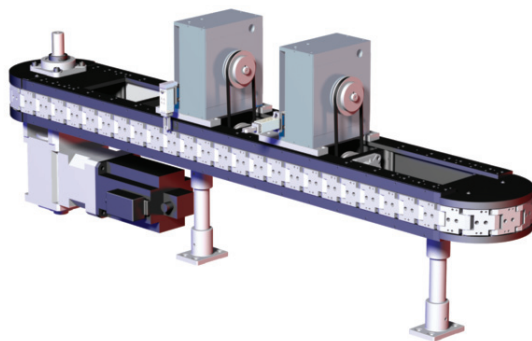
RDM Indexer with dial and fixed number of stations

- Operation is asynchronous (cycle on demand) – a single index followed by a variable dwell time.
- Index motion time is changed by adjusting the frequency setting of the inverter drive.
- Dwell time is variable.
- 30 cycles per minute with a DC motor and drive and 60 cycles per minute with an AC motor and drive.



115RSD Flexible Indexer with a dial

- Servo Driven Indexer with dial and variable number of stations
- Operation is asynchronous (cycle on demand) – a single index followed by a variable dwell time.
- Index motion time is changed by changing the motion profile of the servo motor.
- Dwell time is variable. Single axis servo or multiple axis servo controllers can be used.
- More than 60 cycles per minute – maximum cycle rate can be determined by your application engineer.



Indexer driving a conveyor and Linear Part Handlers

- Operation can be asynchronous (cycle on demand) – a single index followed by a variable dwell time, or the operation can be continuous.
- Index motion time is changed by changing the motion profile of the servo motor.
- Dwell time is variable. Single axis servo or multiple axis servo controllers can be used.
- More than 60 cycles per minute – maximum cycle rate can be determined by your application engineer.



CAMCO Cambot Parts Handlers with Robohand Electric Gripper

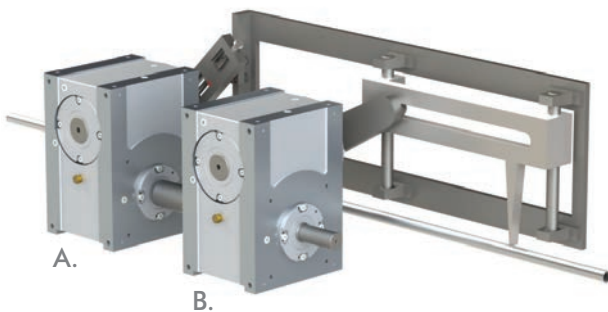
- CAMCO Cambot LPP Pick and Place mounted to conveyor chassis can be supplied with DE-STA-CO Robohand grippers and can be used to load and unload product. Rotary Pick and Place units are also available.
- All motion axes and grippers can be sequenced by your PLC.

Flexible Multi-Axis and High Speed



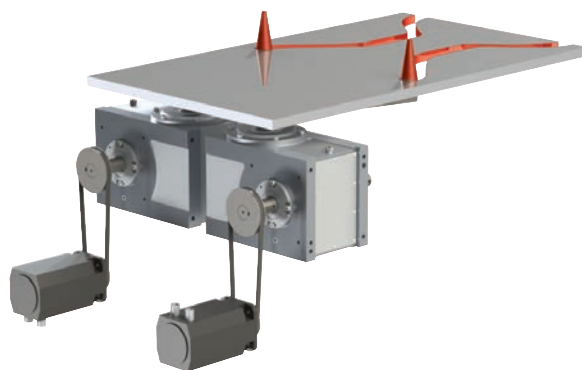
Flexible Cambot Pick and Place

The main rotary axis of the Flexible Cambot Pick and Place is a servo driven indexer. The indexer is used because it has a large output flange face with a large bearing. The linear axis is a Robohand slide. Spidergrip or BodyBuilder components can be connected to Robohand grippers or DE-STA-CO vacuum products to make complete custom end effector solutions.



