



## L Series™

Professional laser  
cutting systems

[www.summa.eu](http://www.summa.eu)

## ABOUT SUMMA

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Summa is a leading supplier of high-end cutting, finishing and laser cutting solutions. With years of experience, Summa is able to provide dedicated solutions to ever-changing market demands, ensuring optimized workflow productivity and a perfect cut at all times. By listening carefully to our customers and follow-up market trends constantly, we are able to further develop our product range and are driven to surpass the needs and expectations of our customers.

Our expertise as a supplier of quality finishing and cutting equipment is based on years of research, perseverance and knowledge. **Every single Summa product that is being distributed worldwide, has been manufactured at our headquarters in Belgium.** This is where our entire research and development, production, quality control and marketing departments are located.

Summa is always on a search for new opportunities to broaden our expertise into different markets. **We therefore not only rely on our internal expertise, but also on that from our partners.** It is, for instance, thanks to our merger with CadCam Technology – an expert in proven laser technology - that we are able to expand our resources in the textile industry with our own Summa laser series.

For we can only make the dream work thanks to a perfect synergy with our network of dedicated and specialized partners, who represent the Summa brand and distribute our products in countries worldwide.

With years of experience, Summa is able to provide dedicated solutions to ever-changing market demands, ensuring optimized workflow productivity and a perfect cut at all times.

# L SERIES™

Summa's professional laser cutting systems have been developed with years of experience in advanced finishing technology. Summa strives to empower you with laser cutting solutions to bring exceptional quality, smart processing and unsurpassed accuracy to your workflow.

## ADVANCED LASER CUTTING FOR DYE SUBLIMATION, PRINTED FABRICS AND TEXTILES

### A perfect cut, each time again

State-of-the-art camera recognition is used to quickly scan the material and to automatically create the vectors for cutting. Alternatively, the marks can be accurately read by the camera, allowing our intelligent analysis to compensate for any deformations. When the laser cut pieces exit the machine, they are perfectly cut, according to the design. Each time again.

### Cut rolls without operator intervention

The optional Vision technology is able to quickly scan the material on the cutting bed, automatically create a cut vector and cut the whole roll without operator intervention. There will be no need to create cut files/designs. With only a click of a button, any design file loaded into the machine will be cut with quality sealed edges.

### Equipped with advanced features

The L Series is equipped with the best quality sealed RF laser source and will excel in a high volume production environment. The stainless steel honeycomb vacuum conveyor will accurately feed and cut any length shape or nested design with unrivalled speed, all within a machine footprint of no more than 8 sqm.

## SERVING VARIOUS INDUSTRIES



# BUILT TO MEET THE HIGHEST REQUIREMENTS

## FEATURES AND BENEFITS



The laser system uses **contactless cutting**, meaning there is no drag on the material or blades to change. It enables users to process sensitive and easily distorted textiles with high precision.



Enhanced productivity with the uniquely designed conveyor system for **continuous production** of roll materials.



Any deformations are automatically recognized by the **intelligent camera system** and immediately compensated in the cutting vector.



**Material optimization** with the Vision technology reduces waste. The laser system does not need markers, so the cutting designs can be placed much closer to each other, ensuring maximum use of the material.



**Environment & Safety** is a priority. Fumes are removed by the internal extraction system and cutting by laser produces no dust fibres ensuring a clean work environment at all times. The L1810 cutting area is enclosed to meet the Class 1 standard, ensuring the laser cutting source is covered during operation and paused when the cover is opened.

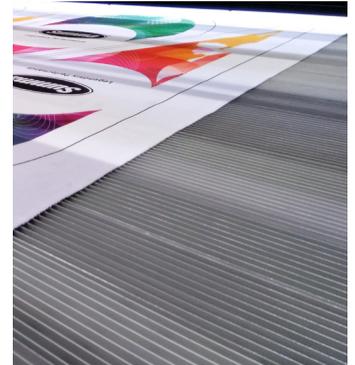
## MEDIA HANDLING HAS NEVER BEEN EASIER

### NEXT GENERATION CONVEYOR SYSTEM

Summa's conveyor system for the L Series is ideal for the continuous production of rolled material, as it automatically transports cut parts out of the machine. The cut shape of the bed allows for vacuum extraction from underneath. The material will be held down by means of the vacuum, which will result in a clean cut and also precise transport movement through the working area.

