



## ALLIGATOR® STAPLE Fastening System

### A Rugged and Durable Splice that is Easy to Install

The Alligator® Ready Set™ Staple Fastener System is ideal for a wide variety of light- and medium-duty fastener applications. The system features one-piece fastener strips with pre-inserted staples that speed installation and keep downtime to a minimum.



### **Quick, Easy Installation**

Designed for belts from 1/16" (1.5 mm) to 1/4" (6.4 mm), Alligator Ready Set installation is easy with a portable, lightweight application tool that can be carried to the job for on-site installation. Simply fit the fastener strip onto the belt end and secure with the special installation tool, then drive and finish set the staples for a strong, long-lasting splice.

### **Market Applications**

- Package and Parts Conveying
- Food and Sanitary Contact
- Agricultural Harvesting and Handling
- Recycling and Scrap Handling
- Wood Products

Patents: [www.flexco.com/patents](http://www.flexco.com/patents)

# ALLIGATOR® STAPLE Fastening System

## Fastener Overview

### How the Alligator® Ready Set™ Fastening System Works



Designed for light and medium-duty synthetic carcass belting, the Alligator® Staple fastener utilizes high tensile, stainless steel staple attachment, in conjunction with an extended plate design. This design separates the point of fastener penetration from the line of belt flexing to eliminate splice fatigue at the point of belt attachment.

Staple fasteners are furnished in strips with a bridge between each fastener plate. This strip design minimizes the chance of individual parts dislodging into the conveyed product. The one-piece design provides a stronger splice, greater resistance to impact damage, and a smoother, unrippled joint that simplifies hinge pin insertion.

Staples are hammer driven through the fastener and belt, working between the carcass fibers without severing them. The staples are then clinched cross-wise to the belt, so that belt tension does not pull against the staples to unclinch them.

### Ready Set™ Fasteners

Available in Steel, 316 Stainless Steel, and 430 Stainless Steel. Ready Set Staple Fasteners feature a one-piece fastener strip with pre-inserted staples, reducing installation time by eliminating the need to handle and load individual staples.

### Fastener Materials

**Steel:** Standard fastener material is suitable for most applications. Plated for rust and corrosion resistance.

**Stainless Steel:** Type 316 provides extra resistance to abrasion, magnetic attraction, and corrosion from acids and chemicals. Also excellent for high-sanitary requirements.

### Conventional Staple Fasteners

Available in abrasion resistant MegAlloy® providing several times the service life of steel. Staples are separate from the fastener plates. Green guide blocks (ST4-5) must be installed on the installation tool and users can insert staples using the C150 staple dispenser.

**MegAlloy®:** Superior resistance to wear and abrasion, providing several times the service life of steel. Not recommended where subject to impact or corrosion.

**Magnetic Stainless Type 430:** For use with magnetic separators and provides resistance to wear and abrasion. Plate, staple, and hinge pins are all constructed from magnetic stainless steel.

#### Fastener Material Characteristics

Metal	Magnetic Resistant	Abrasion Resistant	Chemical Resistant	Rust Resistant	Available Sizes	Sparking/ Non-Sparking
Galvanized Steel	No	Good	Poor	Fair	62,125,187	Sparking
316 Stainless Steel	Yes	Good	Good to Excellent	Excellent	62,125,187	Sparking
430 Stainless Steel	No	Good	Fair to Good	Good	62,125,187	Sparking
MegAlloy®	No	Excellent	Poor	Poor	125,187	Sparking

