



# NEW RELEASE SSB SERIES





# S Class 3 Series

## Precision and performance

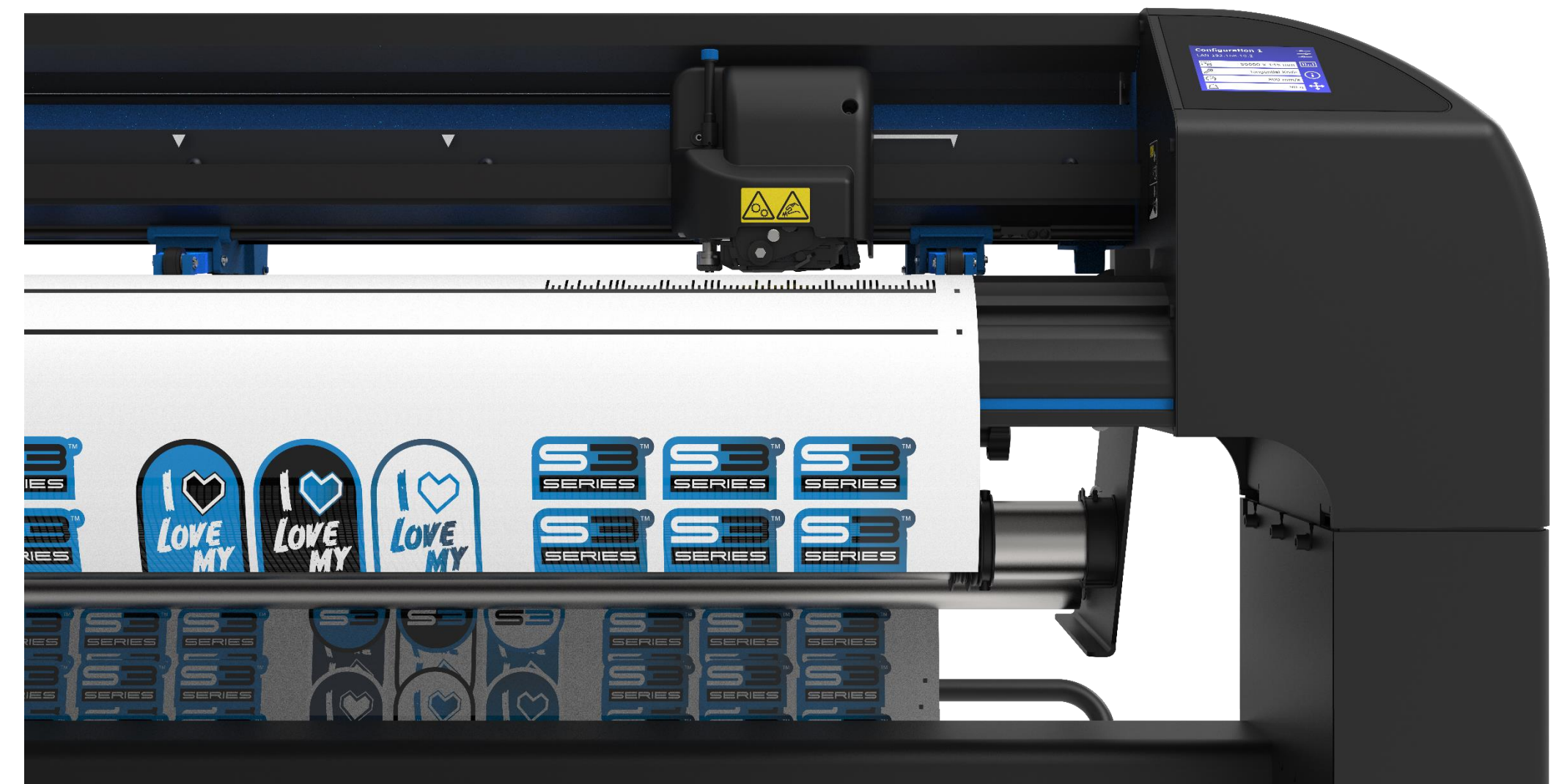
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### High-Precision & Versatile cutting

The Summa S Class 3 is a state-of-the-art device designed for professional users who demand top performance in their roll fed cutting applications.

The range features Summa's advanced True Tangential Cutting Technology with a unique motorised knife, allowing the cutters to achieve unparalleled accuracy and precision down to the smallest details. Furthermore, the ability of thru-cutting, kiss-cutting, and creasing without the need for tool changes proves the cutter's versatility once more.





# Key features

## Some things have not changed

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### Top Quality

Summa is renowned for its durable cutting machines.

**Design & Development** / Production / Delivery / After Sales Support

### Functionality

When tight deadlines arise and jobs need to be completed smoothly and perfectly, the S Class 3 really shows its true potential.

**Top Performance** / **Internal Intelligence** / Contour Cutting / Software

### Compatibility

Summa roll fed cutting plotters are equipped with the tools necessary to ensure worldwide compatibility.








