



Custom Products

Vertical Clamps

Horizontal Clamps

Squeeze Action Plier Clamps

Latch Clamps

Straight-Line Action Clamps

Variable Stroke Straight-Line Action Clamps

Pneumatic Clamps

CARVER Clamps

<< End Effector Tooling

Toolchangers

Rotary Actuators

Grippers

Conveyors



# WORKHOLDING & AUTOMATION SOLUTIONS

## Appliance Manufacturing Industry





# Discover the perfect combination of products for your appliance application.

IN TODAY'S HIGHLY  
COMPETITIVE MANUFACTURING  
WORLD, MAXIMUM  
EFFICIENCY AND RELIABILITY  
ARE REQUIREMENTS FOR  
SUCCESS IN THE APPLIANCE  
INDUSTRY. DE-STA-CO'S  
EXTENSIVE OFFERING OF  
COMPLEMENTARY PRODUCTS  
ALLOWS FOR THE CREATION  
OF THE PERFECT SOLUTIONS  
FOR YOUR UNIQUE  
APPLICATION NEEDS.

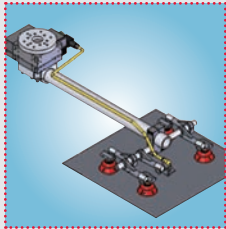
Through comprehensive understanding of the industry's requirements, DE-STA-CO has developed an array of products that provides unparalleled value to appliance manufacturers.

Whether transferring sheet metal to a die press, handling small parts or holding components in place during assembly, DE-STA-CO offers solutions tailored to any workholding or assembly requirement. From the earliest stages of design, our products are created to work together, achieving the highest possible levels of compatibility. This results in total solutions that are easy to create, and provide maximum efficiency and reliability.



# MORE THAN PRODUCTS. COMPLETE SOLUTIONS.

## EXTENSIVE CAD CAPABILITIES



To ensure applicability to the broadest possible base of appliance manufacturers, DE-STA-CO supports a wide variety of CAD programs, ranging from Catia to Unigraphics. Furthermore, all CAD formats are accessible through multiple channels, including our cutting-edge online digital catalog, located at [www.destaco.com](http://www.destaco.com).

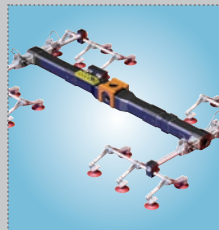
## WWW.DESTACO.COM

Our global website is a constant resource for our customers worldwide. Developed by engineers for engineers, this one-stop engineering resource center contains sizing software, expert application advice and downloadable literature. Presented in multiple languages, [www.destaco.com](http://www.destaco.com) provides access to sales and customer service representatives, as well as detailed comprehensive product information, data sheets and CAD information twenty-four hours a day, seven days a week.



## CUSTOMIZED SPECIAL PRODUCTS

When standard products fail to meet your specific needs, DE-STA-CO's special engineering service department will provide a solution by modifying an existing product or creating an entirely new component. All custom parts are assigned a part number and entered into our system, guaranteeing a quick response to future orders.



Carbon fiber end effector tooling.



Latch clamp with electroless nickel plating.



High temperature pneumatic clamp.

- BEST SOLUTIONS.
- UNIQUE PART NUMBERS.
- EXPERT SUPPORT.

## TECHNICAL EXPERTISE, SERVICE AND SUPPORT

At DE-STA-CO, we maintain the highest possible standards of service and support across all of our product offerings. Our employees possess extensive engineering knowledge and receive comprehensive training on all of our products. When you partner with DE-STA-CO, you work with specialists that fully understand your operations, our products and how the two work together to provide you with value. Our customer service staff is available via a toll-free phone line, fax, email and our company website, so that you can reach us through whatever medium is most convenient.



# END EFFECTOR COMPONENTS FOR THE APPLIANCE INDUSTRY

## COMPREHENSIVE PRODUCT OFFERING

- **End Effector Tooling Components:** DE-STA-CO's diverse and wide range of end effector solutions includes small tooling components and vacuum products, which can fit small part-handling and specialty applications.
- **Automatic Tool Changer Mounts:** Mounts to DE-STA-CO automatic tool changers and interfaces with round tooling booms. Mounts can be ordered as an end or mid mount.
- **Manual Tool Changers:** Quick disconnect airports provide simple connect/disconnect for air power between various end effectors. Offers single hand operation to release the tool from the robot. Two mounting styles are available.