# ALLIGATOR® STAPLE

## Fastening System

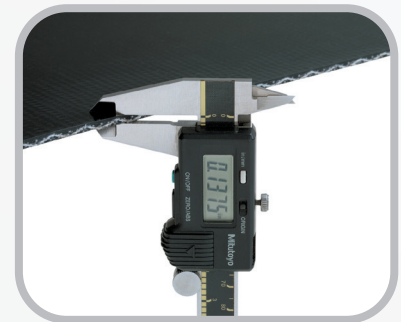
## Fastener Selection Guidelines

### Specify the Right Alligator® Staple Fastener

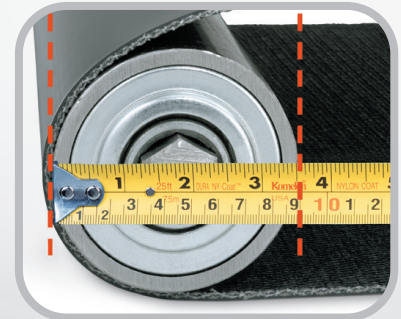
- Determine belt tension.**  
Most conveyor belting has a mechanical fastener rating. Exercise care to ensure belting or fasteners are operated within the recommended range of their capabilities.
- Measure belt thickness.**  
Choose a fastener size which corresponds to belt thickness in the skived area. Measure after any impression cover has been removed.
- Measure the diameter of the smallest pulley in your system.**  
Minimum pulley diameters for individual fasteners are noted in the specification charts for individual fasteners.
- Choose appropriate fastener size.**  
Use specifications for individual fastener sizes to guide your selection.
- Select material.**  
Refer to the material selection chart on page 2 for the metal characteristics which best suit your application. Not all sizes and styles are available in all metals.



*Skive impression cover.*



*Measure belt thickness.*



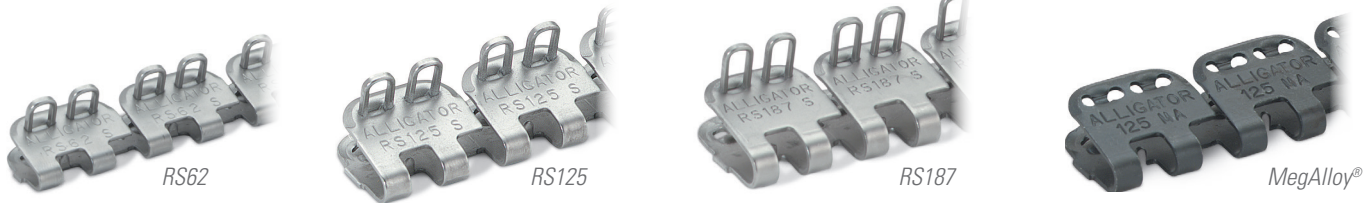
*Measure smallest pulley diameter.*

#### Alligator® Ready Set™ Staple Fastener Selection Guide

Fastener Size	For Belts With Mechanical Fastener Ratings Up To:		Belt Thickness Range		Recommended Minimum Pulley Diameter	
	P.I.W.	kN/m	in.	mm	in.	mm
62	100	17	1/16-1/8	1.5-3.2	2	50
125	160	28	1/8-3/16	3.2-4.8	3	75
187	200	35	3/16-1/4	4.8-6.4	4	102