Connectivity / Software / **GoSign** / MacSign Cut / Drivers





# UNIQUE TRUE TANGENTIAL CUTTING TECHNOLOGY

**Configuration 1**  
LAN 192.168.10.2

	50000 x 145 mm	
	Tangential Knife	
	800 mm/s	
	90 g	

FINISHED BY A SUMMA S CLASS 3  
USING OPDS BARCODE FUNCTIONALITY | WWW.SUMMA.COM



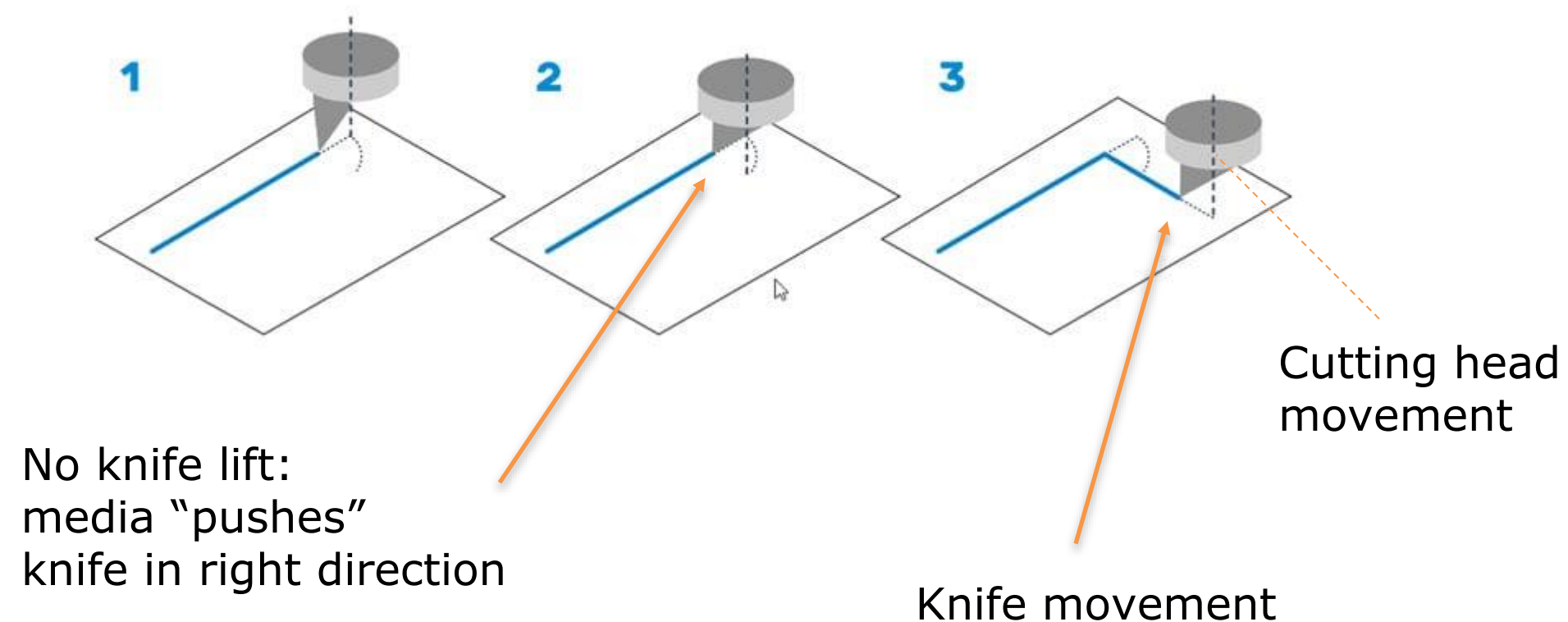


# Knife cutting technology

## Tangential knife vs Drag knife

### Drag Knife Technology

No active knife steering

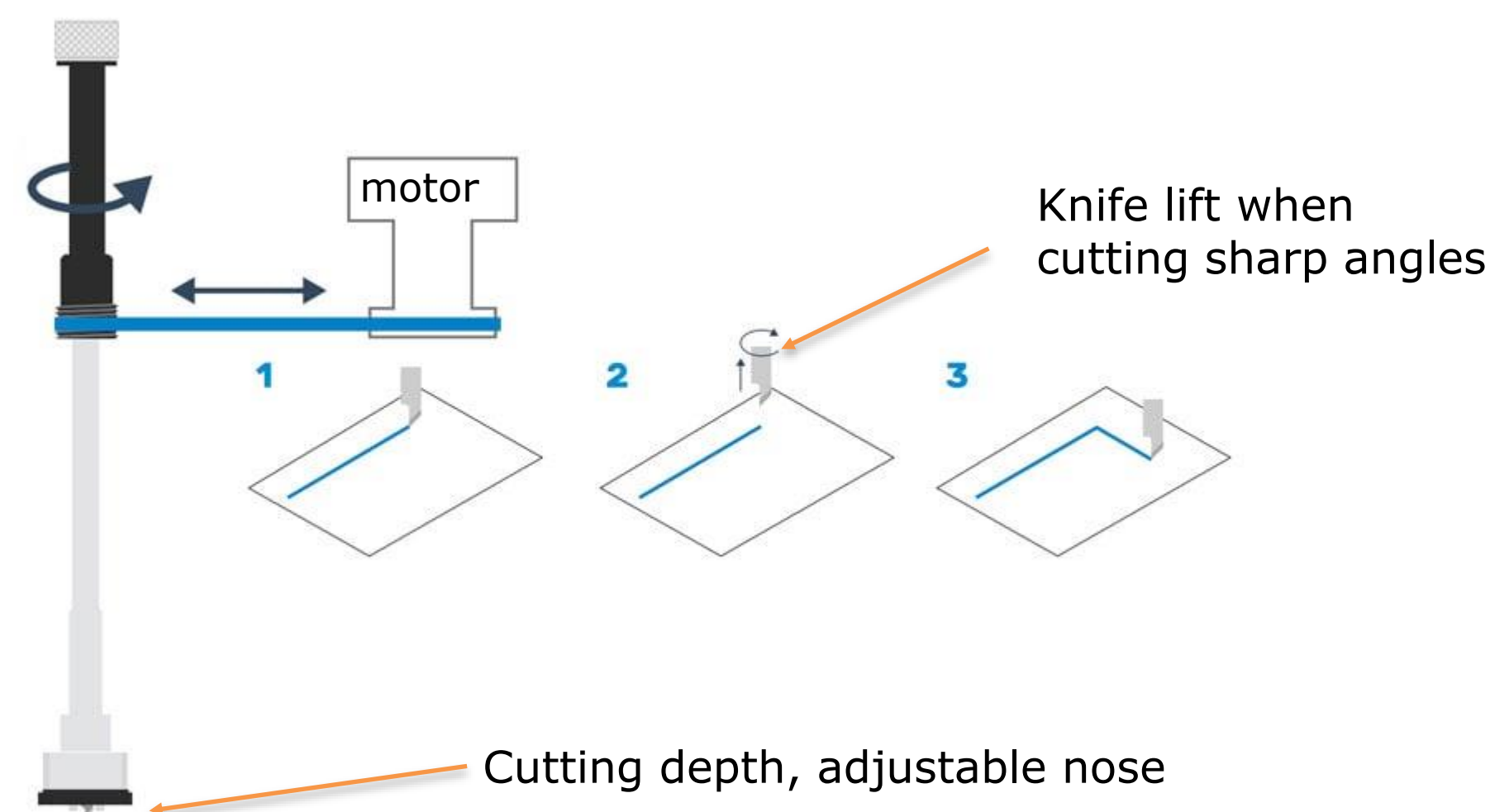


Media is part of the process. The cutting result depends on the **balance between media and knife**.

→ When knife / media combination is correct a good result can be obtained.

### Tangential Technology

Active knife steering



Media is not part of the process, it is processed.

- Best cutting results regardless the material.
  - Works best on a wide range of materials, material independent.
  - Always easy peeling.
  - Most versatile / flexible technology.
  - Knife shaped for cutting, longer knife life-expectancy.
- **Always cutting to Perfection !**

# Knife cutting technology

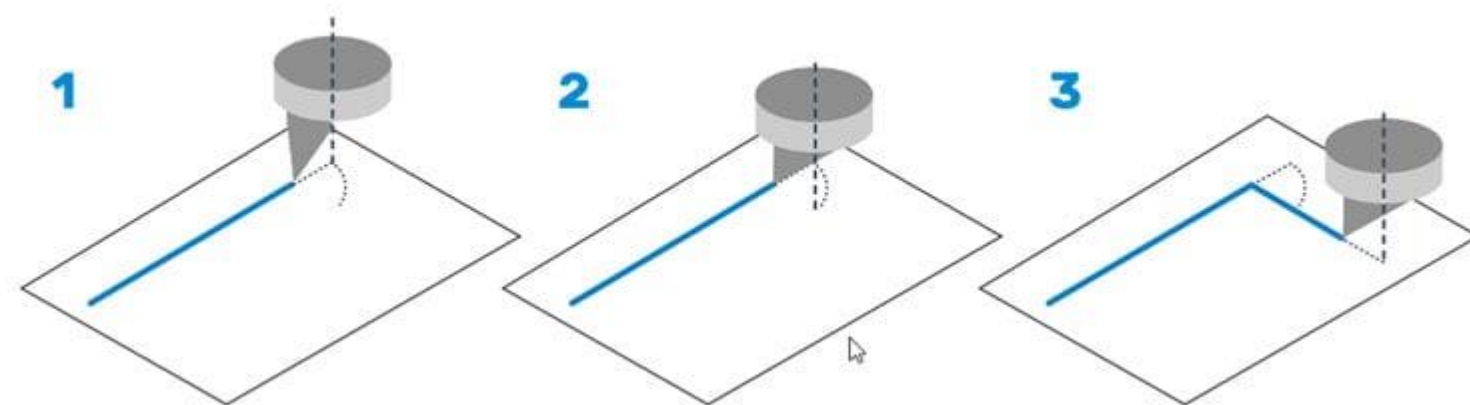
## Drag Knife cutting benefits

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Drag knife technology is the most installed cutting technology:

- Cost advantages.
- When used for the right application, more than good enough.
- Speed, there are no knife lifts.
- Result depends on a fine balance between media and knife.
- Knife movement is calculated and based on media thickness, toughness, elasticity, consistency....
- When using standard SA PVC or media with a similar thickness and behaviour, drag knife technology will do the job, **fast!**

**On average + 20% faster, compared to Tangential Technology**



# Knife cutting technology

## Tangential Technology cutting benefits

- **Accurate and stable Depth Control** (thanks to the nose piece) allows using slightly higher knife pressures, resulting in a **constant cutting quality**.
- Traditionally, screen-print masking film (Rubylith) doesn't allow scratches in the liner.
- When cutting at the **highest speeds**, usually, the media may slightly lift in the cutting devices and may cause pressure variations. **In the T Series this is avoided.**
- When cutting thin, soft materials (thin cast vinyl), the slightest variations in pressure usually result in weeding issues. In combination with the head-lift, the **T Series** will produce **much sharper corners**.
- **FlexCut** is much more **stable and needs less adjustment**, which makes it more reliable in a production environment. The tangential technology also allows using more solid (less sharp) knives, which wear out less rapidly: **Less adjustment & less knife changes.**

→ The S3 is focused on **high production** environments.



Nose piece

# Knife cutting technology

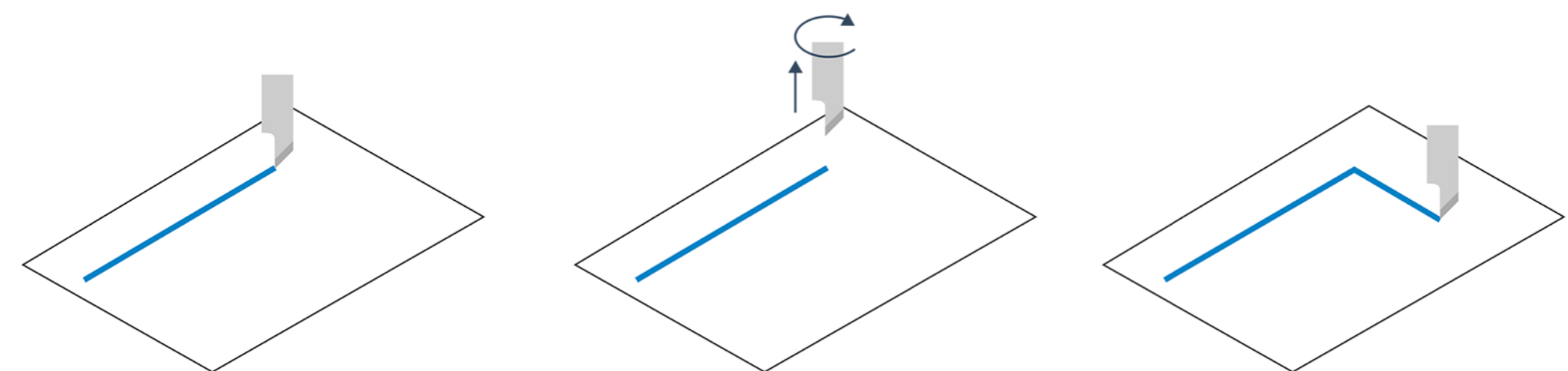
## Tangential Technology cutting benefits

- With the drag/swivel knife technology plowing may occur. The head-lift in every corner, performed by the **tangential cutting technology**, will avoid this.
- The **thicker the material**, the more obvious the advantage will be. Traditional are the sandblast and thick flock materials.
- Also, **tougher floor laminates** are handled more **easily**.
- Although standard laminates may not always need tangential technology, the T Series will do much better in case **more detailed jobs** (small stickers) are requested.



### True Tangential Technology

Thick Materials  
Tough Materials  
Thin Materials  
Tiny Details  
Through Cut





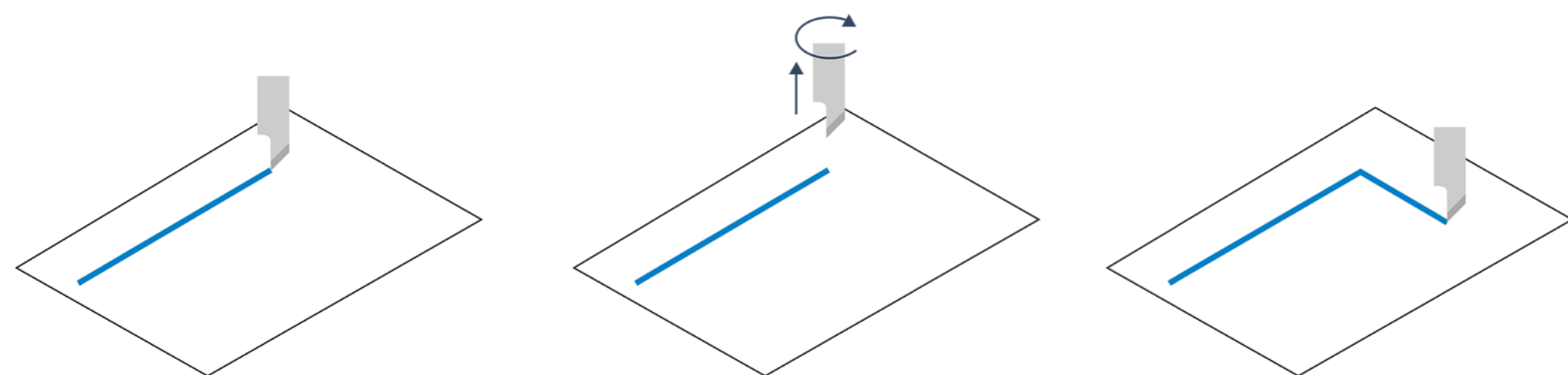
# Knife cutting technology

## Tangential Technology cutting benefits

→ **Cutting is all we do; Summa understands the applications.**

The perfectly cut details allow a faster, easier peeling/weeding of the media, especially with detailed small objects.

→ **Productivity does not end when the cutting is done!**



**T Equals P**

Powerful

Productive

Precision

Peeling perfection

→ **Productive**

→ **Post**

→ **Processing**



# Knife cutting technology

## Tangential Technology cutting benefits

- No need to choose one **or** the other!
- Every **S Class 3 Tangential cutter** comes with a drag knife holder. So, users can benefit from the speed of Drag knife cutting

Enjoy the benefits of Tangential knife technology:

- Benefit from the media versatility: **Thick, Tough, Thin**
- Benefit from fast **Peeling** in post processing
- Benefit from **Perfectly Cut Corners**
- Benefit from better FLEXCUT results, **ThroughCut**
- Benefit from **crisp Tiny Details**

The S Class 3 cutters deliver **Productivity** in every type of job!



