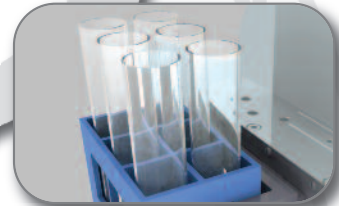
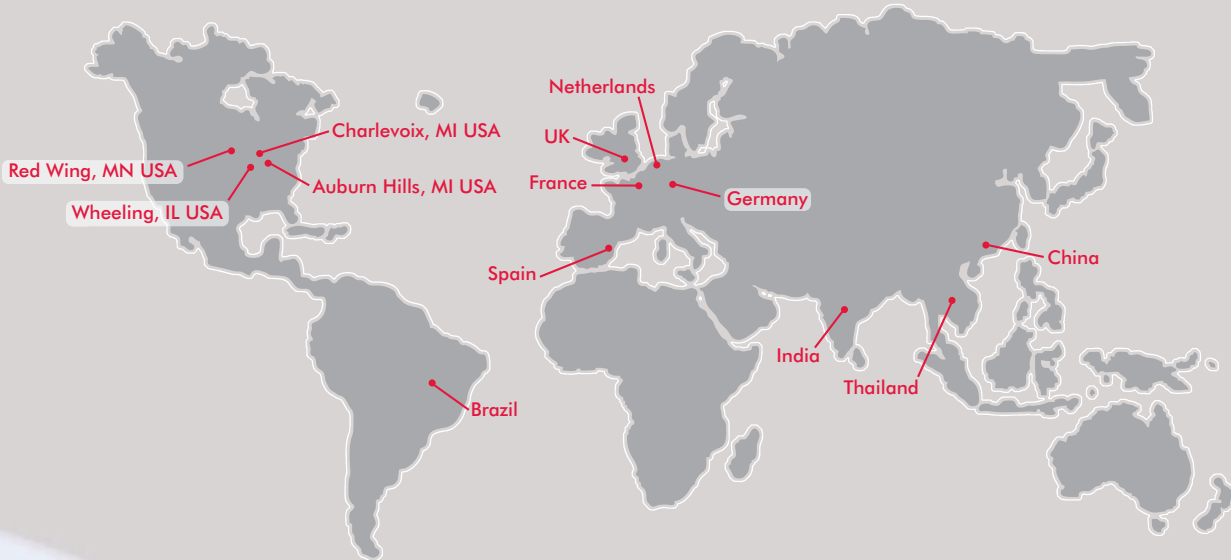


DE-STA-CO in Life-Sciences





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.

Since its founding in 1915, DE-STA-CO has focused on outstanding customer service. The company grew steadily over the next four decades and in 1958 started to expand internationally. In 1983, DE-STA-CO opened its first overseas manufacturing facility in Thailand. With the acquisition of Robohand in 1996, DE-STA-CO started to get involved in automation and since then has expanded by acquiring and integrating other well-known brands like Camco and Ferguson. In 2008, we strengthened our presence in life sciences when Central Research Laboratories (CRL) joined team DE-STA-CO.

Today DE-STA-CO is a world leader in the innovation, design, manufacture and support of clamping, gripping, transferring, indexing and robotic tooling solutions for workplace and automation needs.

Our growth is a direct result of our commitment to serve customers of all sizes on a local, one-to-one basis.

DE-STA-CO provides productivity solutions to a diverse range of market segments

- Life sciences
- Bio containment
- Consumer products
- Food and packaging
- Automotive/transportation
- Aerospace
- Alternative energy
- Nuclear
- Defense





Unique manufacturing challenges require unique solutions

Rapid advancements in the life-sciences industry brings forth a unique set of requirements in production, research, clinical laboratories, and within pharmaceutical automation. DE-STA-CO's innovative product offerings excel with efficiency, reliability, and greatly simplify material handling for these types of highly specialized environments.

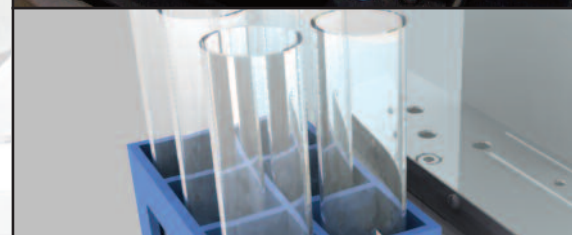
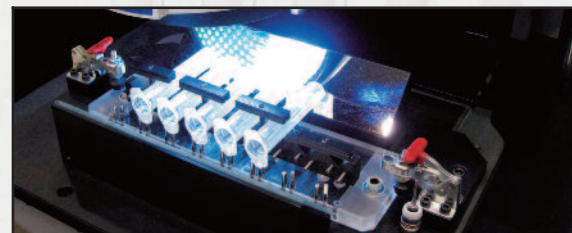
Our products are well-known for their outstanding quality, durability and reliability. This gives our customers tremendous peace of mind when it comes to meeting regulatory challenges and with DE-STA-CO they have a strong, knowledgeable partner who understands their special needs, be it in a production environment or in a laboratory. Many of our products are in the field after decades of trouble-free operation.



