SPA2
FIBER PULSED

Versatility to mark a wide range of plastics and metals

MODEL			SPA 2 F-20 PULSED		SPA 2 F-30 PULSED		SPA 2 F-50 PULSED		SPA 2 F-100 PULSED		SPA 2 F-200 PULSED	
IMAGE												
SYSTEM	Power		20 W		30 W		50 W		100 W		200 W	
	Technology		Ytterbium Pulsed Fiber Laser									
WAVELENGTH	1.064 nm		Std.									
PULSELENGTH	Fixed Pulse lenght		Std.									
	MOPA (Selectable Pulse Lenght)		Opt.		Opt.		Opt.		-		-	
MAINS POWER SUPPLY			110 / 240 V AC									
			50 / 60 Hz									
			(1 Phase + N) 500 VA		(1 Phase + N) 600 VA		(1 Phase + N) 700 VA		(1 Phase + N) 825 VA		(1 Phase + N) 950 VA	
COOLING	Air/Water		Air (SE, DE) / Forced Air (WD)									
	Filtered Blower (200m³/h)		Opt. (DE)		-		-		-			
	Filtered Blower (350m³/h)		Opt. (WD)									
	TCU		Opt. (WD)									
WARMING	Warming Blower		Opt. (WD)									
FOCAL SPECIFICATIONS FOR XQS LENSES	M. Area	WD	FL	BD	PD	BD	PD	BD	PD	BD	PD	BD	PD
	60x60	126 mm	100 mm	45	1249	45	1873	45	3122	45	6244	45	12488
	100x100	201 mm	160 mm	72	488	-	-	-	-	-	-	-	-
	107x107	203 mm	162 mm	73	474	73	710	73	1184	73	2367	73	4735
	160x160	345 mm	254 mm	115	194	115	290	115	484	115	968	115	1936
	212x212	446 mm	346 mm	156	104	156	156	156	260	156	521	156	1041
	242x242	545 mm	420 mm	190	70,8	190	106	190	177	190	354	190	708
	325x325	710 mm	570 mm	257	38,5	257	57,7	257	96,2	257	192	257	385
	560x560	955 mm	820 mm	370	18,6	370	27,9	370	46,5	370	92,9	370	186
MARKING HEAD	XQS Internal		Std.		Std.		Opt.		Opt.		Std. (SE, DE) / Opt. (WD)	
	HPD Split		-		-		Std.		Std.		Std. (WD)	
	XS Split WD (IP65)		Opt.		Opt.		Opt.		Opt.		-	
MARKING HEAD ACCESSORIES	Beam Exit at 90°		Std.									
	Focal Distance Indicator		Opt.									
	Marking Area Indicator		Std.									
CONTROL	Touch Screen TSL-V3		Opt. (SE, DE)									
	Touch Screen TSL-V3 IP65		Opt. (WD)									
	PC with Marca Software		Opt.									
SOFTWARE	ScanLinux		Std.									
	MarcaTouch OS 2.00		Opt.									
	Marca Full Graphics PC Softw.		Opt.									
	TCPIP Protocol		Std.									
	Profinet Protocol		Opt.									
	OPC-UA Protocol		Opt.									
	Internal Barcode Generator		Opt.									
SAFETY	ElectroMechanical Shutter		Opt.									
	Performance Level d Safety Kit		Opt.									
ACCESSORIES			Diode Marking Pointer - Encoder Kit - Mounting Support - Photocell Kit									
ENVIRONMENTAL CONDITIONS	Operating Temperature		10 °C (50 °F) to 40 °C (104 °F)									
	Humidity		10 % < H < 95 %, non-condensing									
	Vibrations		No vibrations									
	Protection Rate (3 types available)		SE (Standard Environment)									
			DE (Dusty Environment)									
			WD (Wash-Down Environment)									
DIMENSIONS AxBxC	Head		108 x 105 x 506 mm (XQS-UHS HEAD) / 108 x 105 x 702 mm (3D HEAD)									
	Cabinet		525 x 650 x 202 mm									
WEIGHT	Net Weight		28 kg (XQS-UHS HEAD) / 29 kg (3D HEAD)									
	Gross Weight		32 kg (XQS-UHS HEAD) / 33 kg (3D HEAD)									

One platform, multiple substrates

Pulsed fiber lasers for coding in the packaging sector. They provide legible markings of the highest quality, which are permanent and sustainable in all production environments.

Available in different enclosures in order to mark a wide variety of substrates such as plastic and metals in the FMCG markets.

PRODUCT BROCHURE

SPA2 is much more than a laser system

The SPA2 range of laser coders is the next generation of Macsa's successful SPA, Smart Packaging Application, laser platform.
The SPA2 range adds more power options including pulsed CO2 lasers.

SPA2
SMART PACKAGING APPLICATIONS

SPA2 FIBER the best solution for metal substrates

SMART | PRECISE | RELIABLE

SPA2 F pulsed fiber lasers are widely used in packaged goods applications including cans. They are typically used to code metal substrates.