### T Equals P

Powerful

Productive

Precision

Peeling perfection

→ **Productive**

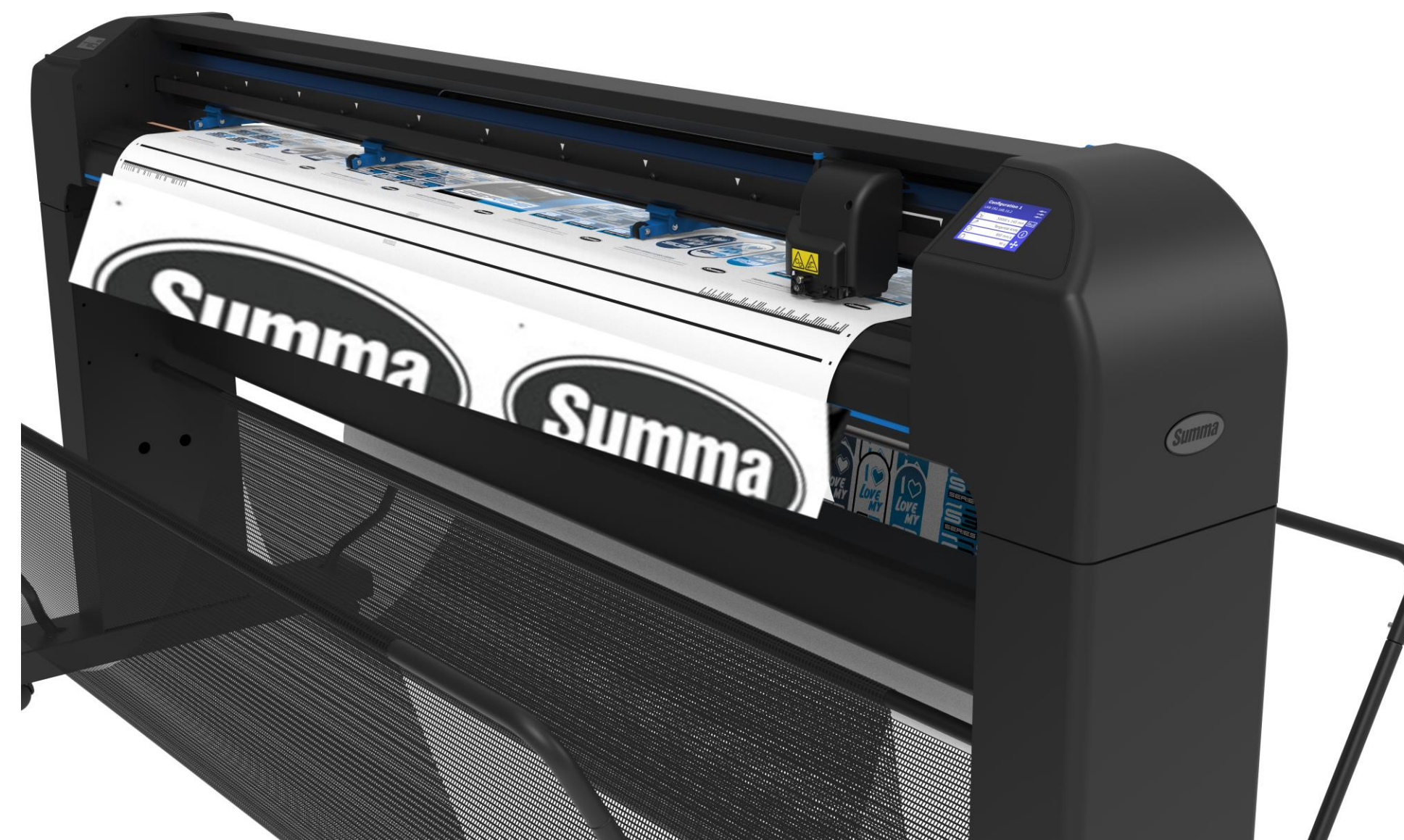
→ **Post**

→ **Processing**



# S Class 3 cutters

Productivity for every type of job!



Take advantage of the **Twin Workflow**

Combine the strengths of the S Class 3 with the strengths of the F Series.



Summa S3 Series  
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# Section 1: At first sight



# S Class 3 Series

## Design features

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### Colour display

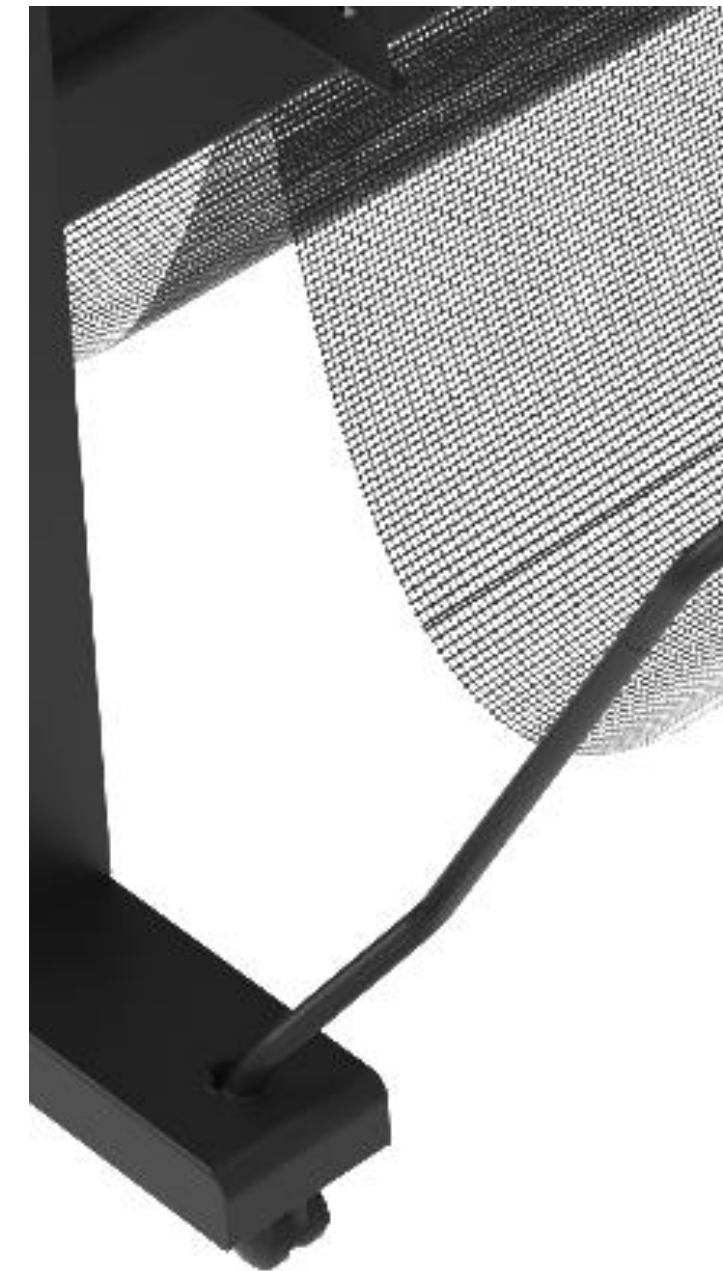
The colour display with touch screen has been updated with a new more ergonomic layout.

### Stand

The cutters are equipped with a new stand.

### Basket

The cutters will have a new type of basket.





# S Class 3 Series

## Design features

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### Status Light bar

The lighted status bar helps to evaluate the status of the cutter instantly. Meaning of the colours:

- Blue: waiting for command
- Green: machine is running
- Red: issue detected

### Toolbox

At the back of the machine there is a tool tray for added convenience during operation.

### Blue parts

Mechanical parts that can be adjusted are now highlighted with a **blue colour**. This enables the operator to quickly identify and switch between these parts.



## Section 2: Key Features





# S Class 3 Series

## Key features

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### Cutting to Perfection

The **smart object sorting** feature is designed to select the most optimal starting point for cutting objects, every single time. With its ability to consider the elastic properties of the material, it ensures perfectly cut objects from beginning to end.

In addition, the cutter has a unique **smart panelling function**. When panelling is set to 40 cm, all objects within 40 cm are cut at once. This improves cutting accuracy and simplifies post-processing.

### Ease of Use

Discover improved ease of use with a blue, green and red lighted status bar, as well as blue parts indicating components that can be moved and adjusted and a tool tray at the back of the machine for efficient operation.

### Optimized Media Handling

The media roll on the cutter can now handle a diameter of 20 cm and supports a roll weight of at least 32 kg. This improvement is highly beneficial for print and cut applications including laminated vinyl.



# S Class 3 Series

## Key features

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### TC Model

#### **Dual Head**

The high-precision cutting head can now carry two tools, allowing cutting through and kiss-cut or a combination with creasing, without changing tools.

#### **OPOS Camera**

A more performant camera which is faster thanks to automatic data processing in the camera instead of the software.





# S Class 3 Series

## What's New

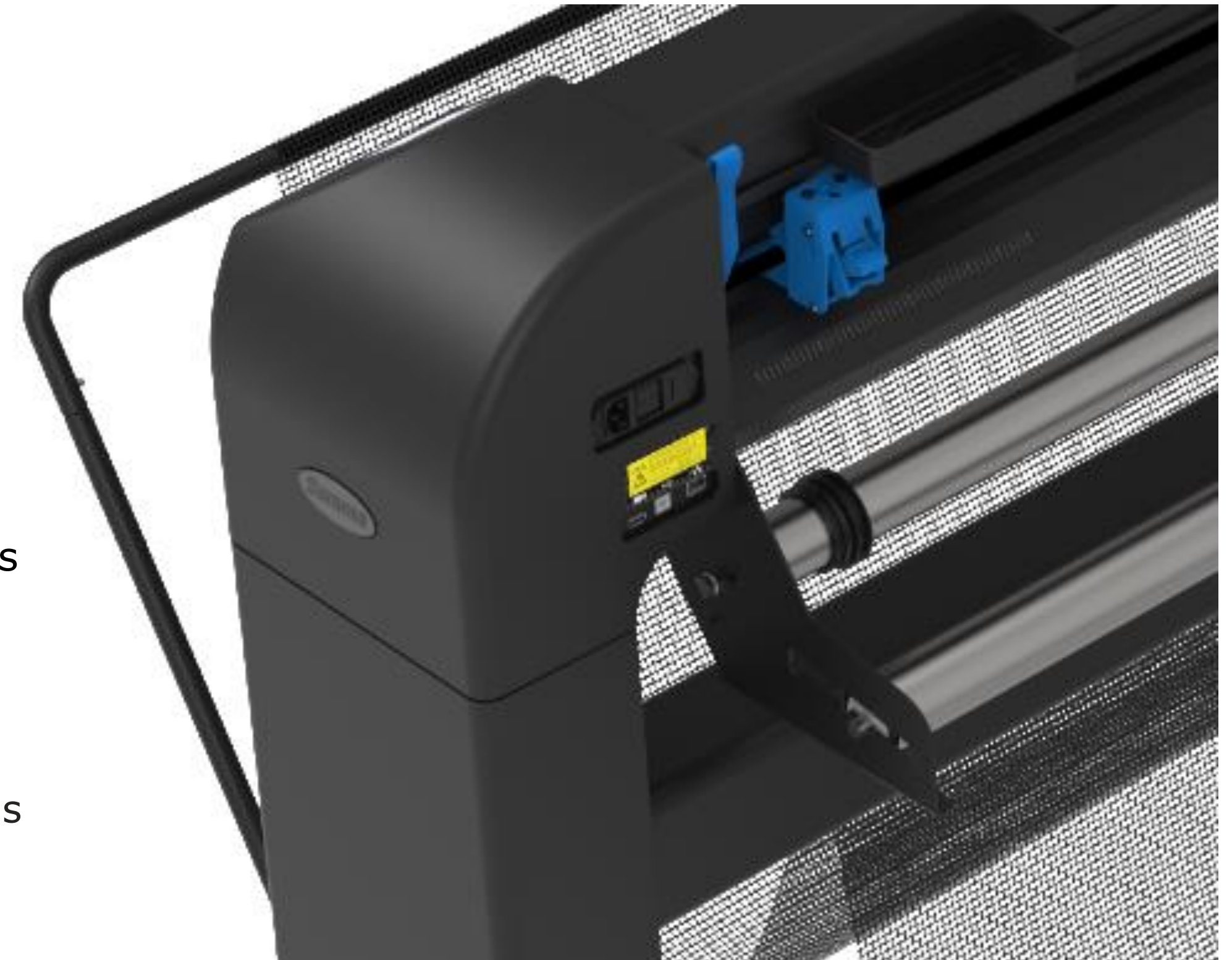
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- Tangential Heads
- Tool for creasing
- OPOS Camera & Processor
- Faster Electronic Board
- Wi-Fi Supported
- Smoother Motion Control
- Extra Left media sensor
  