If application requirements go beyond our extensive standard product range, we can also provide a custom solution to meet specific needs.

DE-STA-CO has a long history of serving the life sciences Industry. Our products are widely used in applications such as:

- Medical device assembly
- Single use medical device manufacturing
- Medical device packaging
- Pharma manufacturing,
- Radio pharma
- Bio containment
- Lab automation, analytical instruments etc.
- Pharma packaging
- Pharmacy automation
- Cosmetics manufacturing and packaging
- End-of-line packaging and palletizing



Robohand **CAMCO** **CRL**

Complete High Speed Precision Solutions

DE-STA-CO with CAMCO and Robohand products offer complete standard and custom automation solutions for high speed, precision indexing and pick-and-place applications.

DE-S
with

DE-STA-CO End Effectors with Power Clamps and Robohand Grippers

CAMCO Ring Drive Indexer

Robohand Grippers and Linear Slides

CAMCO Rotary Indexer

CAMCO Rotary Part Handler

DE-STA-CO Belt Conveyor

CAMCO Precision Index Conveyor

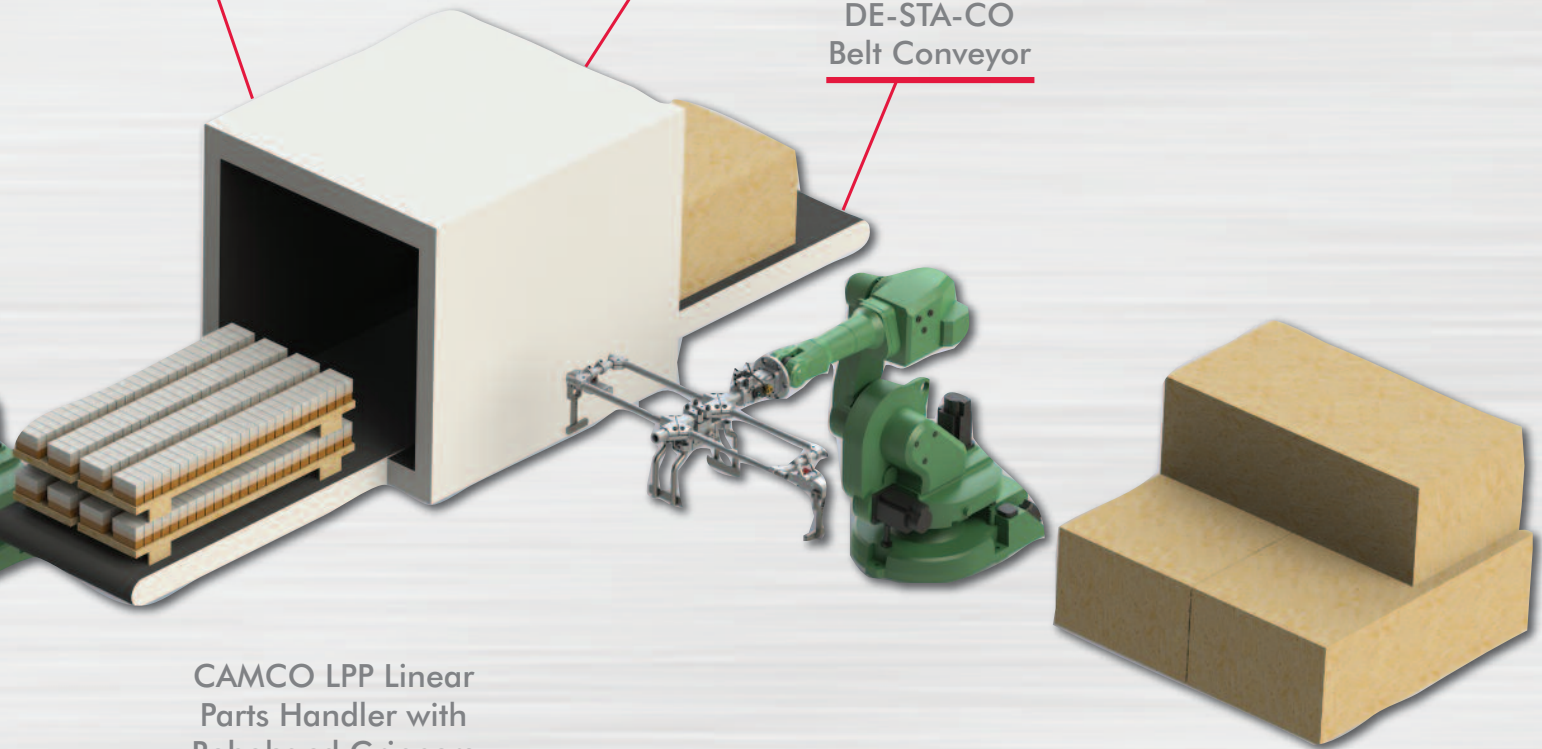
