ROVELL LASER

ONE WORLD,ONE ROVELL LASER

PRODUCT BROCHURE

LASER WELDING/CLEANING/MARKING MACHINE



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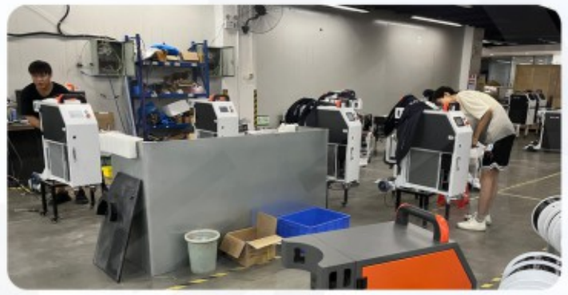
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Highly efficient modern factory









About Us

Rovell laser in 2017, is a group company integrating R&D, production, and sales of laser intelligent and automation equipment. At the same time, Rovell laser is a leading international laser solution provider; our core strength lies in our ability to perform design-based customization and supply to Fortune 500 companies. As a custom manufacturer, we specialize in minor customization as well. Provide customers with comprehensive technical support and services. Laser welding and cutting machine series: handheld laser welding machine, full-automatic laser welding machine, robot laser welding machine, robot laser cutting, automatic laser cutting. Our products hold CE & FDA certifications. Customers around the world highly praise our products for their stable performance and our after-sales service system.

50+	300+	CNY5million	3000SetS	5000+
R&D patents	R&D teams	Annual R&D investment	Equipment prduced per year	Enterprises served







Certification Reports









Why Choose US

OVER 10 YEARS OF R&D AND PRODUCTION EXPERIENCE IN LASER EQUIPMENT MANUFACTURING

We are a direct manufacturer, you are welcome to visit the factory at any time, the product has strong maintainability. The parts prone to partial loss are designed into adjustable or removable modules to facilitate component replacement and avoid mutual involvement and repeated debugging. Rovell laser always maintains favorable market competitiveness and flexible applicability products can be developed customized, produced and installed according to actual customer needs.



