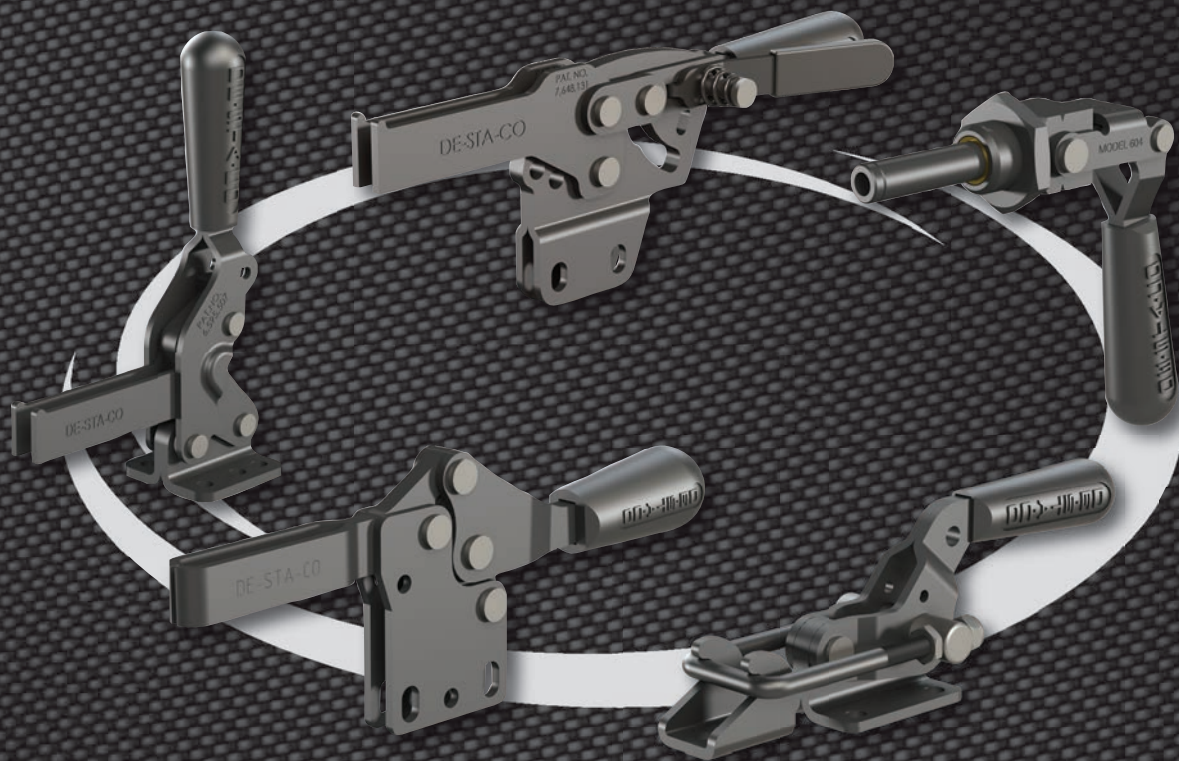


# CLAMPING INNOVATION



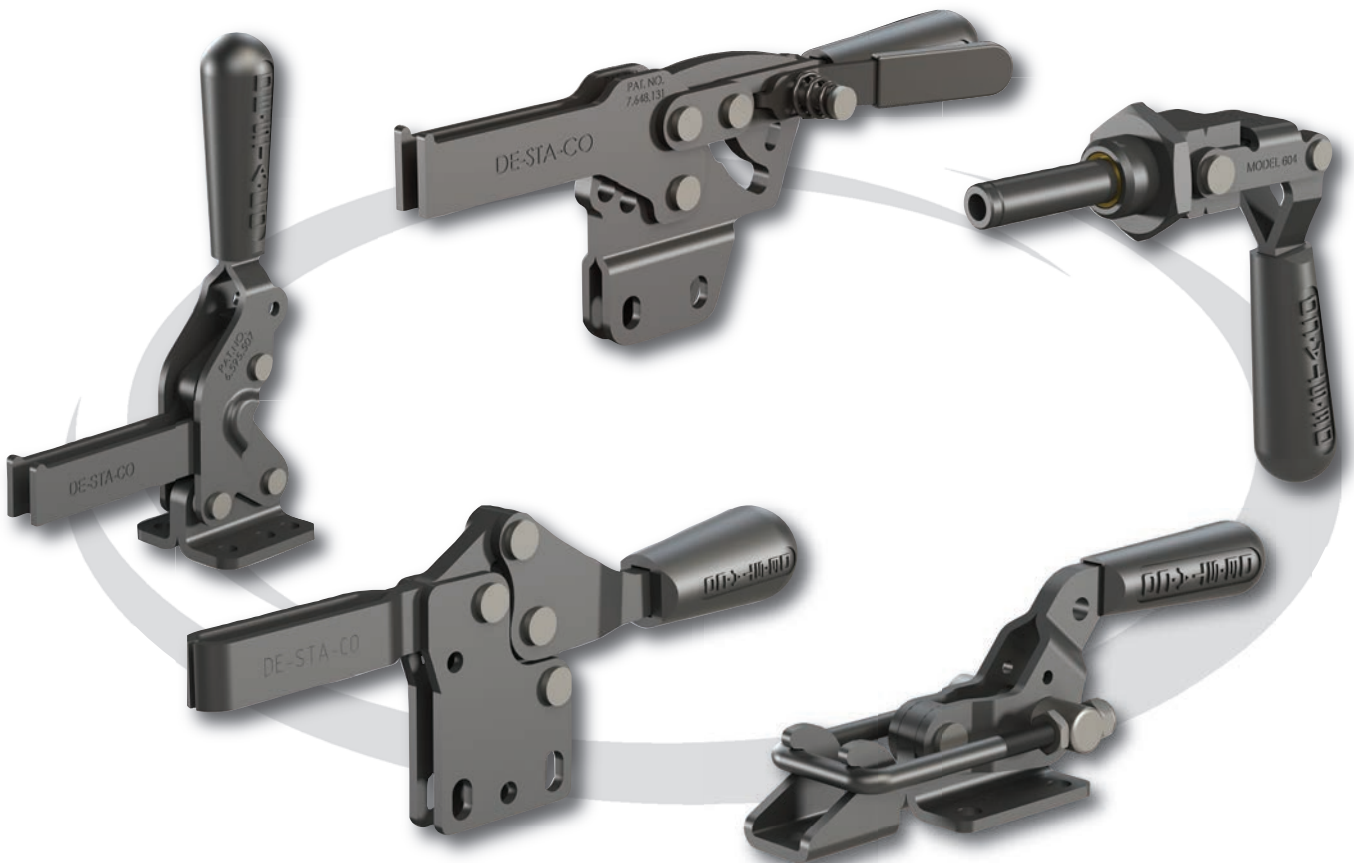
## Overview – Blackout Series Toggle Clamps



Introducing DE-STA-CO's Blackout Series of toggle clamps. These clamps feature the same quality and features you have come to expect in our standard line, but with a black finish. These toggle clamps are ideally suited for applications which require a non-reflective finish.

These clamps are specifically suited for use on fixtures used with 3D optical measurement and inspection technology. The black surface finish limits reflection eliminating interference during measurement and allowing them to be digitally suppressed during the inspection process.

Other useful applications can be found in the entertainment industry where these black clamps become an integral component for modular stage rigging systems. The black finish allows the clamps to blend into the background under the bright lights of a live stage show, while enabling quick take-down and assembly.



## Vertical Hold Down Action Clamps

**2002-U-LS-BLK**  
Flanged Base  
U-Bar



**2002-UB-LS-BLK**  
Straight Base  
