ENGLISH



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# SummaCut Series S Class 2 Series

World renowned vinyl and contour cutters

### SUPERIOR VINYL AND **CONTOUR CUTTERS**



The Summa S Class 2 cutter has a processor, which is seven times more powerful than its predecessor.

A vibrant color touchscreen, a network port, fast and reliable USB connection and an even faster OPOS sensor make the S Class 2 cutter prepared for many years to come.

Equipped with a new trim and sheet cut functionality, the cutter is now more than ever the perfect companion for large format printers.





5<mark>2</mark> 75 Drag or Tangential Knife Drag or Tangential Knife





52 140 Drag or Tangential Knife



52 160 Drag or Tangential Knife

### ADVANCED CUTTER FOR HIGH-VOLUME VINYL AND DIGITAL PRINT SHOPS

Signmaking has evolved, which means, you need equipment that is both flexible and durable. Summa S Class 2 cutters are built on a foundation of rock-solid reliability and offer features to handle virtually any material you feed them with.

Like the finely-tuned suspension in a sports car, our precision tracking lets us put more power under the hood to improve your performance. The S Class 2 cutter features a dual servomotor design that cuts amazingly fast, and Summa tracking lets you do it with complete confidence.

#### **FEATURES & TECHNICAL SPECIFICATIONS**

1 The Summa S Class 2 cutter is unquestionably the world's most advanced cutter. With its exclusive touch-control panel, it is also, by far, the easiest to use.

2 OPOS X contour cutting alignment delivers OPOS unparalleled accuracy and automation, even on laminated images.

3 The cutting head includes an automatic cut-off knife, which can optionally be set to slice your media at the end of each job.

4 The Summa S Class 2 cutter is standard equipped with an Ethernet port for fast and reliable connection to a network and a USB stick can be used to store jobs for later use.

Eight built-in and quickly accessible user configurations make switching between different jobs and media fast and easy.

From cutting vinyl to accurate, digital die-cutting to plotting on paper and beyond, the Summa S Class 2 cutter is a do-it-all cutter with the strength to do the job day in and day out.

The accuracy of our European-crafted cutters is precisely what makes them so durable. Not only do you receive amazing reliability, you also get the confidence of knowing your expensive films and valuable vinyl prints will be cut precisely, each and every time.



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Ouick accessible user configurations



FlexCut feature



Model	S2 75	S <mark>2</mark> 120	S2 140	S2 160
Dimensions	55 x 26 x 43 in. (141 x 68 x 111 cm)	73 x 26 x 43 in. (187 x 68 x 111 cm)	79 x 26 x 43 in. (202 x 68 x 111 cm)	88 x 26 x 43 in. (225 x 68 x 111 cm)
Media Width	2 to 33 in. (6 to 84 cm)	4.5 to 51 in. (12 to 130 cm)	6 to 57 in. (17 to 145 cm)	6 to 66 in. (17 to 168 cm)
Cutting Area	29 x 1968 in. (74 cm x 50 m)	47 x 1968 in. (120 cm x 50 m)	53 x 1968 in. (135 cm x 50 m)	62 x 1968 in. (158 cm x 50 m)
	'Oversized' mode allows a wider cutting area : +/- 7 cm			
Alignment Type	<ul> <li>OPOS X (OPOS CAM : Factory upgrade on new Summa S Class 2 S160T)</li> <li>Barcode Jobrecognition</li> </ul>		<ul> <li>Up to 2 x 64 marks on the X-line</li> <li>Y- Line compensation</li> </ul>	
Tracking Performance	Within +/- 0.004 in. (0.1 mm) on plots: up to 40 ft. (12 m) long on rolls up to 760 mm wide* up to 13 ft. (4 m) long on rolls over 760 mm wide*			
Accuracy	0.2 % of movement or 0.010 in. (0.25 mm), whichever is greater*			
Speed	Up to 56 in. (141 cm) per second diagonal			
Acceleration	Up to 5.5 G diagonal			
Knife Pressure	Drag Knife: Up to 400 grams / Tangential Knife: Up to 600 grams			
Connectivity	USB; Ethernet			
Power Requirements	100-120 / 220-240 VAC, 50/60 Hz, 85 VA maximum			
Included Software	Cutter Control software; Winplot <sup>™</sup> & MacSign <sup>™</sup> Cut cutting software			

\*For complete specifications, please visit www.Summa.com

### PERFORMANCE VINYL AND CONTOUR CUTTERS



Since 1996, the SummaCut Series has evolved to become the world's most advanced performance-price leader. The new SummaCut Series is the product of decades of Summa's brilliant European engineering.

