Bodor Aqu Series

Self-Cooling Handheld Laser Welder



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Weld with Might Peak of its Height





Full Power
Full Force

Triple craftsmanship achieves full power for the whole series.

Small Core Fiber:
Aqu uses small core fibers to deliver superior beam quality and enhanced depth performance at the same power.

Self-Developed High-Converting Light Source :
Aqu reduces heat while providing a continuous high-energy beam through Bodor self-developed high-converting light source.

Optimized Manufacturing:
From component selection and design optimization to fiber connection and beam quality control, excellent manufacturing ensures the laser source delivers full power with exceptional beam quality.



Higher Welding Efficiency

For welding thin sheets under 3mm, the welding speed is doubled compared to traditional MIG and TIG welding.

1mm Sheets Welding Speed

190 cm/min

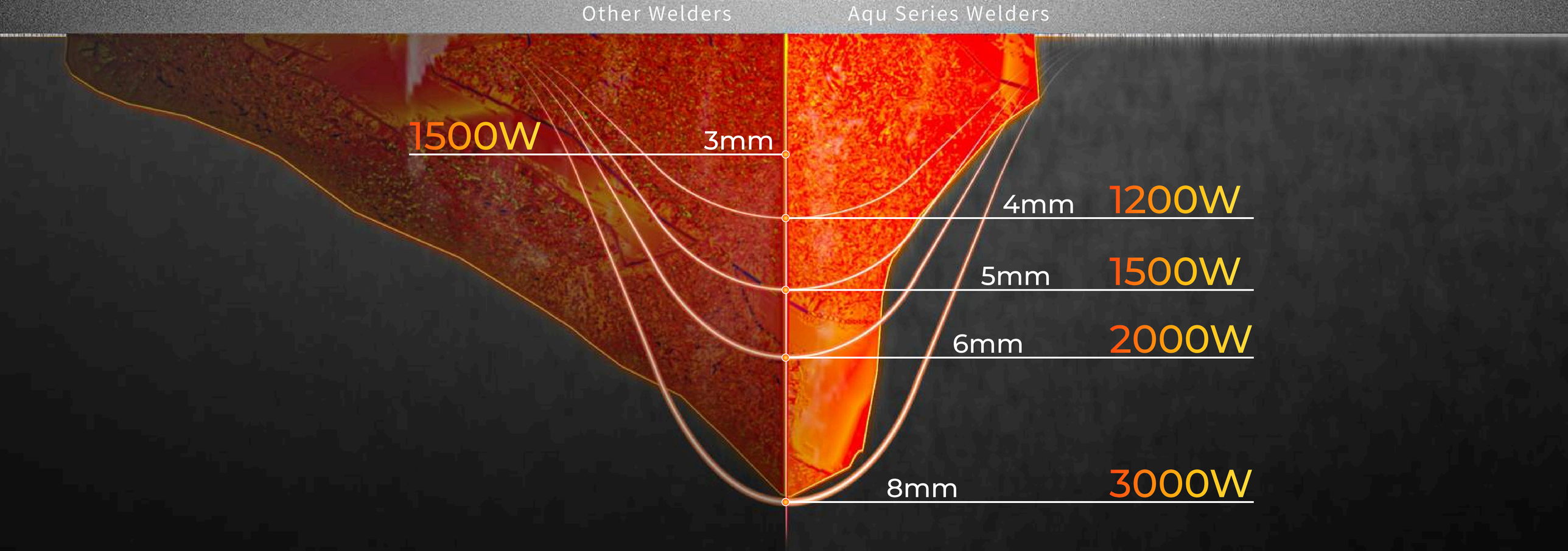
Overall Welding Efficiency Improved By

20 %

Deeper Penetration Stronger Connection

Four power levels (1200W, 1500W, 2000W, and 3000W) can achieve a maximum penetration depth of 4 mm, 5 mm, 6 mm, and 8 mm respectively, meeting various needs with different powers and creating an indestructible welding quality.

The Aqu Series offers diverse powers and outstanding performance.



Unmatched Excellence

Certified Performance

With full power, the Aqu seamlessly integrates fish scale and spot welding, producing smooth, neat, and visually appealing seams. Certified by CNAS, Aqu’s welded components surpass market standards in bend resistance, hardness, and tensile strength.



