

Da Vinci SureForm

Achieve more with your stapler



Achieve more with your stapler

Eliminate guesswork with the intelligence and control of a SureForm[®] stapler.*

At its core is SmartFire technology, which monitors tissue compression before and during firing, making automatic adjustments to optimize the staple line.

A 120° cone of articulation* allows you the freedom to approach tissue where it naturally lies, delivering greater maneuverability around target tissue and potentially reducing tissue tension.[†]

When you choose SureForm staplers, you can reduce uncertainty and increase stapling performance like never before.*

- * Results from internal testing on file.
- † Testing performed in benchtop surgeon evaluations. Surgeons using SureForm staplers applied significantly less target tissue tension during position and clamping than Echelon Flex, Endo GIA, and Signia. Data on file as of March 2019.



Complete surgeon control

All SureForm staplers are seamlessly integrated with our da Vinci[®] surgical systems^{*} to allow you full control of positioning, clamping, and firing from the surgeon console.

Intuitive offers a full portfolio of SureForm staplers to ensure you have the right instrument to meet your procedural needs.



Greater range of motion

A 120° cone of articulation* gives you the freedom to maneuver your stapler and position it where you prefer.



Utilize a greater range of motion than the human hand or leading laparoscopic staplers with SureForm staplers.^ $\!\!\!$



*Results from internal testing on file.

† Compared to Endo GIA Ultra with Tri-Staple technology, Signia with Tri-Staple 2.0 technology, and Powered Echelon Plus with GST as of March 2019.

02 60° Left

60° Down

01

03 60° Right

04 60° Up

Intelligent stapling

With one press of a pedal you activate SmartFire technology, which measures tissue compression before and during firing.

SmartFire technology uses more than 1,000 measurements per second* to make automatic adjustments to the firing process as staples are being formed and as the transection is being made.

This advanced firing technology is easy to use and helps ensure a more consistent staple line, all while preventing damage across a range of tissue thicknesses.[†]



^{*} Results from internal testing on file.

[†] Compared to Endo GIA Ultra with Tri-Staple technology, Signia with Tri-Staple 2.0 technology, and Powered Echelon Plus with GST as of March 2019.

Optimally formed staples across a range of tissue thicknesses*

Percentage of optimally formed staples in thick tissue (>4 mm)*

	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
									9	8.7%
SureFo	rm									
									97.2	2%
Powere	ed Echelo	on Flex w	ith GST							
									95.3%	
Endo G	ilA Ultra	with Tri	-Staple							
									94.3%	

Signia with Tri-Staple 2.0

^{*} Testing performed with black reloads on in vivo porcine stomach tissue with both 45 mm and 60 mm devices. SureForm 60 has significantly more optimally formed staples than Endo GIA and Signia in thick tissue. SureForm 45 has significantly more optimally formed staples than all the three staplers in thick tissue. Data on file as of March 2019.

Bring tissue together with less outer layer tearing*

Successful tissue approximation rate*

	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
										1005
SureFo	rm									
						68	3%			
Powere	ed Echelo	on Flex w	ith GST							
									93%	
Endo G	IA Ultra	with Tri	-Staple							

Signia with Tri-Staple 2.0

 ^{*} Testing performed with black reloads on in vivo porcine stomach tissue with both 45 mm and 60 mm devices. SureForm 45 and SureForm 60 have significantly less outer tissue tearing than Echelon Flex.
 Data as of March 2019.

More consistency

SmartFire's automatic measurements and adjustments during firing help you maintain control of the tissue.

This protects the integrity of the cut line and helps achieve the expected length of transection. These consistent results can help you avoid using an unanticipated reload, potentially reducing cost.



Figure A: Average cutline length (60 mm staplers)

Figure B: Average cutline length (45 mm staplers)



* Testing performed with black reloads on ex vivo porcine stomach tissue. The results of cut line consistency were determined via linear regression of the effect of tissue thickness on cut line length. The cutline length of SureForm 60 and Signia with 60 mm reloads were NOT significantly affected by tissue thickness, while the cutline length of Echelon Flex and Endo GIA with 60 mm reloads were affected by tissue thickness (Figure A). The cutline length of SureForm 45 was NOT significantly affected by tissue thickness, while the cutline length of all three other staplers with 45 mm reloads were affected by tissue thickness (Figure B). Data on file as of March 2019.