All-in-One Handheld Laser Welder



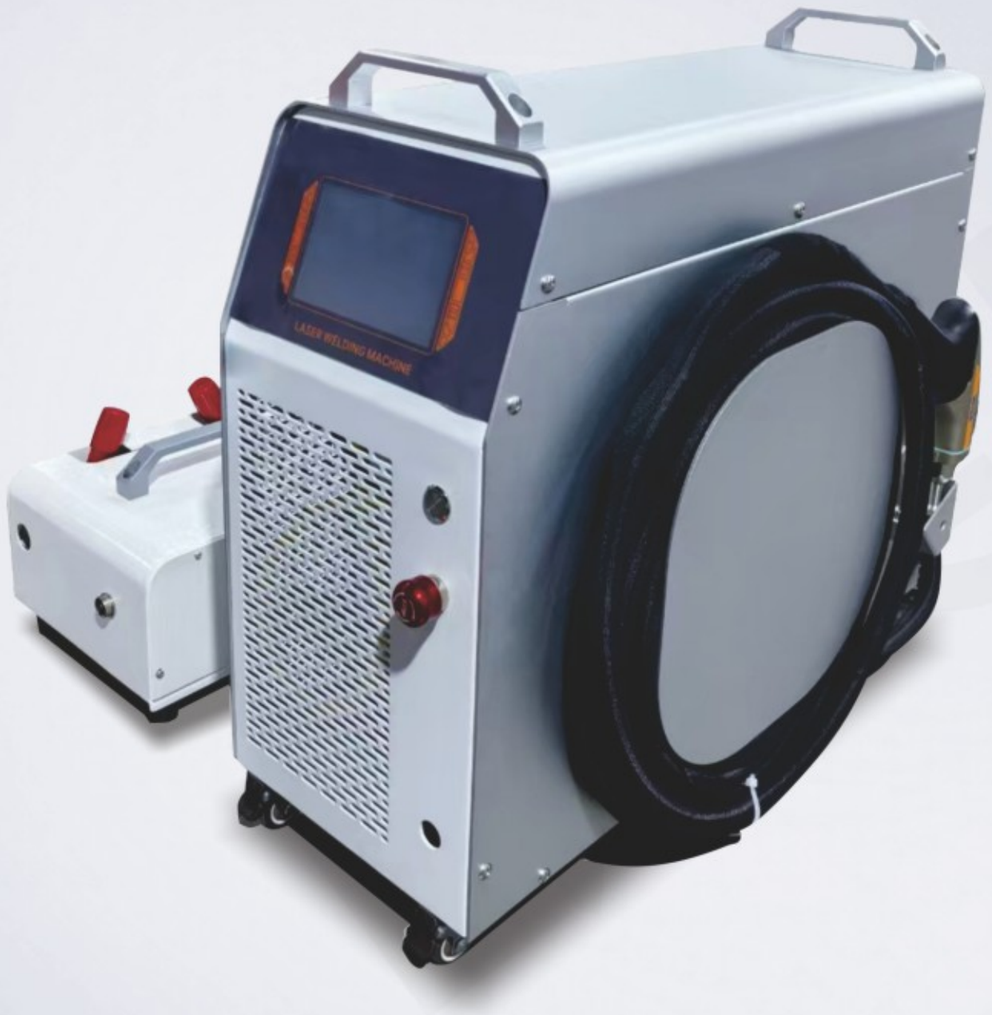
Product Features

- Stop wrestling with messy setups. Our 800W Handheld Laser Welder features a fully integrated wire feeder, built directly into the chassis for maximum portability Whether you're in the shop or on-site,enjoy true grab - and - go convenience;
- Integrated Design: Built - in wire feeder for a clutter- free workspace;
- Instant Start: Precision welding the moment you power on;
- Ultra-Portable: Compact footprint for easy transport and storage.

Technical Parameters

Item Name	Parameter
Laser Type	Fiber Laser
Laser Power	800W/3,5KW
Laser Wavelength	1080nm±10
Output Cable Length	10M
Working Mode	Cwmode ormodulation
Speed Range	25~50mm/s
Cooling Method	Aircooling. phase change materials intelligenttemperature control algorithm
Working Environment Temperature	-10~40°C
Working Environment Humidity	10%~85%
Working Voltage	AC110~240V
Body Size(L*W*H)	560×300×450
Control Mode	Touchscreen
Continuous Light Output Time	24-hour
Overall Weight(with gun head)	<25kg

Easy-welder Air-cooling Handheld Laser Welding Machine



Product Features

- Ultra-Portable Design: Eliminates bulky water chillers. A compact, lightweight system engineered for effortless onsite repairs and workshop mobility;
- Instant Mastery: An intuitive interface allows beginners to achieve professional-grade welds in minutes, drastically reducing labor and training costs;
- 10x Faster Productivity: Outperforms traditional TIG welding by up to 10 times, delivering high-speed, deep-penetration results to maximize your daily output;
- Zero - Grind Quality: Concentrated heat input ensures minimal distortion and clean, flawless seams that require no secondary grinding or polishing;
- Maintenance-Free Reliability: The air-cooled architecture removes the need forwater pumps and filters, ensuring maximum uptime and the lowest total cost of ownership.

Technical Parameters

Item Name	Parameter		
Power	1200W	1500W	2000W
Model	UK-F1200	UK-F1500	UK-F2000
Total Weight	⩽37KG	⩽42KG	⩽43KG
Dimension	585×290×510		
Wave length	1080NM±10nm		
Optical Fiber Length	10m		
Working Mode	CWM/ARM		
Welding Machine Speed Range	0~25mm/S		
Operating Ambient Temperature	-15~40°C		
Operating Ambient Humidity	<80%, no condensation		
Recommended Welding Thickness	⩽6mm		
Welding Seam Requirements	⩽20% of board thickness		
Working Voltage	AC220V 50/60HZ		

Handheld Laser Pulse Welding



Product Features

- Ultra-High Precision: Spot size as small as 0.01 mm enables micro-welding of delicate components without damaging surrounding areas;
- Minimal Heat Input: Narrow pulse width (0.1-20 ms) creates a tiny heat-affected zone (<100 um), preventing warping and material degradation;
- Excellent Hermetic Sealing: Achieves leak rates below $5x10^{-9}$ Pa-m^3/s, ideal for semiconductor, medical, and electronic packaging;
- Versatile Material Compatibility: Welds dissimilar metals (copper-aluminum copper-silicon carbide) and high-reflectivity materials with ease;
- Fast & User-Friendly: Handheld design with intuitive controls reduces setup time; pulse-shaping technology ensures consistent, high-quality welds even for operators with minimal training.