- Touch Screen Display
- Status Light bar
- Stand
- Basket
- Toolbox
- Roll holders
  
- Smart Object Sorting
- Smart Panelling

Larger Roll Support for rolls of maximum **20 cm diameter and 32 kg.**

→ Allowing large rolls of laminated, thick materials such as laminated floor graphics





# S Class 3 Series

## Key features

### New Main Board with Faster processor

- Advanced Motion Control
- Smart Object Sorting
- Smart Panelling

### Dual X Motors

All models +120 cm

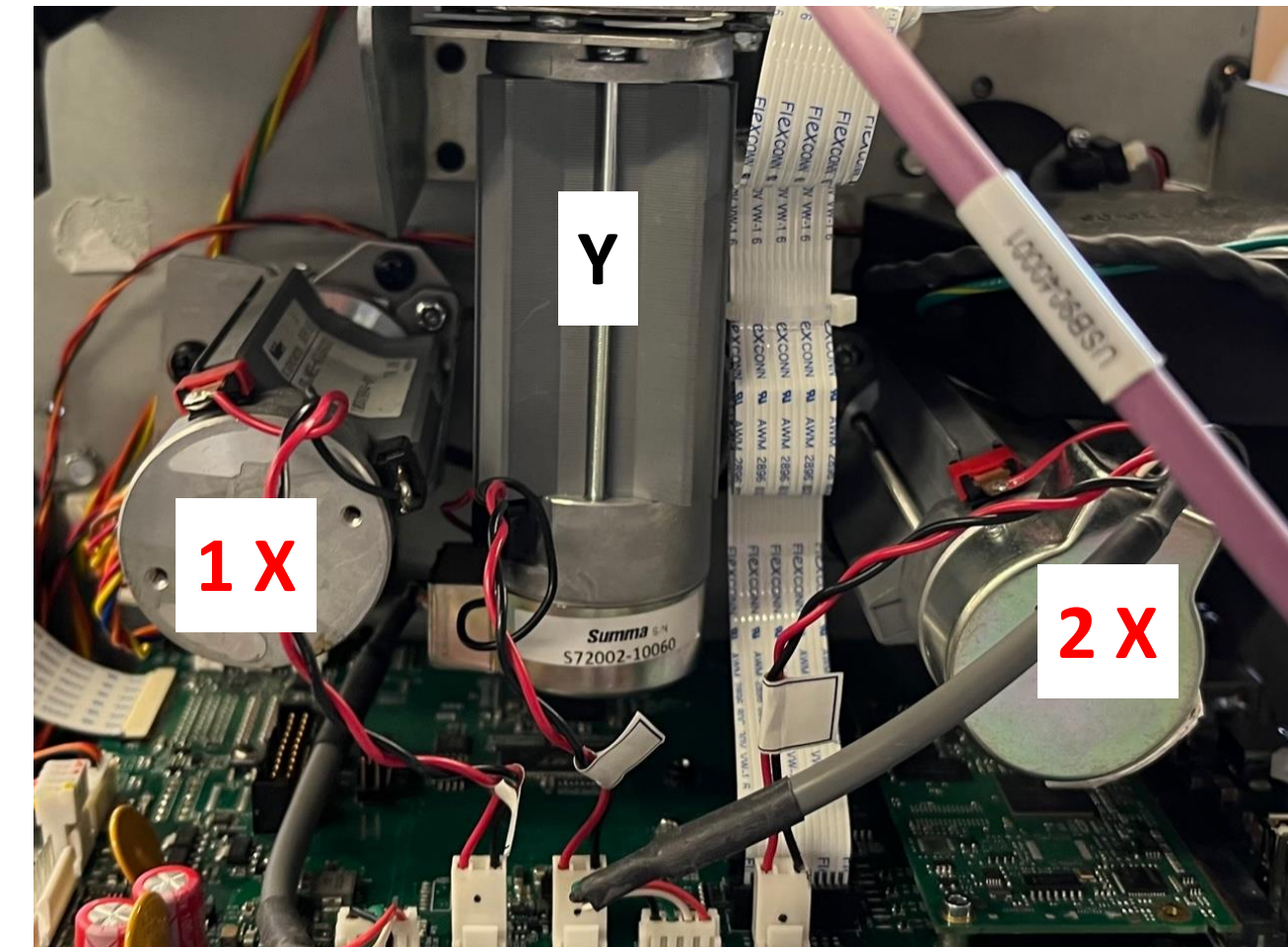
- Higher maximum cutting speed
- Higher maximum carriage up speed
- Maximum acceleration of

: 1000 mm/sec.  
: 1415 mm/sec.  
: 3,5G

### Interface

- USB, USB Stick, Ethernet & Wi-Fi

Top  
Performance





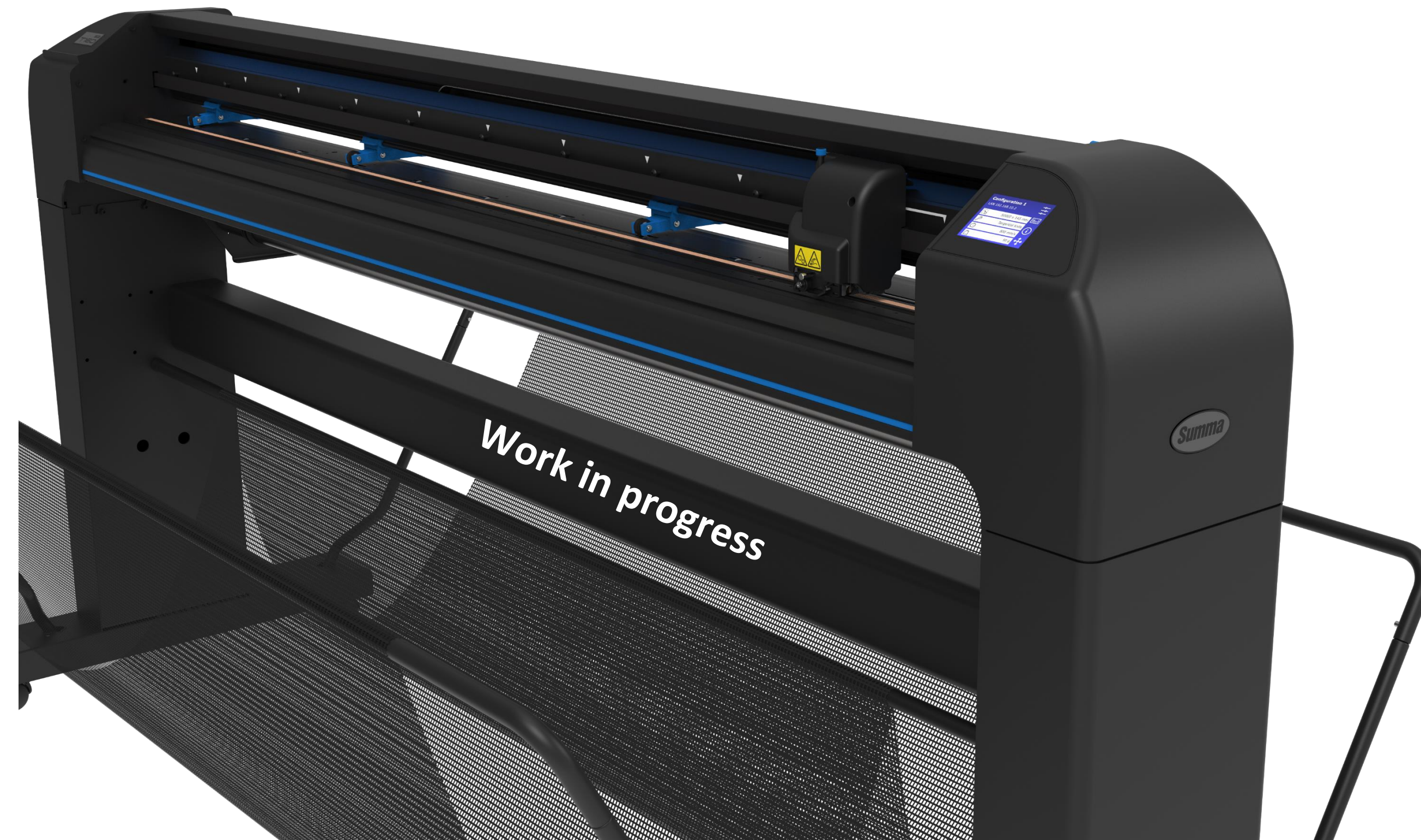
# S Class 3 Series Option



## **NEW redesigned Motorized roll-up system\***

A motorized roll-up system can be added for improved Productivity.

The roll-up system works for P&C as well as standard Self-Adhesive materials.



