

META-C

LOTUS LASER SYSTEMS

Teology

Laser engraving, marking and cutting workstation

Technology this good has never been so affordable





What is Meta-C?

Available with a very wide range of laser wavelengths, output

powers, varying beam characteristics and packed with performance enhancing features Meta-C is our flagship laser engraving, marking and cutting workstation.







Meta-C is a powerhouse of a machine delivering the best performance and functionality in its class.

All of the key components within Meta-C are sourced from European suppliers.

Meta-C also has excellent eco credentials being made from materials and components that are carefully selected for energy efficiency and recyclability.











Standard Features

WIDE RANGE OF LASER OPTIONS

Choosing the right source for the core application is critical to success. Meta-C can be fitted with a single laser source of 10.6µm (CO2), 355nm (UV) as well as 1µm Fiber Q-Switched or MOPA options with a wide range of output power and beam characteristics.



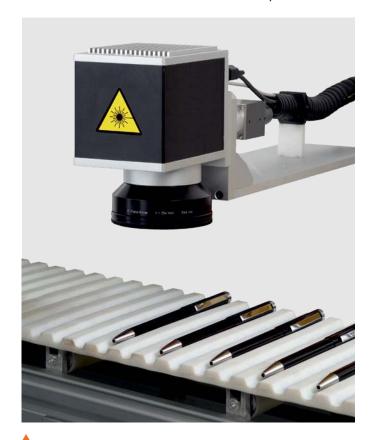


PNEUMATIC ACCESS PANEL

The access panel of Meta-C is pneumatically actuated to provide for next to zero maintenance, a long working life and hands free operation. The cabinet design is space saving by retracting the lower section into the upper section and allows for a full 180 degree access for part loading.

INDUSTRIAL GRADE ELECTRONICS

Meta-C incorporates electronics of an industrial grade the majority of which are made in Germany. A Siemens PLC controls all electronic processes as well as monitoring the system for faults at a component level. There is a touch screen Human Machine Interface (HMI), Phoenix Contact power supplies and dual channel safety circuitry as standard. 100% of the cabling for Meta-C is made in-house at our UK factory.



EXTERNAL DEVICE CONNECTIVITY

The PLC allows for an almost unlimited range of external device connectivity such as conveyor feeds, robots, etc. Therefore, Meta-C is well suited to integration within an automated part handling process.













Standard Features



CUSTOMISABLE SOFTWARE

Lotus Mark is recognised as one of the most powerful and functional laser marking software available, however, for some installations a bespoke software solution is necessary. Meta-C software can be customised at extra cost to suit the most demanding of bespoke requirements.



MK3 ROTARY DEVICE

The MK3 rotary device features a high resolution 30:1 gear ratio, a keyless chuck with a spring-loaded tail stock and a pair of cones to handle marking of most cylindrical objects. This device stays permanently fixed to the base plate and is moved in/out of the marking field when required along heavy duty guide rails. Therefore no alignment is necessary when switching between rotary and T-slot table marking, which saves a lot of time.



REMOVABLE T-SLOT TABLE

The T-slot table can be removed/replaced quickly and accurately without a need for tools. The T-slot table can be fitted over the rotary device.



PROGRAMMABLE Z AXIS

We have redesigned the Z axis of Meta-C to provide for a longer Z travel distance and less weight. Another improvement is the switch from physical to optical sensors, which can be easily adjusted if required.

GET IN TOUCH

















General Technical Data

	LASER SOURCE						
WEIGHT & DIMENSIONS	1μm Q-SWITCH	1µm MOPA	10.6µm	355nm			
Width	790mm	790mm	790mm	790mm			
Depth	1160mm	1160mm	1520mr	m 1160mm			
Height	1030mm	1030mm	1030mr	m 1030mm			
Weight	110kg	110kg	130kg	120kg			
Laser Power W	20, 30, 50, 100	20, 30, 50, 70, 100	50,75, 100	3, 5			
Cooling	Air	Air	Air	Water			
POWER REQUIREMENT							
Single phase auto switching							
230 VAC 50Hz	Consumption specific to laser source						
120 VAC 60Hz							
Air Cooled							
COMPUTER							
Operating System	Windows						
Connection	USB max 2.5m						
AIR REQUIREMENTS (FOR PNEUMATIC DOOR)							
Connecting port	8mm female push-fit						
Pressure	Regulated 4 bar max						
Oil/Moisture	Must be removed						
Flow negligible	Recommended receiver 24L						
MAXIMUM PART LOADING							
With cabinet closed 700mm wide x 380mm deep							
	Z clearance to focal point at:						
Lens / area	T-slot with legs	T-slot withou	t legs	Base plate only			
F330 / 220mm	72mm	162mn	n	182mm			
F254 / 180mm	148mm	238mr	m	258mm			
F163 / 110mm	239mm	329mr	n	349mm			
F100 / 70mm	302mm	392mr	m	412mm			
MAXIMUM PART LO	ADING WITH	ROTARY A	XIS (OPT	ION)			
Х	350mm						
Diameter	250mm						
Weight	5kg						
SAFETY & SECURITY	Y						
Laser class		2					
Emergency stop		Standard					
Keyswitch maintenar (Class 4)	nce	Standard					
Laser safe viewing w	indow	135x135m	m				
CE and RoHS	and RoHS			Compliant			
FDA		Approved 1320021-00					

MISCELLANEOUS				
T-slot size	300x300mm			
External start button	Standard			
External foot switch	Standard			
Pneumatic door access	Standard			
Z-axis programmable by software	Standard			
Lotus mark control software	1 copy			
Rotary axis with keyless chuck	Optional			
3m Conveyor feed	Optional			
Fume extraction	Mandatory – at extra cost depending on application			
WARRANTY (T&C APPLY)				
Main system	2 years			
Laser source	2 years			
Labour	Variable by territory			
Warranty extensions	Optional up to +3 years			
Service Contract	Optional			
ENVIRONMENTAL REQUIREMENTS				
Ambient temp. (min/max)	15°C to 30°C			
Fume extraction rate	Apps dependant, seek advice			
Protect from direct sunlight, vibration, high humidity, dampness, unstable power supply.				

