

SE12 PRO

SE12 PRO LASER MARKING, STRUCTURING, WELDING AND AOI SYSTEM

THE **SE12 PRO** IS AN ALL-ENCOMPASSING, MULTIFUNCTIONAL SYSTEM THAT INTEGRATES LASER MARKING, STRUCTURING, WELDING AND ADVANCED AOI INTO A SINGLE SOLUTION.

Taking the laser welding process offline and separating it from laser cutting is a deliberate focus of the SE12 PRO. By decoupling these processes, each can be optimised for its intended function. This not only maximises overall throughput but ensures higher-quality output.

Fully compatible with all industry-standard frame formats, the SE12 PRO maintains optimal precision, accuracy and repeatability across all features.

Through Watt Laser's unique welding algorithm, the system enables multi-level stencil production. Utilising advanced beam steering optics, the SE12 PRO delivers minimal thermal distortion with high-speed accuracy and performance, all without the need for any assist gas.

It supports marking of high-resolution graphics, QR codes, text and images on both board and squeegee sides.

The system is fully integrated with Watt Laser's proprietary inspection and measurement software, incorporating all functionality of the QC100.



SE12 PRO

LASER MARKING, STRUCTURING, WELDING AND AOI SYSTEM

STRUCTURING AND MARKING SPECIFICATIONS

Structuring Speed	20 x 20mm, 2D Barcode = 30 seconds
Laser Power	20W
Laser Wavelength	1064nm
Laser Beam Quality	M ² <2
Laser Source	Nanosecond Pulsed Fibre Laser
Working Area	750 x 700mm (X*Y)
Positional Accuracy	10µm
Resolution	1µm
File Format	Gerber, DXF, JPEG, SVG, PNG

WELDING SPECIFICATIONS

Welding Speed	50mm/s
Vacuum Fixture	395 x 395mm
Material Thickness (min)	0.070mm
Material Thickness (max)	0.3mm
Positional Accuracy	20µm
Step Areas	2 – 100mm