U-Bar



Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Spindle
<b>2002-U-LS-BLK</b>	[600 lbf] 2700 N	75°	66°	None
<b>2002-UB-LS-BLK</b>				

For detailed technical data view our Clamping Technology catalog

**2007-U-LS-BLK**  
Flanged Base  
U-Bar



**2007-UB-LS-BLK**  
Straight Base  
U-Bar



Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Spindle
<b>2007-U-LS-BLK</b>	[1000 lbf] 4450 N	76°	64°	None
<b>2007-UB-LS-BLK</b>				

For detailed technical data view our Clamping Technology catalog

### Features:

- -U-L and -UB-L versions feature open bar for use with Extensions and Adaptors

**202-U-L-BLK**  
Flanged Base  
Open U-Bar



**202-UB-L-BLK**  
Straight Base  
Open U-Bar



Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Spindle
<b>202-U-L-BLK</b>	[200 lbf] 890 N	105°	65°	None
<b>202-UB-L-BLK</b>				

For detailed technical data view our Clamping Technology catalog

**207-U-L-BLK**  
Flanged Base  
Open U-Bar



**207-UB-L-BLK**  
Straight Base  
Open U-Bar



Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Spindle
<b>207-U-L-BLK</b>	[375 lbf] 1670 N	99°	57°	None
<b>207-UB-L-BLK</b>				