- High-powered lasers enable them to code on the fastest production lines (up to 172,000 cans/hour).
- The XQS high precision printhead ensures clear and legible codes even on curved surfaces.
- DUO dual processor technology enables high-speed and high-quality printing with variable data.
- Extra protection enclosures and touch screen are available for dusty (IP54) and washdown (IP65) environments.

SPA2 C

ICON 3

SPA2 FP

The most complete range of CO2, Fiber and DPSS lasers on the market

CO2
Available from 10 to 450W

Fiber
From 20W to 200W

Fiber Film
From 20W to 100W

DPSS
From 6 to 20W
(also Green & UV available)

PRECISION
Several features including Macsa's propietary VCS to ensure high print quality even on high-speed production lines.

VCS
Vibration Compensation System

VERSATILITY
Integrated into any production line, it can encode over a wide range of materials using 3D printing options.

3D printing

RELIABILITY
Production environments can test the reliability of laser systems. SPA2 lasers are designed to operate reliably in dusty or damp environments even when subject to extreme temperatures.

RAF* Reverse Air Flow

ADAPTABILITY
Wide range of essential and extra accessories to optimise the laser's performance.

Macsa Accesories

SIMPLICITY
Videos and support material to facilitate its installation and integration.

MARCA software®

CONNECTIVITY
The lasers include the TCP/IP protocol in order to have complete control of the system from most standard communications. The new SPA2 platform includes the integration of the most widely used industrial communication protocols such as Profinet and OPC-UA. These are both available in all models upon request.

PROFI NET®   OPC UA

SE Standard Environment IP31
SPA 2F-10 / SPA 2F-20 / SPA 2F-30 / SPA 2F-50 / SPA 2F-100 / SPA 2F-200

DE Dusty Environment IP54
SPA 2F-10 / SPA 2F-20 / SPA 2F-30 / SPA 2F-50 / SPA 2F-100 / SPA 2F-200

WD Washdown IP55 / IP65
SPA 2F-10 / SPA 2F-20 / SPA 2F-30 / SPA 2F-50 / SPA 2F-100 / SPA 2F-200

SOFTWARE AND SERVICES

integranet 4.0

Maintaining Service

Equipment performance

MONITORING AND PREDICTIVE MAINTENANCE

From any place and at any time, data is provided in real time to increase productivity, improve efficiency and reduce downtime. It allows monitoring of the status of the equipment from any remote device which can allow the reception of alerts. IntegraNET allows our service engineers to receive Diagnostics in real time to detect problems before they occur and prevent expensive downtimes.

REMOTE ASSISTENCE

IntegraNET allows field technicians and Macsa id engineers to interconnect and exchange information through video calls.

INCREASED EFFICIENCY

The collected data is integrated with the different software of Macsa id modules for production management, traceability and effciency of the production lines.
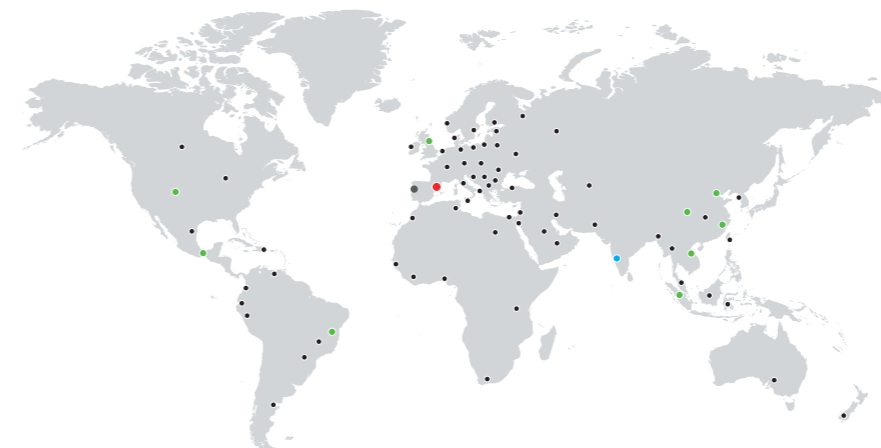
Why Macsa id?

Macsa id is one of the 4 leading companies in the world in coding and marking lasers. It offers the widest range of lasers to code and mark both in the productive sectors (food, beverages, pharmaceutical, healthcare, cosmetics ...) as well as in the industrial ones (industry, automotive, aeronautics, defense, construction materials ...).

Macsa id is recognized as a world leader in technological innovation in lasers for marking and coding. The company invests more than 10% of its turnover in R&D every year.

Macsa id in more than 80 countries

- ● MACSA Headquaters
- ● MACSA Branch Offices
- ● MACSA Distributors
- ● MACSA JV

ecoding
Driven by Nature

NO CONSUMABLES
A clean technology that does not produce waste.

ENVIRONMENT FRIENDLY
No harmful emissions are generated, thus benefitting the work environment and the planet.

CLEAN
For a cleaner and healthier workspace.

ENERGY EFFICIENT
Maximum quality and coding speed with just the right amount of energy.