

**photon**  
5G

# CNC Fiber Laser Cutter

Experience 5g Laser Cutting



**ESPRIT**  
AUTOMATION









## Ultimate 5g Performance

For those businesses that need performance & productivity to go hand in hand with high-precision and operator control, we proudly present our flag-ship Photon 5G fiber laser cutter.

Thanks to its aerospace-inspired machine design with hybrid gantry, this top-of-the-range Esprit Photon is capable of accelerating at 5g to reach staggering vector speeds of **325 m/min**, making it a champion in productivity.

To tame the extreme 5g forces that are generated by this powerful machine, the Photon 5G relies on Esprit's signature precision-welded bed & gantry design. The robustness of this machine is one of the first things customers comment on.

## Discover It For Yourself

If you would like to **see the Photon 5G in action** in our factory, we would be pleased to arrange a visit for you so you experience 5g laser cutting first hand and meet the team of experts who built the machine.

*Vector Speed*

**325** m/min

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## Incredible Productivity

Accelerating from point-to-point at **incredible speeds**, a fiber laser machine draws a lot of electricity. Yet, during each deceleration stage significant kinetic energy is dissipated as heat. Not with the Photon 5G.

Thanks to Esprit's trademarked LiveRegen®, excess energy is captured and temporarily stored to use for the next impressive 5g acceleration, keeping your costs low and productivity high.

