

HRLASER

A3MD40i

A3MD30i

A3M50i

A3 series

01

Deeper penetration

Upgrade to the D mode at top speed

Further solve the problem of insufficient penetration and incomplete penetration when welding thick plates over 3mm

Upgrade A3 to D mode to increase instantaneous power and achieve greater penetration depth

Ensure high efficiency, low energy consumption and deep weld seams

The penetration depth has increased by 30%

The fastest welding speed has been increased by 22%

Low energy consumption (higher photoelectric conversion rate)



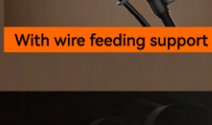
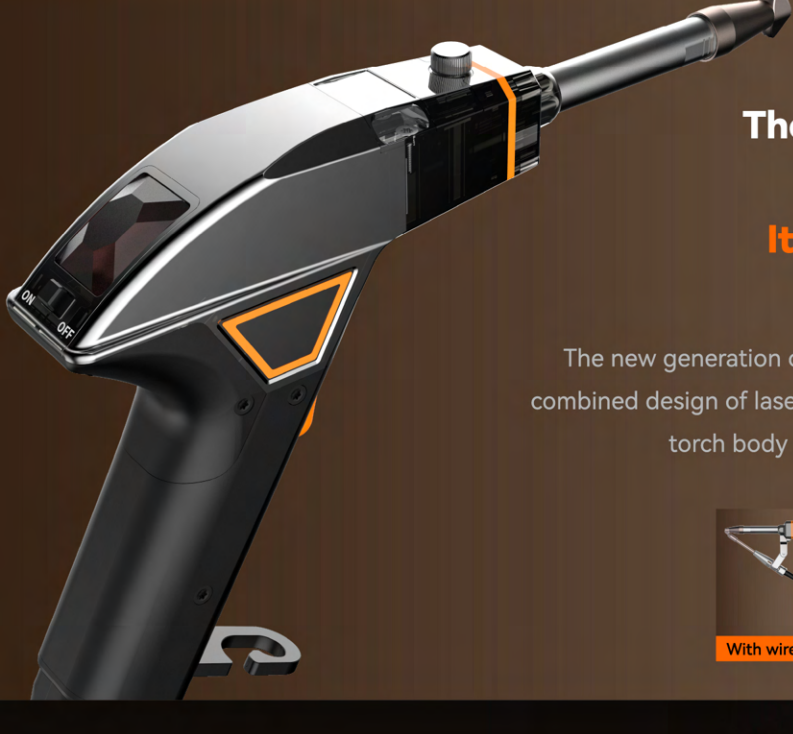
02

The second-generation welding torch

has been newly upgraded

It is lighter to handle and has better maneuverability

The new generation of welding torches is ergonomically designed, featuring a combined design of laser optical path spot, collimating mirror, galvanometer and torch body diameter. Slimming down together is easy and effortless.



With wire feeding support

490_g

The welding torch is light

32_g

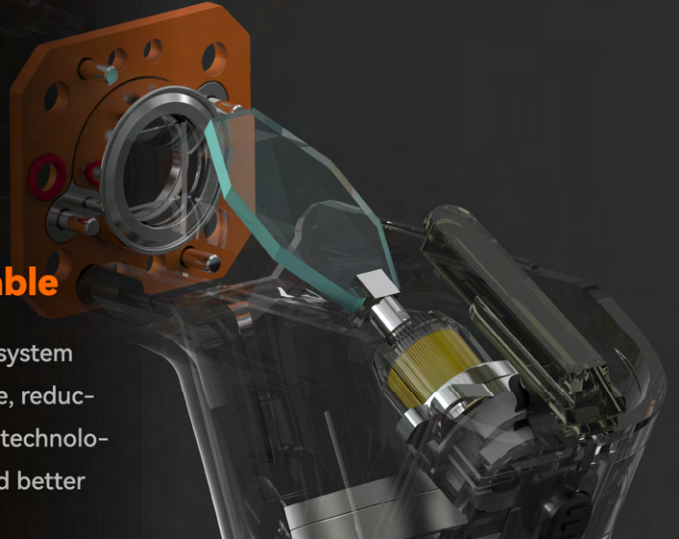
The smallest and lightest motor

03

All-digital galvanometer system

Upgrade to standard 6-meter armored cable

It is the only one in the industry to embed the galvanometer drive system into the gun head structure and connect it with an integrated cable, reducing the transmission path. It also adopts all-digital communication technology, which is more durable, has stronger anti-interference ability and better reliability.