CAMCO Robohand



DE-STA-CO Vacuum Cups
Vacuum Generators

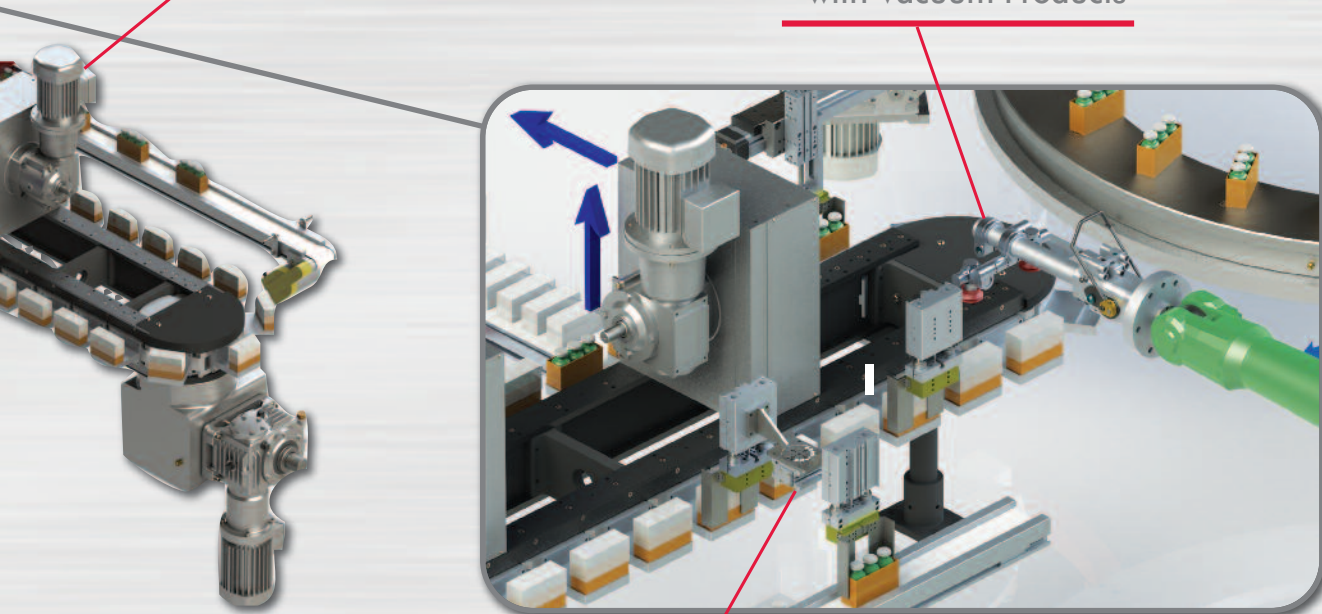
Robohand
Linear Slides

DE-STA-CO
Belt Conveyor



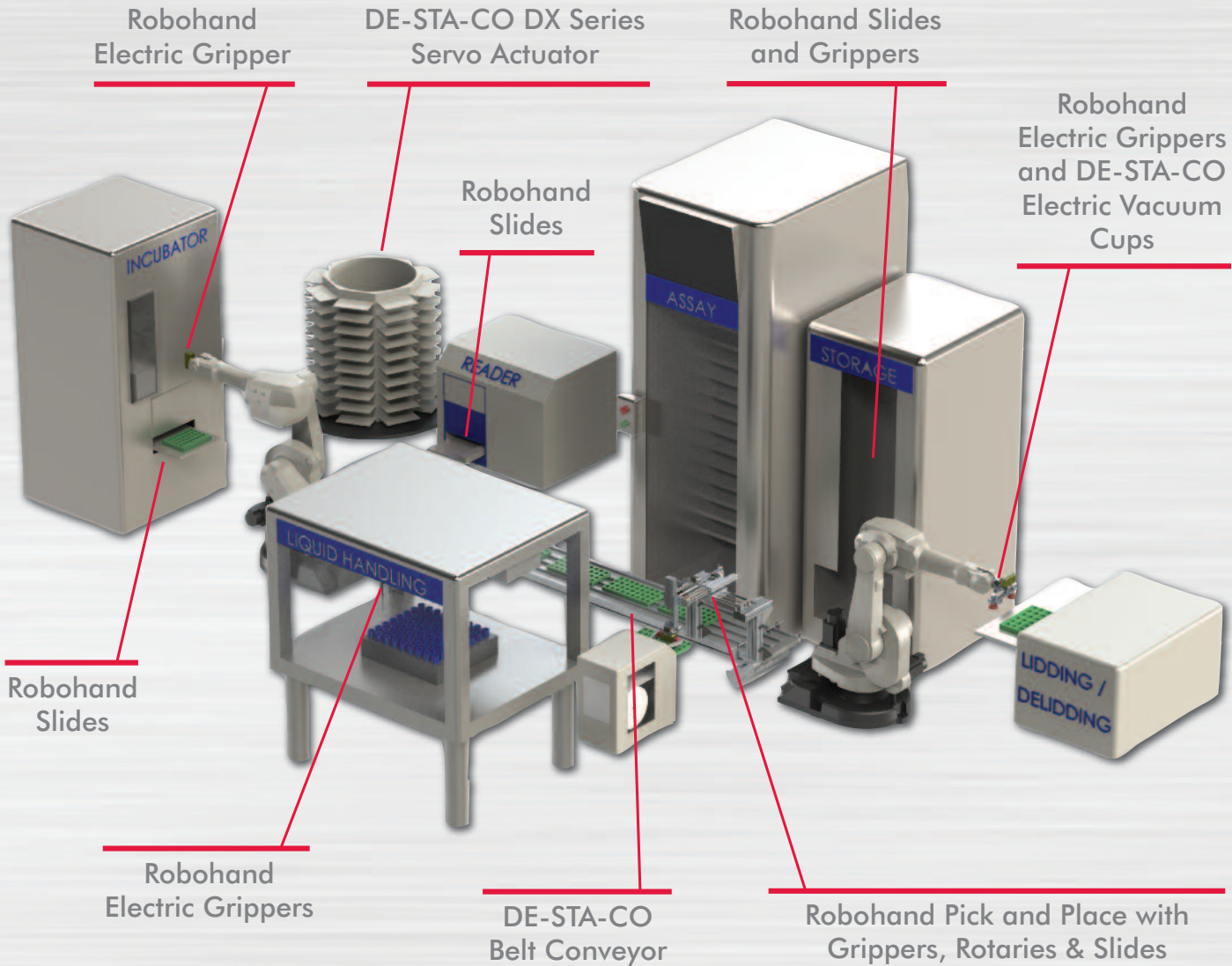
CAMCO LPP Linear
Parts Handler with
Robohand Grippers

DE-STA-CO End Effector
with Vacuum Products



Robohand Rotaries,
Slides and Grippers

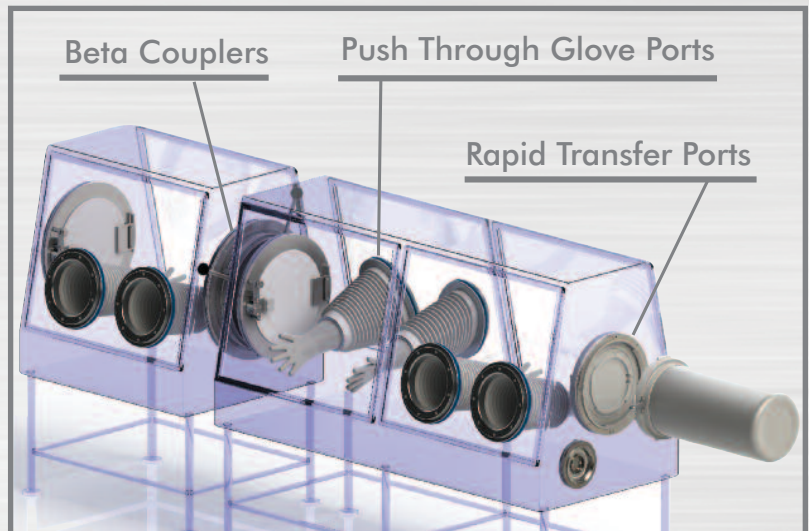
Lab Automation Solutions



CRL's Push-Through Gloveports are used in isolators or gloveboxes where activities bring together dangerous or sterile products with human operators.