## Stunning Simplicity

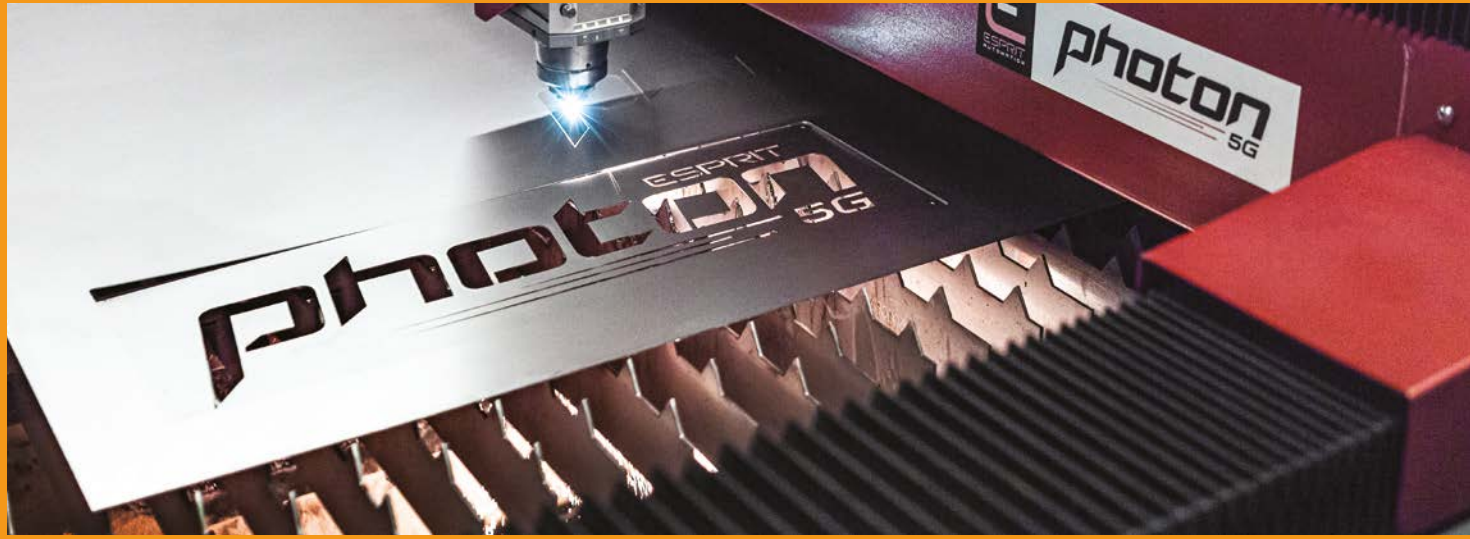
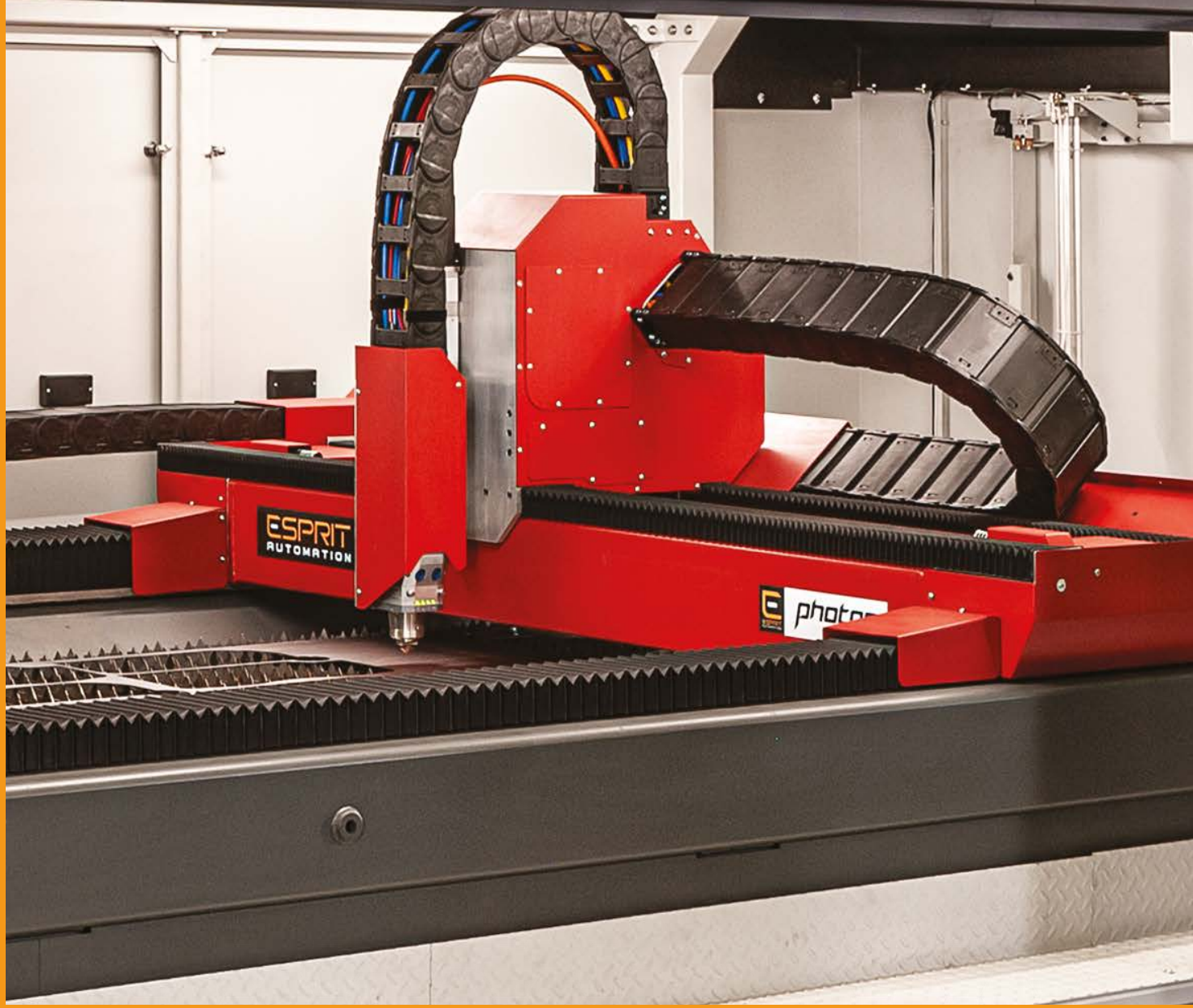
Operating a machine needs to be easy. Building on the feedback from our customers, we made this fiber laser cutting machine so **user-friendly** that it could be operated by literally anyone with very little training, even an apprentice.

Esprit created LiveNest®, LiveControl®, and LiveGuard®, revolutionary pieces of CNC software that allow anyone to be productive at the machine with a minimum of training.