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## Fasteners



Belt Width		Steel With Nylon Covered Steel Cable Pins (NC)	Steel With Spring Wire Pins (SP)	Stainless (300 Series) With Stainless Spring Wire Pins (SS)	Stainless (300 Series) With Nylon Covered Stainless Cable Pins (NCS)
in.	mm				
<b>RS62</b>					
12	300	RS62J12/300NC	RS62J12/300SP	RS62SJ12/300SS	RS62SJ12/300NCS
18	450	RS62J18/450NC	RS62J18/450SP	RS62SJ18/450SS	RS62SJ18/450NCS
24	600	RS62J24/600NC	RS62J24/600SP	RS62SJ24/600SS	RS62SJ24/600NCS
30	750	RS62J30/750NC	RS62J30/750SP	RS62SJ30/750SS	RS62SJ30/750NCS
36	900	RS62J36/900NC	RS62J36/900SP	RS62SJ36/900SS	RS62SJ36/900NCS
42	1050	RS62J42NC	RS62J42SP	RS62SJ42SS	
48	1200	RS62J48NC	RS62J48SP	RS62SJ48SS	RS62SJ48NCS
60	1500	RS62J60NC	RS62J60SP	RS62SJ60SS	RS62SJ60NCS
<b>RS125</b>					
12	300	RS125J12/300NC		RS125SJ12/300SS	RS125SJ12/300NCS
18	450	RS125J18/450NC	RS125J18/450SP	RS125SJ18/450SS	RS125SJ18/450NCS
24	600	RS125J24/600NC	RS125J24/600SP	RS125SJ24/600SS	RS125SJ24/600NCS
30	750	RS125J30/750NC	RS125J30/750SP	RS125SJ30/750SS	RS125SJ30/750NCS
36	900	RS125J36/900NC	RS125J36/900SP	RS125SJ36/900SS	RS125SJ36/900NCS
42	1050	RS125J42NC	RS125J42SP	RS125SJ42SS	RS125SJ42NCS
48	1200	RS125J48NC	RS125J48SP	RS125SJ48SS	RS125SJ48NCS
60	1500	RS125J60NC	RS125J60SP	RS125SJ60SS	RS125SJ60NCS
<b>RS187</b>					
12	300	RS187J12/300NC		RS187SJ12/300SS	RS187SJ12/300NCS
18	450	RS187J18/450NC	RS187J18/450SP	RS187SJ18/450SS	RS187SJ18/450NCS
24	600	RS187J24/600NC	RS187J24/600SP	RS187SJ24/600SS	RS187SJ24/600NCS
30	750	RS187J30/750NC	RS187J30/750SP	RS187SJ30/750SS	RS187SJ30/750NCS
36	900	RS187J36/900NC	RS187J36/900SP	RS187SJ36/900SS	RS187SJ36/900NCS
42	1050	RS187J42NC	RS187J42SP	RS187SJ42SS	RS187SJ42NCS
48	1200	RS187J48NC	RS187J48SP	RS187SJ48SS	RS187SJ48NCS
60	1500	RS187J60NC	RS187J60SP	RS187SJ60SS	RS187SJ60NCS

One carton contains 4 fastener sets, 4 hinge pins, and required amount of retaining washers.

### Magnetic Stainless (Type 430)

Includes four fastener sets, four hinge pins, and required retaining washers. Plates, staples, and hinge pins are all magnetic stainless steel.

Magnetic Stainless (Type 430)
RS62MJ24/600MS
RS125MJ24/600MS

### MegAlloy® Fasteners

Includes sixteen 6" (150 mm) fastener strips with loose staples. Hinge pins not included.

MegAlloy® Fasteners
125MA
187MA

Note: When ordering MegAlloy® fasteners or bulk ordering lacing with special staple lengths, you must use a green guide block (ST4-5, #50240) with your installation tool. When using loose staples, you can order a staple dispenser to speed installation of this product.

# ALLIGATOR® STAPLE Fastening System

## Hinge Pins

Match our selection of hinge pins to the special needs of your application.

### NC - Nylon Covered Steel Cable

For use with steel fasteners, NC hinge pins are recommended for troughing or flat belt conveyors.

### NCS - Nylon Covered Stainless Steel Cable

For extra abrasion and chemical resistance.

### SS - Stainless Steel Spring Wire

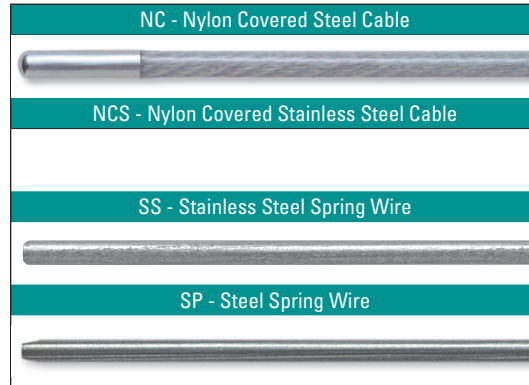
For use with stainless steel fasteners, flat belts only.