For detailed technical data view our Clamping Technology catalog

Horizontal Hold Down Action Clamps

**2013-U-LS-BLK**  
Flanged Base, U-Bar



**2013-UB-LS-BLK**  
Straight Base, U-Bar



**2013-UBR-LS-BLK**  
Straight Base, U-Bar  
with DE-STA-CO®  
Toggle Lock  
Plus



Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Spindle
<b>2013-U-LS-BLK5</b>	[295 lbf] 1310 N	71°	58°	None
<b>2013-UB-LS-BLK</b>				
<b>2013-UBR-LS-BLK</b>				

For detailed technical data view our Clamping Technology catalog

**2017-U-LS-BLK**  
Flanged Base, U-Bar



**2017-UB-LS-BLK**  
Straight Base, U-Bar



**2017-UBR-LS-BLK**  
Straight Base, U-Bar  
with DE-STA-CO®  
Toggle Lock  
Plus



Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Spindle
<b>2017-U-LS-BLK</b>	[560 lbf] 2500 N	73°	69°	None
<b>2017-UB-LS-BLK</b>				
<b>2017-UBR-LS-BLK</b>				

For detailed technical data view our Clamping Technology catalog

**2027-U-LS-BLK**  
Flanged Base, U-Bar



**2027-UB-LS-BLK**  
Straight Base, U-Bar



**2027-UBR-LS-BLK**  
Straight Base, U-Bar  
with DE-STA-CO®  
Toggle Lock  
Plus



Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Spindle
<b>2027-U-LS-BLK</b>	3740 N [840 lbf]	68°	70°	None
<b>2027-UB-LS-BLK</b>				
<b>2027-UBR-LS-BLK</b>				

For detailed technical data view our Clamping Technology catalog

## Horizontal Hold Down Action Clamps

### Features:

- **-U-L** and **-UB-L** versions feature open bars for use with Extensions and Adaptors

#### 213-U-LS-BLK\*

Flanged Base  
U-Bar



#### 213-UB-LS-BLK\*\*

Straight Base, U-Bar



#### 213-U-L-BLK

Flanged Base  
Open U-Bar



#### 213-UB-L-BLK

Straight Base, Open U-Bar



\*ident. 213-U852-LS  
\*\*ident. 213-UB852-LS

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Spindle
213-U-LS-BLK	[150 lbf] 670 N	90°	60°	None
213-UB-LS-BLK				None
213-U-L-BLK				None
213-UB-L-BLK				None

For detailed technical data view our Clamping Technology catalog

#### 217-U-LS-BLK\*

Flanged Base,  
U-Bar



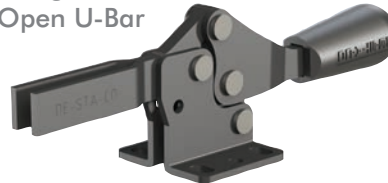
#### 217-UB-LS-BLK\*\*

Straight Base, U-Bar



#### 217-U-L-BLK

Flanged Base  
Open U-Bar



#### 217-UB-L-BLK

Straight Base  
Open U-Bar



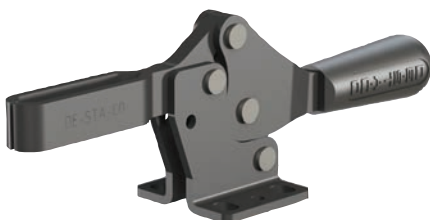
\*ident. 217-U851-LS  
\*\*ident. 217-UB851-LS

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Spindle
217-U-LS-BLK	[200 lbf] 900 N	91°	61°	None
217-UB-LS-BLK				None
217-U-L-BLK				None
217-UB-L-BLK				None

For detailed technical data view our Clamping Technology catalog

#### 227-U-LS-BLK\*

Flanged Base, U-Bar



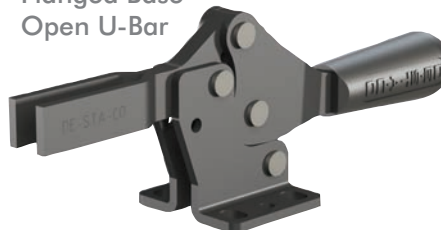
#### 227-UB-LS-BLK\*\*

Straight Base  
U-Bar



#### 227-U-L-BLK

Flanged Base  
Open U-Bar



#### 227-UB-L-BLK

Straight Base  
Open U-Bar



\*ident. 227-U853-LS  
\*\*ident. 227-UB853-LS

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Spindle
227-U-LS-BLK	[5000 lbf] 2220 N	91°	56°	None
227-UB-LS-BLK				None
227-U-L-BLK				None
227-UB-L-BLK				None