Deliver a more consistent cut line length across thin and thick tissue.*

Less tension

With the full cone of articulation and anvil centric design of SureForm staplers, you can position the device exactly where you want, minimizing tension on the target tissue and stress to the surrounding anatomy.

Less tension on target tissue and less stress on surrounding tissue during positioning and clamping*



Tension on target tissue.

01

02 Stress on surrounding tissue.

> Average tension applied to target tissue while positioning and clamping stapler

Average stress applied to surrounding tissue while positioning and clamping stapler



SureForm Powered Echelon Flex with GST

1.0 MPa 0.9 MPa 0.84 0.84 0.83 0.8 MPa 0.7 MPa 0.6 MPa 0.5 MPa 0.37 0.4 MPa 0.3 MPa 0.2 MPa 0.1 MPa 0.0 MPa

Measured in megapascals as a unit of stress

- Endo GIA Ultra with Tri-Staple
- Signia with Tri-Staple 2.0
- * Testing performed in benchtop surgeon evaluations. Surgeons using SureForm staplers applied significantly less target tissue tension during positioning and clamping than Echelon Flex, Endo GIA, and Signia. Surgeons using SureForm staplers applied significantly less surrounding tissue stress during positioning and clamping than Echelon Flex, Endo GIA, and Signia. Data on file as of March 2019.

More stability during firing*



Note: Average amount of tip movement during firing in a side-by-side benchtop test.

Images are for illustration purposes only and are not to the exact size.

^{*} As tested in ex vivo surgeon evaluations. SureForm 60 and competitive 60mm stapler data displayed. SureForm 45 and SureForm 60 demonstrated significantly less tip movement during firing than Echelon Flex, Signia, and Endo GIA. Data on file as of March 2019.



8 mm SureForm 30 Curved-Tip

Small stapler. Big impact.

Experience the performance of a SureForm stapler, now on a smaller scale. $\!\!\!\!^{\star}$



* Compared to 12 mm SureForm staplers.

More maneuverability*

01

Fits through 8 mm cannula

02

120° articulation

03

Narrower curved-tip anvil*





The 8 mm SureForm 30 Curved-Tip fits through the standard cannula used with other da Vinci instruments, enabling you to choose the optimal angle to access tissue through any available port. With SureForm's standard 120° of articulation, a 30 mm reload length, and a narrower^{*}, curved-tip anvil, this stapler arms you with a greater range of motion[†] in tight spaces and the flexibility to position and maneuver it as needed.

* Compared to 12 mm SureForm staplers.

† Compared to Echelon Powered Vascular Stapler and Signia Small Diameter Reloads.

More precision

A narrower anvil fits through smaller dissection windows^{*} allowing for easy access around vessels and the 120° of articulation helps you precisely position the stapler with less tissue tension.[†]

Less tension on target tissue and less stress on surrounding tissue during positioning, clamping, and firing.[‡]

Average tension applied to target tissue^{*}



Average stress applied to surrounding tissue^{*}



Measured in megapascals as a unit of stress

Echelon Powered Vascular Stapler Signia Small Diameter Reloads

36% Less tension on target tissues[†] with 8 mm SureForm 30



Less stress on surrounding tissues $^{\rm t}$ with 8 mm SureForm 30

8 mm SureForm 30

* Compared to 12 mm SureForm staplers.

- † Compared to Ethicon Echelon Powered Vascular Stapler and Signia Small Diameter Reloads.
- ‡ Testing performed in benchtop surgeon evaluations. Surgeons using 8 mm SureForm 30 applied significantly less target tissue tension during positioning, clamping, and firing than Echelon PVS and Signia. Surgeons using 8 mm SureForm 30 applied significantly less surrounding tissue stress during positioning, clamping, and firing than Echelon PVS and Signia. Data on file as of March 2022.