检 测 报 告

报告编号： ADTK20230814004-1
报告日期： 2023/08/16
页 码： 1 / 3

委托单位： 济南邦德激光股份有限公司
单位地址： 山东省济南市历城区华奥路 3999 号
样品名称： 碳钢焊接样板（Q235）
母材规格牌号： Q235+Q235(4mm+4mm)
焊材规格牌号： /
焊接方法： /
接头形式： /
焊接位置： /
检测部位： 焊缝+热影响区+母材
样品数量： 5 件
备注： /

样品来源： 委托方送样
样品描述： 完好
到样日期： 2023/08/14
检测日期： 2023/08/14-2023/08/16
检测评价依据： 委托方提供技术要求
检测结果： 详见后续页

More Stable Self-Developed System

Aqu is equipped with a self-developed dual-core motherboard, which greatly improves the stability of the system. In a complex and changeable working environment, it can maintain **7*24h** stable operation.



*7*24h stable operation requires an environmental temperature range of -20°C~40°C.

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Cutting/Cleaning Always Shining

*At the full power condition,

Max. Cutting Thickness

5mm

Various types of sheets
can be cut with ease.

Max. Cleaning Width

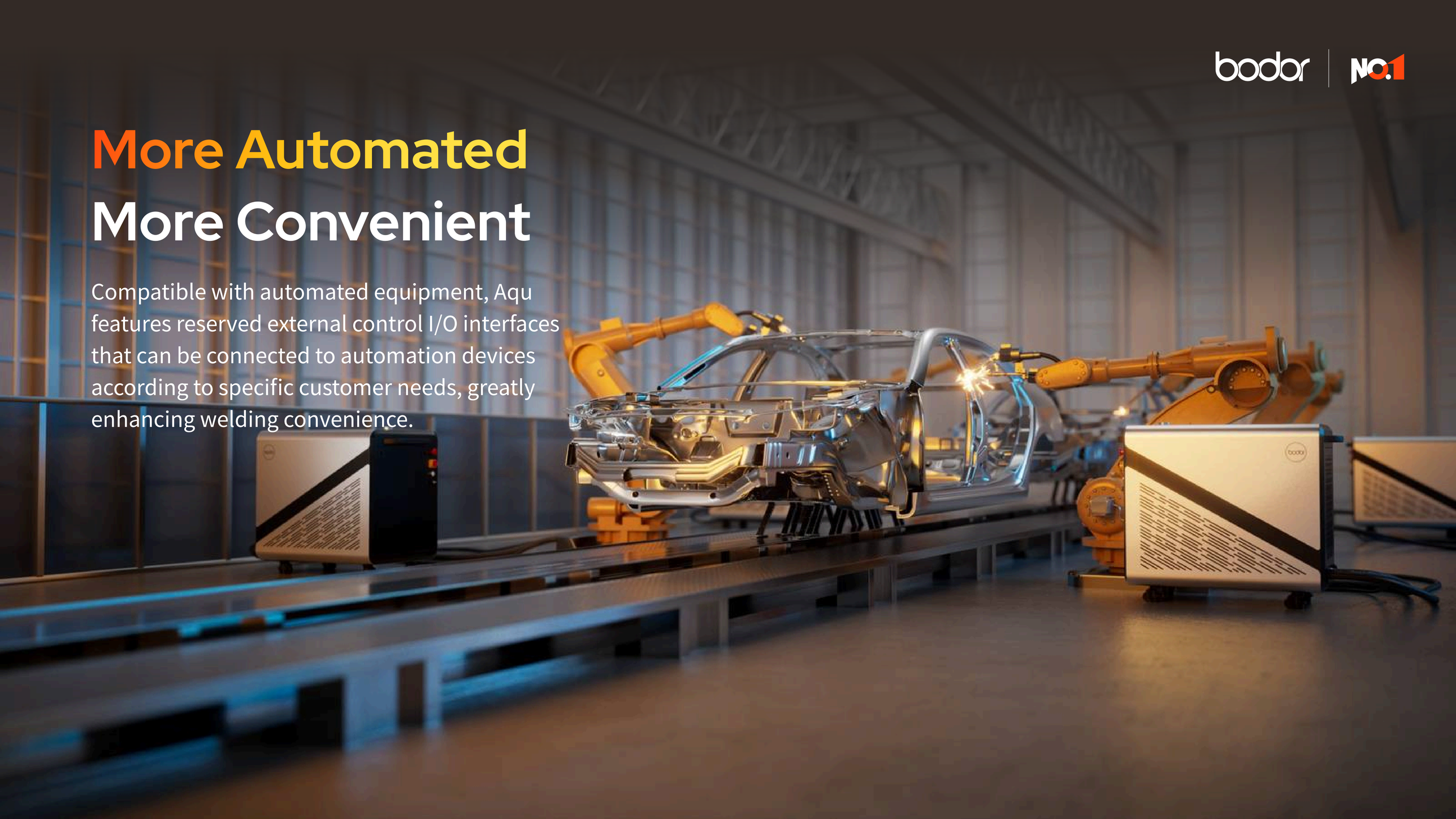
120mm

Rust, paint, and other stains
can be effortlessly removed.