### SP - Steel Spring Wire

For use with steel fasteners in abrasive or gritty material applications, flat belt only.

Hinge Pins			
Belt Width		SP Steel Spring Wire Pins	SS 300 Series Stainless Spring Wire Pins
in.	mm		
<b>62</b>			
12	300	SP62-12/300	SS62-12/300
18	450	SP62-18/450	SS62-18/450
24	600	SP62-24/600	SS62-24/600
30	750	SP62-30/750	SS62-30/750
36	900	SP62-36/900	SS62-36/900
42	1050	SP62-42	SS62-42
48	1200	SP62-48	SS62-48
60	1500	SP62-60	SS62-60
<b>125</b>			
18	450	SP1-18/450	SS1-18/450
24	600	SP1-24/600	SS1-24/600
30	750	SP1-30/750	SS1-30/750
36	900	SP1-36/900	SS1-36/900
42	1050	SP1-42	SS1-42
48	1200	SP1-48	SS1-48
60	1500	SP1-60	SS1-60
<b>187</b>			
18	450	SP2-18/450	SS2-18/450
24	600	SP2-24/600	SS2-24/600
30	750	SP2-30/750	SS2-30/750
36	900	SP2-36/900	SS2-36/900
42	1050	SP2-42	SS2-42
48	1200	SP2-48	SS2-48
60	1500	SP2-60	SS2-60

Packages of 10 pins.



Hinge Pin Coils			
Coil Length		NC Nylon Covered Steel Cable	NCS Nylon Covered Stainless Cable
Foot	M		
<b>62</b>			
10	3	NC62-X	NCS62-X
100	30	NC62-C	NCS62-C
<b>125</b>			
10	3	NC1-X	NCS1-X
100	30	NC1-C	NCS1-C
<b>187</b>			
10	3	NC187-X	NCS187-X
100	30	NC187-C	NCS187-C

Pin material is offered in 10' (3 M) coils ("X") or 100' (30 M) reels ("C").

## Hinge Pin Retaining Washers

Avoid hinge-pin migration with easy-to-install retaining washers.

Retaining Washers	
For Fastener Number	Ordering Number
62	62-RET-50
125	125-RET-50
187	187-RET-50

Box of 50 washers.



## Alligator® Hinge Pin Cutter

Cuts bulk hinge pin cable quickly and easily. Provides a clean cut with no frayed ends.

Alligator® Hinge Pin Cutter
APC-1



## Hinge Pin Bender

Bends hinge pin end to prevent migration.

Hinge Pin Bender
PB1

For use with steel spring wire pin.



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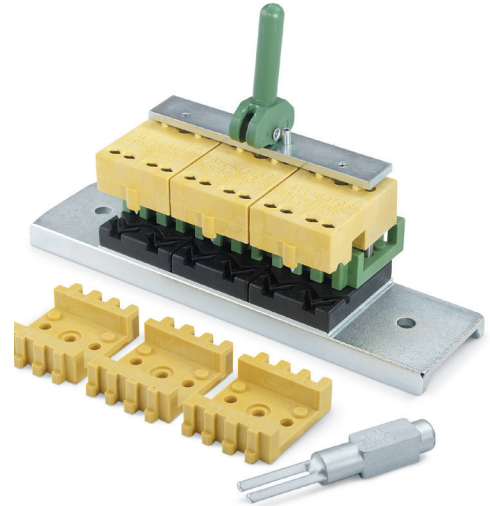
## Installation Tools

### RSC187 Installation Tool

Securely holds the fasteners on the belt, in proper alignment, while staples are driven. Installs two staples simultaneously for fast, simple splicing and the tool can be moved rapidly along the belt as staples are installed. Also provides a solid anvil surface for initial clinching of the staples.

The RSC187 tools come complete with guide blocks and drivers and are available in a variety of widths. Wider tools are available for production lacing and fabrication shop requirements.

