

The new standard for laser workstations

Engraving | Marking | Cutting

Red and Blue Carmine

Laser marking, engraving and micromachining are now more approachable than ever. With its meticulous design, superior functionality, and shocking speed, Carmine is an uncompromising upgrade to your workflow.

It features our hybrid touch-enabled software system that shifts your team's productivity into high gear.

Benefits

Cut with unparalleled precision

Raising the bar for thin metal cutting. From 0.1 to 3 mm, Carmine carves out details like no other. Our unique approach to workpiece temperature management eliminates material distortion. The results exceed the strictest of standards.

Make your mark

Carmine creates permanent, high-contrast and precise markings without surface penetration. Achieved using state-of-the-art fiber laser technology, the speed and quality are superior to traditional methods.

Engrave with confidence

Laser technology enables impressive engraving jobs. Produce abrasion-resistant industrial part markings or intricate 3D reliefs up to x4 times faster than with traditional CNC milling and engraving.





CUSTOMERS



Tel. +49 176 9644 0413 · Fax +49 3222 1700569 · <u>www.b2-solutions.de</u> Postbank München (BLZ 700 100 80) 825 227 804, IBAN: DE80 7001 0080 0825 2278 04, BIC: PBNKDEFFXXX

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Axxell Utbildning	OUL JOHAN Lindroos	SC Created	Petri Pulliainen
Aalto University	SAS koulutusku	SKY	Midas Goldsmiths

And more about our customers Characteristics

Do what others cannot!

Laser technology uniquely enables processes unachievable by other means. Mark materials without surface penetration, create deep engravings, and cut thin metals with incredible results.

Works with anything you do

Metals, polymers, and many other materials.

Direct Part Marking

High-contrast marking right on your workpiece. No additives, no adhesives.

Designed for longevity

Over 10 years of reliable operation.

Low downtime

Few moving parts and contact-free processing means minimal maintenance.





Light and portable

Coming in at 81×56×83 cm and just 65 kg. Carmine feels at home in any environment.

Affordable operation

High energy efficiency and no consumables. The most cost-effective operation possible.

See Carmine in action today.

Book a personal walkthrough and participate in a live demo.

Contact us a live demo

AND

Supercharge your production!

Carmine unlocks production speed you didn't think was possible. Powerful, yet simple to use, it quickens your workflow, no matter if you do a single workpiece or large batches.

Easy to learn, easy to master

Carmine does not require special training and can be mastered within days.

Up and running in no time

Ready for production upon delivery, with no configuration needed. Our laser experts will help you get started.

Blazingly fast

Marking done in seconds, engraving and cutting – in mere minutes. Try and keep up.

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Robot-ready

From simple inline automation to advanced process integrations, Carmine's hardware and software are ready to roll.

Effortless workholding

No physical milling bits, no workholding headaches. Material prep up to 5x faster.

Make it yours

How it looks and how it works – we will help you find the right machine configuration.



Why Carmine?

Features

We've designed Carmine from the ground up to be appreciated by professionals, and approachable by newcomers.

The workstation's construction enables effortless everyday use. Its software makes challenging jobs pleasant.

Design in details

It's not just good looks. Carmine is full of delightful details that help you be more productive.

Laser power for any application

From 20 to 100 W, it's more than enough for anything you throw at it.

Next-gen software

Touch-enabled, it strikes the right balance between approachable and powerful.

Cross-platform control software

Works with Windows, Mac or Linux.

Advanced focus control

Process different parts at different heights. Effortlessly.

Large work area

For larger workpieces and operator comfort.

Safe and secure

Carmine satisfies the most rigorous safety standards, permitting use without protective eyewear.

Air and shielding gas

Improve workpiece cooling with extra airflow, or eliminate oxidation with shielding gases.

Accessories

Remarkable add-ons that punch way above their weight.

Get started in minutes

Machine setup requires no special expertise, and only takes a few moments.

You won't find yourself buried in the manual.



Contact us for a live demo Accessories

Designed to be modular and customizable, Carmine is capable of a lot more with the right add-ons.

Pick and choose among our top of the line accessories, to tailor Carmine into exactly the machine you need.

Dust extractor

Removes harmful airborne particles emitted during laser processing. Automatically syncs with Carmine for operator convenience and safety.