For detailed technical data view our Clamping Technology catalog

Horizontal Hold Down Action Clamps

**215-U-LS-BLK**  
Flanged Base  
U-Bar



**215-UB-LS-BLK**  
Straight Base  
U-Bar



Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Spindle
215-U-LS-BLK 215-UB-LS-BLK	[200 lbf] 890 N	87°	78°	None

For detailed technical data view our Clamping Technology catalog

Features:

- Dual mounting surfaces
- Large bar opening angle

**317-U-LS-BLK**  
Flanged Base  
U-Bar



Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Spindle
317-U-LS-BLK	[375 lbf] 1670 N	185°	60°	None

For detailed technical data view our Clamping Technology catalog



## Pull Action Latch Clamps

### Features:

- U-hook style latch clamps are supplied with threaded U-hooks for easy adjustment
- Supplied with latch plate

### 331-BLK



**331-R-BLK**  
with DE-STA-CO®  
Toggle Lock  
Plus



Model	Max. Holding Capacity	Drawing Movement
<b>331-BLK</b>	[720 lbf] 3200 N	[1.75] 44,5kg
<b>331-R-BLK</b>		

For detailed technical data view our Clamping Technology catalog

### 341-BLK



**341-R-BLK**  
with DE-STA-CO®  
Toggle Lock  
Plus



Model	Max. Holding Capacity	Drawing Movement
<b>341-BLK</b>	[2000 lbf] 8900 N	[2.50] 63,5kg
<b>341-R-BLK</b>		

For detailed technical data view our Clamping Technology catalog

**Straight Line Action Clamps**

**Features:**

- For push and pull clamping
- Locks over center in the extended and retracted position

**602-MM-BLK**



Model	Max. Holding Capacity	Plunger Travel	(M) Plunger Thread
<b>602-MM-BLK</b>	[200 lbf] 900 N	[0.75] 19	M6

For detailed technical data view our Clamping Technology catalog

**604-MM-BLK**



Model	Max. Holding Capacity	Plunger Travel	(M) Plunger Thread
<b>604-MM-BLK</b>	[300 lbf] 1330 N	[1.50] 38	M8

For detailed technical data view our Clamping Technology catalog

**6004-MM-BLK**



Model	Max. Holding Capacity	Plunger Travel	(M) Plunger Thread
<b>6004-MM-BLK</b>	[450 lbf] 2000 N	[1.50] 38	M8

For detailed technical data view our Clamping Technology catalog

**603-M-BLK**



Model	Max. Holding Capacity	Plunger Travel	(M) Plunger Thread
<b>603-M-BLK</b>	[600 lbf] 2670 N	[1.25] 31,8	M8

For detailed technical data view our Clamping Technology catalog

**630-M-BLK**



Model	Max. Holding Capacity	Plunger Travel	(M) Plunger Thread
<b>630-M-BLK</b>	[2,500 lbf] 11100 N	[2.00] 50,8	M10

For detailed technical data view our Clamping Technology catalog

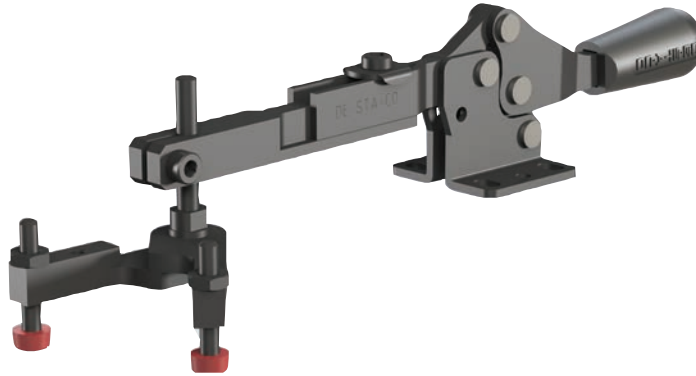


## Adaptors and Extensions

### Features:

- Time saving accessories reduce the need for custom fabricated attachments
- Provides flexible adjustment fo length and height
- Made from lightweight aluminum