CRL Transfer products are used to:

- Transfer hazardous toxic or sterile material from one sealed enclosure to another sealed enclosure
- Perform transfer without contaminating the sealed enclosures or the environment surrounding the sealed enclosures





Pharma/Cleanroom Solutions

DE-STA-CO Stainless Steel Manual Clamps

CAMCO Direct Drive Index Table

CRL Tele-Manipulators

CRL Rapid Transfer Port

DE-STA-CO Vacuum Products DX Drive Actuators and Robohand Slides

Robohand Pick and Place

CAMCO Med-Redi Index Conveyor

CRL Gloveports Systems and Rapid Transfer Ports

CRL Sterile Liquid Transfer Port

DE-STA-CO Belt Conveyors

DE-STA-CO Electric Grippers

CRL Gloveport Systems and Rapid Transfer Ports

CRL Gloveport Systems and Rapid Transfer Ports

Telemanipulators are typically used for remotely performing tasks in a high-radiation or isolated environment by extending the dexterous manipulative capabilities of a human operator.

Courtesy of DEMCO Automation

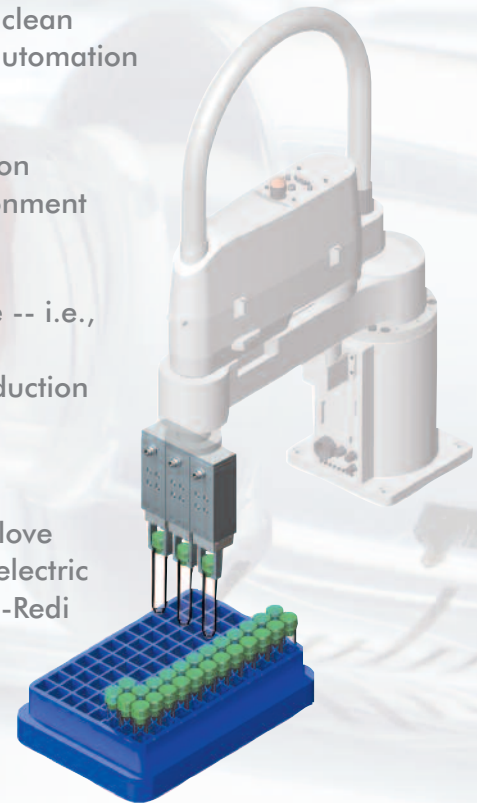
Clean Environment / Clean Room

Whether your application is in a standard production environment, a clean environment, or a cleanroom, DE-STA-CO has a broad spectrum of automation and workholding solutions to fit customer needs.

Clean environments are common in all kinds of life sciences production areas. Many of our products are capable of working in a clean environment (cleanroom 10,000 / US FS 209 or also class 7 / ISO 14644).

Frequently, applications require production environments to be sterile -- i.e., pharmaceutical production and to a lesser degree medical device manufacturing. Cleanrooms have been gaining in importance in production of some pharmaceutical compounds as well as some Medical Device Manufacturing (typically up to cleanroom 100 or ISO class 5).

For applications requiring cleanroom conditions, DE-STA-CO offers glove and transfer ports, manipulators, mini manipulators, pneumatic and electric grippers, slides, rotary actuators, clamping technology, indexers, Med-Redi conveyors, and the EcoCup -- the world's first electric vacuum cup.



If a demanding application requires bio-containment, DE-STA-CO offers many products suitable for cleanroom use. Our team of experts at CRL are ready to advise you.





Custom Products for Unique Applications

Sometimes it takes more than a standard product to achieve maximum performance, while at other times, you may have an application that requires a unique approach. This is where the DE-STA-CO custom engineering department comes in.

We will work with customers to meet special application needs, be it through modifying an existing product or through creating an entirely new product.

Throughout this process customers will work with a knowledgeable and highly trained engineer who understands your specific application needs. With DE-STA-CO's years of experience within the life-science industry, we are the trusted, global partner of choice that understands project requirements and the importance of complying with current Good Manufacturing Practices (cGMP).

DE-STA-CO is ISO 9001 certified.



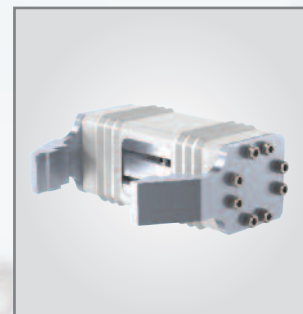
Peek gripper



Stainless steel gripper



Latch clamp with electroless nickel plating.