04

The wire feeding machine has

been newly upgraded

Compatible with up to 20KG wire rolls

The brand-new dual drive motor provides more powerful wire feeding

The fully enclosed design protects the internal structure of the wire feeding, making it safer and more reliable

The centerline of the screw disk and the wire feeding assembly is coaxial, reducing friction and ensuring smoother wire feeding



05

The air-cooling technology generations

The advanced technology new peak

Inheriting the previous generation of aerospace-grade cooling solution, we exclusively design the "high performance heat pipe radiator" By using high-performance copper tube arrays, cutting-edge "phase change" materials and intelligent temperature control algorithms

, light can be produced stably even at extreme temperatures



06

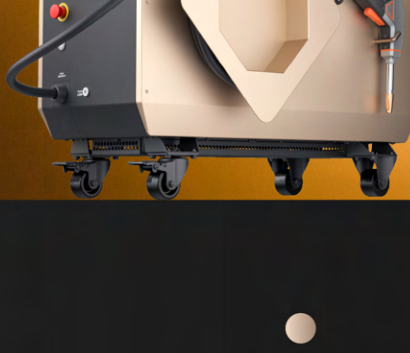
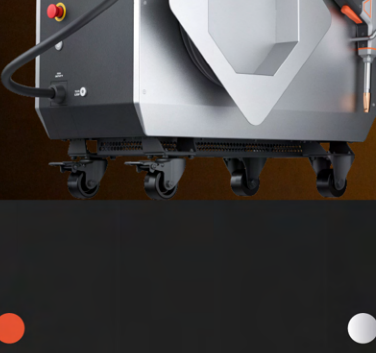
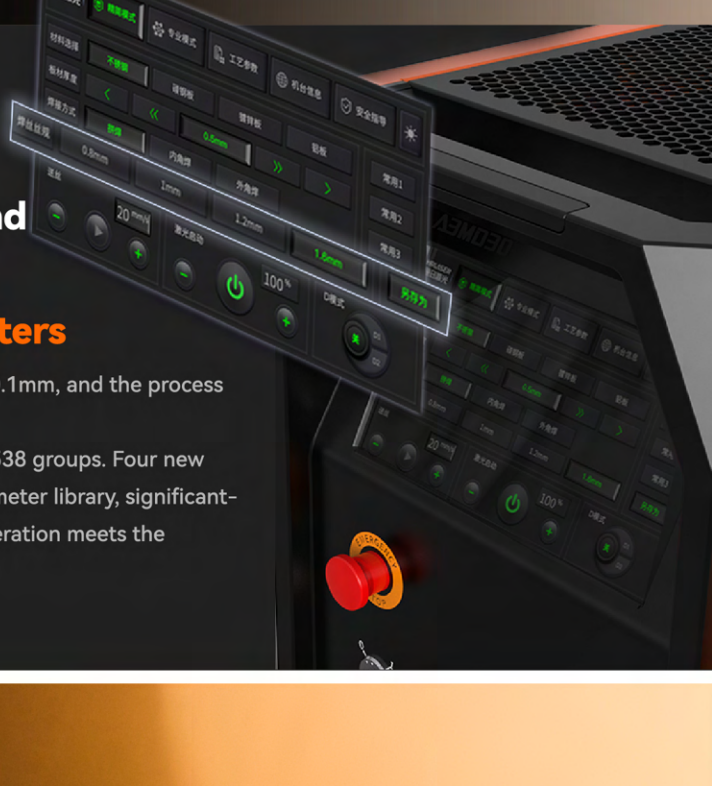
The brand-new upgraded intelligent and

streamlined mode

Intelligently match the optimal parameters

The thickness selection of the sheet has been upgraded from 1mm to 0.1mm, and the process adaptation is more precise

The built-in parameter library has been upgraded from 110 groups to 538 groups. Four new groups of wire specification adjustments have been added to the parameter library, significantly improving the welding accuracy and ensuring that every welding operation meets the optimal standard



A3MD30i

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A3M50i

Parameter

Overall weight	29KG	32KG	39KG
Overall volume	0.08m ³	0.08m ³	0.09m ³
Overall dimensions	560*260*502mm	560*260*502mm	670*260*502mm
Welding torch weight	0.49kg	0.49kg	0.49kg
Working modes	continuous, quasi-continuous, pulse	continuous, quasi-continuous, pulse	continuous, quasi-continuous, pulse
Operation method	7-inch IPS screen	7-inch IPS screen	7-inch IPS screen
Input voltage	AC220V	AC220V	AC220V
Cooling method	air cooling phase change	air cooling phase change	air cooling phase change

Depth of penetration(mm)

Stainless steel	3.5	4.5	6.0
Carbon steel/iron	3.5	4.5	6.0
Galvanized sheet	3.5	4.5	6.0
Aluminum	2.7	3.7	4.0
Brass	2.5	3.0	3.5
Red copper	1.0	2.0	2.5

According to the tests conducted by HRLASER Laboratory, the thickness of the weld is related to the material quality, welding speed, welding method, and welding temperature, etc