Rotary Mini

Mark and engrave rings, bangles, and other light cylindrical items. Its unique double-action trigger mechanism enables tool-free workpiece clamping.

Rotary Pro

For marking and engraving larger and heavier cylindrical workpieces. Comes with an innovative tool-free clamping mechanism and an optional tailstock.

Icewind temperature management unit

Cut thin metals with absolutely no distortion. A truly dramatic improvement to any metal workpieces <2 mm thick.

Camera positioning system

Precisely position designs on workpieces and monitor your jobs live.

Motorized door

The three-sided door opens and closes automatically with each job cycle.

Replaceable Lenses

Easily swap optics to prioritize a larger field size or a higher detailed designs.



Fixtures and specialty workholding

Position even the most challenging workpieces with confidence.

Custom features and accessories

Our team can accommodate your requests and special business hardware and software requirements.

An afterglow, not an afterthought

You'd be surprised how much more Carmine can do with our meticulously designed accessories.

Contact us for a live demo



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Specifications

	Laser Source	*Bundle Prices, as of:			
	Optical Power	Pulse I	Beam quality (M²)	Focus finder laser pointer	
IR 1064 nm	20 W Yb-doped MOPA fiber source	2 - 350 ns 1 - 4000 KHz	< 1.4	Class 2 635 nm	Forced air 25.500
IR 1064 nm	30 W Yb-doped MOPA fiber source	2 - 350 ns 1 - 4000 KHz	< 1.4	Class 2 635 nm	Forced air 28.500
IR 1064 nm	60 W Yb-doped MOPA fiber source	2 - 500 ns 1 - 4000 KHz	< 1.5	Class 2 635 nm	Forced air 29.950
IR 1064 nm	80 W Yb-doped MOPA fiber source	2 - 500 ns 1 - 4000 KHz	< 1.6	Class 2 635 nm	Forced air 32.950
IR 1064 nm	100 W Yb-doped MOPA fiber source	2 - 500 ns 1 - 4000 KHz	< 1.6	Class 2 635 nm	Forced air 34.950
	Optics				
	Lens type	Scannin	ıg field area	Maximum workpiece he	ight
F100	Lens type F-theta standard Fused silica scanning lens		g field area 50 mm	Maximum workpiece he 390 mm	ight
(F100) (F100)	F-theta standard	50×			ight
\bigcirc	F-theta standard Fused silica scanning lens F-theta standard	50× 70×	50 mm	390 mm	ight
F100	F-theta standard Fused silica scanning lens F-theta standard Fused silica scanning lens F-theta standard	50× 70× 112×	50 mm 70 mm	390 mm 390 mm	ight
(F100) (F163)	F-theta standard Fused silica scanning lens F-theta standard Fused silica scanning lens F-theta standard Fused silica scanning lens F-theta standard	50× 70× 112× 150×	50 mm 70 mm 112 mm	390 mm 390 mm 330 mm	ight
(F100) (F163) (F210)	F-theta standard Fused silica scanning lens F-theta standard Fused silica scanning lens F-theta standard Fused silica scanning lens F-theta standard Fused silica scanning lens	50× 70× 112× 150× 175×	50 mm 70 mm 112 mm 150 mm	390 mm 390 mm 330 mm 280 mm	ight

Bundle Prices include 1x laser workstation, 1x fume extraction system, 1x Lightburn software (no PC), 1x day installation and training. Packaging and freight will be charged separately on top of pricing.

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System Specifications

CARMINE	
Dimensions (Length × Width × Height)	72 × 75 × 84 cm 125 cm tall with the door open.
Weight	65 to 95 kg
Laser focus control	Automatic and programmable Supports unlimited user-defined presets.
Software compatibility	Windows, macOS and Linux
Data ports	TIA-232 (accessory connection), USB-C (computer connection), USB-A (diagnostics)
Gas ports	Fume extraction outlet, compressed air inlet, shielding gas inlet Effortless clamp-free attachment system.
Included accessories	Operator keys (x2), IEC C13 power cable, USB-C data cable, USB drive with details