Technical Parameters

Item Name	Parameter
Working Mode	Pulse
Peak Power	1000 W
Pulse Duration	⩽50 ms
Center Wavelength	976 nm
Pilot Beam Output Power	0.2 nw
Output Cable Length	5 m
Working Voltage	AC 110~240V
Body Size(L*w*H)	200×510×348mm
Cooling Method	Air-cooling
Overall Weight(with gun head)	15 KG
Working Environment Temperature	-10~40°C
Gas Pressure	0.2–0.4 Mpa
Gas Flow Rate	⩾5 L/min

ALL-IN-ONE HANDHELD LASER WELDER
Water-cooling



Product Features

- All-in-One Integration: Features a built-in wire feeder for a streamlined, cable-free workflow and a smaller factory footprint;
- Maximum Portability: Ultra-compact and lightweight, designed for effortless mobility in tight spaces and onsite repairs;
- Superior Gap-Bridging: Synchronized internal feeding ensures strong, consistent welds even on widegaps and uneven joints;
- Instant "Plug&Play": Intuitive controls allow beginners to achieve professional-grade esults with zero setup hassle;
- Flawless Finish: Precision laser energy produces clean, aesthetic seams that require no post-weld grinding or polishing.

Technical Parameters

Item Name	Parameter		
Power	1000W	1500W	2000W
Model	UK-E1000	UK-E1500	UK-E2000
Total Weight	⩽56KG	⩽58KG	⩽68KG
Dimension	862×335×855mm		
Wavelength	1080nm±10nm		
Optical Fiber Length	10m		
Working Mode	CWM/ARM		
Welding Machine Speed Range	0~25mm/S		
Operating Ambient Temperature	-15~40℃		
Operating Ambient Humidity	<80%, no condensation		
Recommended Welding Thickness	⩽10mm		
Welding Seam Requirements	⩽20% of board thickness		
Working Voltage	AC 220V 50/60Hz		

Water-cooling Handheld Laser Welding Machine



Product Features

- Cost-saving: This feature is realized through increased speed, reduced requirement for manual skills, and minimized post welding processes;
- Energy-saving: Compared with water cooling, the aerospace grade cooling technology saves about half of the electric energy;
- High efficiency: The system adopts a highly redundant pure air-cooling design, ensuring a longlife span and high energy conversion efficiency.

Technical Parameters

Item Name	Parameter	
Power	1500W	2000W
Model	UK-H40-1500	UK-H40-2000
Total Weight	⩽50KG	⩽60KG
Dimension	680×350×640mm	800×460×700mm
Wavelength	1080nm±10nm	
Optical Fiber Length	10m(Customized)	
Working Mode	CWM/ARM	
Welding Machine Speed Range	0~30mm/S	
Operating Ambient Temperature	-15~35°C	
Operating Ambient Humidity	<70%,no condensation	
Recommended Welding Thickness	0.5~8mm	
Welding Seam Requirements	⩽0.5mm	
Working Voltage	220VAC/380VAC	

Laser Cleaning Machine



Product Features

- High cleaning efficiency: It can be held by hand, and can cooperate with mechanical equipment to realize automatic operation, with stable and efficient cleaning;
- Precise position and precise cleaning: Parameters can be set, auto-focusing, curved surface cleaning, high cleanliness of the cleaned surface and so on;
- Non-contact cleaning: A cleaning method to remove surface attachments or surface coatings at high speed and effectively without damaging metal substrates.

