# BodorMelder

### Self-cooling Handheld Laser Welding Machine



### Redefine Handheld Laser Welding with Self-cooling Technology

Reliable in Extreme Cold and Heat

🔗 Self-cooling Technology

\* Continuous Laser Output



### **Constant Temperature, Universal Reliability**

Discover a superior welding experience with BodorWelder 1500, engineered to perform remarkably well in climatic extremities in humidity levels of up to 90%.





aodorWeider 15c

booh

### Temperature : -20°C Humidity : 81% Continuous laser output

Our rigorous testing at the national-level enthalpy difference laboratory stands testimony to this claim, underscoring our commitment to providing an unwavering welding solution.

### Welding Performance Test Report of BodorWelder 1500 in Extreme Cold and Heat



### Objective:

To ensure the BodorWelder 1500 operates reliably across global climatic variances, we designed thorough tests emulating diverse climate scenarios, aiming to deliver enduring value and a premier user experience to our customers.

### Test Outline:

Four BodorWelder 1500 units from the same production batch were tested under varying temperatures (-20°C to 60°C) and humidity levels (30% to 90%). The tests were structured to gauge the machine's performance in transitioning temperatures and humidity, focusing on continuous light output capabilities.

### Key Findings:

Continuous, flawless operation was recorded in the temperature range of -20°C to 60°C and humidity range of 30% to 90%.
Under sharp temperature fluctuations, the equipment maintained a stable light output with power oscillating between 1400-1430W.
In a controlled room temperature and humidity (25°C /50%), the light output power remained within the range of 1470~1480W.
The ambient temperature had no adverse impact on equipment operation throughout the testing period.

Test Duration: June 1, 2023, to August 30, 2023 Location: Shandong Boke Environmental Equipment Co., Lt



### Temperature : 60°C Humidity : 90% Continuous laser output

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### Welding Performance Test Report of BodorWelder 1500 in Extreme Cold and Heat



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### **International Accreditation**

Our tests have been validated by the CNAS authoritative certification agency, revealing that steel processed with our self-cooling handheld laser welding showcased exceptional resilience in bending, hardness, and tensile strength tests. The weld quality was notably superior, exhibiting smooth, sturdy, and deformationfree seams.







# **Innovative Features**

### **High-Efficiency Laser Source**

Our self-developed laser source guarantees lower heat generation while delivering a continuous high-energy beam, ensuring optimal welding performance.

Constant Temperature Circulation Utilizing Bodor's patented Constant Temperature Circulation system, BodorWelder effortlessly maintains precise temperature control, facilitating continuous welding even in harsh conditions.

### Advanced Cooling System

The high-performance condensing heat dissipation mechanism, combined with an efficient compressor and intelligent refrigerant control, keeps core components cool, unaffected by external temperature variations.



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### **User-Friendly Interface**

With a simple, intuitive knob-type interactive design, adjusting parameters and saving processes become a breeze, even for beginners.



Save techniques



Start welding



### **Compact yet Potent**

Unlike traditional water-cooled welding equipment, our self-cooling handheld laser welding design requires **no built-in water tank**, making it lightweight and portable. Despite its compact footprint of just 0.24m<sup>2</sup>, it packs a punch thanks to our smart control constant temperature technology.







## Versatile Applications

BodorWelder comes with dedicated welding/cutting nozzles, making it adaptable to various processing scenarios, ready to meet diverse customer requirements.







### Machine Parameter

Output Power	1500W
Optical Fiber Cable Length	10m
Cooling Method	Self-cooling
Laser Output	Continuous
Operating Ambient Temperature Range	-20°C -60°C
Maximum Welding Material Thickness	4mm
Overall Weight	55kg
Dimensions	760mm × 325mm × 540mm



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Dare to dream