A compressed air knife system is located under the end of the conveyor which blows a thin jet through the honeycomb slats, to remove the cut parts clear of the machine.

Our conveyors are encoder driven and use endless wedgetooth belts for precise movement. Stainless steel honeycomb slats and anodised aluminium parts are corrosion resistant to ensure longevity.



### MOTORISED DE-REELER

Printed roll material is presented to the conveyor, using our motorised roll handling system. As the roll unwinds, a loop is created in the material. This loop is kept constant with the use of a light sensor. As material is taken up by the conveyor, the motorized roll handler automatically feeds the material out.

The fabric moves back and forth to adjust for telescoping or uneven rolling of the textile by detecting the edge of the material. The motorised de-reeler ensures that the edge enters the machine at the same point continually. The loop also relaxes the material, so all fabric tension is removed before cutting, reducing distortion and ensuring an accurate cut.



### SEGMENTATION FEED

Thanks to the conveyor system, the L Series makes light work of cutting shapes and designs, that are much larger than their actual cutting area. Once the first part of the cut is completed, the conveyor moves, then cuts the next part, and so on. This makes the L Series system ideal for laser cutting flags and banners of any length.

### DISTORTION COMPENSATION

The intelligent camera technology enables to automatically compensate for any distortions or stretches on any textiles, ensuring an accurate cut at high speed each time again.

# L1810

Whether you are in the industry of fast fashion, athletic clothing or technical textiles, the L1810 serves as a perfect laser cutting system.

Easy media handling options are added to further improve your workflow. Equipped with features such as a working area width of 1.8 m, a conveyor with de-reeler and a state-of-the-art camera, the L Series provides you with a highly accurate cut for every project. The L1810 model will seamlessly integrate into your print and cut workflow for a perfect synergy.



L1810

## VISION TECHNOLOGY

State-of-the-art camera recognition is used to quickly scan the material and automatically create the vectors for cutting. High-production environments with automation workflows for the processing of printed textiles can rely on the Summa L1810 Vision laser system.

This laser's advanced Vision system scans the material and automatically creates a cut vector. Then, it starts cutting while the material is fed at the same time. This is the on-the-fly-cutting principle reducing idle periods considerably. The system is also popular for the cutting of all sorts of raw materials, used in the composite industry, such as carbon fibres, composites, thermoset and thermoplastics, ensuring the highest level in finishing quality at all times.



L1810 Vision



Model	L1810		
<b>Laser Power</b>	50 or 100 Watt (Aircooled) 120 or 250 Watt (Watercooled)	<b>Max cut width x length</b>	1860 mm x Continuous
<b>Dimensions</b>	1700 x 1040 x 2100 mm 1700 x 2620 x 2100 mm (with Vision system) <small>All dimensions are displayed without motor de-reeler</small>	<b>Speed</b>	<ul style="list-style-type: none"> <li>Maximum speed: 1000mm/sec</li> <li>Axial Speed 0.2mm/s up to 1000mm/s</li> <li>Speed increments of 0.1mm/sec for accurate adjustment</li> </ul>
<b>Max roll width</b>	1900 mm	<b>Camera Recognition</b>	<ul style="list-style-type: none"> <li>OPOS marks</li> <li>Optional: Vision system</li> </ul>
<b>Features</b>	<ul style="list-style-type: none"> <li>Motion system loop servo motors with hardened ground steel rails</li> <li>Software ApS-Ethos Cutting Composer</li> <li>Resolution 0.025 mm</li> <li>Acceleration up to 2g</li> <li>Water chiller (if required)</li> <li>Steel reinforced drive belts</li> <li>Zero backlash X Belts</li> <li>Kevlar reinforced timing belts</li> </ul>	<ul style="list-style-type: none"> <li>High precision CNC controller with raster capability</li> <li>Visible diode for setup</li> <li>Hardened and ground precision motion rails</li> <li>Full complement single row cageless bearings</li> <li>Fully anodised extruded chassis</li> <li>Single phase input</li> <li>Extraction speed control</li> <li>Compressed air drying bowl and flow regulator</li> <li>High resolution line scanner (optional with Vision system)</li> </ul>	