Technical Parameters

Item Name	Parameter			
Laser Power	1000 Вт	1500 Вт	2000 Вт	3000 Вт
Model Code	UK-QX1000	UK-QX1500	UK-QX2000	UK-QX3000
Weight of The Whole Machine	226KG	226KG	248KG	270KG
Working Mode	Modulated/Continuous			
Cantral Wavelength	1070~1090nm			
Fiber Length	7/10m (15/20 can be customized)			
Focal Length Specification	F600/F800 (can be customized)			
Laser Frequency Range	1~50kHz			
Duty Cycle	1~100%			
Scanning Speed	10000-20000mm/s			
Cooling Mode	Water Cooling (18-25°C)			
Cooling Water Type	Deionized Water / Distilled Water / Purified Water			
Scanning Range	150/300mm (standard)			
Overall Dimension	1110x743x1238mm			
Scanning Type	Arc+Flat-Top Focus(canbe customized)			
Auxiliary Gas	Compressed Air / Nitrogen(oil-water filtration is required)			

Integrated Robot Welding Machine



Product Features

- The use of a manipulator can realize barrier free welding operation;
- Fast welding speed, can meet the welding thickness of 0.5mm-5mm, and the thermal image of the welding process shows a small sound area, small defiection, smooth and beautiful weld;
- Robut laser welding has no consumables, no maintenance, high efficiency and stability, and the service life is up to 100,000 hours. The power consumption of the whole machine is only equivalent to that of YAG laser welding machine and traditional argon arc welding, butt welding and plasma welding one-eighth of welding;
- The robot laser welding operation is simple and easy to use, reducing the labor cost and sighificantly improving work efficiency.

Technical Parameters

Item Name	Parameter
Model Number	UK-YT-JXH15
Laser Wavelength	1070±10nm
Working Mode	Continuous / Pulse < 0.5mm
Recommended Welding Thickness	Stainless Steel / Carbon Steel: 0.5-5mm
Welding Gap Requirement	<0.5mm
Repeated Positioning Accuracy	±0.05mm
Aiming and Positioning Mode	Red Light Indication (CCD optional)
Power of Complete Equipment	10-20kW
Working Voltage	AC 220V/380V 50-60Hz
Optional Power	1500-6000W
Spot Size	0.2mm-5mm (adjustable)
Manipulator Travel	1.55m

Robot Laser Welding Machine



Product Features

- The use of a manipulator can realize barrier-free welding operation;
- Fast welding speed, can meet the welding thickness of 0.5mm-8mm, and the thermal impact of the welding process shows a small sound aree,small defiection smooth and beautiful weld;
- Robot laser welding hes noconsumables, no maintenance, high efficiency and stability, and the service life is up to 100,000 hours, the power consumption of the whole machine is only equivalent to that of YAG laser welding machine and traditional argon are welding, butt welding and plasma welding, one eighth of the welding;
- The robot laser welding operation is simple and easy to use, reducing labor costs and significantly improving work efficiency.

Technical Parameters

Item Name	Parameter
Model Number	UK-JXH18
Laser Wavelength	1070 ±10nm
Werking Mode	Continuous/Pulse
Recommended Welding thickness	Stainless Steel/Carbon Steel:0.5-8mm
Weldinggap Requirement	<0.5mm
Repeated Positioning Accuracy	+0.05mm
Aiming and Positioning Mode	Red Light Indication (CCD optional)
Power of Complete Equipment	10-30kW
Worting Voltage	AC 220V/380V50-60Hz
Optional Power	1500-6000W
Spot Size	0.2mm-5mm (Adjustable)
Manipulator Travel	1.6m, 1.87m, 2.0m (Optional)

Robot 3D Platform Laser Welding Machine



Product Features

- The robot can realize barrier-free welding operation;
- It can expand multi-station welding, with a wide processing range and multiple welding angles;
- Multi-axis collaborative welding can be realized;
- The welding speed is faat, which can meet the welding thickness of 0.5mm-8mm. The heat-affected zone of the welding process is small, the deformation is small, and the weld is smooth and beautiful;
- Laser welding of robot hand is consumption-free, maintenence-free, efficient and stable, with a service life of up to 100000 hours. The power consumption of the whole machine is only one eighth of that of YAG laser welding machine, traditional gas arc welding, butt welding and plasma welding;
- The laser welding operation of the robot hand is simple and easy to use, which reduces the labor cost and significantly improves work efficiency.