Numerous refinements have been made, such as the OPOS X technology, which is known from our most advanced S Class 2 cutting plotters. The OPOS X technology is now integrated into a newly designed drag knife cutting head.

The SummaCut Series is capable of reading registration marks for contour cutting on standard materials but also on reflective, holographic or mirroring materials, and on the many different types of laminates being used today.



### VINYL CUTTERS THAT SET THE INDUSTRY STANDARD FOR PERFORMANCE AND VALUE

The SummaCut cutter features highly complex algorithms to compensate for any deformation of the print, using the world's most reliable sensor technology. This makes the SummaCut cutter a winning contour cutter for any sign or print shop.

Summa engineers know there is not a more important vinyl cutter feature than tracking. This is why every cutter we build starts with our exclusive and patented MicroSprocket<sup>™</sup> grit roller.

Milled from the finest materials in a unique process assuring each roller has an exacting diameter, we then specially coat each roller to eliminate the risk of wear and oxidation which could degrade tracking over time.

Quality craftsmanship is about more than low price. It is about value. With cutting performance that rivals other top-of-theline cutters, it comes as no suprise that the affordably priced SummaCut D60 is one of the most popular vinyl cutters ever built.

#### **FEATURES & TECHNICAL SPECIFICATIONS**

**1 The large, easy-to-use control panel** allows you to quickly and easily change settings such as speed, pressure and plot mode in order to perform test cuts.

**2** Our **high-speed cutting head** features the utmost accuracy for exceptionally reliable and effortless vinyl cutting.

**3** Integrated media rollers and roll flanges load your vinyl straight and keep your media on track, even when cutting at top speed.

**4 OPOS X contour cutting alignment** means you can die-cut valuable printed vinyl graphics with complete confidence and reliability.









Legendary tracking



Model	D60	D75	D120	D140 (FX)	D160	
Dimensions	39 x 13 x 11 in. (100 x 35 x 30 cm)	45 x 13 x 11 in. (115 x 35 x 30 cm)	63 x 26 x 44 in. (160 x 68 x 112 cm)	68 x 26 x 45 in. (175 x 68 x 114.5 cm)	77 x 26 x 45 in. (198 x 68 x 114.5 cm)	
Media Width	2 to 25 in. (7 to 66 cm)	2 to 28 in. (7 to 71 cm)	4 to 49 in. (12 to 126 cm)	7 to 55 in. (18 to 141 cm)	7 to 64 in. (18 to 164 cm)	
Cutting Area** extended mode	<b>23 x 1968 in.</b> (60 cm x 50 m) 24 in. (63 cm)	<b>29 x 1968 in.</b> (75 cm x 50 m) 30 in. (78 cm)	<b>47 x 1968 in.</b> (120 cm x 50 m) 48 in. (123 cm)	<b>53 x 1968 in.**</b> (135 cm x 50 m)** 54 in. (138 cm)	62 x 1968 in. (157.5 cm x 50 m) 63 in. (160.5 cm)	
Alignment Type	•			<ul> <li>Up to 2 x 64 marks</li> <li>Y- Line compensation</li> </ul>	to 2 x 64 marks on the X-line Line compensation	
Tracking Performance	Within +/- 0.1 mm on plots: up to 26 ft. (8 m) long on rolls up to 760 mm wide* up to 13 ft. (4 m) long on rolls over 760 mm wide*					
Accuracy	0.2 % of movement or 0.25 mm, whichever is greater*					
Speed	Up to 44 in. (113 cm)/sec diagonal					
Acceleration	Up to 3 G diagonal					
Knife Pressure	0 - 400 grams, in 5 gram increments					
Connectivity	USB RS232 (serial)	USB RS232 (serial)	USB Ethernet	USB Ethernet	USB Ethernet	
Power Requirements	100-120 / 220-240 VAC, 50/60 Hz, 85 VA maximum					

\*For complete specifications, please visit www.Summa.com

\*\* SummaCut FX series differ from the regular series, please see the next page for the SummaCut FX series specifications

## FEATURES OF BOTH THE **S CLASS 2** & THE **SUMMACUT** SERIES

#### DRAG KNIFE TECHNOLOGY

Its simplicity has made Drag Knife (or swivel knife) technology the most commonly used.