## CUSTOMIZED MATERIAL HANDLING SOLUTIONS

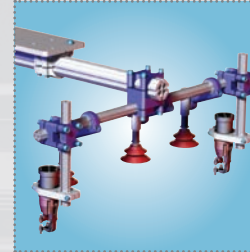
- **Small Parts Handling:** Ideal for small part handling, injection press unloading, coil and blank feeding, press to press transfer and unusually shaped objects.
- **Fully Customizable:** Allows for unlimited configuration possibilities using multiple types of tooling systems. Along with a wide assortment of vacuum cups, grippers, sensor mounts, sprue cutters and tool changers, DE-STA-CO offers a one-stop complete appliance manufacturing solution.
- **Manual or Fully Automatic Quick Disconnect Tool Changers:** Allows quick exchange between various tooling in seconds. Optional integral air ports and electric connectors provide immediate power to the system, eliminating manual re-connection of air lines and reduced machine downtime.
- **Flexible and Rugged:** All hardware allows for 360° adjustment.
- **Carbon Fiber World Tool** is a high-strength, lightweight tooling solution designed to dramatically increase overall performance in production while decreasing vibration. Internal steel mounting plates ensure solid connection between boom and automation.
- **Round Tooling Systems** are ideal for small part handling, and unusually shaped objects. This tooling system is constructed of lightweight aluminum and offers a high-volume, low-cost, fully customizable solution.



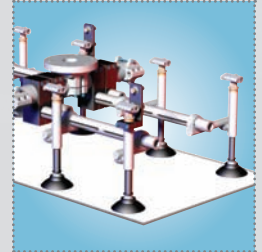
PICK AND PLACE OPERATIONS, PRESS ROOM, GLASS AND MATERIALS HANDLING



SPECIALTY TOOLING SOLUTIONS AND ENGINEERING SERVICES



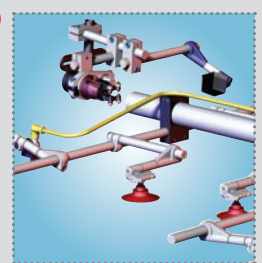
ROBOT TO ROBOT INTERACTION, MECHANICAL GRIPPER HOLDING, BODY SHOP



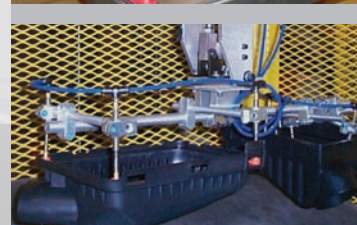
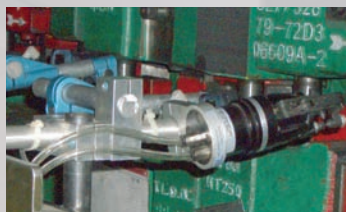
PRESS LOAD AND UNLOAD VACUUM HOLDING, PLASTIC INJECTION



CARBON FIBER WORLD TOOL



ROUND TOOLING SYSTEMS



### Flexible Mounting

Systems allow for both cantilever and mid-frame mounting for interfacing with the robot.

# MANUAL CLAMPS FOR THE APPLIANCE INDUSTRY

**NEW**

## VERTICAL CLAMPS

- **Durable construction:** High performance achieved through torsion-protected hardened bushings, stainless steel rivets and zinc plating.
- **Safe design:** Oil-resistant, ergonomically shaped DE-STA-CO handle grip increases operational safety.
- **Advanced design:** DE-STA-CO® Toggle Lock Plus integrates a release lever that eliminates the potential for unintentional opening and closing.
- Holding capacity ranges from 600 lbs. to 1,400 lbs.



2002-U, 2007-U,  
2010-U



2002-UR, 2007-UR,  
2010-UR DE-STA-CO®  
TOGGLE LOCK PLUS

Model no.	Holding Capacity ▲ [N / lbf.]	Overall Height [mm / in.]	Height Under Bar [mm / in.]	Overall Length [mm / in.]
2002-U	2,700 / 600	120.1 / 4.73	24.3 / 0.95	83.6 / 3.29
2007-U	4,500 / 1,000	183.1 / 7.21	31.6 / 1.25	122.2 / 4.81
2010-U	6,200 / 1,400	228.6 / 9.00	43.3 / 1.70	154.7 / 6.09
2002-UR	2,700 / 600	120.1 / 4.73	24.3 / 0.95	105.9 / 4.17
2007-UR	4,500 / 1,000	183.1 / 7.21	31.6 / 1.25	150.9 / 5.94
2010-UR	6,200 / 1,400	228.6 / 9.00	43.3 / 1.70	184.9 / 7.28

## STRAIGHT-LINE ACTION CLAMPS

- **Flexible performance:** Models lock in both the extended and retracted positions.
- **Durable construction:** High performance achieved through stainless steel rivets and zinc plating.
- **Safe design:** Oil-resistant, ergonomically shaped DE-STA-CO handle grip increases operational safety.
- **Adaptable solution:** Plunger contains internal threading.
- Holding capacity ranges from 300 lbs. to 800 lbs.



