



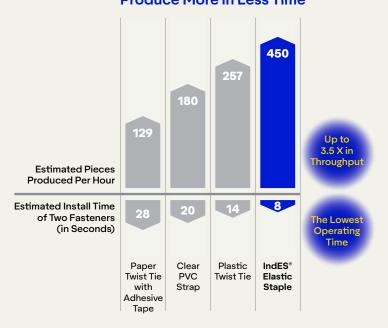
Faster Packaging for Greater Productivity

Replacing conventional manual packaging methods with the Avery Dennison IndES Elastic Staple System can:

- Decrease downtime by reducing time and steps in packaging production
- Reduce operator workload
- Reduce packaging materials

Sustainable Packaging

Accelerate Your Packaging Performance: Produce More in Less Time



PACKAGING METHODS

Estimates based on internal testing. Application of two fasteners to attach a product to a backing card.

Water and energy use, solid waste production, and CO₂ emissions are reduced when compared to conventional packaging methods such as plastic cable ties and paper twist ties. Using the IndES Elastic Staples can eliminate excess packaging and reduce the amount of materials being transported.

In addition to this, our Ecotach™ Elastic Staples can help reduce waste by reducing the amount of single-use plastic that would go into a landfill environment.

Ecotach Elastic Staples are made from a proprietary blend of thermoplastic polyurethane material specifically designed to degrade* at an accelerated rate of 10.63% over 45 days in landfill conditions. The technology used results in no microplastics* so that when this staple completely degrades, all that is left is carbon dioxide, water, and microbes (biomass). Comparatively speaking, a typical thermoplastic polyurethane fastener would degrade ~0% over the same time frame and take anywhere from 20 - 30 years to break down, depending on environmental conditions.

Once the Ecotach Elastic Staple is placed into a landfill, naturally occurring bacteria in that environment breaks the fastener down without leaving behind microplastics or any other harmful substances.* These products are shelfstable and will not begin to degrade unless put into the designated end-of-life waste stream.

*We have completed 3rd party ASTM D5511-18 testing that shows that our Ecotach Elastic Staples degrade 10.63% over 45 days in a landfill environment. We do not have data showing how much time it takes for the fasteners to completely degrade.

Secure and Attractive Packaging



The strong, pliable staples stretch to a wide variety of product shapes and sizes. Unlike cable ties or twist ties, elastic staples are thin and enable a clean appearance of the product when secured to the packaging.

While you can realize gains in production efficiency, the most important advantage of using the IndES Elastic Staple is at the point-of-sale. Consumers can easily read the product information and messages typically displayed on the back of a card. Here's a comparison of packaging using conventional twist ties versus the same packaging using the IndES Elastic Staple system.

Elevates the Consumer's Experience

Reduced packaging creates a better view of the product, increasing overall shelf appeal and providing a positive consumer experience both before and after the sale through:

- Improved visuals of the product at the point-of-sale
- Increased customer interaction with the product, which remains securely packaged
- Faster, easier and safer removal of the product



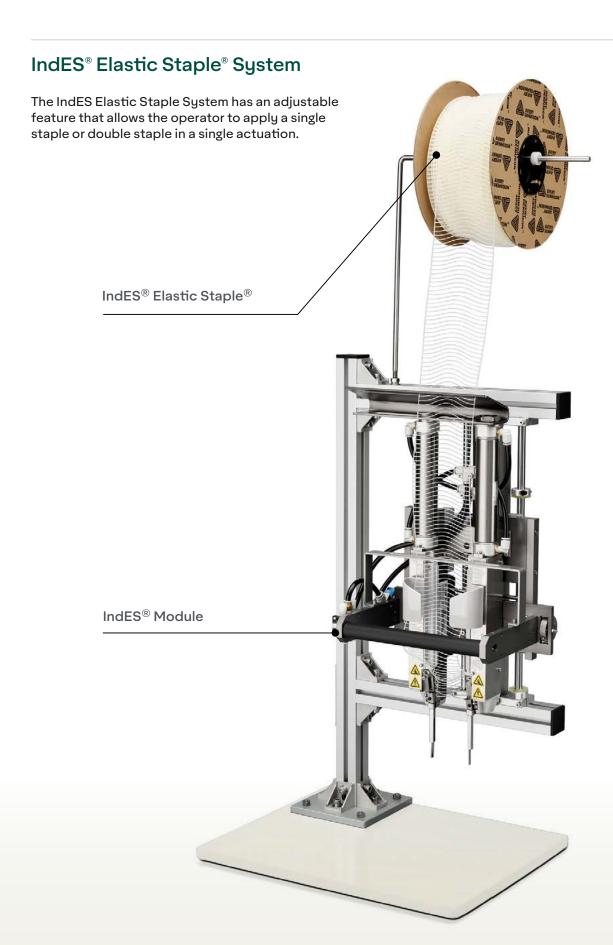


Fastening with Conventional Twist Ties

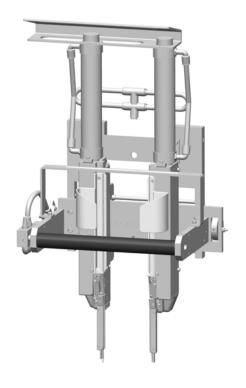




Fastening with IndES® Elastic Staple® System



IndES® Elastic Staple® Module



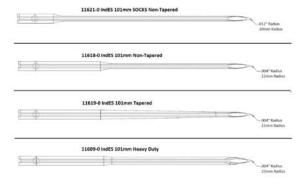
IndES® Module with Handle Part# 11601-0

Gross Weight	5.7kg (12.6lbs)
Overall Dimensions	54cm x 27.2cm x 18.6 cm (21.29" x 10.7" x 7.32")
Operating Pressure	0.28MPI (40 psi) – 0.55MPI (80 psi)
Cycle Speed	0.6 seconds
*Min. Needle Spacing	12.7mm (.50")
*Max. Needle Spacing	160mm (6.30")