An offset parameter defines the distance between the knife tip and the rotating center.

In order to know the position of the freely rotating knife inside the knife holder, a drag movement is made, assuming the knife tip will follow accordingly.

Summa cutters include enhanced methods to optimize this drag movement in order to obtain the best possible cutting quality.

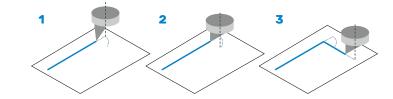
#### **DRAG MOVEMENT**

**1** The Drag Knife stops cutting right before entering a corner.

**2** The eccentric blade is rotated by performing a drag movement to the desired angle, never leaving the media.

**3** Once the drag-movement is completed, the corner cutting continues.





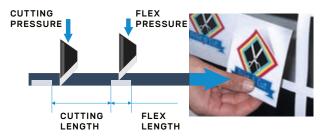
#### **DUAL HEAD**

As an option, the S Class 2 T Series and the SummaCut Series can be equipped with a cutting head with dual functionality. This special Dual Head features an extra pen adaptor, instead of the OPOS sensor, allowing you to work alternately with each tool.

The perfect solution for drawing and cutting patterns in one easy step!

#### **CUTTING THROUGH WITH FLEXCUT**

Summa's FlexCut feature enables you to cut simple designs completely through the material.



Alternately, one length is cut completely through the material, and one length is cut halfway through.

This way a kind of tear-off line is created, ensuring the material keeps a certain rigidity during transportation through the Summa cutter, while remaining easy to remove from the design afterwards.



#### MATERIAL TRANSPORT

Tracking is the ability to transport the media through the machine in a repetitive way. This ability makes sure that one single job is cut within specifications, covering the complete guaranteed tracking length. Nevertheless, also longer jobs are accepted by the cutter.

The guaranteed tracking length also indicates the possibility of doing multiple jobs sequentially, exceeding the guaranteed tracking length several times without the need of reloading the media.



#### INTERNAL INTELLIGENCE

Summa cutters are loaded with intelligent routines, optimizing the cutting data.

All Summa cutters use an advanced vector look-ahead technology that cuts complex images and lettering with improved efficiency. OptiCut

The benefits are extensive. The cutting time is reduced considerably, curves are smoother, and the motors are less loaded, which increases the lifetime of the plotter.

Other intelligent features include:

#### OverCut

OverCut extends the vector at the beginning and at the end of a curve. This ensures the design is cut through completely. Without the OverCut function, the cut line may not be completely closed, causing difficulties when weeding.

OptiCut, a function specially developed for drag knife cutters, simulates tangential cutting. Due to performance of complex movements, the OptiCut feature compensates for changes in the blade offset, caused by wear and tear. The OptiCut feature makes sure the knife is orientated correctly. This revolutionary technology gives you optimal quality during your blade's lifetime.





#### **CONTOUR CUTTING WITH OPOS**

The automated contour alignment system OPOS stands for Optical Positioning System. The OPOS X sensor technology senses marks on a wide range of materials. Some of its features include a fully-automated workflow using **OPOS barcodes**, enabling you to contour cut multiple jobs without intervention.

Another feature automates the contour cutting of multiple sheets with repeating graphics. During this workflow, the OPOS sensor will start to look for marks, immediately after a new sheet is loaded.



Without OPOS



With OPOS

#### **MULTIPLE STRENGTHS**

One of the strengths of OPOS is the unique ability to register multiple marks: a minimum of 4 and a maximum of 128 marks along a job and an OPOS XY line in front of the job. The OPOS XY line makes it possible to compensate deformations along the width of the machine as well.

This combination allows our system to contour cut large jobs more accurately.



