



# S CLASS 2

Superior vinyl and contour cutters



## Advanced vinyl and contour cutters for high-volume vinyl and digital print shops.

Sign making has evolved and more than ever you need equipment that's both flexible and durable. Summa S Class 2 cutters are built on a foundation of rock-solid reliability and offer features to handle virtually anything you feed them with. From cutting vinyl to accurate digital die-cutting to plotting on paper and beyond, Summa S Class is a do-it-all cutter with the strength to do it day in and day out.

Like the finely tuned suspension in a sports car, our precision tracking lets us put more

power under the hood. S Class 2 features a dual servomotor design that cuts amazingly fast. Summa tracking lets you do it with complete confidence.

Like a quality timepiece, the accuracy of European-crafted cutters is precisely what makes them so durable. So you not only get amazing reliability, you get the confidence of knowing that your expensive films and valuable vinyl prints will be cut precisely each and every time.

Model	S275	S2120	S2140	S2160
Dimensions	141 X 68 X 111 CM	187 X 68 X 111 CM	202 X 68 X 111 CM	225 X 68 X 111 CM
Media Width	6 TO 84 CM	12 TO 130 CM	17 TO 145 CM	17 TO 168 CM
Cutting Area	74.2 CM X 50 M	120 CM X 50 M	135 CM X 50 M	158 CM X 50 M
	'OVERSIZED' MODE ALLOWS A WIDER CUTTING AREA : +/- 7CM			
Repeatability (guaranteed)	WITHIN +/- 0.1 MM ON PLOTS : UP TO 12M LONG ON ROLLS UP TO 760 MM WIDE <sup>2</sup> ; UP TO 4 M LONG ON ROLLS OVER 760 MM WIDE <sup>2</sup>			
Accuracy	0.2 % OF MOVE OR 0.25 MM, WHICHEVER IS GREATER <sup>2</sup>			
Speed	UP TO 141 CM/SEC DIAGONAL			
Acceleration	UP TO 5.5 G DIAGONAL			
Knife Pressure	DRAG: UP TO 400 GRAMS, TANGENTIAL: UP TO 600 GRAMS			
Connectivity	USB; ETHERNET			
	*For complete specifications, visit <a href="http://www.summa.eu">www.summa.eu</a>			



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

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



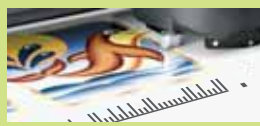
Eight built-in and quickly accessible **user configurations** makes switching between different jobs and media fast and easy.



# S2 CLASS

Summa's new flagship, the S Class 2, has a processor which is seven times more powerful than its predecessor. The new colour touchscreen, network connection, USB stick support and faster OPOS sensor makes S2 prepared for many years to come. New trim and sheet cut functionality makes the cutter more than ever the perfect companion for large format printers.

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



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



#### Flexcut



FEATURE

#### Tracking



SYSTEM

#### Smart



INTELLIGENCE

#### Genuine



TANGENTIAL

EQUIPPED WITH **OPOS X**

### S2 75

75 cm drag or tangential knife



### S2 120

120 cm drag or tangential knife



### S2 140

140 cm drag or tangential knife

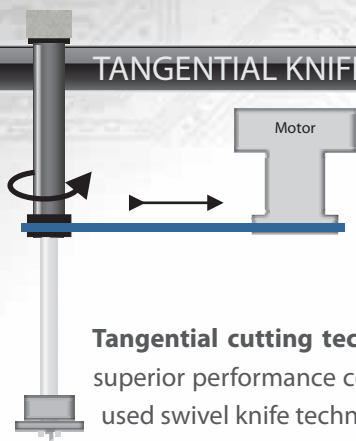


### S2 160

160 cm drag or tangential knife

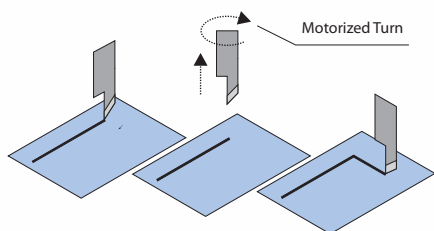


## TANGENTIAL KNIFE CUTTERS



**Tangential cutting technology** guarantees a superior performance compared to commonly used swivel knife techniques. The direction of the tangential knife is electronically controlled, by which T series are capable of cutting very precisely and with very high pressures. The perfect cutting makes weeding very easy, saving you a lot of valuable time.