Performance you can depend on

Built on the same trusted foundation as 12 mm SureForm staplers, the 8 mm SureForm 30 is powered by SmartFire technology, which monitors tissue compression before and during firing, making automatic adjustments to optimize the staple line.

More stability during firing*



Average amount of tip movement during firing in a side-by-side benchtop test. Images are for illustration purposes only and are not to the exact size.

30%

Less tip motion during clamping and firing with 8 mm SureForm 30 compared to the Echelon Powered Vascular stapler

46%

Less tip motion during clamping and firing with 8 mm SureForm 30 compared to the Signia Small Diameter reloads

^{*} As tested in ex vivo surgeon evaluations. 8 mm SureForm 30 demonstrated significantly less tip movement during firing than Echelon Powered Vascular Stapler and Signia Small Diameter Reloads. Data on file as of March 2022.

Secure hemostasis

Substantially equivalent hemostasis*	8 mm SureForm 30 (2 row) has been tested with gray and white reloads on in vivo porcine vessels and pedicles, and demonstrated substantially equivalent hemostasis to SureForm 45 (3 row).*
Significantly better hemostasis [†]	8 mm SureForm 30 has been tested with white reloads on in vivo porcine vessels and bundles, and demonstrated significantly better hemostasis than Echelon Powered Vascular Stapler and Signia Small Diameter Reloads. [†]

* Compared to SureForm 45. Testing performed with gray and white reloads on in vivo porcine vessels. 8 mm SureForm 30 demonstrated equivalent hemostasis performance to SureForm 45 at p < 0.05. Data on file as of April 2021.

[†] Compared to Echelon Powered Vascular Stapler and Signia Small Diameter Reloads. Testing performed with white reloads on in vivo porcine vessels. 8 mm SureForm 30 demonstrated significantly better hemostasis than Echelon PVS and Signia Small Diameter Reloads at p < 0.05. Data on file as of March 2022.

SureForm specifications

Stapler

- 8 mm SureForm 30: 32 mm staple line/30 mm cut line
- SureForm 45: 45 mm staple line/ 40 mm cut line
- SureForm 60: 60 mm staple line/ 55 mm cut line
- An anvil-centric design

- SureForm 45 and SureForm 60 operate through a 12 mm cannula
- 8 mm SureForm 30 operates through an 8 mm cannula
- 12 fires per device
- Single patient use

SureForm 60 reload

White, blue, green, black reloads

Six rows of staples

New knife with every reload



SureForm 45 reload

Gray, white, blue, green, black reloads

Six rows of staples

New knife with every reload



8 mm SureForm 30 reload Gray, white, blue reloads

Four rows of staples



SureForm staplers

Instruments

Purchasing information

SureForm 60 6 units per box 480460

Part Number



da Vinci X and da Vinci Xi



SureForm 45 6 units per box 480445



SureForm 45 Curved-Tip 6 units per box

da Vinci X and da Vinci Xi

da Vinci X and da Vinci Xi

480545

8 mm SureForm 30 Curved-Tip 6 units per box

488530



da Vinci X and da Vinci Xi

SureForm 60	Reloads			
Purchasing information		SureForm 60 White Reloads 12 units per box	Part Number 48360W	
		SureForm 60 Blue Reloads 12 units per box	48360B	
		SureForm 60 Green Reloads 12 units per box	48360G	
	100.10	SureForm 60 Black Reloads 12 units per box	48360T	

SureForm 45	Reloads	
_		Part Number
Purchasing information	SureForm 45 Gray Reloads 12 units per box	48345M
	SureForm 45 White Reload 12 units per box	ls 48345W
	SureForm 45 Blue Reloads 12 units per box	48345B
	SureForm 45 Green Reload 12 units per box	ls 48345G
	SureForm 45 Black Reload 12 units per box	s 48345T

8 mm SureForm 30	Reloads		
			Part Number
Purchasing information 	48230M		
		8 mm SureForm 30 Curved-Tip White Reloads 12 units per box	48230W
		8 mm SureForm 30 Curved-Tip Blue Reloads 12 units per box	48230B

