

acal | bfi



Acal BFi France

Fournisseur de solutions de soudage laser portable

Fournisseur de solutions pour les applications de marquage, gravure et découpe laser

Qui est Acal BFi?

“Nous développons des solutions en partenariat avec nos clients à partir des technologies Photonique et Imagerie les plus avancées sur le marché”



Pourquoi les clients choisissent ils ACAL?

Nous offrons une **présence pan-européenne** qui garantit un soutien local, une communication efficace et une logistique fiable.

Depuis 1973, nous travaillons avec des leaders technologiques sur les marchés les plus importants d'Europe.

Grâce à nos **10 unités commerciales différentes**, nos clients ont un accès unique à un éventail complet de technologies.

Nos clients ont un accès complet à **nos 8 centres technologiques** pour des solutions personnalisées.

Extension d'une présence paneuropéenne

Nous sommes présents dans 11 pays en Europe, avec plus de 400 employés, 150 ingénieurs, 8 centres technologiques et 3 centres logistiques en Allemagne, au Royaume-Uni et à Hong Kong.

Nous avons des bureaux en :
France, Allemagne, Italie, Angleterre, Espagne, Pays-Bas, Belgique, Suède, Finlande, Danemark et Norvège.



we made WELDING easier than you can imagine!

Introducing World's **Lightest** and **Most Compact**
Professional Handheld Fiber Laser Welding Machine Family



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Smallest And lightest

The one and only TRUELY Portable System

It weighs **only 39kg** and the **volume is <0.1m³**.
It is currently the lightest and smallest handheld laser welding machine in the world. The feeder cable can be placed in the cable reel to make the machine more compact to be stored or transported. Thanks to the light weight and our unique cable sleeve locking mechanism, the feeder cable can be used to pull the machine to move around in the working area, which makes it more convenient to use during operations.

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Only 39kg

Volume <0.1m³

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Solution clé en main de soudage laser

Easy to Learn, Easy to Weld, Excellent Performance!



Product Model		X1w-1500	MA1-65	MA1-45	MA1-35
Weld Thickness (mm)	Stainless steel	5	6.5	4.5	3.5
	Carbon steel/Iron	4.5	6.5	4.5	3.5
	Aluminum	4	5.5	4	3
	Galvanized sheet	5	6.5	4.5	3.5
	Brass	3	4.5	3.5	2.5
	Copper	--	3	1.5	--
Wobble (mm)		0-4	0-4	0-4	0-6
Operating Temperature (°C)		0-40	0-40	0-40	0-40
Operating Temperature (°F)		0-104	0-104	0-104	0-104
Weight (kg)		39	39	38	25
Weight (pounds)		86	86	84	55
Dimensions (mm*mm*mm)		667*276*542	667*276*542	667*276*542	576*265*425
Dimensions (in*in*in)		26.3*10.9*21.3	26.3*10.9*21.3	26.3*10.9*21.3	22.7*10.4*16.7
Volume (m³)		< 0.1	< 0.1	< 0.1	0.06
Volume (cubic feet)		< 3.5	< 3.5	< 3.5	2.1

Maxphotonics' new generation of handheld laser welding are light weighted, small sized, portable, flexible to use, simple to operate and easy to learn. In stainless steel, carbon steel, aluminum, galvanized sheet, copper and other wider materials to achieve better quality and uniform welding effect, excellent welding performance, fast welding speed, high welding strength, and small heat affected zone. It will never produce the situation of deformation, edge biting and burn through, etc, no need subsequent grinding or polishing. Thus, the overall production efficiency is significantly improved, the consumable waste is reduced and cut the produce cost of each workpiece.