The patented nose piece avoids small pieces being pushed out of the vinyl while cutting. With up to 600 grams of cutting force, Summa S Class 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!



## Double tip knife

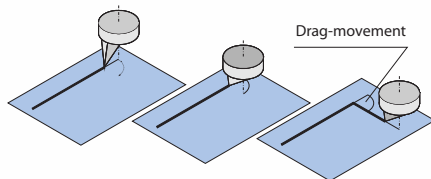
Summa tangential cutters can also drive double tip knives, these have two cutting edges. The Dual tip as a result is much more rigid, significantly elongating the life time of the knife. When penetrating the material, the dual tip automatically generates an overcut. Especially when cutting high reflective materials, the extra overcut and rigidity proves its value in this hard and thick material.



## 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 centre. 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 optimise this drag-movement to obtain the best possible cutting quality.





## Media Options

### A servo-powered roll-up system (S160 & S140)

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



### Extra Pinchrollers

Extra pinchrollers can be installed to have extra grip when required.



### A solid, most effective media rack

(S140 & S160)



## 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 their competition with super fast precision, 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 S75T, S140T and S160T vinyl cutting plotters.



## Dual Head

As an option, the S Class T Series can be equipped with a cutting head with a double functionality.

This special double head features an extra pen adaptor (instead of the OPOS sensor) allowing to work alternately with both tools.

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



# SUMMACUT

Performance vinyl and contour cutters



## Vinyl cutters that set the industry standard for performance and value.

Since 1996 SummaCut has evolved to become the world's most advanced performance-price leader. The new SummaCut Series is the product from decades of Summa's brilliant European engineering. Numerous refinements have been made, such as the OPOS X technology, known from our most advanced S-Class cutting plotters, which is now integrated into a newly designed drag-knife cutting head. SummaCut is capable of reading registration marks for contour cutting; not only on standard materials but also on reflective, holographic or mirroring materials, as well as through the many different types of laminates being used today. The SummaCut features highly complex algorithms to compensate for any deformation of the print, using the world's most reliable sensor technology; this makes SummaCut a winning contour cutter for any sign shop or print shop.

Summa engineers know there's not a more important vinyl cutter feature than tracking. That's why every cutter we build starts with our exclusive and patented MicroSprocket™ grit roller. Milled from the finest materials, in a unique process that assures each roller has an exacting diameter, we then specially coat each roller to eliminate the risk of wear and oxidation that can degrade tracking over time.

Quality craftsmanship is about more than just low price. It's about value. With cutting performance that rivals others' top-of-the-line cutters, it's no wonder that the affordably priced SummaCut D60 is one of the most popular vinyl cutters ever built.

Model	D60	D120	D140	D160
Media Width	7 TO 66 CM	12 TO 127 CM	18 TO 142 CM	18 TO 164 CM
Cutting Area (extended mode)	60 CM X 50 M (63 CM)	120 CM X 50 M (123 CM)	135 CM X 50 M (138 CM)	157.5 CM X 50 M (160.5 CM)
Dimensions	100 X 35 X 30 CM	160 X 68 X 112 CM	175 X 68 X 115 CM	198 X 68 X 115 CM
Repeatability (guaranteed)	WITHIN +/-0.1 MM ON PLOTS: UP TO 8 M LONG ON ROLLS UP TO 760 MM WIDE*; UP TO 4 M LONG ON ROLLS OVER 760 MM WIDE*			
Accuracy	0.2% OF MOVE OR 0.25MM, WHICHEVER IS GREATER			
Speed	UP TO 113 CM/SEC DIAGONAL			
Acceleration	UP TO 3 G DIAGONAL			
Knife Pressure	0 - 400 GRAMS, IN 5 GRAM INCREMENTS			
Connectivity	USB, RS232 (SERIAL)			
Included Software	CUTTER CONTROL SOFTWARE; WINPLOT & MACSIGN CUT CUTTING SOFTWARE			

\*For complete specifications visit [www.summa.eu](http://www.summa.eu)



The large, easy-to-use control panel that allows you to quickly and easily change settings like speed, pressure, plot mode and perform test cuts.