\* Not retrofittable with S Class 2



Summa S3 Series  
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# S Class 3 Series

## Key features

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### D Models

- Drag knife head
- Up to 400 gr cutting force

### T Models

- Tangential head **NEW**
- Up to **1000 gr** of knife pressure

### TC Models

- **Performance heads**
- Tangential head with up to 1000 gr of knife pressure
- Dual head
  - With option for creasing tool
  - With option for pen
- With new improved OPOS Camera and on-board processor
  - Ready for random registration marks & **Fast processing**
  - Creasing Tool opens new market opportunities (WIP)







# CONTOUR CUTTING AT ITS BEST

Summa



# Cutting to perfection

## Smart Object Sorting



Media movement direction



**Rips are made for printing, cutters require another approach.**

Third party data is now handled and [sorted inside the cutter](#), as you are already used to with GoSign.



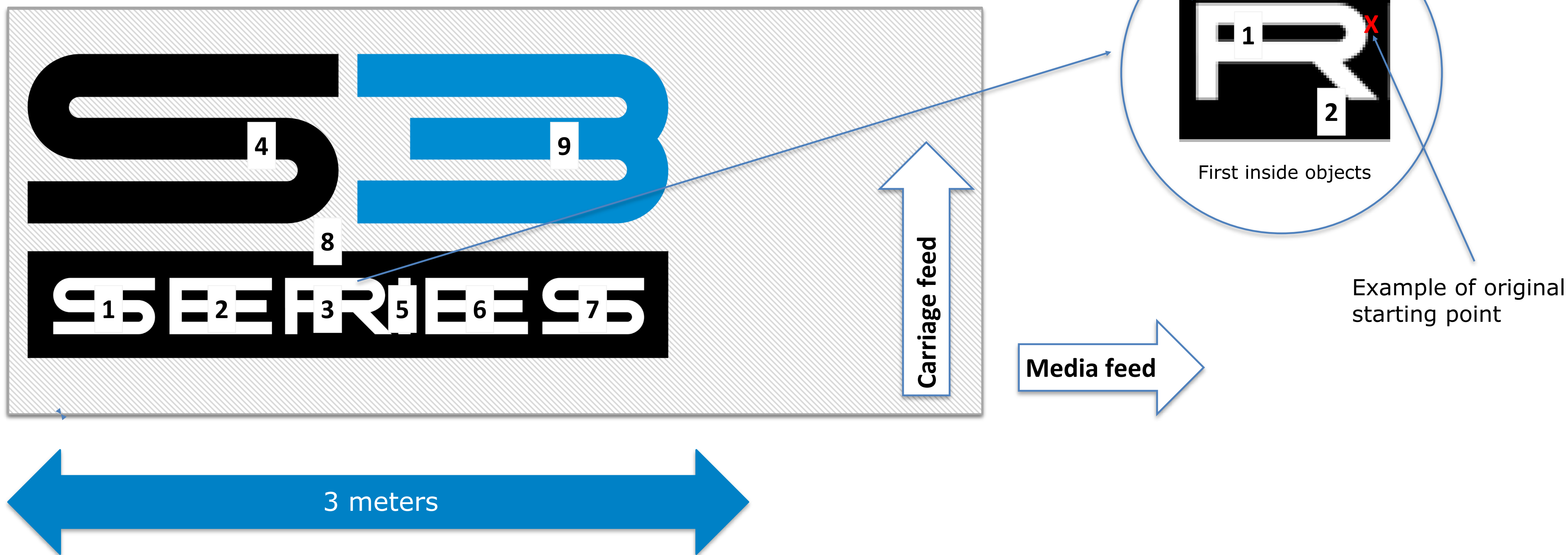


# Cutting to perfection

## Smart Object Sorting

Summa minimizes the media movement by horizontal sorting in media movement direction.

**Starting point optimisation:**  
Connecting in media feed direction



# Cutting to perfection

## Smart Object Sorting



Summa minimizes the cut trough by only panelling objects that are larger than the set panel size.

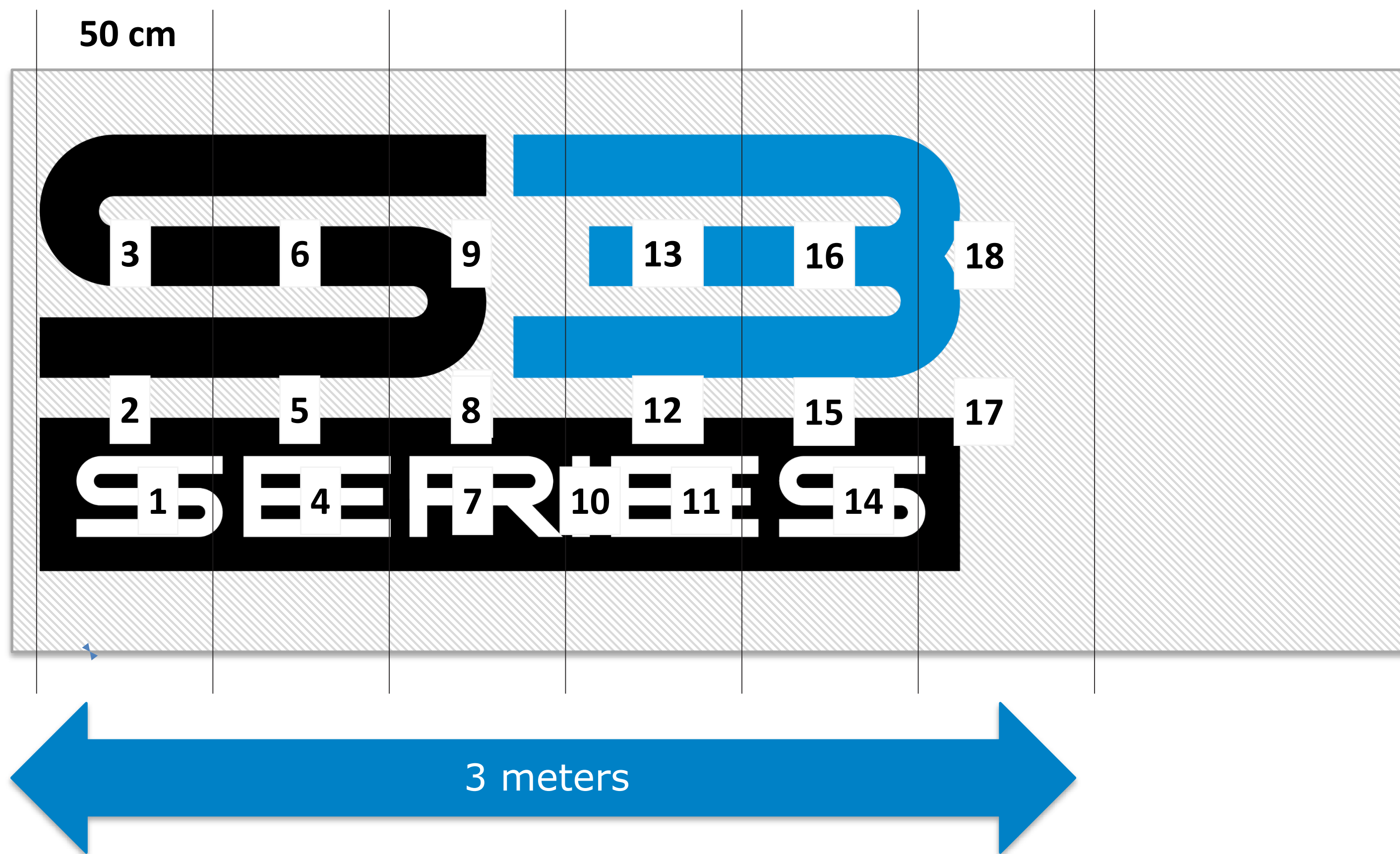




# Cutting to perfection

## Smart Object Sorting & Panelling

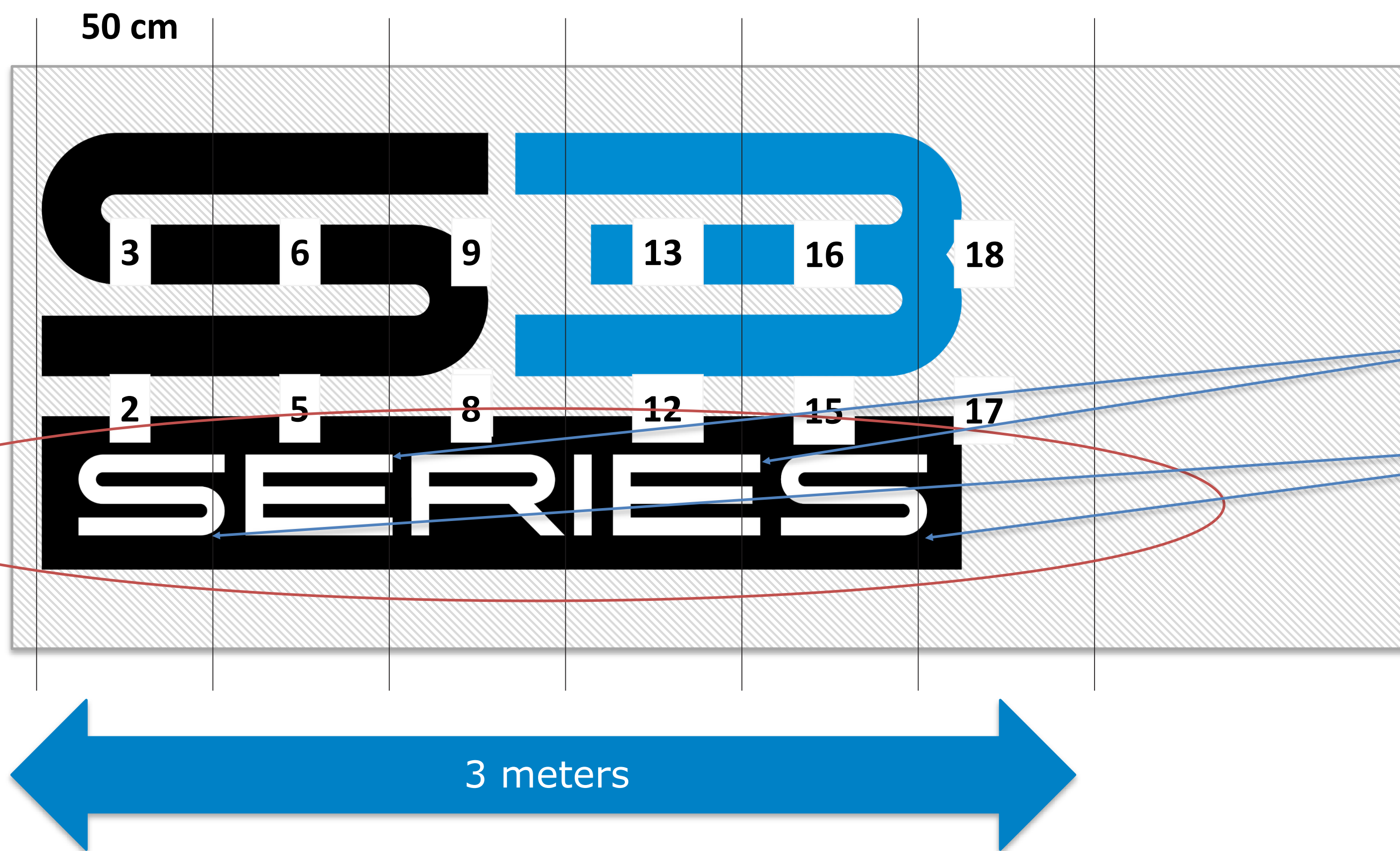
Summa minimizes the cut trough by only panelling objects that are larger than the set panel size.