SUMMARY		SummaCut FX Series	SummaCut Series	S Class 2 D series	S Class 2 T series	OPOS CAM series
Desc	ription	Reliable, No-Nonsense <u>Contour</u> & Vinyl Cutter	Reliable, Efficient, No-Nonsense Vinyl & Contour Cutter	Maximum Performance, Reliable, Efficient, Vinyl & Contour Cutter	Maximum Possibilities, Versatile, Flexible, Vinyl & Contour Cutter	Maximum Possibilities, Versatile, Flexible, Vinyl & Contour Cutter
	60	-	25 in. (66 cm)	-	-	-
	75	-	31 in. (81 cm)	33 in. (84 cm)	33 in. (84 cm)	-
Maximum Media Width	120	-	49 in. (127 cm)	51 in. (130 cm)	51 in. (130 cm)	-
	140	55 in. (142 cm)	55 in. (142 cm )	57 in. (145 cm)	57 in. (145 cm)	-
	160	-	64 in. (163 cm)	66 in. (168 cm)	66 in. (168 cm)	66 in. (168 cm)
Cutting Tech	nology	Drag Knife	Drag Knife	Drag Knife	True Tangential Knife	True Tangential Knife
OPOS X (Contour	Cutting)	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$
OPOS CAM (C	amera)	-	-	-	-	$\checkmark$
Barcode S	upport	✓	✓	✓	✓	✓
FlexCut (Cutting 1	Fhrough)	✓	$\checkmark$	$\checkmark$	$\checkmark$	✓
F	Roll-up	-	-	Optional	Optional	Optional
V	elocity	**	***	****	****	****
F Working	lexible g Sizes	-	✓	<ul> <li>Image: A start of the start of</li></ul>	✓	✓

### FEATURES SPECIFICALLY FOR THE **S CLASS 2** SERIES



#### TANGENTIAL KNIFE TECHNOLOGY

Tangential cutting technology guarantees a superior performance compared to commonly used swivel knife techniques. The direction of the Tangential Knife is electronically controlled, enabling the T Series to cut very precisely and with very high pressures. The perfect cut ensures easy weeding, saving you valuable time. The patented nose piece prevents small pieces from being pushed out of the vinyl while cutting.

With up to 600 grams of cutting force, the Summa S Class 2 cutter powers through heavy sandblast, paint mask and reflective materials with incredible ease, speed and accuracy.

With a T model, you know you can do the job!

▶ Video available on www.Summa.com/video/tangential

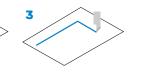
#### **TANGENTIAL MOVEMENT**

**1** The Tangential Knife stops cutting right before a corner.

2 A motor lifts and re-orients the blade.

**3** Once the blade has reached the desired angle, it is lowered and continues to cut the corner.





#### **G-PERFORMANCE MODE**

This mode is especially designed to enhance the speed / performance of digital finishing operations on the S2 roll cutters up to **40%**. The advantages include faster cutting speeds on wider substrates and faster reading of the registration marks. Especially within large industrial environments, this G-performance mode will prove its worth and give your overall workflow a serious boost.

Unlock your boost extension at www.Summa.com/g-performance!

#### **MEDIA OPTIONS**

#### A servo-powered roll-up system (1)

(S2 140 & S2 160)

After a job is finished, the system will roll up the artwork neatly and prepare the machine for the next unattended job. The integrated paneling feature splits long-length runs into shorter consecutive jobs. The S Class 2 can therefore cut complete rolls unattended and deliver the output nicely rolled-up.

#### A solid, most effective media rack <sup>(2)</sup>

(S2 140 & S2 160) Note: The roll-up system and the media rack cannot be combined.

#### Extra pinch rollers (3)

(S Class 2 Series & SummaCut Series) Extra pinch rollers can be installed when required.









#### **OPOS CAMERA**

With OPOS CAM, Summa delivers yet another amazing innovation with the printing industry's first camera recognition alignment solution for friction-driven vinyl drum cutters.

Summa customers in volume-driven workflow environments will now be able to excel against the competition with extremely fast precision and accurate cutting of short or long run contour cutting jobs.

OPOS CAM is a factory upgrade option now available on all new Summa S Class 2 S160T vinyl cutting plotters.



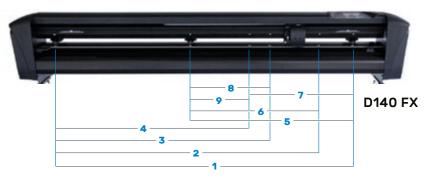
### FEATURES SPECIFICALLY FOR THE **SUMMACUT** SERIES

#### SUMMACUT FX SERIES

#### **Price Breaker**

Benefit from all the features of the SummaCut Series at an affordable price.