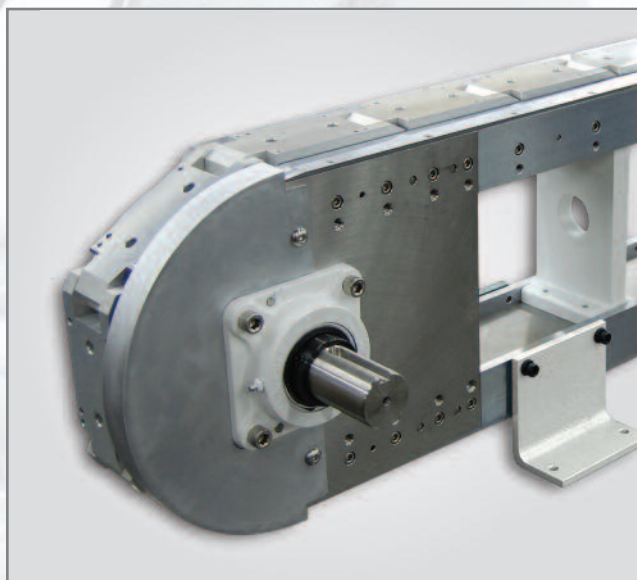
Parallel gripper with boot for clean room



Stainless steel clamp with special hook and locking tab.



Electric gripper for low temperature



Precision conveyors for pharmaceutical applications, with electroless nickel plated shafts and mounting surfaces, pharmaceutical approved grease, etc



Application required grippers to be installed on a very tight center-line with this 8 bank gripper.

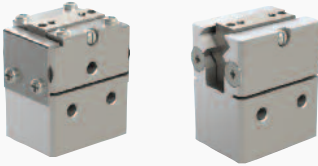


Non-synchronous, long stroke back to back gripper for pick and place application.

DE-STA-CO Products for the Life-Sciences Industry

The following pages are a show case of our products typically used by customers in the life-sciences Industry. You can find a complete selection of our products and specifications on our website.

RPM/RPMC Miniature Parallel Grippers



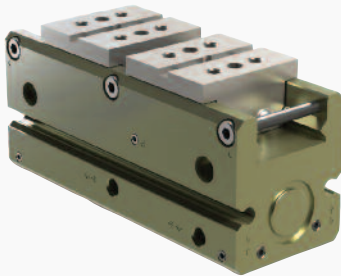
- Preloaded roller bearing for added precision and load bearing
- Very small, 16mm width [5/8"], gang mountable with top manifold
- Ideal for small parts
- Nominal force 36N at 7 bar [8 lbf at 100psi]
- RPMC suitable for cleanroom class 100

RPL/RPLC Miniature Parallel Grippers



- Patented Preloaded double (V) roller bearing for added precision and load bearing
- Wide range of pressure (0.3 to 7 bar [5 to 100psi]) and gripping force
- Non-synchronized option available for pick-and-place at an off-center point
- Features additional vacuum/pressure port and sensor mounting
- RPLC suitable for cleanroom class 10

DPP Precision Parallel Gripper



- Patented Preloaded double (V) roller bearing for added precision and load bearing
- Wide range of pressure (0.3 to 7 bar [5 to 100psi]) and gripping force
- Non-synchronized option available for pick-and-place at an off-center point
- Optional spring assist for fail-safe operation or increased force
- Sensor mounting
- Very high precision and repeatability, though final grinding after assembly

RA Angular Grippers



- Inexpensive general purpose angular gripper
- Rugged design and high grip force for its size
- Suitable for internal and external gripping
- Adjustable open position of jaws

DCT Angular Grippers



- Jaws open completely (180 deg)
- Housing protected against ingress of metal shavings and particles
- Sensor mounting
- Spring assist version available for fail-safe operation

FUA Angular Grippers



- Meets regulatory requirements (EN 1672-2) for direct food contact
- IP69K rated
- Electro-polished stainless steel
- Food grade grease, very low maintenance

DE-STA-CO Products for the Life-Sciences Industry

DPE/RPE Parallel Electric Grippers



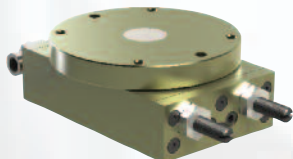
- Plug and Play, Light switch type operation, no programming, no adjustment required
- As easy to operate as a pneumatic gripper
- Long cycle life of over 20 Million cycles
- Ideal for operations where pneumatic solutions are not desirable
- Gripping Forces starting at 5N [1.1 lbf] using the RPE 100, going up to 400N [89lbf] with the DPE 400