# Cutting to perfection

## Smart Object Sorting & Panelling

Summa minimizes the cut trough by only panelling objects that are larger than the set panel size.



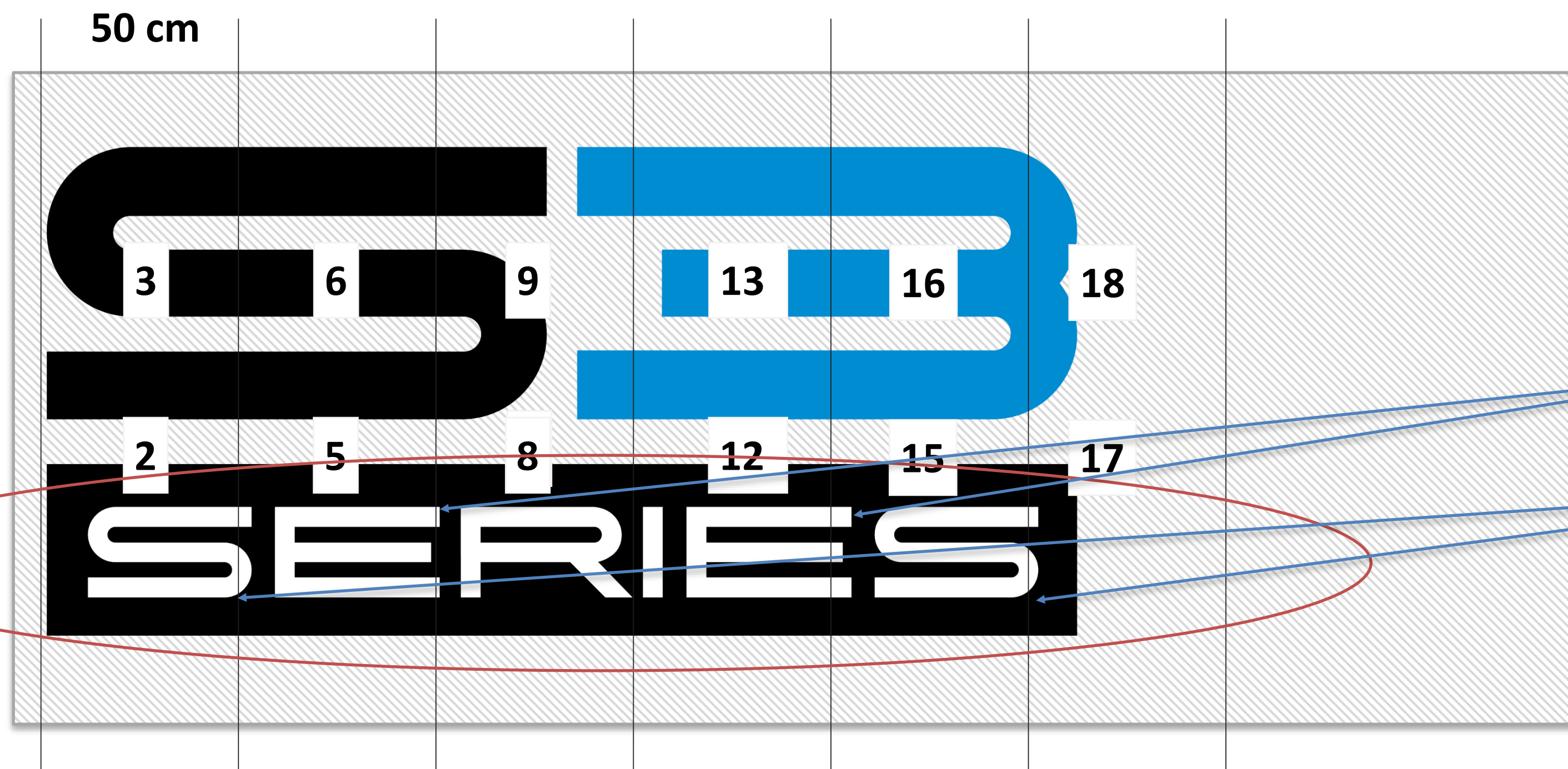
Although the S and E are crossing the panels, **they will not be split since the character size is less than 50 cm**, which is the set panel size.



# Cutting to perfection

## Smart Object Sorting & Panelling

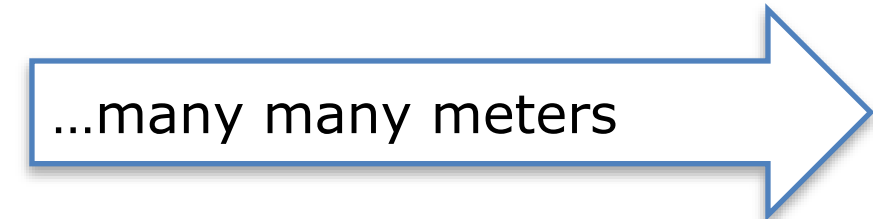
Summa minimizes the cut trough by only panelling objects that are larger than the set panel size.



Although the S and E are crossing the panels, **they will not be split since the character size is less than 50 cm**, which is the set panel size.

~~→ Small texts will not be split in half~~

Summa's Legendary Tracking supported by Smart Panelling



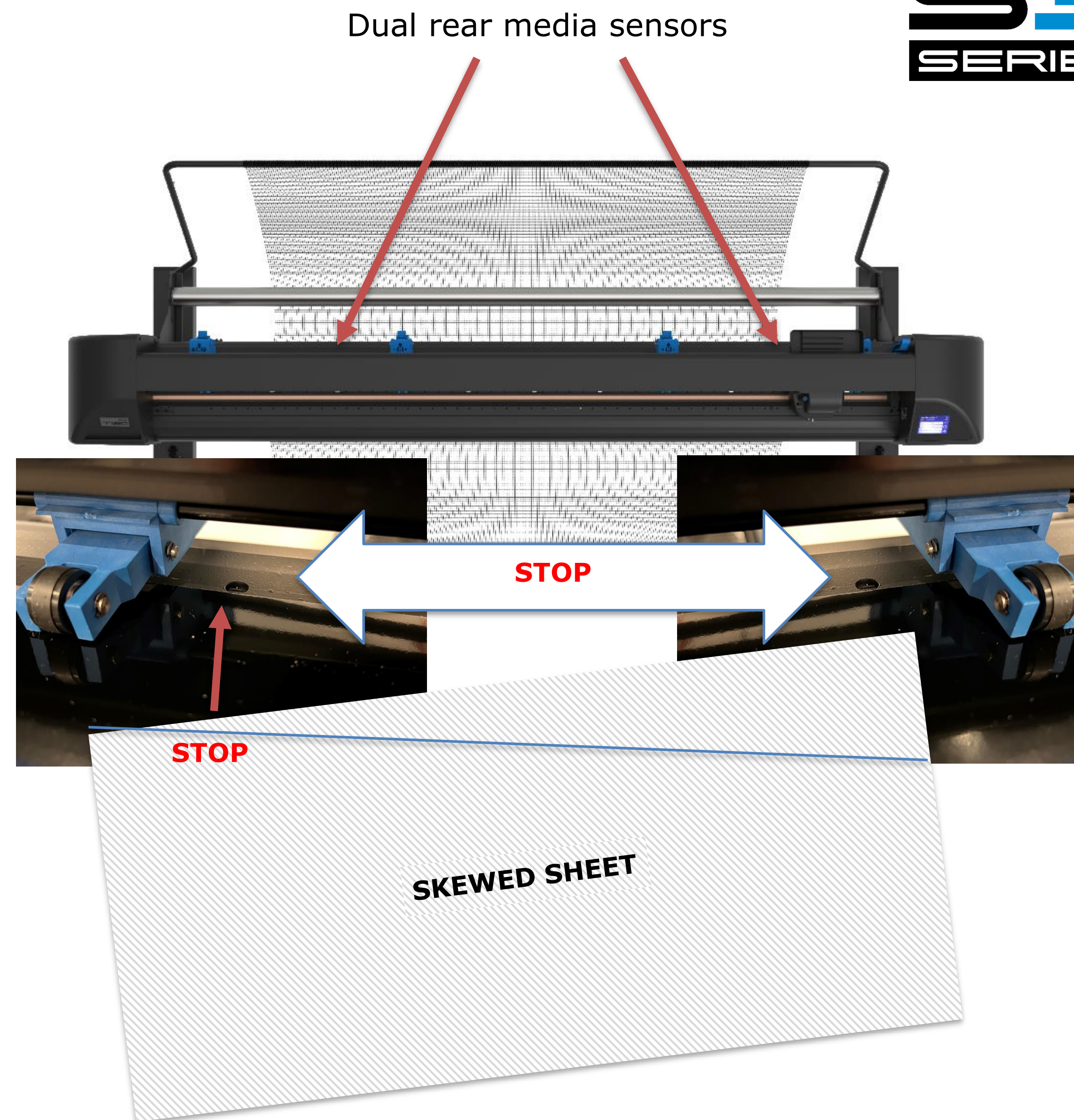
# Cutting to perfection

## Advanced Media loading

### Two left/right Media End sensors

- Even if media is loaded skewed (+1m width), the material will not run out of the pinch rollers, it will be read by either the left or right media sensor, and stop.