<i>RSC187 Installation Tool</i>		
Tool Size		Ordering Number
in.	mm	
2	50	RSC187
4	100	RSC187-4
6	150	RSC187-6
12	300	RSC187-12
24	600	RSC187-24



### Alligator® Quad Staple Driver

The Alligator® Quad Staple Driver allows for the installation of four staples at one time. Using a 2 lb. hammer, this durable, heat-treated steel quad driver allows installers to cut their installation time by 50%.

<i>Alligator® Quad Staple Driver</i>
Ordering Number
ST6-9



### Alligator® Staple Tool Kit

Everything you need to install, maintain, and repair Alligator Ready Set Staple splices. Kit includes the RSC187 tool described above, as well as the staple final set plate, hand skiver, belt marker, belt nippers, and 1 lb. (.45 kg) hammer. Packaged in a durable box with plenty of room for other items.

<i>Staple Kits</i>	
Description	Ordering Number
6" Installation Kit	RSTK4-6
12" Installation Kit	RSTK4-12



# ALLIGATOR® STAPLE Fastening System

## Installation Tools

### Alligator® Staple Gold Class™ Plus

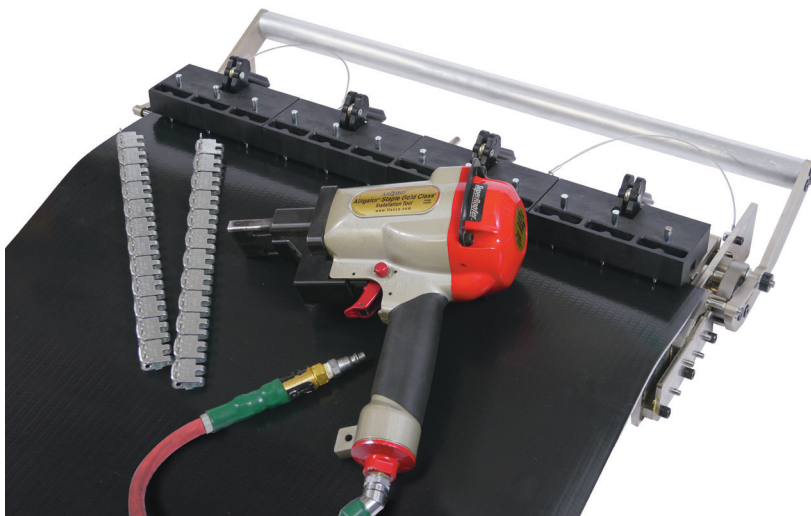
The Gold Class™ power driver, in conjunction with the Gold Class Plus tool allows users to install Alligator® Ready Set™ staple plates with quick and effortless trigger pulls. The design of the Gold Class Plus tool allows users to switch between plate sizes in mere seconds.

The Gold Class Plus tool combines both the initial and final set function in a single base. This process is not only fast and easy, but it is also virtually error proof. The patented drive punch has been designed to

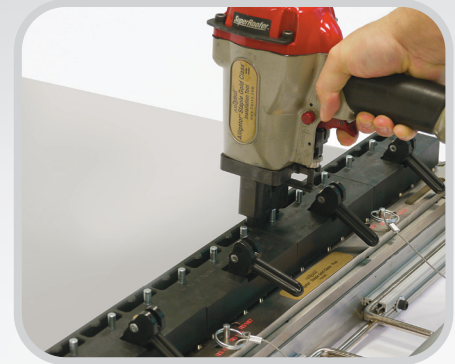
seat the front edge of the fastener plate down for proper compression, while also keeping the fastener loops protected. This ensures smooth hinge pin insertion.

By eliminating the need to use a hammer to install the fasteners, the Alligator Staple Gold Class system reduces the risk of repetitive motion injuries. It also reduces operator fatigue associated with hammer installing numerous splices throughout the day.