**//** *We are really impressed with the cut quality on the Photon 5G and its fast acceleration. We've been dealing with Esprit for about 4 years. They are easy to deal with and we would recommend them to other manufacturers.* **//**

*Tim & Oliver Wells,  
Managing Director  
& Operating Director  
at Stainless UK,  
owner of a Photon 5G  
with 10kW*

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## British Engineering

The Photon 5G is proudly **designed in the UK** by our team of expert British engineers. This premium fiber laser cutter is also available in a mirrored design to fit your workshop. Easy access to the internal systems is guaranteed via the huge panoramic door and removable access panels.

## British Manufacturing

The Photon 5G, just like any other machine in the Esprit range, is **made in Britain**. In fact, Esprit Automation is the first manufacturer to fully design and produce an industrial fiber laser cutting machine in the UK.

## British Service & Support

Besides making unrivalled CNC cutting machines & software, Esprit Automation is known for offering **first-class British service support**, engineering expertise and the flexibility to meet the needs of our customers.

At Esprit, we use our machines to make our machines, so we understand all too well the need to avoid downtime. That is why we offer comprehensive after-sales support, delivered by our expert team of British and Irish technicians.



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## Embedded Nesting

Tired of running back to the CAD/CAM office to get a single item recut? With **LiveControl®** an operator can cut any single item from a historic job directly at the CNC, even on a piece of scrap.

LIVE►CONTROL

## Advanced Vision

See any nest visually projected on your plate before cutting to verify optimal nesting thanks to Esprit's **LiveNest®**. The system can recognise the plate and auto position any nest with a single touch.

LIVE►NEST

## Smart Anti-Collision

Avoid collision, even at 5g speeds, thanks to **LiveGuard®**. Receive a collision risk assessment at the CNC before cutting. During cutting, the system will protect the cutting head with an automatic collision stop function.

LIVE►GUARD

## Low Operating Costs

Despite reaching incredible speeds, the Photon 5G is very economical. Thanks to Esprit's **LiveRegen®** technology, every Watt is optimally used. Smart power regeneration saves energy during machine deceleration to reuse during acceleration.

LIVE►REGEN





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## Auto Nozzle Changer

Increase productivity and reduce manual operations with our 22 station Automatic Nozzle Changer. Maximise your efficiency regardless of the material and thickness whilst **future proofing your machine** if you wish to add automation at a later date.

## Procut CAD/CAM

Pair your Photon 5G industrial laser cutting machine with Esprit's Procut software to **unleash the full potential** of this powerful machine. This modular CAD/CAM software solution is celebrated for its user-friendliness and flexibility.

**PROCUT**

## IRIS Industry 4.0

Thanks to Esprit's very own IRIS (Intelligent Real-time Information Service) Industry 4.0 solution you can monitor your Photon 5G fiber laser cutter in real-time and track its impressive productivity statistics from any computer, tablet or phone **anywhere, any time.**