with Adaptors



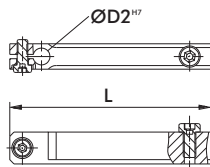
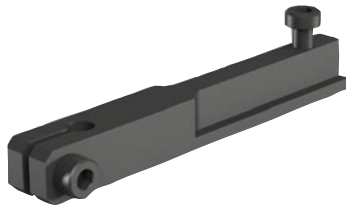
with Adaptors



with Extension

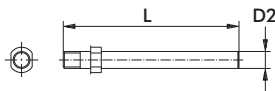


**Length Adaptor**



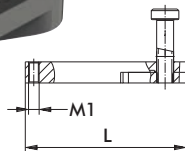
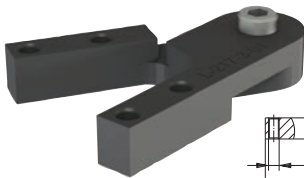
Model	Used with:	L	D2 <sup>17</sup>
L-213-1-01-BLK	213-U-L-BLK / 213-UB-L-BLK	[1.97] 50	[0.24] 6
L-213-1-02-BLK	2013-U-LS-BLK / 2013-UB-LS-BLK / 2013-UBR-LS-BLK	[3.54] 90	
L-217-1-01-BLK	202-U-L-BLK / 202-UB-L-BLK	[2.17] 55	[0.24] 6
L-217-1-02-BLK	2002-U-LS-BLK / 2002-UB-LS-BLK 2017-U-LS-BLK / 2017-UB-LS-BLK / 2017-UBR-LS-BLK	[3.74] 95	
L-217-1-03-BLK		[5.31] 135	
L-227-1-01-BLK		[2.17] 55	[0.31] 8
L-227-1-02-BLK	207-U-L-BLK / 207-UB-L-BLK 227-U-L-BLK / 227-UB-L-BLK	[3.74] 95	
L-227-1-03-BLK	2007-U-LS-BLK / 2007-UB-LS-BLK	[5.31] 135	
L-227-1-04-BLK		[6.89] 175	

**Height Adaptor**



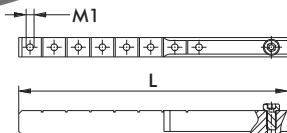
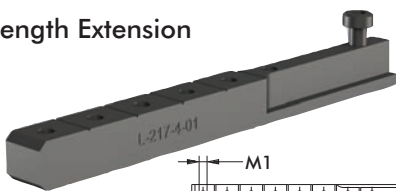
Model	Used with:	L	D2 <sup>17</sup>
L-213-2-01-BLK	213-U-L-BLK / 213-UB-L-BLK	[2.05] 52	[0.24] 6
L-213-2-02-BLK	2013-U-LS-BLK / 2013-UB-LS-BLK / 2013-UBR-LS-BLK	[3.23] 82	
L-217-2-01-BLK	202-U-L-BLK / 202-UB-L-BLK 2002-U-LS-BLK / 2002-UB-LS-BLK	[2.05] 52	[0.24] 6
L-217-2-02-BLK	2017-U-LS-BLK / 2017-UB-LS-BLK / 2017-UBR-LS-BLK	[3.23] 82	
L-227-2-01-BLK	207-U-L-BLK / 207-UB-L-BLK 227-U-L-BLK / 227-UB-L-BLK	[2.09] 53	[0.31] 88
L-227-2-02-BLK	2007-U-LS-BLK / 2007-UB-LS-BLK	[3.23] 82	

**Clamping Arm Adaptor**



Model	Used with:	L	M1
L-213-3-01-BLK	213-U-L-BLK / 213-UB-L-BLK 2013-U-LS-BLK / 2013-UB-LS-BLK / 2013-UBR-LS-BLK	[2.40] 61	M5
L-217-3-01-BLK	202-U-L-BLK / 202-UB-L-BLK 2002-U-LS-BLK / 2002-UB-LS-BLK 2017-U-LS-BLK / 2017-UB-LS-BLK / 2017-UBR-LS-BLK		M5
L-227-3-01-BLK	207-U-L-BLK / 207-UB-L-BLK 227-U-L-BLK / 227-UB-L-BLK 2007-U-LS-BLK / 2007-UB-LS-BLK	[2.99] 76	M5