DRG/DRF Rotary Actuators



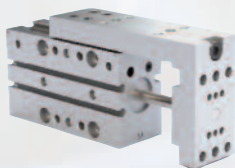
- Multiple mounting options
- Options of 45, 90, 135 180 deg with adjustment
- Robust rack and pinion design, shaft is mounted with bearings at top and bottom
- DRF is a high precision version for precise positioning at end of stroke

RR Light Duty Rotary Actuators



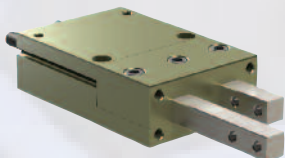
- Compact low profile design
- High precision zero backlash design with preloaded ball bearings
- Air manifold option eliminates twisted airlines

DLM Mini Ball Rail Slides



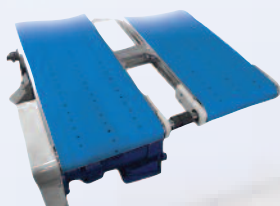
- Flexible air porting, part of our DIRECTCONNECT family of products
- Stroke adjustment (retract and extend) provides precise positioning
- High repeatability, ideal for intricate part assembly
- Position sensing options
- Excellent bearing support and power for its size
- Starting as small as 10mm width, ideal for small medical part assembly

RFE Feed Escapements



- Interlocking fingers eliminate premature retraction of the extended finger
- Minimize part jamming
- Ideal for separating components fed on a conveyor

Light, Medium and Heavy Duty Conveyors Belts



- Direct and offset drive versions, cleated, stainless steel, modular plastic, vacuum etc
- Modular design for fully configurable conveying solutions

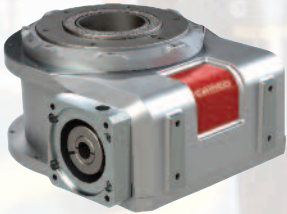
DE-STA-CO Products for the Life-Sciences Industry

DX Series Drives



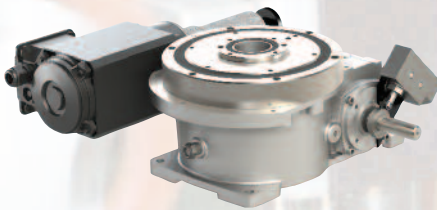
- Easy to setup
- High accuracy and repeatability combined with fast response
- Cam-profile motions provide smooth acceleration/deceleration
- Energy-efficient operation

RSD Rotary Servo Index Drive



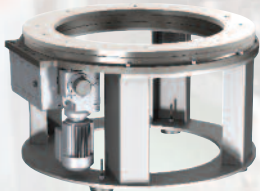
- Preloaded, zero backlash, cam actuated drive, industry standard interface for servo motors
- Variable number of stations, cycle on demand (asynchronous operation)
- Single index followed by variable dwell time.
- Index time is changed by changing motion profile of servo motor
- Over 60 cycles/min, more possible depending on application

RDM Index Drives



- Asynchronous (cycle on demand) operation
- Single index followed by variable dwell time
- Index motion time is changed by adjusting the frequency setting of the inverter drive
- 60 cycles/min with AC motor and drive(30 cycles/min with DC)

RNG Ring Index Drives



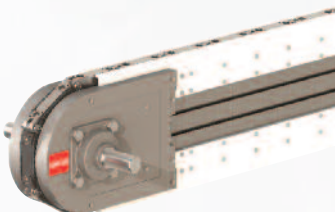
- Large center opening for mounting auxiliary equipment, providing operator access
- Up to 60 station capability, ideal for multiple part automatic assembly machines
- Superior accuracy and load capability

Precision Link Index Conveyor



- Multiple station chassis for the assembly of more complicated products
- Lengths from 3 feet to 40 feet, link lengths 3", 4.5" or 6"
- Modular open frame design in 18" increments for quick assembly and delivery
- Metric links optional
- Precision positioning of parts

Rite-Link and Med-Redi Index Conveyor

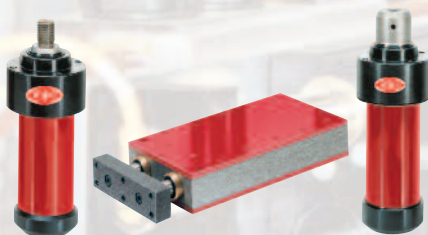


- Thin profile, pre-assembled precision link system for industrial and medical conveying applications
- More accurate and stable than roller chains, quieter operation, high speed operating speed capabilities
- Med-Redi version available with 316L SS shafts and covers at drive and take up ends