More Automated
More Convenient

Compatible with automated equipment, Aqu features reserved external control I/O interfaces that can be connected to automation devices according to specific customer needs, greatly enhancing welding convenience.



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Lower Costs
Higher Cost-Efficient

Aqu brings triple savings and creates an excellent welding experience with high cost effectiveness for you.



Fewer Consumable Costs

25%

Using Nitrogen
Instead of Argon

Lower Labor Costs

50%

No Need for
Extra Grinding

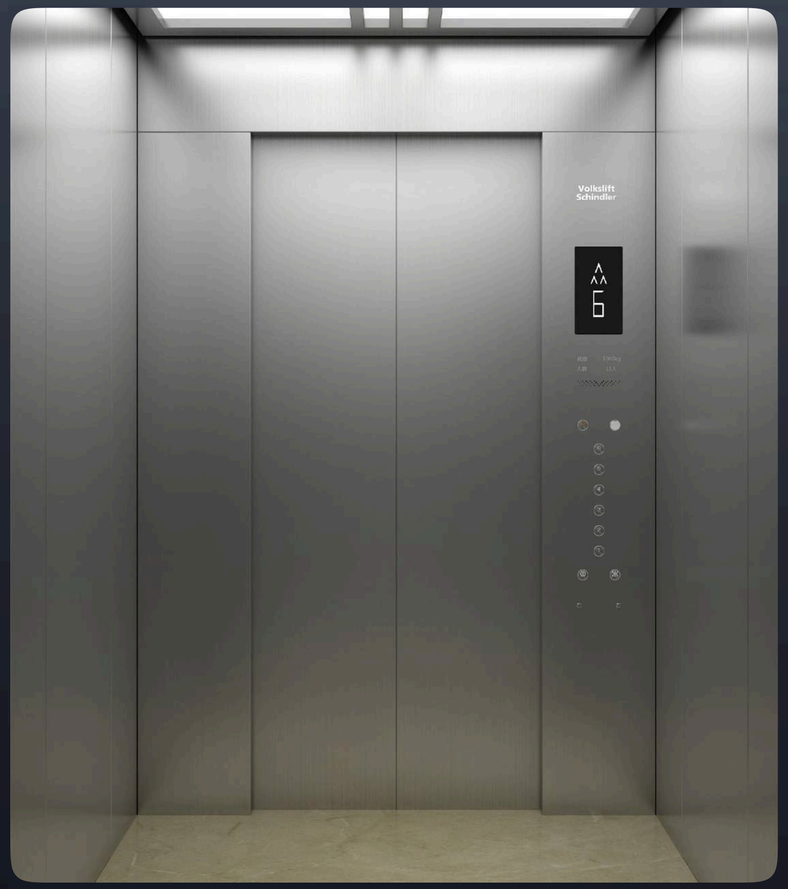
With no welding certification required

0.5h to get welded with ease





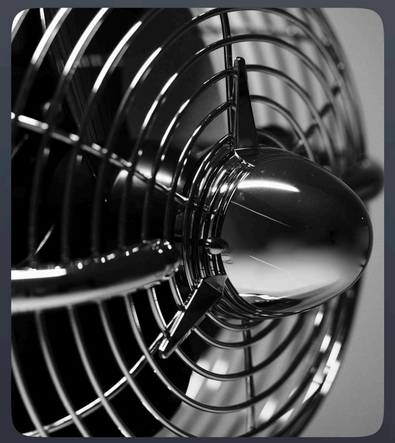




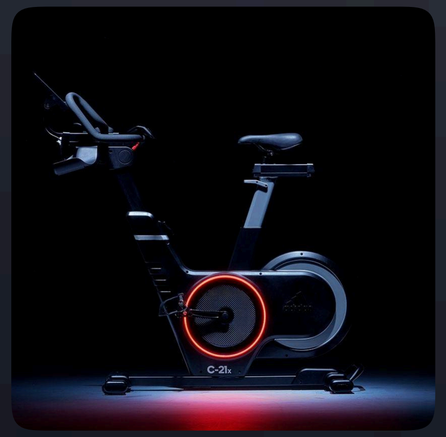
Self-Cooling Handheld Laser Welding Machine

