TECHNICAL DATA

	MODEL	SPA2 C-60	SPA2 C-80	SPA2 C-100	SPA2 C-80 PULSED	SPA2 C-125 PULSED
IMAGE						
SYSTEM	Power	60 W	80 W	100 W	80p	125p
	Technology	CO2 Sealed Tube CW			CO2 Sealed Tube Pulsed	
		RF Technology				
WAVE-LENGTH	10,6 microns for BIO materials	Std.				
	10,2 microns for FILM materials	Opt.			-	
	9,3 microns for PET bottles	Opt.				
MAINS POWER SUPPLY		110 / 240 V AC				
		50 / 60 Hz				
		(1 Phase + N) 1600 VA	(1 Phase + N) 1900 VA	(1 Phase + N) 2100 VA	(1 Phase + N) 1900 VA	(1 Phase + N) 2230 VA
COOLING	Air/Water	Air (SE) / Forced Air (DE)/Water (WD)	Air (SE) / Forced Air (DE)/Water (WD)	Air (SE) / Forced Air (DE)/Water (WD)	Water	Water
	Filtered Blower (350m3/h)	Opt. (DE)	Opt. (DE)	-	-	-
	TCU	Opt. (DE)	Opt. (DE)	Opt. (DE)	-	-
	Chiller	1000W (WD)	1500W (WD)	2000W (WD)	2000 W	2500 W
WARMING	Warming Blower	Opt. (DE)	Opt. (DE)	Opt. (DE)	-	-

FOCAL SPECIFICATIONS FOR LENSES with BE for XQS Head

M. Area	WD	FL	BD	PD	BD	PD	BD	PD	BD	PD	BD	PD
40x40	60 mm	65 mm	191	209	191	278	211	287	175	331	175	517
60x60	95 mm	95 mm	280	97,2	280	130	308	134	257	154	257	241
75x75	115 mm	125 mm	371	55,6	371	74,1	408	76,6	340	88,2	340	138
100x100	165 mm	160 mm	473	34,2	473	45,5	520	47,1	434	54,2	434	84,7
150x150	235 mm	240 mm	707	15,3	707	20,4	777	21,1	648	24,3	648	37,9
200x200	320 mm	320 mm	946	8,5	946	11,4	1041	11,8	867	13,5	867	21,2
250x250	430 mm	410 mm	1209	5,2	1209	7,0	1330	7,2	1109	8,3	1109	13,0
500x500	700 mm	720 mm	2126	1,7	2126	2,3	2339	2,3	1949	2,7	1949	4,2

FOCAL SPECIFICATIONS FOR LENSES with BE for HPD Head

M. Area	WD	FL	BD	PD	BD	PD	BD	PD	BD	PD	BD	PD
40x40	55 mm	65 mm	120	532	120	710	132	733	88	620	88	968
60x60	85 mm	95 mm	175	250	175	333	192	344	128	251	128	393
100x100	150 mm	150 mm	275	101	275	135	302	140	201	105	201	165
150x150	230 mm	230 mm	424	42,5	424	56,6	467	58,5	311	105,3	311	164,5
200x200	310 mm	300 mm	553	25,0	553	33,3	608	34,4	405	62,0	405	96,9
250x250	400 mm	400 mm	740	14,0	740	18,6	814	19,2	542	34,6	542	54,1
320x320	435 mm	450 mm	828	11,1	828	14,9	911	15,3	607	27,6	607	43,1
500x500	700 mm	715 mm	1319	4,4	1319	5,9	1451	6,1	967	10,9	967	17,0