YouTubes

Heatshrink Marking | Carmine Cold: https://www.youtube.com/shorts/PMsZ3JpN3ss

Ziptie Marking | Carmine Cold: https://www.youtube.com/shorts/EXN_vX5PZj0

Black Acrylic Marking | Carmine Cold: https://www.youtube.com/shorts/tbL_nJKVJew

Grey Silicone Marking | Carmine Cold: https://www.youtube.com/shorts/pB6YTIYTc2Y

White Silicone Marking | Carmine Cold: https://www.youtube.com/shorts/xFtphMbzozo

ABS Marking | Carmine Cold: https://www.youtube.com/shorts/if19G9oPdLw

Plastic Plate Marking | Carmine: https://www.youtube.com/shorts/NyLxTTkyKm8

Polycarbonat Marking | Carmine: https://www.youtube.com/shorts/h6cAOXawPRY

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Prices Red Carmine

Red Carmine, IR 1064 nm, laser workstation, MOPA fiber laser source:

Model	Description	Price excl. VAT	Notes
SC30-GB1	Carmine 30W laser workstation	25.500 €	Yb doped MOPA fiber source
SC60-GB1	Carmine 60W laser workstation	28.500 €	Yb doped MOPA fiber source
SC80-GB1	Carmine 80W laser workstation	29.999 €	Yb doped MOPA fiber source
SC100-GB1	Carmine 100W laser workstation	32.950 €	Yb doped MOPA fiber source
SC120-GB1	Carmine 120W laser workstation	34.950 €	Yb doped MOPA fiber source

All equipped with software

Red Carmine accessories for IR 1064 nm MOPA fiber laser source:

Model	Description	Price excl. VAT	Notes
SRM20-B1	Rotary Mini	1.750 €	
TBF10S-G1	TBH BF10 Fume Extractor, inclusive Carmine sync cable for remote help	2.150 €	
SFESC-G1	Carmine sync. Cable for TBH systems	159 €	
SCCB-B1	Basic positioning & monitoring camera	559 €	
SCCA-B1	Advanced positioning & monitoring camera	829 €	
SCFA-B1	Basic Fixture Kit	459 €	
SFTL-B1	Replaceable Lenses for following work areas [mm]: 50x50, 75x75, 110x110, 150x150, 175x175, 200x200, 300x300	590 €	

custom accessories on request



Prices Carmine Blue

Blue Carmine, UV 355 nm, laser workstation, DPSS source:

Model	Description	Price excl. VAT	Notes
SCC5-GW1	Carmine Cold 5W laser workstation	28.200 €	
SCC10-GW1	Carmine Cold 10W laser workstation	32.500 €	
SCC15-GW1	Carmine Cold 15W laser workstation	36.000 €	
SCC20-GW1	Carmine Cold 20W laser workstation	48.500 €	
SCC30-GW1	Carmine Cold 30W laser workstation	62.500 €	

All equipped with an advanced positioning camera, a water chiller, a mechanical safety shutter and software.

Blue Carmine accessories, for UV 355 nm DPSS laser source:

Model	Description	Price excl. VAT	Notes
SRM20-B1	Rotary Mini	1.750 €	
TBF10S-G1	TBH BF10 Fume Extractor, inclusive Carmine sync cable for remote help	2.150 €	
SFESC-G1	Carmine sync. Cable for TBH systems	159 €	
SCFA-B1	Basic Fixture Kit	459 €	
SFTL-B1	Replaceable Lenses for following work areas [mm]: 50x50, 75x75, 110x110, 150x150, 175x175, 200x200, 300x300	590 €	



Prices for Services

Туре	Description	Price excl. VAT	Notes
INST-1/2D	Installation on site (4 hours)	600€	
INST-1D	Installation on site (8 hours)	1.200 €	
TRAIN-1/2D	Training on site (4 hours)	600€	
TRAIN-1D	Training on site (8 hours)	1.200 €	
REMOTE-1/2D	Remote services (4 hours) for either installation or training	490 €	
REMOTE-1D	Remote services (8 hours) for either installation or training	980 €	

All listed prices	herewith are net prices, VAT has to be charged additionally.			
Payment terms:	50% down payment by order acknowledgement 25% payment on delivery announcement			
	25% payment 15 days after installation			
<u>Delivery times</u> are	5-6 weeks	<u>Warranty:</u>	24 months after delivery	

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