Newly designed high-speed cutting head features precision accuracy for exceptionally reliable and effortless vinyl cutting.



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



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



### D60

60 cm drag knife

### D120

120 cm drag knife

### D140

140 cm drag knife

### D160

160 cm drag knife





## Contour cutting with OPOS

EQUIPPED WITH  
**OPoS X**

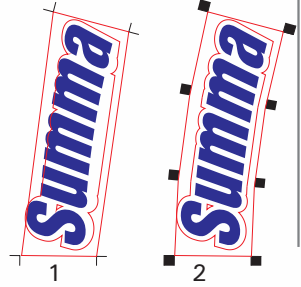


The automated contour alignment system OPOS stands for **O**ptical **P**ositioning System. The OPOS X sensor technology senses marks on a wide range of materials.

Some of our latest features include a fully automated workflow with barcode reading, enabling you to contour-cut multiple jobs without any user intervention. Another feature is while using multiple sheets with repeating graphics, the OPOS sensor will start looking for markers immediately after a new sheet is loaded.

### Multiple Markers:

OPOS has the unique capability of registering multiple markers along a job. This enables our system of scanning large jobs without loss of accuracy. Compared to a typical 4 point alignment system, which will generate inaccuracies in the contour. OPOS can scan a minimum of 4 to a maximum of 128 markers allowing a much higher precision even on large jobs.



## Media Basket

As the media advances, output collects neatly in a linen basket (optional on D60 models), preventing dust and debris from collecting on the media. This eliminates the problem of media coming in contact with dirty floors, which can contaminate work surfaces and result in particles being trapped between the vinyl and substrate. The basket also neatly organises vinyl and other media when processing multiple jobs.



### Optional Stands for SummaCut D60

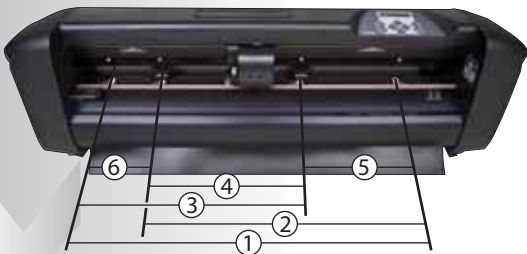
Sturdy Metal Stand on 4 roller casters (#399-050)



Sturdy Metal Stand with fabric basket on 4 roller casters (#399-075)



## SummaCut D60FX



### Price Breaker

Benefit from all the goodies of the Summacut Series at a bottom price. With four pinchroller positions (handling 6 basic sizes) and an extended cutting mode, the SummaCut D60FX is optimized for most common media sizes.

Media Width	11.5 TO 67 CM					
	1) >595 MM (61 CM)	2) >490 MM (50 CM)	3) >395 MM (40 CM)	4) >290 MM (A3)	5) >210 MM (A4)	6) >115 MM (SENSOR DISABLED)
Cutting Area	1) 575 MM X 50 M	2) 470 MM X 50 M	3) 375 MM X 50 M	4) 270 MM X 50 M	5) 190 MM X 50 M	6) 95 MM X 50 M

MAXIMUM CUTTING WIDTH IN EXTENDED MODE: 63 CM

For other specification: see standard SummaCut D60





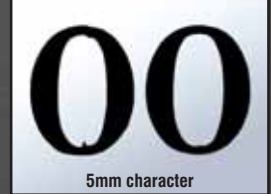
Summa cutters are loaded with several intelligent routines optimising the cutting data. All Summa Series use an advanced vector look-ahead technology that cuts complex images and lettering with improved efficiency. The benefits are extensive. Cutting time is reduced seriously, curves are smoother and the motors are less loaded, which increases the lifetime of the plotter. **Other intelligent features include:**

### Overcut

"OverCut" extends the vector in the beginning and at the end of a curve. This way it makes sure that the design is completely cut through. Without the "OverCut" function, due to a variety of tolerances, the cut line may not be completely closed causing difficulties when weeding.