605



607



610

Model no.	Holding Capacity ◄► [N / lbf.]	Overall Height [mm / in.]	Overall Length [mm / in.]
605	1,340 / 300	87.4 / 3.44	139.2 / 5.48
607	3,560 / 800	90.4 / 3.56	152.7 / 6.01
610	3,560 / 800	115.6 / 4.55	170.7 / 6.72

## SQUEEZE ACTION PLIER CLAMPS

- **Increased flexibility:** High quality clamping forces are provided where permanent, stationary clamping of workpieces is not possible.
- **Durable construction:** Heavy strength, drop-forged steel is used to guarantee maximum performance and reliability.
- **Safe design:** Oil-resistant, vinyl-dipped DE-STA-CO handle grip increases operational safety.
- **Efficient operation:** Some models feature a two-way trigger release for fast and easy opening of clamp.
- Holding capacity ranges from 100 lbs. to 1,200 lbs.



431



462



480

Model no.	Holding Capacity ▲ [N / lbf.]	Overall Length [mm / in.]
431	450 / 100	154.7 / 6.90
462	3,200 / 700	215.9 / 8.50
480	5,340 / 1,200	33.3 / 1.31

**NEW**

## HORIZONTAL CLAMPS

- **Durable construction:** High performance achieved through stainless steel rivets and zinc plating.
- **Safe design:** Oil-resistant, vinyl-dipped DE-STA-CO handle grip increases operational safety.
- **Advanced design:** DE-STA-CO® Toggle Lock Plus integrates a release lever that eliminates the potential for unintentional opening and closing.
- Bar openings range from 68° to 73°.
- Holding capacity ranges from 295 lbs. to 1,680 lbs.



2013-U, 2017-U,  
2027-U, 2037-U



2013-UBR, 2017-UBR, 2027-UBR,  
2037-UBR DE-STA-CO® TOGGLE  
LOCK PLUS

Model no.	Holding Capacity ▲ [N / lbf.]	Overall Height [mm / in.]	Height Under Bar [mm / in.]	Overall Length [mm / in.]
2013-U	1,310 / 295	32.3 / 1.27	19.1 / 0.75	149.4 / 5.88
2017-U	2,490 / 560	176.5 / 6.95	24.9 / 0.98	218.9 / 8.62
2027-U	3,740 / 840	55.9 / 2.20	33.5 / 1.32	251.0 / 9.88
2037-U	7,470 / 1,680	69.9 / 2.75	41.2 / 1.62	339.1 / 13.35
2013-UBR	1,310 / 295	50.6 / 1.99	30.5 / 1.20	149.4 / 5.88
2017-UBR	2,490 / 560	76.2 / 3.00	40.6 / 1.60	218.9 / 8.62
2027-UBR	3,740 / 840	83.3 / 3.28	51.8 / 2.04	251.0 / 9.88
2037-UBR	7,470 / 1,680	105.9 / 4.17	65.0 / 2.56	339.1 / 13.35

## LATCH CLAMPS

- **Advanced design:** DE-STA-CO® Toggle Lock Plus integrates a thumb control lever to eliminate the potential for unintentional opening.
- **Durable construction:** High performance achieved through stainless steel rivets and zinc plating.
- **Safe design:** Oil-resistant, ergonomically shaped DE-STA-CO handle grip increases operational safety.
- **Complete solution:** U-shaped hooks and latch plates are included with clamps.
- Holding capacity ranges from 360 lbs. to 2,000 lbs.



331, 341



331-R, 341-R  
DE-STA-CO® TOGGLE LOCK PLUS

Model no.	Holding Capacity ▶ [N / lbf.]	Overall Height [mm / in.]	Height Under Bar [mm / in.]	Overall Length [mm / in.]
331	3,200 / 700	50.3 / 1.97	16.8 / 0.66	153.9 / 6.06
341	7,000 / 2,000	73.4 / 2.89	23.9 / 0.94	208.3 / 8.20
331-R	3,200 / 700	52.8 / 2.08	16.8 / 0.66	153.9 / 6.06
341-R	7,000 / 2,000	73.4 / 2.89	23.9 / 0.94	208.3 / 8.20

## PNEUMATIC CLAMPS

- **Protected design:** Enclosed assembly reduces maintenance by retaining lubrication and protecting moving parts.
- **Flexible performance:** Clamping force can be maintained even when removed from air supply.
- **Extreme abilities:** High temperature models can withstand continuous exposure to 500° and short exposure to 700°.
- **Efficient size:** High clamping forces are provided in a compact, space-efficient design.