DE-STA-CO Products for the Life-Sciences Industry

Pneumatic Power Cylinder



- Pneumatic Cylinder with Mechanical force amplification (10x) on last 6mm of stroke
- Suitable for applications such as punching out parts from plastic sheets, pill pressing, ultrasonic welding, stamping etc
- Small space requirement compared to hydraulic and electrical alternatives
- Clean solution, no risk of oil leaks, ideal for medical applications

Stainless Steel Manual Clamps



- Large selection of vertical, horizontal, Latch clamps, ideal for process engineering applications, primary packaging, etc.
- Long product life in harsh conditions
- Holding capacity up to 3375N [750 lbf] (vertical), 3825N [850 lbf] (horizontal) and 9000N [2000 lbf] (Latch)

Pneumatic Power Clamps



- Ideal for connector systems in discharge of large containers
- Reliable with high holding forces
- Enclosed bodies
- NAAMS and Euro mounting
- Several sizes available
- Field-adjustable arm opening
- Patented manual unlock/locking feature

Vacuum cups and vacuum generators



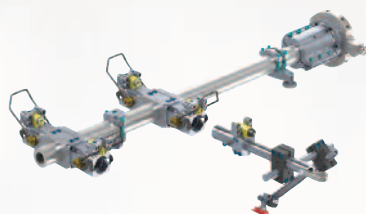
- Size 6mm and up
- Selection of materials
- Selection of round, oval, flat, bellows and different durometers

EcoCup™ Electric Vacuum Cup



- World's first electric vacuum cup
- Option where air and vacuum solutions are not preferred and the surface of the component offers a good seal
- Noise free, no airborne contaminants
- Ideal for applications such as lidding and de-lidding microplates and agar plates in Lab

End of arm tooling for robots



- Ranging from light duty to heavy duty, fully configurable
- Ideal for many end-of-line packaging applications
- Accessories such as tool changers also available

DE-STA-CO Products for the Life Sciences Industry

Telemanipulators



- Ideal for connector systems in discharge of large containers
- Reliable with high holding forces



CRL Gloveports and Systems



- Oval or round glove ports
- Glove system can be mounted in single wall insulators, 10mm, 12mm or 15mm panel thickness or double wall insulators on request

CRL Rapid Transfer Port

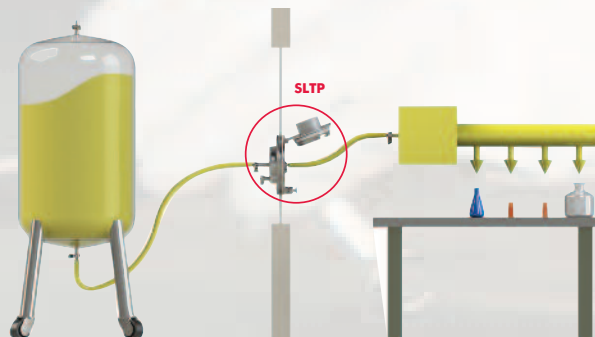


- Double door transfer system
- Wide variety of Alpha assemblies and Beta containers and bag flanges in Stainless Steel, HDPE and Medical grade plastics

CRL Sterile Liquid Transfer Port



- Efficient aseptic liquid transfer into a cleanroom or isolator for pharmaceutical manufacturing
- Engineered to use standard steam in place processes





Value Added Services

EACH DAY, DE-STA-CO PROVIDES CUSTOMERS WITH A COMPLETE RANGE OF WORKHOLDING AND AUTOMATION PRODUCTS AND SERVICES that reduce costs, minimize waste and eliminate bottlenecks. As a global supplier, we have extensive experience in bringing optimal solutions to customers of all needs and sizes. When you partner with DE-STA-CO, you put a world of resources at your fingertips.



MODULAR AUTOMATION

Our full continuum of products provides an extremely flexible approach to automation. Through DE-STA-CO, you receive a solution that is specifically tailored to meet the needs and demands of your operations



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.



A DOVER COMPANY

Workholding

- Widest variety of workholding products
- High durability and reliability
- Flexible solutions for all applications
- Custom products for unique requirements

Automation

- Broad range of engineered automation products
- Complementary products for modular integration
- Unmatched accuracy, reliability and performance
- Unparalleled global sales, service and engineering support

GLOBAL LOCATIONS

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