With 5 different copper nozzles

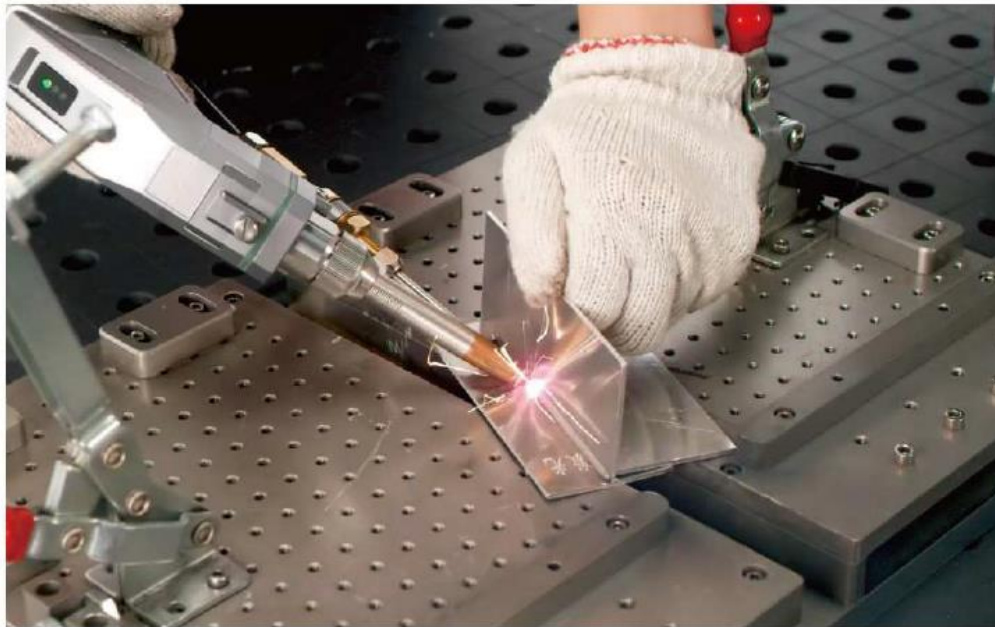
- **Smaller**
- **Lighter**
- **Truly Portable**

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Excellent welding performance energy saving and environment Friendly

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- **Up to 4 times** faster than traditional welding methods, which helps our customers to **save 80% to 90% of electrical energy**, greatly improve production efficiency and reduce overall operational cost.
- State of art laser control system brings high beam stability, consistent and neat welding seam, improved welding strength and minimum deformation.
- Cooling system adopts phase change heat conduction technology with powerful self-adaptive fans, which ensures long-term stability.



Solution clé en main de soudage laser



Galvanized

Carbon steel

Stainless steel

Aluminum

Copper

	Traditional welding method	laser welding machine
Physical hazard	Large radiation and smoke	Low radiation, environmentally friendly
Welding speed	Slow and inefficient	Up to 4 times faster than TIG and MIG
Welding quality	Welding seam are rough and irregular, need to be polished	Beautiful and neat welding seam, deep molten pool and high strength
Learning difficulty	High	Low
Heat affected zone	Large	Small
Bending deformation	High	Low
Welding seam damage	With air holes, easy to weld through	Uniform molten pool and good consistency
Welding materials	Limited by changes in consumables	Wide range of materials

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The lightest and smallest handheld welding torch in the industry

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Our unique handheld welding torch weighs **only 0.68kg** and at the same time it comes with compact size and ergonomic design. It has been proven to be the most comfortable, stable, and easy-to-operate welding torch of its kind. In addition, multiple safety precautions allow for continuous and safe welding operations throughout the day.



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Simple and easy to use

- Embedded with 24 pre-set modes for various material easy welding
- Only half hour training needed for beginners to operate the welding system
- Beginners can use the pre-set modes to achieve the same high-quality, consistent, and neat welding seems like experienced operators.
- Pre-set modes include wobble parameters, suitable for wider welding seams and high tolerance for workpiece assembly clearance.
- For advanced operators, additional process modes for different materials and thickness combinations can be created and stored.

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7 inch touch screen



Ecrans – Rideaux – Barrières - Stores de protection laser

- Certification EN 12254:2010 et EN 207
- Barrières de protection laser flexibles/rigides et autoportantes
- Rideaux/écrans et panneaux de protection laser montés sur portiques fixes ou mobiles, rails ou tringles, roll up.
- Stores de protection laser déroulants
- Solutions disponibles en dimensions standards et custom
- Nous recherchons des installateurs pour proposer une solution clé en main rideaux sur rails



Lunettes - Sur lunettes - Masques de protection laser

- Filtres et montures certifiés EN 207/EN 208
- Large choix de filtres en verre minéral et polycarbonate (de l'UV à l'IR lointain)
- Développement de filtres spéciaux possible



Accessoires de protection

- **station de nettoyage des lunettes de protection laser**
- **Sangles ou serre-tête**

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Merci de votre attention