



L Series™

Professional laser
cutting systems

Summa.com

ABOUT SUMMA



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 Europe.** 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 cutting 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.

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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.

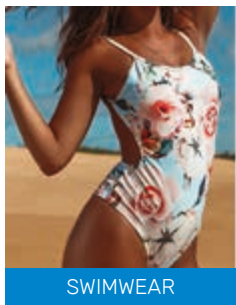
Cut rolls without operator intervention

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 CUTTING REQUIREMENTS

FEATURES AND BENEFITS



Productivity

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



Usability

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



Reliability

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.



Safety

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.



Efficiency

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.

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.

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.



EDGE DETECTING 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 edge detecting 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.

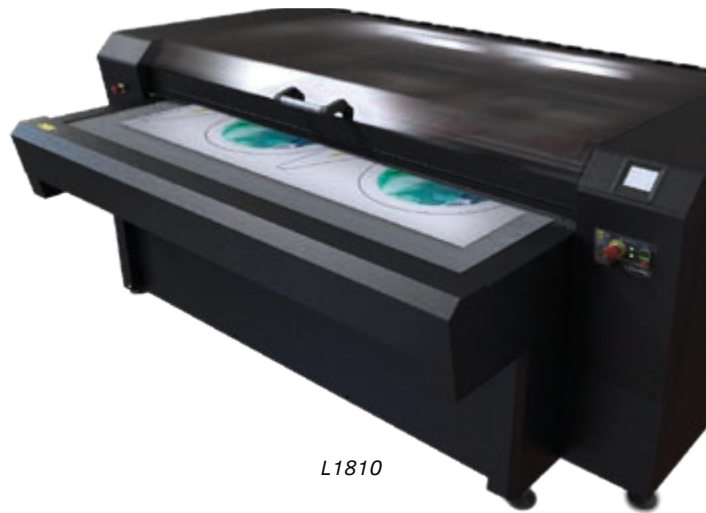
DISTORTION COMPENSATION

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

PERFECT FOR FAST FASHION, ATHLETIC CLOTHING AND TECHNICAL TEXTILES

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 is available in two models with and without Vision system. Both 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.

Video available on www.SummaAmerica.com/video/L1810



L1810 Vision

Model	L1810	
Laser Power	50 or 100 Watt (Aircooled) 120 or 250 Watt (Watercooled)	Working Area 1850 mm x 910 mm (Cut only) 1800 mm x 890 mm (Print & Cut - W/o Vision) 1800 mm x 400 mm (Print & Cut - Vision)
Dimensions	2690 x 2160 x 1120 mm 2690 x 2160 x 1770 mm (with Vision system) All dimensions are displayed without motorized de-reeler	Speed • Axial Speed 0.2mm/s up to 1000mm/s • Speed increments of 0.1mm/sec for accurate adjustment
Max Roll Width	Up to 1900 mm	Camera Recognition • OPOS marks • Optional: Vision system
Features	<ul style="list-style-type: none"> • Extraction speed control • 3 Vacuum zones • Single phase input 	<ul style="list-style-type: none"> • Centrifugal extraction pump • Repeatability 0,05% of move or 0.05mm, whichever is larger • Clearance 25,4 mm (1 Inch)
Standard Solution Includes	<ul style="list-style-type: none"> • PC and Monitor • Software ApS-Ethos Cutting Composer • Conveyor System • Head camera 	<ul style="list-style-type: none"> • Visible diode for setup • Water chiller (if required) • High-resolution line scanner (with optional Vision system) • Motorized de-reeler (optional with Edge Detection) • Compressed air drying bowl and flow regulator

L3214

BOOST PRODUCTIVITY IN WIDE-FORMAT LASER CUTTING

Textile is one of the fastest growing markets nowadays, where on-demand and fast deliveries become increasingly important. The market needs solutions to quickly respond to customer demands for applications on large format and printed textiles without compromising on cutting quality. Summa complies to this demand with the L3214 laser cutter, boosting efficiency and productivity to the highest levels, providing high-quality processing solutions at high production speeds, especially for wide format soft signage applications.



SCAN THE DESIGN AND CUT IT SIMULTANEOUSLY

Besides the size, one of its most unique features is the **on-the-fly cutting concept**, simultaneous and continuous scanning and cutting while feeding the material segment per segment.

Due to the automatic recognition of the design by the Vision system at the back, the software can automatically create the cut file needed for the job. Simultaneously, the laser system is cutting while the conveyor system is feeding the material forward. This will provide for **unseen productivity** to your workflow. Idle periods belong to the past and jobs will be processed faster without sacrificing an inch of accuracy.

The L3214 is bound to be the game changer for the textile market, enabling users to enhance their workflow with cutting solutions of high productivity, especially for soft signage applications.