### OptiCut

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

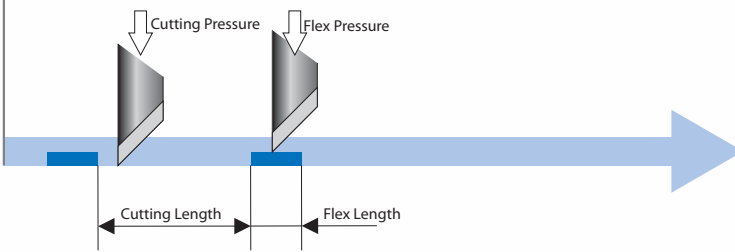


without OPTiCut with OPTiCut

## CUTTING THROUGH WITH FLEXCUT



Summa's FlexCut feature makes it possible to cut simple designs completely through the material. Alternately, one length is cut completely through the material, and one length is cut half through. This way, a kind of tear-off line is created, ensuring the material keeps a certain rigidity to be transported through the Summa cutter while it remains easy to take out 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 within the complete guaranteed tracking length. Nevertheless, longer jobs are also accepted by the cutter.



The guaranteed tracking length also indicates the possibility of doing multiple jobs after each other (exceeding the guaranteed tracking length several times) without the need of reloading the media.



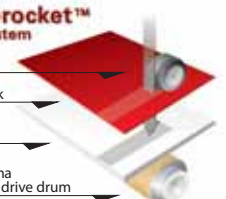
### MicroSprocket™ Tracking System

Pinch roller

Vinyl face stock

Release liner

Patented Summa MicroSprocket drive drum

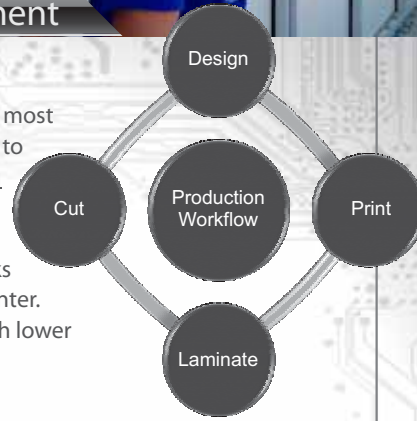




## Unique benefits of dedicated cutting equipment

### More Productive Workflow

Printers that cut are highly inefficient in workflows that are common in most better-established print and sign shops. Jobs are sent from design to print-production. Once printed, images are allowed as much **drying time** as scheduling permits, and then **laminated**. Finally they're sent to finishing, which might involve cutting, mounting or other finishing tasks. Sending jobs back into print production to perform cutting tasks would delay other printing and significantly limit the capacity of the printer. On top of that, the **cutting speed** of integrated printer-cutters is much lower than on Summa Cutters, reducing the printing capacity even more.



### More Material Choice

Professional-grade cutters are far more capable than the light-duty cutting heads on inkjet printer-cutters. They have more cut-force (grams of down-force). Summa cutters can handle **hard-to-cut materials** like Lexan over-laminate, floor graphic kits and other thick and semi-rigid laminates. But that is merely one aspect of what separates a dedicated cutter from a printer with a cutting head. **Material tracking** in cutters is designed for back-and-forth travel; on a sheet of labels, it might go back and forth as many as 50 times. They have heavy-duty motors that can handle the weight of large, laminated prints. And they cut with much greater consistency, assuring that every label is cut precisely and weeded easily. Many print shops evolved for screen-printing, and still do both. Summa cutters are optimized for all types of printing, and add value throughout the organization.



### Unmatched Accuracy

With modern print techniques a lot of **heat** is used, **deforming** the printed material significantly. Cutting after printing without reloading and aligning will generate significant shift between the print and the cut line. Long jobs will completely fail. **Alignment systems** built in print&cut units are slow, limited in use on different materials and laminates and inaccurate as they are limited to a 4 point method while Summa OPOS X can handle up to 128 marks.

### Cut more than just prints: Integrates all cutting in one department

Cutting involves more than just printed vinyl. **Vinyl graphics** and **lettering** are also commonly-produced by shops of all sizes. It would make no sense whatsoever to schedule production of cut vinyl in print production. They are far better-served with a vinyl-cutter that can do all cutting, whether that's contour-cutting or cut-vinyl lettering. That consolidates all cutting and weeding where it belongs: in the cutting department by people that have the tools, space and knowhow to cut, weed, and apply pre-mask when needed. Doing those tasks in print production is extremely inefficient.