**Length Extension**

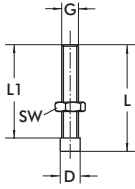


Model	Used with:	L	M1
L-213-4-01-BLK	213-U-L-BLK / 213-UB-L-BLK 2013-U-LS-BLK / 2013-UB-LS-BLK / 2013-UBR-LS-BLK	[2.95] 75	M5
L-217-4-01-BLK	202-U-L-BLK / 202-UB-L-BLK 2002-U-LS-BLK / 2002-UB-LS-BLK 2017-U-LS-BLK / 2017-UB-LS-BLK / 2017-UBR-LS-BLK	[5.00] 127	M5
L-227-4-01-BLK	207-U-L-BLK / 207-UB-L-BLK 227-U-L-BLK / 227-UB-L-BLK 2007-U-LS-BLK / 2007-UB-LS-BLK	[6.57] 167	M5

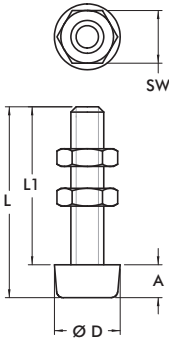
## Accessories

### Bonded neoprene spindles

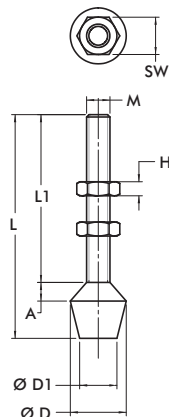
- Black neoprene with black screw and nuts
- Oil resistant, LABS free
- Hardness – 80-85 Shore A
- Includes jam nut



Part No.	Ø D	G	L	L1
<b>213208-M-L-S</b>	6	M5	32	28
<b>213208-M-L-S-82</b>	6	M5	82	78
<b>217208-M-L-S</b>	7	M6	43	38
<b>217208-M-L-S-83</b>	7	M6	83	78



Part No.	Ø D	G	L	L1
<b>213208-M852-S</b>	10	M5	34	30
<b>213208-M852-84</b>	10	M5	84	80



Part No.	Ø D	Ø D1	G	L	L1
<b>202208-M851-S</b>	16	12	M6	44	30
<b>202208-M851-84</b>	16	12	M6	84	70
<b>225208-M853-S</b>	21	14	M8	53	35
<b>225208-M853-83</b>	21	14	M8	83	65





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

### EUROPE

Germany  
Tel: +49-6171-705-0  
Customer Service: [europa@destaco.com](mailto:europa@destaco.com)

France  
Tel: +33-1-3996-5000  
Customer Service: [france@destaco.com](mailto:france@destaco.com)

UK  
Tel: +44-1902-797980  
Customer Service: [uk@destaco.com](mailto:uk@destaco.com)

Spain  
Tel: +34-936361680  
Customer Service: [spain@destaco.com](mailto:spain@destaco.com)

Netherlands  
Tel: +31-297285332  
Customer Service: [benelux@destaco.com](mailto:benelux@destaco.com)

### ASIA

Thailand  
Tel: +66-2-326-0812  
Customer Service: [info@destaco.com](mailto:info@destaco.com)

China  
Tel: +86-21-60812888  
Customer Service: [china@destaco.com](mailto:china@destaco.com)

India  
Tel: +91-80-41123421-426  
Customer Service: [india@destaco.com](mailto:india@destaco.com)

### NORTH AMERICA

DE-STA-CO Headquarters  
Auburn Hills, Michigan  
Tel: 1.248.836.6700  
Toll Free: 1.888.DESTACO  
Marketing: [marketing@destaco.com](mailto:marketing@destaco.com)  
Customer Service: [customerservice@destaco.com](mailto:customerservice@destaco.com)

Charlevoix, Michigan  
Tel: 1.888.DESTACO  
Customer Service: [customerservice@destaco.com](mailto:customerservice@destaco.com)

Wheeling, Illinois  
Tel: 1.800.645.5207  
Customer Service: [camco@destaco.com](mailto:camco@destaco.com)

Red Wing, MN (Central Research Laboratories)  
Tel: 651.385.2142  
Customer Service: [sales@centres.com](mailto:sales@centres.com)

### SOUTH AMERICA

Brazil  
Tel: 0800-124070  
Customer Service: [samerica@destaco.com](mailto:samerica@destaco.com)



A DOVER COMPANY

DE-STA-CO Europe GmbH

Hiroshimastraße 2  
D-61440 Oberursel

GERMANY

Telefon +49 (0) 6171-705-0

Telefax +49 (0) 6171-705-120

[europa@destaco.com](mailto:europa@destaco.com)

[www.destaco.com](http://www.destaco.com)



© Copyright, 2012 DE-STA-CO. All rights for layout, photos and text rest with the publisher DE-STA-CO. All photomechanical or other reproductions only with our express permission. All sales are based on our terms and conditions of sale, delivery and payment.



KAT-BLC-0413-GB