▶ Video available on www.Summa.com/video/L3214

Model		L3214	
Laser Power	250 Watt (Watercooled)	Max Cut Width x Length	3300 mm x continuous
Dimensions	1328 mm x 4382 mm x 3071 mm All dimensions are displayed without scanning module.	Camera Recognition	<ul style="list-style-type: none"> • OPOS marks • Advanced Vision system
Max Roll Width	3400 mm	Speed	<ul style="list-style-type: none"> • Maximum speed: 1500mm/sec • Max acceleration 1 G
Features	<ul style="list-style-type: none"> • Extraction speed control • Fully anodised extruded chassis 	<ul style="list-style-type: none"> • Full complement single row cageless bearings 	
Standard Solution Includes	<ul style="list-style-type: none"> • PC and monitor • Active motorized edge detect de-reeler • Conveyor system • Vision system • Water chiller 	<ul style="list-style-type: none"> • Software ApS-Ethos Cutting Composer • Visible diode for setup • Compressed air drying bowl and flow regulator • Vacuum pumps • Centrifugal extraction pump 	

ON-THE-FLY-CUTTING CONCEPT EXPLAINED

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 m² an hour**.

Continuous workflow

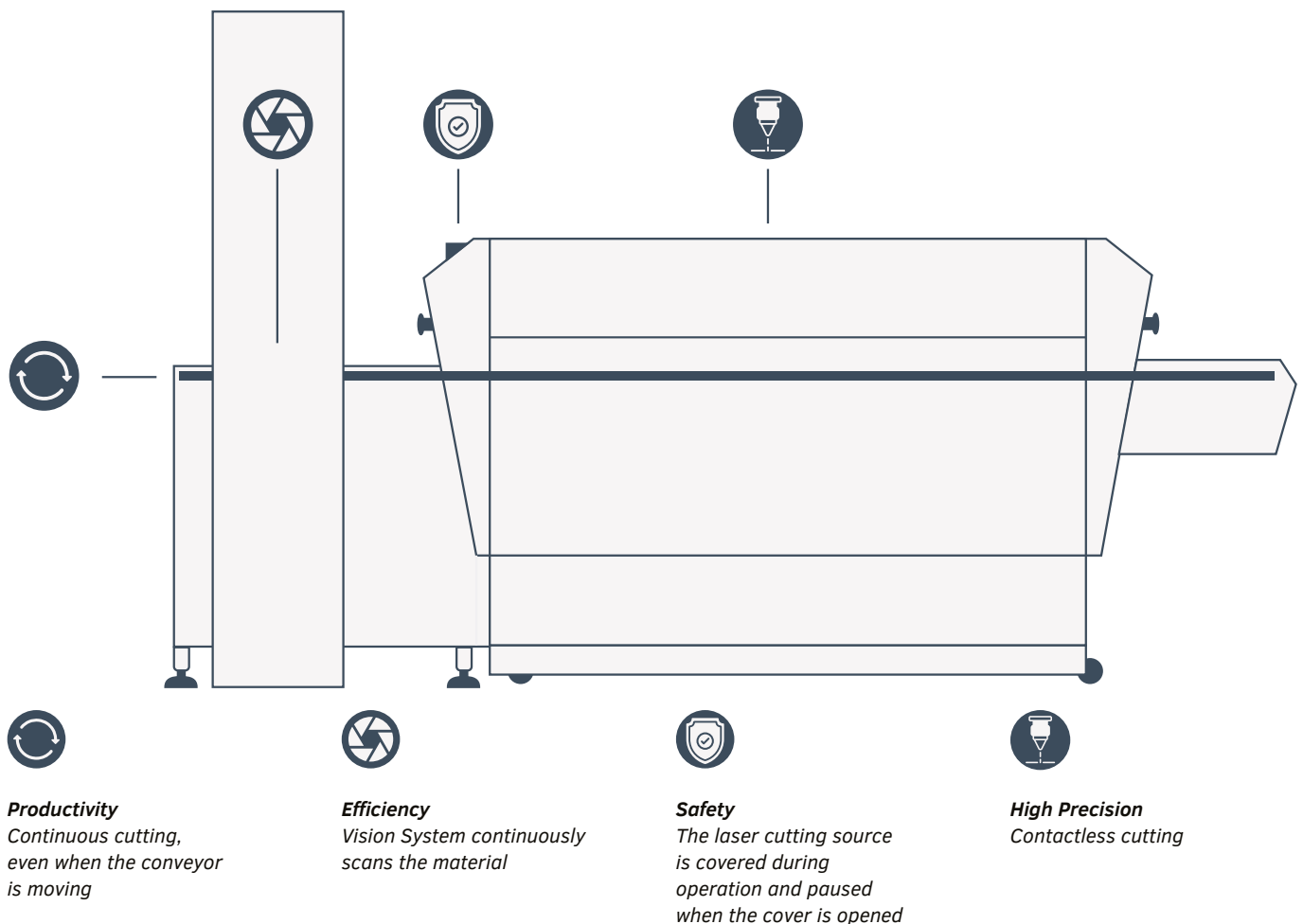
At the core of the enhanced productivity lies a top-notch camera recognition system. Instead of getting your files ready, or waiting for the design to be scanned, this Summa L3214 system **continuously scans** the design and automatically creates the cut vector needed for the job. The system secures **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

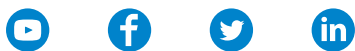




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