SureForm 60 and 45 stapler accessories	Cannulas		Part Number
stapler accessories Purchasing information Image: Stapler Cannula (100 mm) (unit per box (reusable) Image: Stapler Cannula (150 mm) (unit per box (reusable) Image: Stapler Cannula (150 mm) (unit per box (reusable) Image: Stapler Cannula (150 mm) (unit per box (reusable) Image: Stapler Cannula (150 mm) (unit per box (reusable) Image: Stapler Cannula (150 mm) (unit per box (reusable) Image: Stapler Cannula (150 mm) (unit per box (reusable)	470375		
	Pracessories Pracessories	470389	
		12 mm & Stapler Canula Seal 10 units per box	Part Number 470380
		12-8 mm Reducer 6 units per box	470381

SureForm 60 and 45 stapler accessories	Obturators		Part Number			
Stapler accessories Purchasing information 12 mm & Stapler Blunt Obturator 1 unit per box (reusable) 12 mm & Stapler Blunt Obturator, Long 1 unit per box (reusable) 12 mm & Stapler Blunt Obturator, Long 1 unit per box (reusable) 12 mm & Stapler Bladeless Obturator 1 unit per box (reusable)	470376					
	12 mm & Stapler Blunt Obturator, Long 1 unit per box (reusable)	470390				
		12 mm & Stapler Bladeless Obturator 1 unit per box (reusable)	470395			
		12 mm & Stapler Bladeless Obturator, Long 1 unit per box (reusable)	470396			

8 mm SureForm 30 stapler accessories	Cannulas		
a mm SureForm 30 Can stapler accessories Purchasing information		8 mm Cannula, Standard 1 unit per box (reusable)	Part Number 470002
		8 mm Cannula, Long 1 unit per box (reusable)	470004
	Obturators		Part Number
		8 mm Blunt Obturator 1 unit per box (reusable)	470008
		8 mm Blunt Obturator, Long 1 unit per box (reusable)	470009

8 mm SureForm 30	Disposables	
stapier accessories		Part Number
Purchasing information	12-8 mm Reducer 6 units per box	470381 *
	8 mm Bladeless Obturator (Optical) 6 units per box	470359
	8 mm Bladeless Obturator, Long (Optical) 6 units per box	470360
	5–8 mm Cannula Seal 10 units per box	470361
	Universal Cannula Seal (5–12 mm) 10 units per box	470500

To contact a representative or receive additional information:

Visit www.intuitive.com or

Call Intuitive Surgical Customer Service:

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Europe

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Rest of the world 1.408.523.2100

* Version 12 or higher.

Disclosure

The comparative studies highlighted in this document were performed in a benchtop setting, in vivo, or in a virtual setting and were not statistically powered to show the differences seen. The significance level to detect statistically significant differences was set at p<0.05.

Important safety information

Serious complications may occur in any surgery, including surgery with a da Vinci system, up to and including death. Examples of serious or lifethreatening complications, which may require prolonged and/or unexpected hospitalization and/or reoperation, include but are not limited to, one or more of the following: injury to tissues/ organs, bleeding, infection, and internal scarring that can cause long-lasting dysfunction/pain.

Risks specific to minimally invasive surgery, including surgery with a da Vinci system, include but are not limited to, one or more of the following: temporary pain/nerve injury associated with positioning; a longer operative time, the need to convert to an open approach, or the need for additional or larger incision sites. Converting the procedure could result in a longer operative time, a longer time under anesthesia, and could lead to increased complications. Contraindications applicable to the use of conventional endoscopic instruments also apply to the use of all da Vinci instruments. For important safety information, including surgical risks and considerations, please also refer to www.intuitive.com/safety. For a product's intended use and/or indications for use, risks, full cautions and warnings, please refer to the associated User Manual(s).

Individuals' outcomes may depend on a number of factors, including but not limited to patient characteristics, disease characteristics, and/or surgeon experience.

Da Vinci instruments and accessories

It is the responsibility of the owner of the da Vinci surgical system to properly train and supervise its personnel to ensure that the instruments and accessories are properly cleaned, disinfected, and sterilized as required by the User's Manual. Da Vinci products should not be used in a clinical setting unless the institution has verified that these products are properly processed in accordance with the da Vinci System User Manual.

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