With pinch roller positions handling most common sizes and an extended cutting mode, the SummaCut FX Series is optimized for most common media sizes.



D140 FX Working Area	<b>1</b> 52 in. (1324 mm)	2 46 in. (1174 mm)	3 37 in.(954 mm)
	<b>4</b> 34 in. (864 mm)	5 28 in. (720 mm)	6 22 in. (570 mm)
	<b>7</b> 17 in. (454 mm)	8 13 in. (350 mm)	9 10 in. (260 mm)
D140 FX	1 54 in. (1372 mm)	2 48 in. (1220 mm)	3 40 in. (1000 mm)
Target Media	<b>4</b> 36 in. (914 mm)	5 30 in. (762 mm)	6 24 in. (610 mm)
Width	<b>7</b> 20 in. (500 mm)	8 16 in. (406 mm)	9 11 in. (297 mm)

#### **MEDIA BASKET**

(OPTIONAL D60, D75 & D140FX)

As the media advances, the output will be neatly collected in a textile basket, optional on D60, D75 and D140FX models, preventing dust and debris from collecting onto the media. This eliminates the problem of media coming in contact with dirty floors, which could contaminate work surfaces and result in particles being trapped between the vinyl and substrate. The basket also neatly organizes vinyl and other media when processing multiple jobs.

For the S Class 2 Series and SummaCut D120-D140-D160, the media basket is always standard included.



#### OPTIONAL STANDS FOR SUMMACUT D60/D75

- 1 Sturdy Metal Stand on 4 roller casters (#399-050)
- 2 Fabric basket (#399-070 /#399-360)

### SUMMA GOSUITE SOFTWARE PLATFORM

The Summa GoSuite software platform has been developed to enable users to make the most of their print and cut workflow. With the Summa software, operators, designers and business owners, can easily process and analyse complex and high volume jobs with great flexibility. The GoSuite platform is prepared for the future. It takes usability and flexibility to a whole new level thanks to a whole range of included advanced features.

#### GOSIGN CUTTING SOFTWARE NEW

GoSign is your first choice cutting software designed for the Summa Roll Cutters. It allows you to manage your preferred workflow with great flexibility. Enjoy automated cutting options, custom configuration of action sets, easy plug-ins for design programs and much more.

The software GoSign that comes with the machines includes plentiful features to get you going and will expand further in the future. For a small additional charge, a Pro pack can be purchased, making even more functionality available to accommodate to your growing business even more.

Video available on www.Summa.com/video/GoSign

#### BUILD A CUTTING WORKFLOW TO YOUR PREFERENCE

GoSign is specially developed with the user in mind to streamline his workflow as much as possible.

- Workflow automation, minimizing operator intervention substantially.
- Increased flexibility with the option to cut directly from Adobe Illustrator or CorelDRAW.
- Material manager with your most commonly used materials and the possibility to add other material types as you go.
- Enhanced file compatibility, providing perfect synergy between hardware and software.

#### GoSign 2.0

Standard available on www.Summa.com

- All common functionalities specific to cutting programs: sorting, weeding box, multi-copy, ...
- Custom configuration of action sets
- Plug-ins for Adobe Illustrator and CorelDRAW
- Material Manager
- Job log functionality
- × Camera recognition
  - × Twin workflow
- × Barcode functionality
- × Hot folder job handling
- × Import of plot files

- Choose your preferred import method by colour or by layer name.
- Availability of job log functionality, one step closer to making the Summa roll cutters Industry 4.0 compatible.
- Compatible with: DXF and PLT files and even files from open source design programs, such as Inkscape.
- Custom action sets tailored to your specific workflow needs.

#### GoSign 2.0 Pro Pack

One-time Pro version purchase (395-995)

- All common functionalities specific to cutting programs: sorting, weeding box, multi-copy, ...
- Custom configuration of action sets
- Plug-ins for Adobe Illustrator and CorelDRAW
- Material Manager
- ✓ Job log functionality
- Camera recognition
  - Twin workflow
- Barcode functionality
- Hot folder job handling
- Import of plot files

### Download for free on www.summa.com Talk to sales



The MacSign software offers a collection of plug-ins for Adobe Illustrator. These plug-ins facilitate the development of the cutter designs and add considerable value to the roll cutter's production workflow. The MacSign plug-ins are included with every Summa Cutter and only require a free registration. Compatible with: Mac OS X 10.6 and later, including macOS Catalina.9