- Especially advantageous with short P&C sheets.
- **No media loss**
- **Increased user comfort**

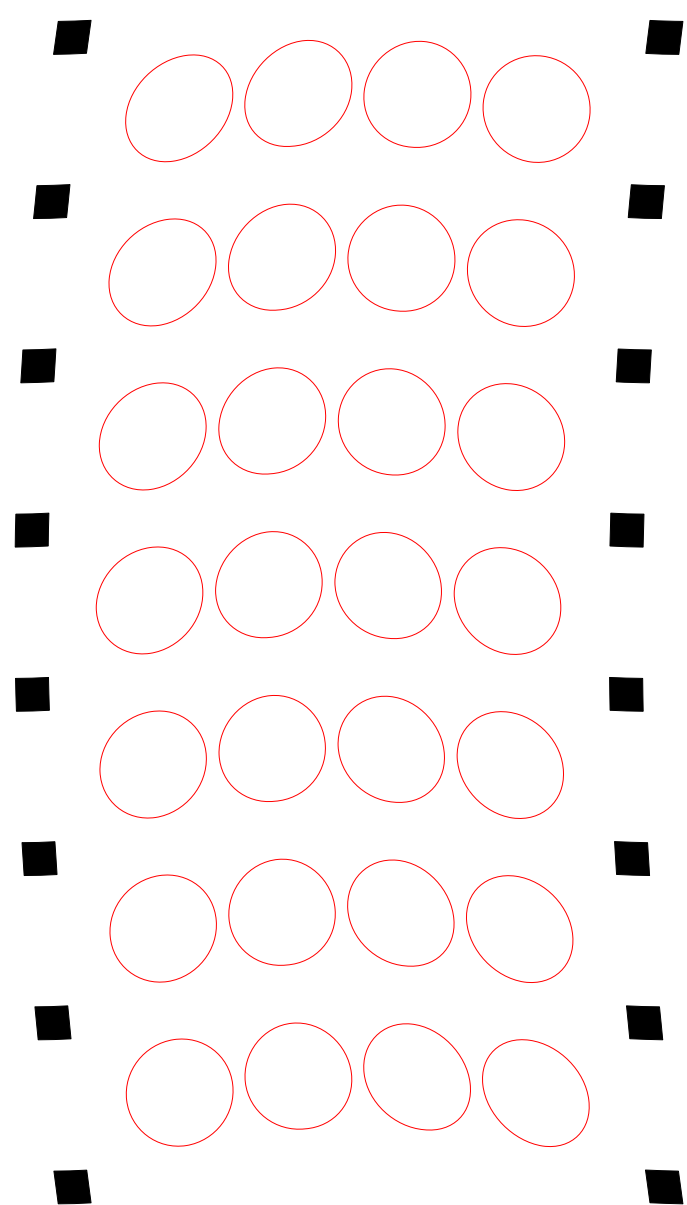




# Cutting to perfection

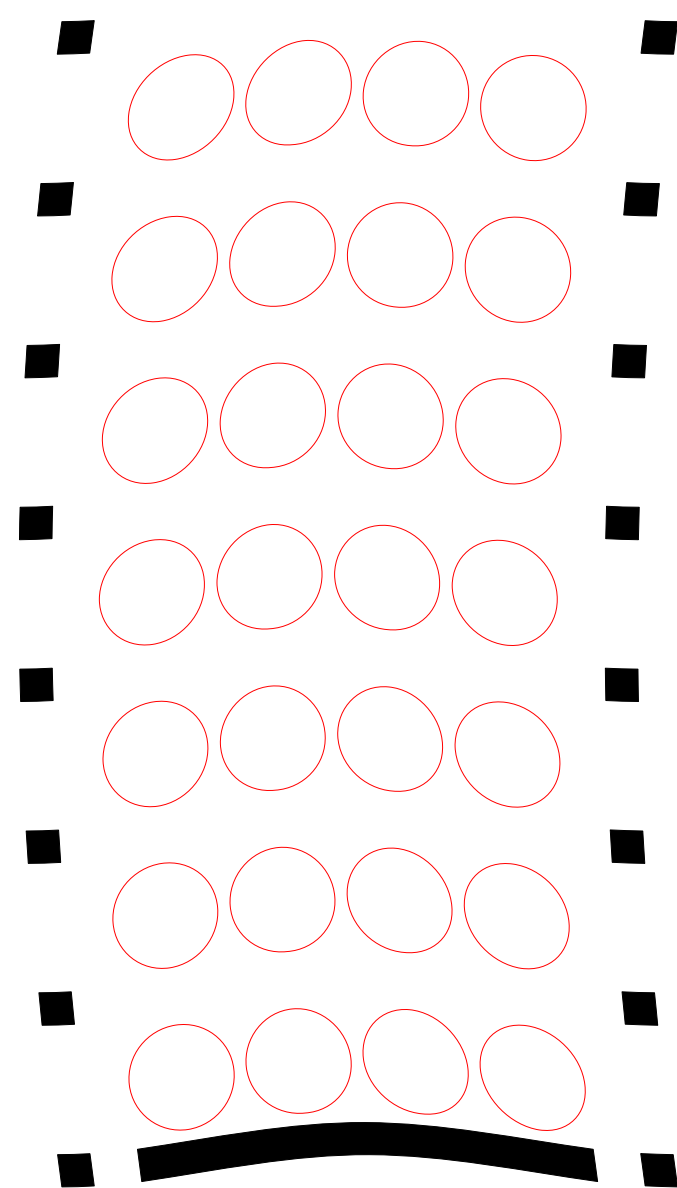
## OPOS Explained

**OPOS Xtra** is an evolution of OPOS XY2 and is specifically beneficial for the processing of small sticker jobs. OPOS Xtra adds additional lines between each set of registration marks, allowing for an even more accurate detection of curvature changes.



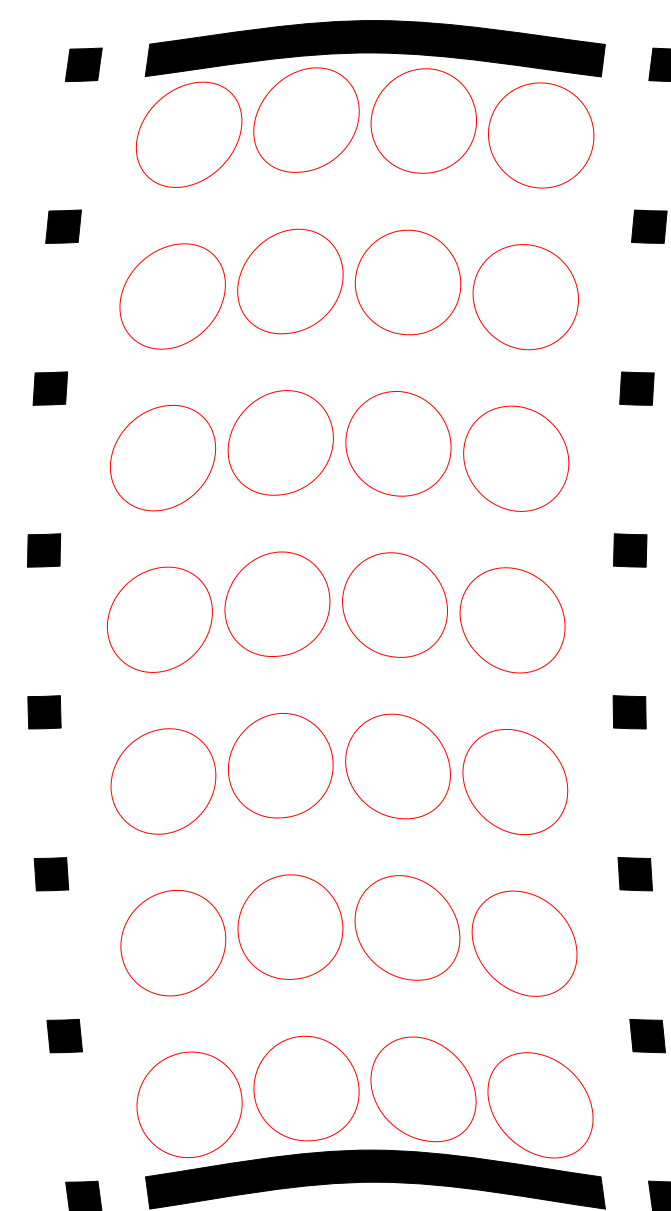
### **OPOS**

Compensates for position, scaling and follows the deformation of the print along the feeding direction.



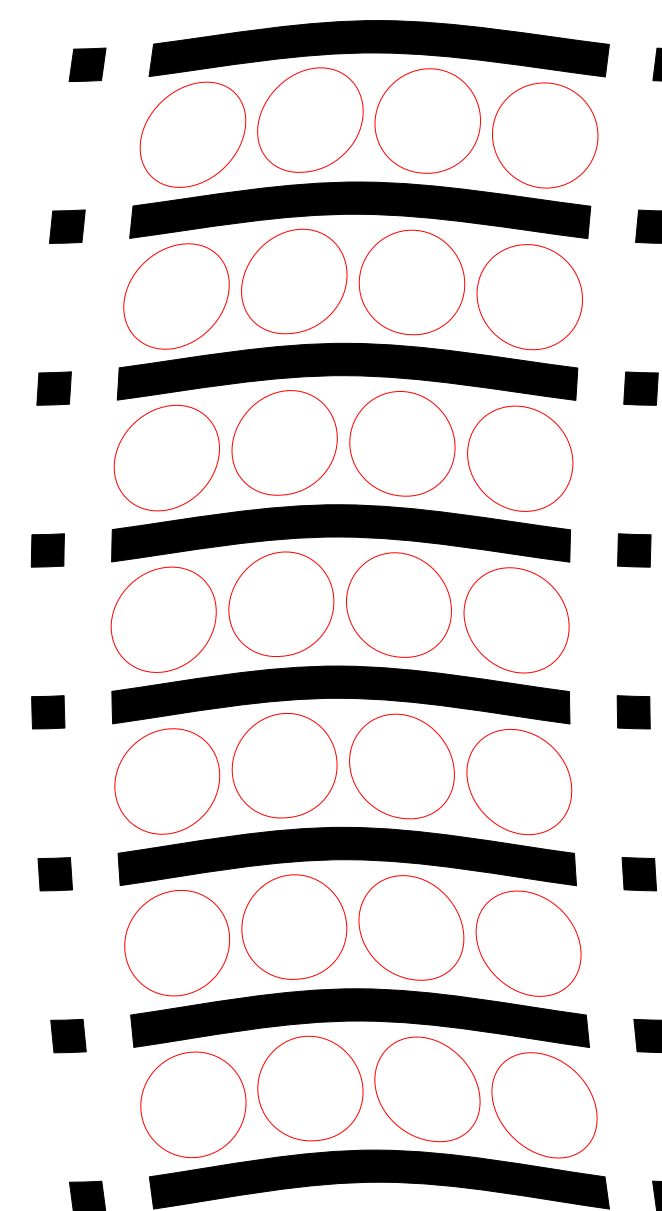
### **OPOS XY**

Compensates material deformations over the width of the machine mainly caused due to heat in the print or the laminating process.



### **OPOS XY2**

Deformation is not always constant over the length of the job. So, this feature also measures it in the front and back of the design.



### **OPOS Xtra**

Even higher accuracy is achieved by intermediate measurements. This is especially useful when cutting smaller labels.

# S Class 3 TC Models

## Performance Head (OPOS Cam)

**OPOS CAM:** FAST and on-board registration marker recognition. Able to read registration marks at speeds of up to **10 times faster** than our competitors.