Applicable Industries

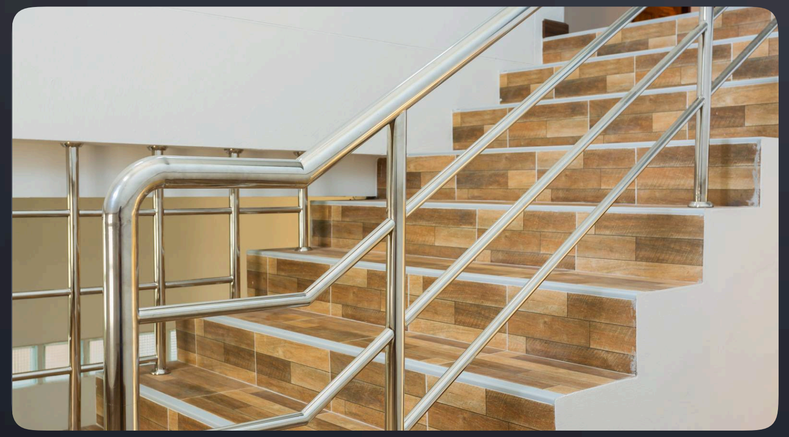
Widely applied in kitchenware, sheet metal processing, stainless steel products, ventilation ducts, shelves, crafts, stair handrails, computer cases, furniture, home appliances and other industries.

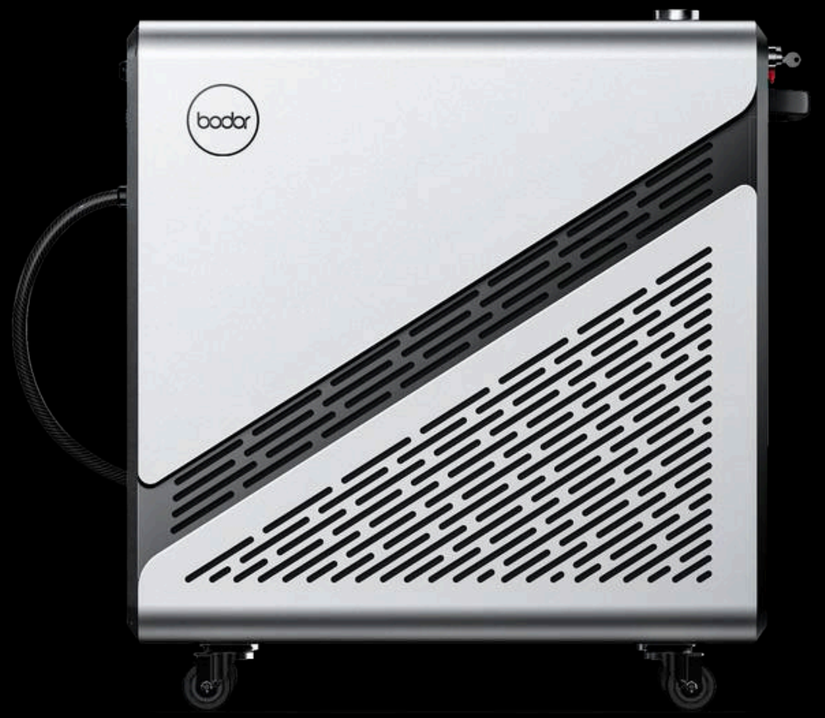












Aqu Series Parameters

	Aqu 1200	Aqu 1500	Aqu 2000	Aqu 3000
Output Power	1200W	1500W	2000W	3000W
Length Of Optical Fiber Cable	10m±0.5m	10m±0.5m	10m±0.5m	10m±0.5m
Welding Thickness	Carbon Steel：4mm Stainless Steel：4mm	Carbon Steel：5mm Stainless Steel：5mm	Carbon Steel：6mm Stainless Steel：6mm	Carbon Steel：8mm Stainless Steel：8mm
Cooling Method	Water Cooling	Water Cooling	Water Cooling	Water Cooling
Constant-Power Continuous Light Emission	●	●	●	●
Operating Ambient Temperature Range	-20℃ to 40℃	-20℃ to 40℃	-20℃ to 40℃	-20℃ to 40℃
Weight	130kg	140kg	155kg	170kg
Dimensions	850mm×625mm×885mm	850mm×625mm×885mm	850mm×625mm×885mm	960mm×625mm×885mm

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