Flying Cutoff Application

This application takes a formed tube and cuts it to length. The inputs of two CAMCO roller gear models are coupled together and work together to produce the product. A slaved servo motor is used to drive the two CAMCO boxes and will stay in step with any possible speed variations of the tube line. The model on the left (A) is an indexer that has an adjustable length arm that moves a frame holding the cutting tool. The indexer moves the frame to match the speed and position. The model on the right (B) is an oscillator that moves the cutting tool down and up. The length of the tube is infinitely adjustable. Longer pieces are cut by increasing the arm length. Very long pieces are cut by allowing the tube to flow out before the servo motor is single cycled.



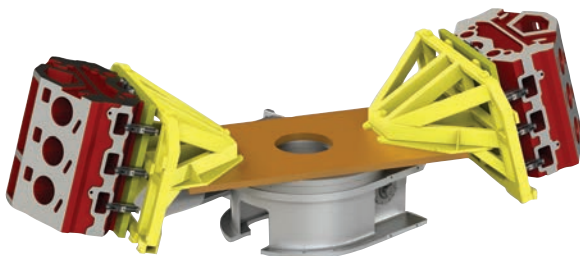
High Speed Contouring

This application requires high speed contouring (> 1000 ppm) of a paper or plastic web. Two CAMCO oscillators have lasers or similar cutting tools mounted to the ends of the oscillating arms attached to them. In this example, the customer submitted desired patterns for the finished product and CAMCO engineers designed cams that closely met the customer patterns, were dynamically stable and did not require maintenance. The two servos that drive the cam boxes are slaved to the web line and will stay in step with it.

Heavy-Duty Rotary

The E-Series Index Drive is ideal for heavy-duty rotary dial applications with features including:

- Large output mounting surface supported by a 4-point contact bearing superior thrust and moment capacity
- Large center thru hole to accommodate stationary center post, electrical wiring and air or hydraulic lines
- Complete motorized drive package with reducer and brake-motor combinations to suit most applications
- Precision cam with preloaded cam followers for maximum accuracy
- Durable welded steel housing
- Preloaded "center rib" design for smooth acceleration and deceleration with precision positioning



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TRAINING

Providing true solutions requires more than just standard-setting products. DE-STA-CO provides customers with a variety of optional training opportunities, including online, onsite and customized training programs.



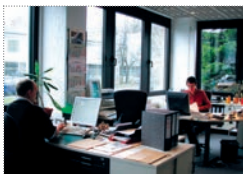
GLOBAL WEB RESOURCE

In addition to working closely with customers on a face-to-face basis, we provide a wealth of accessible, user-friendly material through our website, www.destaco.com. DE-STA-CO's website contains the comprehensive product information you would expect, as well as intuitive tools designed to provide instant customer support.



3D CAD & CONFIGURATOR

DE-STA-CO supports a wide variety of CAD programs, ranging from AutoCAD to SolidWorks. Our innovative online digital catalog features a 3D CAD library that allows engineers to configure individual 3D models from DE-STA-CO's extensive product lines.



CUSTOMER SUPPORT

DE-STA-CO provides support to customers available via fax, email or telephone. Our highly trained customer service staff work diligently to address any and all questions you might have.



TECHNICAL SUPPORT

DE-STA-CO customers receive technical support from our own expert engineers. These highly trained employees work hand-in-hand with you to develop and implement the best possible solutions for your operations.

PRODUCT WARRANTY

All DE-STA-CO Industrial Products are thoroughly inspected and tested. We fully guarantee all materials and workmanship to be free of defects. Any product that is found to be defective in design, material or workmanship in the course of its normal use will be promptly replaced.

This Warranty does not apply to any product where the failure is a result of misapplication or abuse, nor is there any Warranty expressed or implied as to the merchantability or fitness for a particular purpose of the product and any warranty is limited to the above express warranty.

This Warranty is null and void if the product is repaired, modified or altered in any way. DE-STA-CO is not liable for labor, special, direct, incidental, or consequential damages and under no circumstances any charges in excess of the invoice amount of the product proven to be defective.



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- Unmatched accuracy, reliability and performance
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