Category		SPA2 C-60	SPA2 C-80	SPA2 C-100	SPA2 C-80 PULSED	SPA2 C-125 PULSED
MARKING HEAD	XQS Split	Std. (SE, DE)	Std. (SE, DE)	Std. (SE, DE)	-	-
	HPD Split	Opt. (SE, DE)	Opt. (SE, DE)	Opt. (SE, DE)	-	-
	XQS Split WD (IP65)	Opt. (SE, DE) / Std. (WD)	Opt. (SE, DE) / Std. (WD)	Opt. (SE, DE) / Std. (WD)	Std.	Std.
	HPD Split WD (IP65)	Opt				
ACCESSORIES MARKING HEAD	Beam Exit at 0°	Opt. (SE, DE)	Opt. (SE, DE)	Opt. (SE, DE)	-	-
	Beam Exit at 90°	Std.				
	Split Elbow	Opt.				
	Focal Distance Indicator	Opt.				
	Marking Area Indicator	Opt.				
CONTROL	Touch Screen TSL-V3	Opt. (SE, DE)	Opt. (SE, DE)	Opt. (SE, DE)	-	-
	Touch Screen TSL-V3 IP65+	Std. (WD)	Std. (WD)	Std. (WD)	Std.	Std.
	PC with Marca Software	Opt.				
SOFTWARE	ScanLinux	Opt.				
	MarcaTouch OS 2.00	Std.				
	Marca Full Graphics PC Softw.	Opt.				
	TCPIP Protocol	Opt.				
	Profinet Protocol	Std.				
	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	15 °C (50 °F) to 40 °C (104 °F)				
	Humidity	< 95 %, non-condensing				
	Vibrations	No vibrations				
	Protection Rate (3 types available)	SE (Standard Environment)			-	
		DE (Dusty Environment)			-	
		WD (Washdown Environment)				
DIMENSIONS (AxBxC)	Head	-			-	
	Cabinet	202 x 650 x 525 mm (SE, DE) / 350 x 243 x 1105 WD W/O ELBOW			525 x 294 x 1055 mm (W/O ELBOW)	
WEIGHT	Net Weight	28 kg (SE, DE) / 70 kg (WD)			82 kg	
	Gross Weight	30 kg (SE, DE) / 72 kg (WD)			84 kg	

SPA2 C

C-60W │ C-80W │ C-100W │ C-80P │ C-125P

Reliable laser coding in **high-speed**, dusty and washdown environments

One platform, multiple substrates

CO2 lasers used in higher speed packaged goods applications including boxes, bottles and blister packs. 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 cardboard, glass, ceramics, PET and PVC 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 C ideal for packaged goods

SMART | RELIABLE | FAST

SPA2 C 60W to 125W CO2 lasers are widely used in higher speed packaged goods applications including boxes, bottles and blister packs. They are typically used to code paper and board, glass and ceramics, coated materials, PET and PVC.

- 10.6, 10.2 and 9.3 wavelength lasers are available to meet the coding needs of specific substrates such as film and PET.
- High-powered pulsed lasers (80W & 125W) are available for the highest speed lines enabling print speeds of up to 200,000 bottles/hour.
- DUO dual processor technology enables high-speed and high-quality printing with variable data.
- 10.1-inch touch screen controller with context sensitive HELP and on-line instruction videos including Marca Touch OS.
- Extra protection enclosures 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.
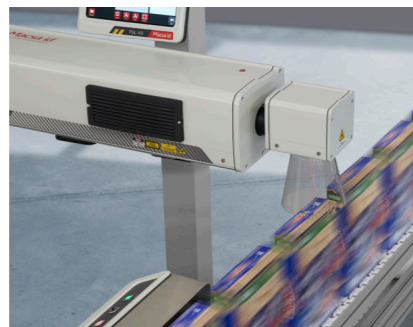
MARCA software

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.

PROFINET
OPC UA

SE Standard Environment IP31
C-60W / C-80W / C-100W

DE Dusty Environment IP54
C-60W / C-80W / C-100W

WD Washdown IP65
C-60W / C-80W / C-100W / C-80p / C-125p

SOFTWARE AND SERVICES

integranet 4.0

Maintaining Service

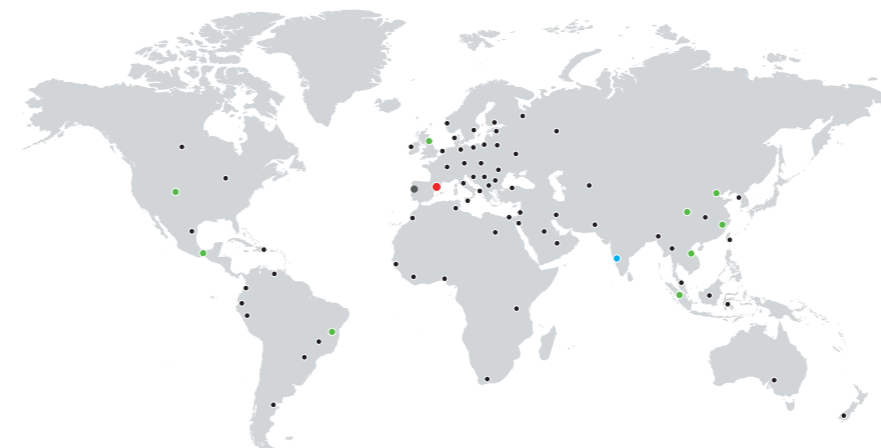Equipment performance

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.