# SUMMA L3214: THE LARGEST LASER SYSTEM OF ITS KIND

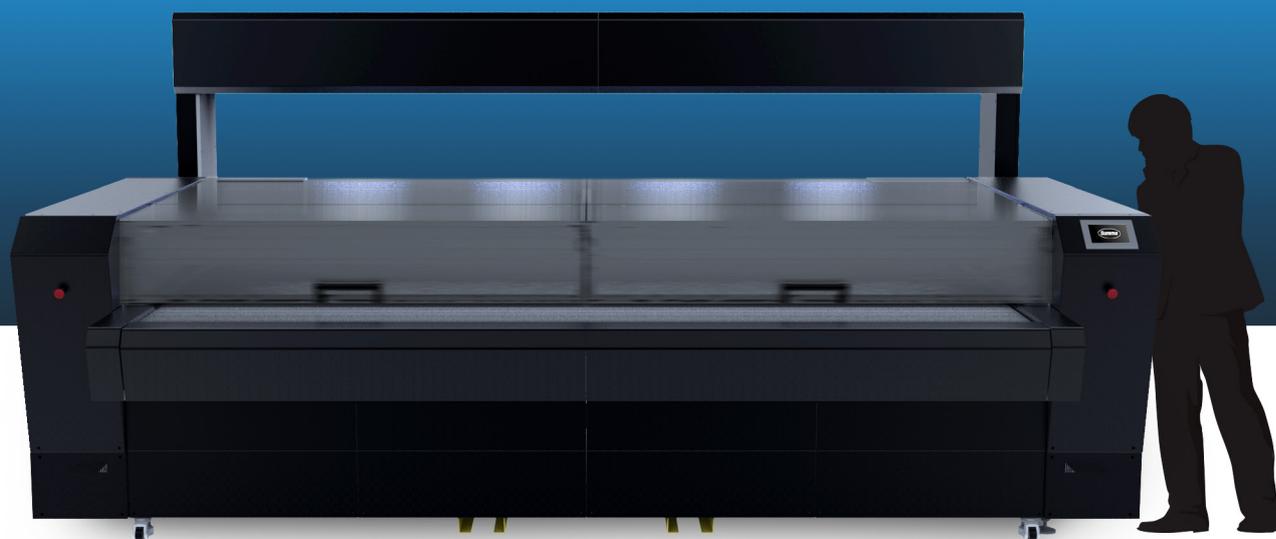
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Textile is one of the fastest growing markets nowadays, where on-demand digital printing proved to be the gamechanger many soft signage, sportswear and fashion brands need. Printed textiles still require finishing and nothing cuts as accurately as laser cutting. The contactless cutting method means no fabric distortion, low to none dust generation, no tool wear and no fraying of synthetic textiles thanks to the edge sealing feature. It can be applied to any type of material and secures a quick and precise cutting of even the most intricate designs.

## BOOST YOUR PRODUCTIVITY

Besides the size, one of its most unique features is the **on-the-fly cutting concept**, which allows for continuous scanning of material and continuous cutting while feeding the material segment per segment. This will make the user **much more productive**. While the machine continues cutting, the newly cut material is readily available for pick-up from the conveyor belt. Fast, accurate, and on-the-fly cutting – the L3214 is bound to change the go-to-market strategy for applications in soft signage, home decoration, sportswear and fashion.

▶ Video available on [www.summa.eu/video/L3214](http://www.summa.eu/video/L3214)



UNHEARD-OF. UNPRECEDENTED. UNRIVALLED.

# ON-THE-FLY-CUTTING CONCEPT

## MEET YOUR CUSTOMERS' DEADLINES AND IMPROVE YOUR MARGIN

Summa has developed a unique on-the-fly cutting concept to ensure a perfectly cut product, ready to roll off the table. The concept has many benefits to offer, contributing to higher productivity, enabling L3214-users to serve their customers faster with high accuracy. To illustrate this, when processing typical jobs, the machine even cuts 400 m<sup>2</sup> an hour.