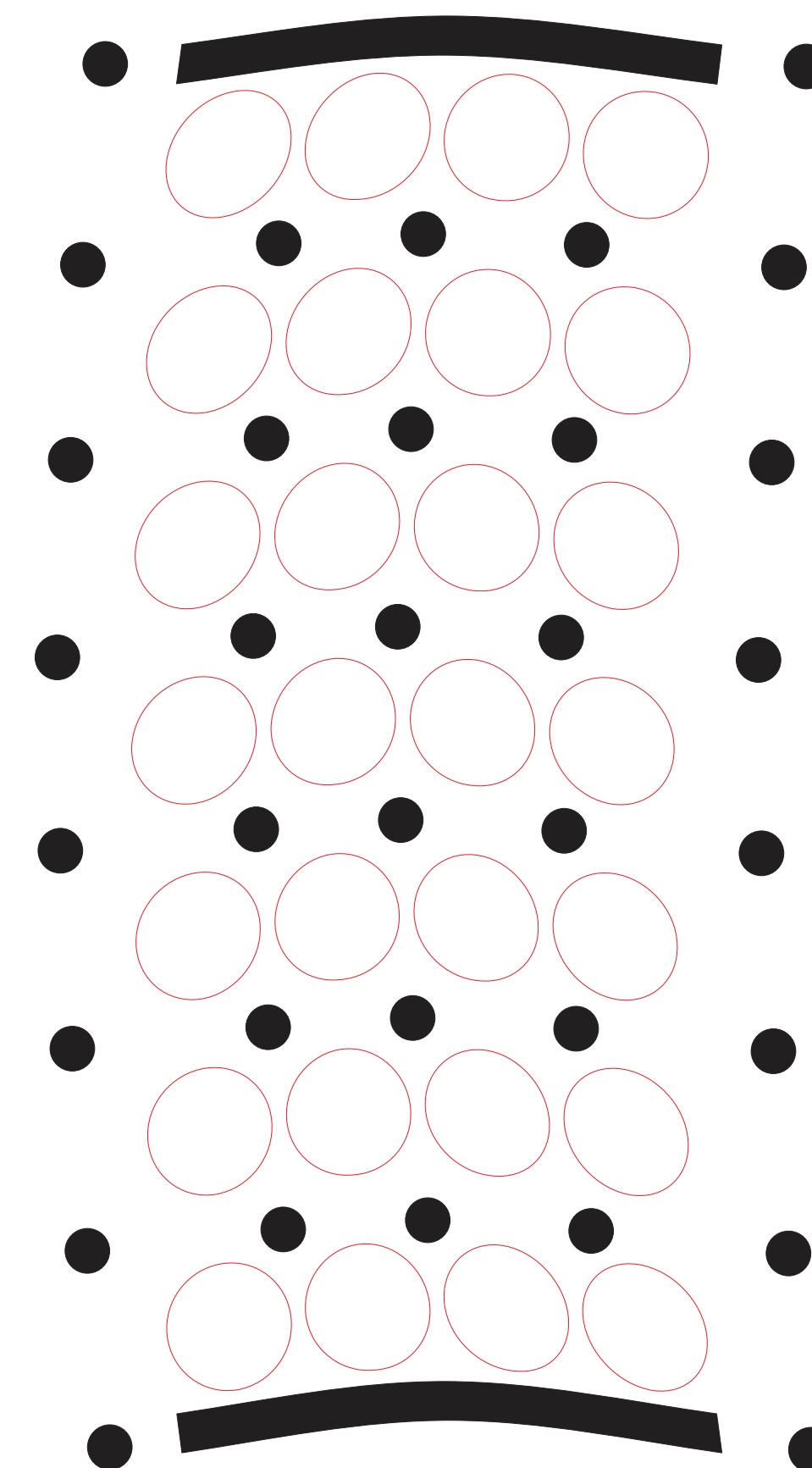
- ✓ **Compatible with F Series**
- ✓ **Now Twin Workflow works both ways!**

**Random marker recognition** available by September in combination with GoSign.

*Watch the video in the info pack.*



The OPOS CAM data can also be analysed by GoSign. Only available with Tangential cutting on TC Models



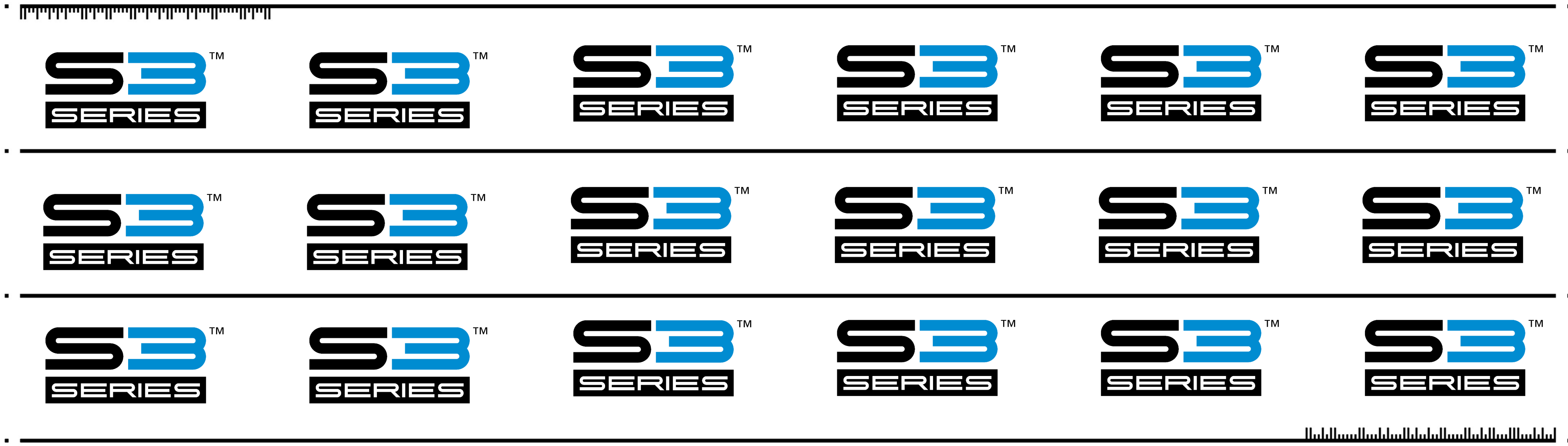


# S Class 3 Series

## Contour Cutting – Barcode

- Every job has its own unique job-number, indicated by a barcode at the beginning of the job.
- When the job is finished, the cutter automatically starts looking for the next job and its barcode.
- This way, multiple jobs can be processed without the operator's intervention. The risk of sending the wrong data to the wrong print is excluded.

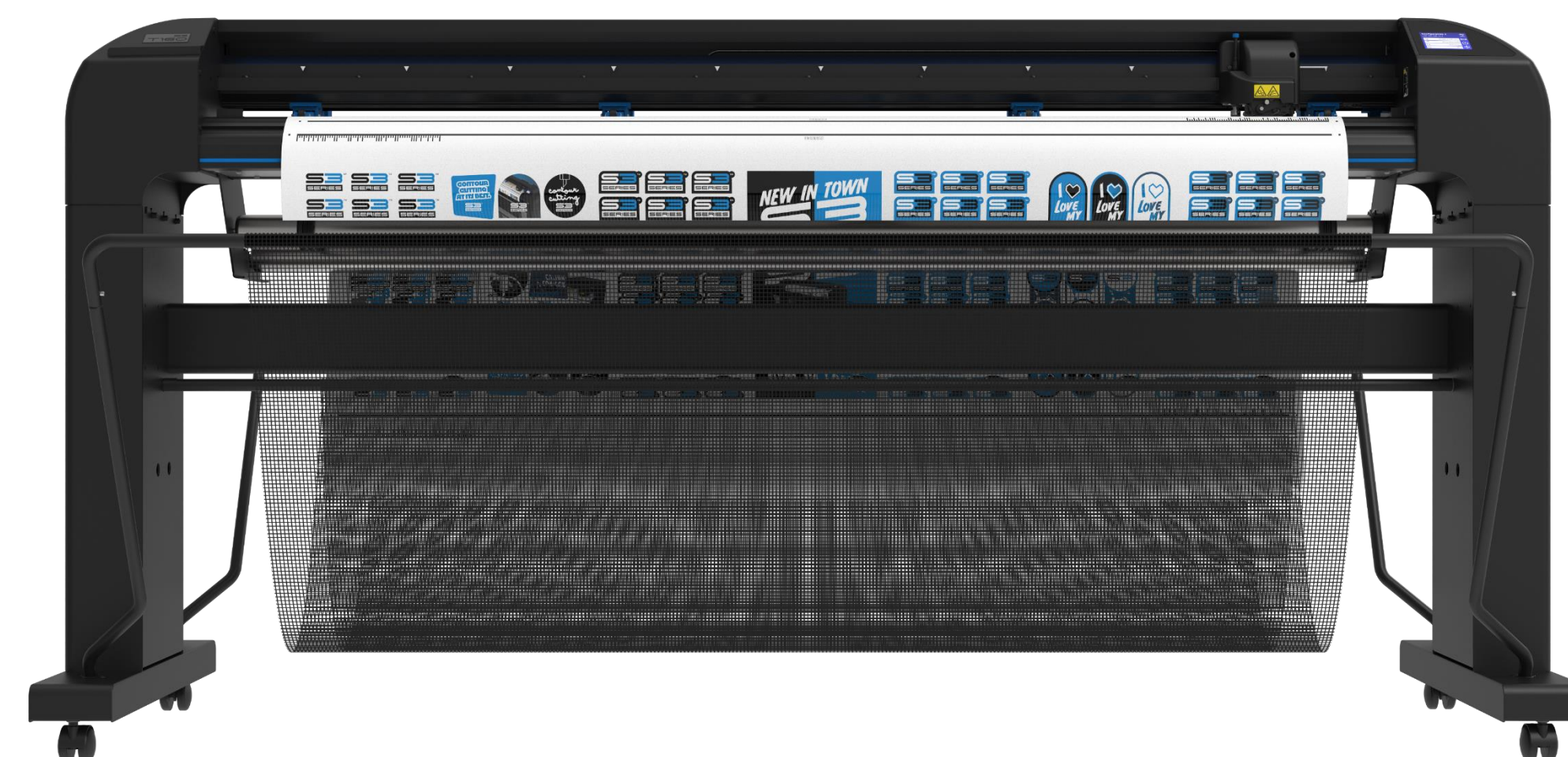
**FASTER BARCODE READING**



# S Class 3 Series

## Models & Sizes

• <b>Drag Knife</b>	Standard Cutting	Ext. Load Cutting	Max Media Width
S3D75	74.2 cm	81.2 cm	84 cm
S3D120	120 cm	127 cm	130 cm
S3D140	135 cm	142 cm	145 cm
S3D160	158 cm	165 cm	168 cm
• <b>Tangential Knife</b>			
S3T75	74.2 cm	81.2 cm	84 cm
S3T120	120 cm	127 cm	130 cm
S3T140	135 cm	142 cm	145 cm
S3T160	158 cm	165 cm	168 cm
• <b>Performance Head with OPOS Cam</b>			
S3TC75	74.2 cm	81.2 cm	84 cm
S3TC160	158 cm	165 cm	168 cm



All models have a stand and basket included.





**Legendary Performance**

## CONTINUOUS IMPROVEMENT

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