991-MRM, 1091-MRM



82L



9500 SERIES



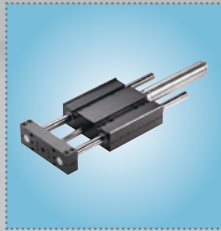
CUSTOM PNEUMATIC  
CLAMP

# AUTOMATION COMPONENTS FOR THE APPLIANCE INDUSTRY

## MODULAR AUTOMATION COMPONENTS



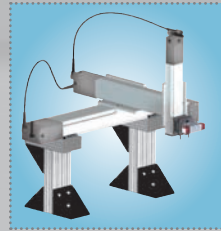
**DPDL PARALLEL GRIPPERS**  
Multiple jaw styles supported, with a rigid body for long finger applications.



**DLT BLOCK THRUSTER**  
Compact design enables use in small spaces and optional mounting flange is available.



**DLB BASE SLIDES**  
Footprint reduced by up to 50%, with adjustable hard stops to 0.001" precision.



**SMART LINEAR ACTUATOR**  
Eliminates external computer for simple 2-3 axis synchronized motion.

## DIRECTCONNECT™

**DIRECTCONNECT™**  
DE-STA-COs' unique DIRECTCONNECT™ system eliminates the need for adaptor plates, providing easy and efficient modular automation connectivity. By using standardized mounting patterns, DIRECTCONNECT™ provides the flexibility necessary to meet any automation requirement.



## OTHER AUTOMATION COMPONENTS



**GR1 - 15 SHEET METAL GRIPPERS**  
Remains closed during loss of air pressure and no service lubrication required.



**VACUUM CUPS**  
Specialized models can handle pre-lubricated panels and high-temperature applications.



**84A CAM TYPE GRIPPERS**  
Fast opening and closing actions with self-locking at end stop position.

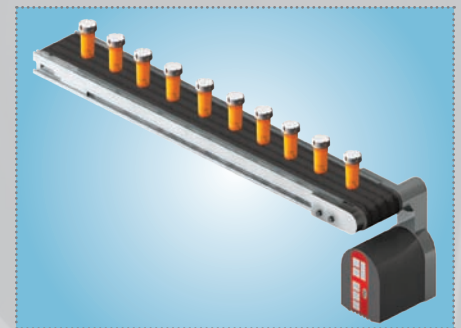


**AUTO RELEASE VENTURI (ARV) VACUUM GENERATOR CUP MOUNT**  
Single air port operation with automatic quick panel release and exhaust silencer.

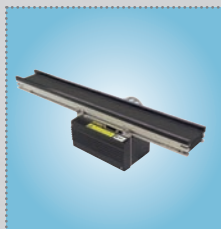


## CONVEYORS

- **Flexible options:** Assembled and component-based systems offer lower prices and shorter delivery times.
- **Comprehensive solutions:** We offer numerous conveyor system options for light, medium and heavy duty applications, as well as modular conveying systems.
- **Intelligent control electronics:** Regulate the belt speed independent of load.
- **Fast and easy belt change:** Belts can be changed in less than eight minutes for the center drive, and only three minutes for the end drive.



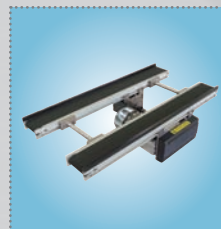
**LIGHT-DUTY CONVEYORS**



**MEDIUM-DUTY CONVEYORS**



**HEAVY-DUTY CONVEYORS**



**DUAL BELT CONVEYORS**



**PALLETIZED SYSTEMS**



**ACCESSORIES**

## A TRUE GLOBAL PRESENCE

Through a constant commitment to the Team DE-STA-CO philosophy, we draw from our worldwide pool of information and resources to offer the highest levels of service to each of our customers, regardless of geographic location. Our status as a truly global company empowers us to improve the global competitiveness of your operations. Whatever your automation or workholding need, Team DE-STA-CO has the best possible solution.



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Positioning our customers for productivity.