### Advanced cutting modes

Cutters can do things no printer-cutter is designed to do. That's especially the case with Summa cutters, which can not only perform the simple kiss-cutting needed to contour-cut labels and graphics. They can also **cut completely through** the backing to eliminate the need to hand-cut individual labels. Or the user can kiss-cut and cut a separate path that goes through the backing in a single operation to create sheets of labels or large contour-cut graphics that do not need to be sectioned manually by the cutter operator. Manual tasks are eliminated, which improves operator productivity and reduces job-cost.

## SummaCut & D Series

55° Blades, dia. 2 mm



36° Blades, dia. 1,5 mm



60° Blades, dia. 1,5 mm



Pouncing pin



Knife Holder, dia. 2 mm



Knife Holder, dia. 1,5 mm



Pouncing Kit



Black fiber-tip 0,3 mm pens



Holder and pouncing pin



## S Class T Series

36° Blades



45° Blades



Holder for tangential blades



Holder for Ballpoint



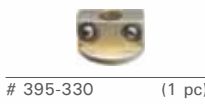
Double Tip 36° Blades



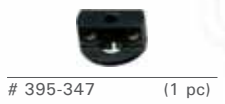
Standard Nose piece



Dummy Nose piece



Low Nose piece



Holder for drag blades



Fiber-tip Pen



60° Blades



Holder and pouncing pin



Ballpoint



## SummaSign T Series

Holder for tangential blades



Pouncing Pin



Holder for drag blades



Holder for Ballpoint



Ballpoint

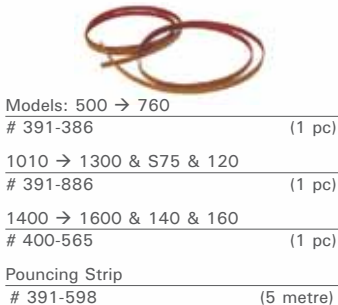


Blade install tool



## General

Cutting Strips



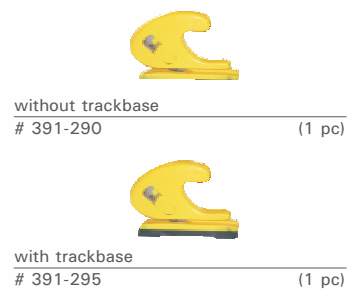
Core Holders



Replacement Blades



Cut-Off Knives





**WinPlot™ is a cutting software utility for the Microsoft Windows operating systems. An exclusive Summa version of Winplot is delivered free of charge with every new Summa Cutter.**

**Compatibility:** Winplot supports all Summa cutting devices : SummaCut and S Class. Supported communication ports : USB, Serial (RS 232), ethernet, centronics parallel and any printer port installed on your operating system which enables networked printing.

**Input:** includes **plug-ins for CorelDRAW and Illustrator** and imports simplified .eps, .ai and .dxf files from other applications.

**Edit:** allows scaling, mirroring and rotating of the design or parts of the designs.

**Output:**

- ! NESTING with support of multiple copies : Winplot automatically rotates and positions different designs as well as multiple copies in order to optimize the use of material
- ! PANELLING : jobs larger than the media width will be split in panels
- ! **INTEGRATION OF OPOS** : using Summa's Optical Positioning System has never been easier
- ! WEEDINGBOX : automatically generates weeding boxes around cut images
- ! CUTTINGBY COLOUR



## MACSIGN™ CUT

MacSign Cut is included with every Summa cutter.



Compatible with:  
Mac OS X (10.2 or higher)  
Mac OS 9

MacSign Cut is a "bridge" application that imports artworks saved by popular desktop publishing applications (Illustrator, FreeHand, Canvas, Corel Draw, and so on) and sends them to Summa vinyl cutters. Imported artworks are displayed on the worksheet before processing and can be resized, positioned, mirrored, turned, distorted, duplicated, and so on.

The tiling feature panels the design and allows the user to cut large designs.

After a 30days trial, a free registration is required.

More info on :  
[www.softteamweb.com](http://www.softteamweb.com)



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