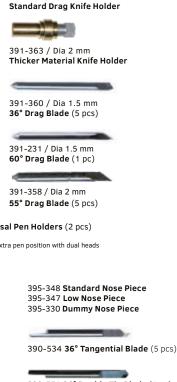
#### UNIQUE BENEFITS OF SUMMA'S DEDICATED **CUTTING EQUIPMENT**

- Relies on a constant quality of the cut for which it is specially designed.
- Handling up to 128 marks with Summa's alignment system OPOS X. 1
- Perfect integration between Summa software and hardware 1 to get the most out of the cutters.
- Professional-grade cutting heads are far more capable and J powerful than light-duty cutting heads on inkjet printer-cutters.
- Handling very rigid materials as opposed to printer-cutters. 1
- Powered by heavy-duty motors, able to handle the weight of large, laminated prints.
- Obtains a much greater consistency and precision, ensuring J easy weeding.
- Optimized for all types of printing and add value to many 1 a sign maker's business.
- Cutting vinyl graphics and lettering, which are methods that make no sense to schedule into a print production.

### CONSUMABLES

#### Summacut & S Class 2 D series

MP06BK Black fiber-tip 391-332 / Dia 1.5 mm (4 pcs-0,3 mm pens) (Car 391-595 Pouncing Kit 391-363 / Dia 2 mm SummaCut 395-313 Pouncing Kit S Class 2 D Series 395-430 Roller Ball (5 pcs-Black) ---395-431 Roller Ball (5 pcs-Blue) 391-358 / Dia 2 mm 391-592 Pouncing Pin (1 pc) 395-434 Universal Pen Holders (2 pcs) Black/Copper Not compatible for extra pen position with dual heads S Class 2 T series 390-553 Blade Install Tool 395-315 Pouncing Kit S Class 2 T Series 391-592 Pouncing Pin (1 pc) 395-376 Fiber-tip Pen 18 395-324 Holder for Ballpoint 395-325 Ballpoint



390-551 36° Double Tip Blade (1 pc)

390-560 45° Double Wedge (1 pc)

390-550 60° Tangential Blade (1 pc)

395-322 Tangential Knife Holder

395-323 Tangential Drag Knife Holder

#### DISADVANTAGES OF A HYBRID **PRINTER & CUTTER**

- Alignment systems are limited to a 4-point X method and are therefore slow, inaccurate and limited in use.
- Sending jobs back into print production to X cut jobs delays other printing tasks and significantly limits the printer's capacity.
- × The light-duty cutting heads on inkjet printer-cutters have less cutting force and are less capable.
- The cutting speed of integrated printer-× cutters is much lower.
- With modern print techniques, a great x deal of heat is used, deforming the printed material significantly.
- Long jobs will fail completely. Cutting after printing without reloading and aligning generates significant shift between the print and the cut line.

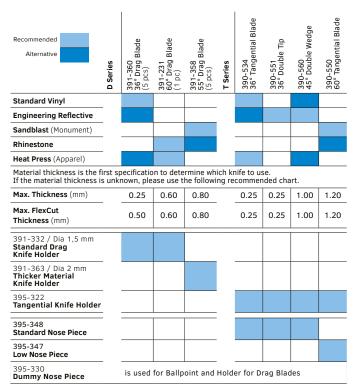
#### General

- A. 400-565 Cutting Strip (1 Pc)
- B. 391-290 Cut-Off Knife (Without trackbase)
- C. 391-510 Core Holders (2 Pc) D. 395-401 Pinch roller (set of 2 with 4 clips)
- E. 391-598 Pouncing Strip (30 meter) F. 391-146 Replacement Blades
- (10 Pack)
- G. MP06BK Plotter Pen (4 Pc)



#### Cutter knife guidelines

When you choose a knife to cut your material, always use the lowest degree knife (shallowest angle), assuming the thickness of the material did not exceed the maximum listed for that knife.



WARNING HAZARDOUS MOVI KEEP FINGERS AND OTHER ATTENTIO PARTIES MOBILES DA TENIR LES DOIGTS ET PARTIES DU CORPS

# SummaCut Series<sup>®</sup> S Class 2 Series<sup>®</sup>

World renowned vinyl and contour cutters

Follow us:



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www.Summa.com

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