Needles and Accessories

IndES® Needles

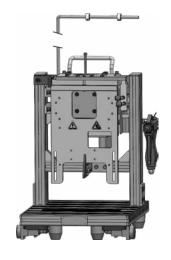
Part #	Description	
11618-0	Non Tapered Needle	
11619-0	Tapered Needle	
11609-0	Heavy Duty 101mm Needle	
11621-0	Hosiery Needle	



Needle Comparison

IndES® Accessories

Part #	Description
11606-0	IndES® module without handle
11616-0	Spring Mounting Stand
10751-0	Brush Anvil 102mm x 102mm, 4" x 4"
11610-0	APU Benchtop Unit
11623-0	Adjustable Needle Spacing Kit



APU Benchtop Unit Accessory

OVERALL LENGTH

IndES® Elastic Staple® System Portfolio



Part #	Part#	Part# Ecotach™		Overall Length		*Minimum Elongation		Qty Per Reel
Natural	Black	Natural	Class	MM	INCH	MM	INCH	
11625-2	11645-1	11750-0	Standard	15	.5	25.4	1.00	15,000
11626-2	11646-1	11751-0	Standard	19	.75	25.4	1.00	15,000
11627-2	11647-1	11752-0	Standard	25	1.0	44.5	1.75	15,000
11628-2	11648-1	11753-0	Standard	30	1.1875	44.5	1.75	15,000
11629-2	11649-1	11754-0	Standard	33	1.25	44.5	1.75	15,000
11630-2	11650-1	11755-0	Standard	37	1.5	44.5	1.75	15,000
11631-2	11651-1	11756-0	Standard	41	1.625	44.5	1.75	15,000
11632-2	11652-1	11757-0	Standard	44	1.75	82.5	3.25	15,000
11633-2	11653-1	11758-0	Standard	50	2.0	82.5	3.25	15,000
11634-2	11654-1	11759-0	Standard	54	2.125	82.5	3.25	15,000
11635-2	11655-1	11760-0	Standard	58	2.25	82.5	3.25	15,000
11636-2	11656-1	11761-0	Standard	64	2.5	101.5	4.00	15,000
11637-2	11657-1	11762-0	Standard	68	2.625	101.5	4.00	15,000
11638-2	11658-1	11763-0	Standard	73	2.875	101.5	4.00	15,000
11639-2	11659-1	11764-0	Standard	75	2.9375	101.5	4.00	15,000
11640-2	11660-1	11765-0	Standard	80	3.125	101.5	4.00	15,000
11641-2	11661-1	11766-0	Standard	85	3.375	190.5	7.50	15,000
11642-2	11662-1	11767-0	Standard	90	3.5	190.5	7.50	15,000
11643-2	11663-1	117678-0	Standard	95	3.75	190.5	7.50	15,000
11644-2	11664-1	117679-0	Standard	100	3.9375	190.5	7.50	15,000
11685-0	11690-0		Standard	110	4.3125	190.5	7.50	10,000
11686-0	11691-0		Standard	120	4.75	190.5	7.50	10,000
11687-0	11692-0		Standard	130	5.125	190.5	7.50	10,000
11688-0	11693-0		Standard	140	5.5	190.5	7.50	10,000
11689-0	11694-0		Standard	150	5.875	190.5	7.50	10,000
11710-0			Standard	165	6.5	220	8.66	10,000
11711-0			Standard	180	7.1875	220	8.66	10,000
11712-0			Standard	200	7.875	220	8.66	10,000
11720-1	11730-1		Heavy Duty	25	1.0	44.5	1.75	15,000
11721-1	11731-1		Heavy Duty	37	1.5	44.5	1.75	15,000
11722-1	11732-1		Heavy Duty	45	1.75	82.5	3.25	15,000
11723-1	11733-1		Heavy Duty	54	2.1875	82.5	3.25	15,000
11724-1	11734-1		Heavy Duty	64	2.5625	101.5	4.00	15,000
11725-1	11735-1		Heavy Duty	75	2.9375	101.5	4.00	15,000
11726-1	11736-1		Heavy Duty	90	3.5625	190.5	7.50	15,000
11727-1	11737-1		Heavy Duty	100	3.9375	190.5	7.50	15,000

IndES® Elastic Staple® System Specifications

IndES® Elastic Staple®

Standard Staple Tensile Strength	5.0 lbf Minimum (2.27kgf)		
Heavy Duty Staple Tensile Strength	6.0 lbf Minimum (2.72kgf)		
Material	Thermoplastic Polyurethane		
Weight	0.026 min / 0.077 max grams		
Package	10,000 or 15,000 Per Reel		
Staple Temperature Range	60°C (140°F) to -26°C (-15°F)		
Standard Staple Application Machine(s)	11600 IndES® Module (All staple sizes) 10790, VNS & 10797, SNS (All sizes except 85mm – 100mm)		
Heavy Duty Staple Application Machine(s)	11601, 11606 IndES® Module (All staple sizes) 11603 IndES® Hosiery Benchmount (All staple sizes)		

Plastic Usage Comparison

Staple size: 41mm x 4

Needle spacing: 30mm

Plastic comparison:

Original packaging (top) = 15.49g IndES packaging (bottom) = 0.131g

A total plastic reduction of 15.359g!



A 99.14% Plastic Reduction!



Sustainability at Scale

To watch the IndES Elastic Staple system in action view online (2)

For more information visit <u>fastener.averydennison.com</u>, call or email us at <u>fastener@averydennison.com</u>

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