Alligator® Staple Gold Class™ Plus		
Description	Ordering Number	Item Code
Alligator® Staple Gold Class™ Plus Installation Tool		
24" Alligator Gold Class Plus Installation Tool	RS-GOLD-DA	55590
Replacement Parts		
Guide Block	ST7-5	55554
Anvil Replacement Kit	ST8-ANV	55591
Cam Lever	ST8-CAM	55592
Alligator® Staple Gold Class™ Power Driver		
Power Driver	RS-GOLD-DRIVER	55541

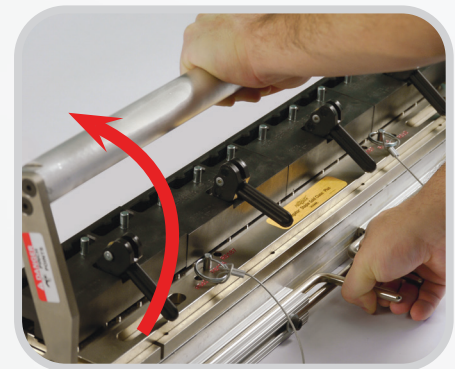


## 3 Simple Steps:



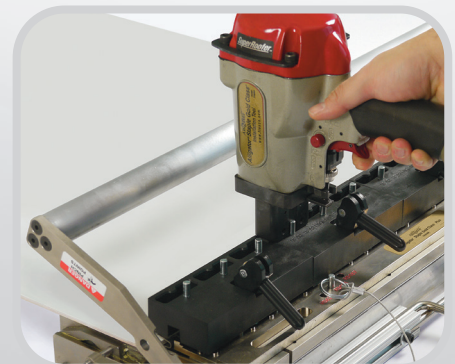
### Initial Set:

Fasteners and belt are inserted into the base where the pre-staked staples are driven through the belt with simple trigger pulls.



### Simple Adjustment:

After the fasteners are initially set, simply flip the handle.



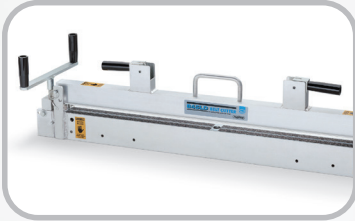
### Final Set:

With additional trigger pulls, the staples receive their final set and the compression fit is obtained.

# ALLIGATOR® STAPLE Fastening System



900 Series Belt Cutter



845LD Belt Cutter



Rough Top Belt Skiver



Belt Grinder



Belt Nippers

## Belt Preparation Tools

### 900 Series\* Belt Cutter

The 900 Series Belt Cutter incorporates numerous features for easy, smooth cutting of belts with extreme accuracy.

- Durable blade design that produces highly accurate cuts while being fully enclosed for safety
- Quick belt clamp feature
- Cuts belts up to 1-1/2" (38 mm)

900 Series Belt Cutter		
Belt Width		Ordering Number
in.	mm	
24	600	900924
36	900	900936
48	1200	900948
60	1500	900960
72	1800	900972
84	2130	900984

### 845LD Belt Cutter

A sturdy, safe, simple, and portable tool specially designed for cutting wide belts.

- Enclosed blade is handle-driven from either end
- Cuts belts up to 1/2" (12 mm) thick

845LD Series Belt Cutter		
Belt Width		Ordering Number
in.	mm	
36	900	845836LD
48	1200	845848LD
60	1500	845860LD
72	1800	845872LD

### Rough Top Belt Skiver

Simplifies removal of belt impression covers prior to fastener size selection and installation.

Rough Top Belt Skiver	
Ordering Number	
RTBS	

### Belt Grinder

Carbide cuts belt impression cover instead of burning it for quick and clean skiving. Attaches to a 3/8" (10 mm) electric or pneumatic drill (2,500 rpm).

Belt Grinder	
Ordering Number	
RB-1	

### Belt Nippers

Simple, hand-held tool used to notch/chamfer belt edges and to remove individual fastener plates from belt.

Belt Nippers	
Ordering Number	
BN-1	