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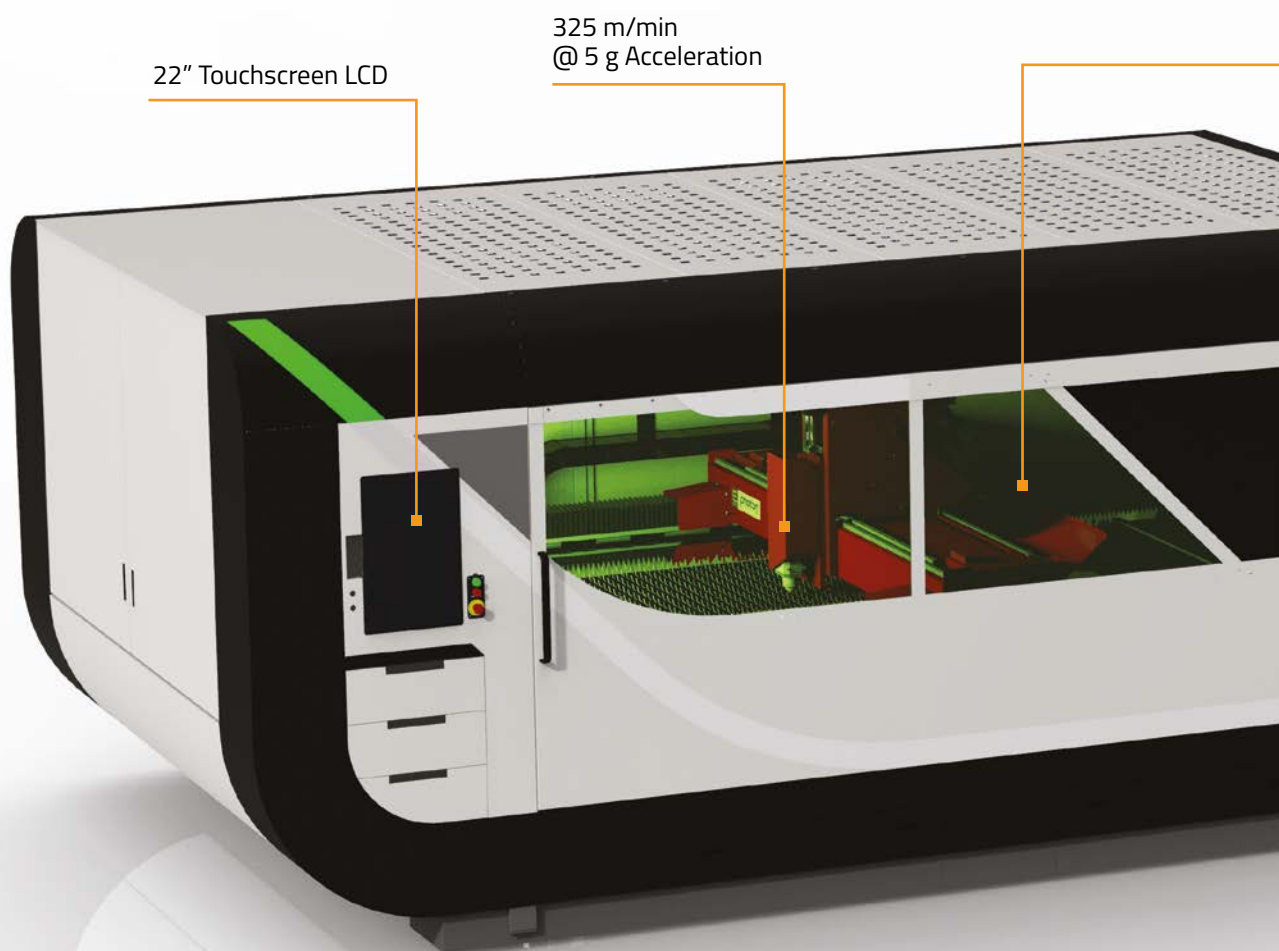




# CNC Fiber Laser Cutter

## Specifications

	Photon 5G 3x1.5	Photon 5G 4x2
Nominal Sheet Size	3,000 x 1,500mm	4,000 x 2,000mm
Max Plate Size	3,065 x 1,530mm	4,065 x 2,030mm
Shuttle Table Height	900mm	900mm
Max. Workpiece Weight	890 kg	1,570 kg
Max. X-Y Vector Speed	325 m/min	325 m/min
Cutting Head	Precitec ProCutter 2.0 Zoom	Precitec ProCutter 2.0 Zoom
Machine Dimensions	4,439 x 9,999 x 2,362 mm	4,939 x 11,999 x 2,362 mm





### Max cutting thickness (in mm) vs power (kW)

kW	Mild Steel	Stainless Steel / Aluminium	Copper	Brass
4	20mm	15mm	8mm	8mm
6	25mm	25mm	12mm	15mm
10	25mm	30mm	12mm	15mm
12	30mm	30mm	12mm	15mm
15	30mm	30mm	20mm	20mm
20	40mm	40mm	20mm	20mm

// It's fantastic that we can still produce a machine like that in the UK. The Esprit Photon 5G has been a game changer for our business, so I would definitely recommend it to anyone. //



*Peter Slater, Operations Director  
at Pete Slater Engineering.*


Panoramic Sliding Door




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