### Continuous workflow

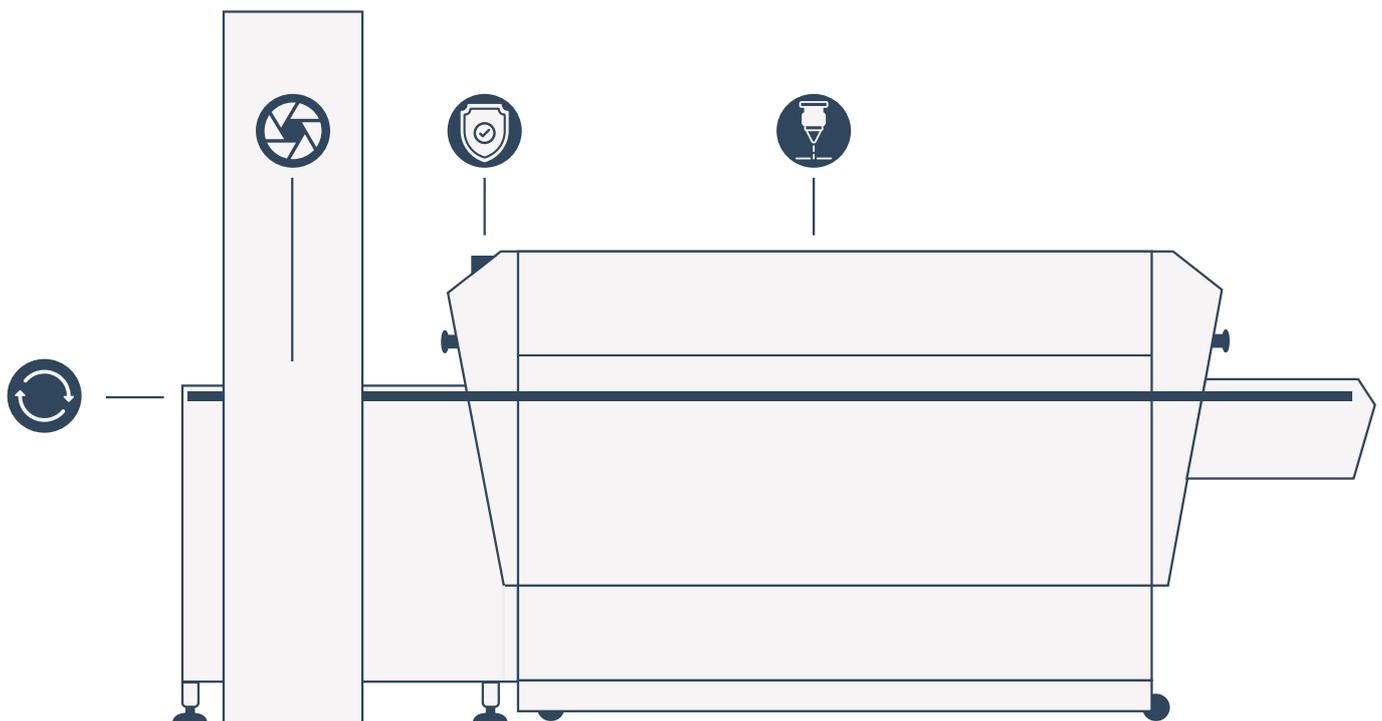
At the core of the enhanced productivity lies a top-notch camera recognition system. Instead of getting your files ready, or waiting for the material to be scanned, this Summa L3214 system **continuously scans** the material and automatically creates the cut vector needed for the job. The system secures **continuous cutting**, even when the conveyor is moving, saving you a considerable amount of valuable time.

### Maintain high accuracy level at top speed

At this high speed, Summa is still able to maintain the high standards for accuracy. A **motorized de-reeler** makes sure there is no fabric distortion while cutting. The system secures a constant and stable fabric feed onto the vacuumed cutting bed.

By creating a loop in the material, the de-reeler relaxes the material, reduces distortion and secures an accurate cut. No more idle periods, yet boosted productivity instead with a perfectly cut product that's immediately ready for shipment or further processing.

## HOW DOES IT WORK



*Continuous cutting, even when the conveyor is moving*



*Vision system continuously scans the material*



*The laser cutting source is covered during operation and paused when the cover is opened*



*Contactless cutting*



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cutting systems

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