Technical Parameters

Item Name	Parameter
Laser Wavelength	1070nm
Working Mode	Continuous/Pulse
Recommended Welding Thickness	Stainless Steel/Carbon Steel:0.5-8mm
Requirements for Welding Gap	<0.5mm
Repeated Positioning Accuracy	0.05mm
Aiming and Positioning Mode	Red Light indication (CCD optional)
Power of the Whole set of Equipment	5-20kW
Working Voltage	AC 220V/380V 50-60Hz
Optional Power	1000-4000W
Length of Manipulator	930mm (optional)
Spot Size	0.2mm-5mm (adjustable)
Workbench	Customizable

Automatic Welding Laser Welding Four-axis Workbench



Product Features

- 4-Axis Precision: Advanced X-Y-Z-R motion allows for seamless welding of complex 3D geometries and cylindrical parts with micron-level accuracy;
- Flawless Weld Quality: High power density ensures deep penetration and clean seams with minimal heat distortion, eliminating the need for post-weld polishing;
- Maximum Efficiency: High-speed automation reduces cycle times by over 50% delivering consistent, high-volume output with zero human error;
- Plug-and-Play Operation: An intuitive CNC interface supports quick programming and rapid batch changeovers, making it accessible for any skill level;
- 24/7 Industrial Reliability: A heavy-duty, vibration-dampened chassis ensures stable performance and long-term durability in the most demanding production environments.

Technical Parameters

Item Name	Parameter
Model Number	UK-ZDH
Laser Wavelength	1070±10nm
Operating Mode	Continuous / Pulse
Recommended Welding Thickness	Stainless Steel / Carbon Steel: 0.5-8nm
Welding Gap Requirements	<0.5mm
Aiming and Positioning	Red Light Positioning
Working Voltage	AC 220V / 380V 50-60Hz
Optional Power	1000-4000W
Appearance Dimension	1040*970*1720mm (Customizable)

Robot Laser Cutting Machine



Product Features

- 6-Axis infinite Flexibility: The high-performance robotic arm enables effortless 360° cutting of complex 3D parts, curved surfaces, and irregular geometries that traditional CNC machines can't reach;
- Micron-Level Precision: Equipped with world-class fiber laser technology, it delivers ultra-clean edges and intricate detalls with extreme repeatability, eliminating the need for secondary finishing;
- Accelerated Production Cycles: Maximize your ROI with rapid path-following speeds and optimized motion control, reducing processing time by up to 60% compared to manual or traditional methods;
- Universal Material Compatibility: A versatile solution engineered to precision-cut a wide range of metals, including stainless steel, carbon steel, aluminum, and high-strength alloys of varying thicknesses;
- "Lights-Out" Industrial Reliability: Designed for 24/7 continuous operation with minimal human intervention. Its heavy-duty construction ensures stable, high-speed performance in the most demanding manufacturing environments.

Technical Parameters

Item Name	Parameter
Model Number	UK-JXO18
Laser Wavelength	1070±10nm
Operating Mode	Continuous
Recommended Cutting Thickness	Stainless Steel/Carbon Steel: 0.5-8mm
Repeat Positioning Accuracy	±0.03mm
Aiming and Positioning Mode	Red Light Indication
Power of Complete Equipment	16-20kW
Working Voltage	AC 220V/380V 50-60Hz
Optional Power	1500-4000W
Manipulator Travel	1.6m、1.8m、2.0m (Optional)

Integrated Robot Cutting Machine



Product Features

- Compact "All-in-One" Architecture: A space-saving, integrated design that houses the laser source, chiller, and controller in a single cabinet. This reduces your factory footprint by up to 40% compared to modular systems;
- 6-Axis Robotic Versatility: Equipped with a high-precision robotic arm for seamless 3D cutting. It handles complex contours, tubes, and irregular workpleces with 360° flexibility that traditional flatbeds cannot match;
- Plug-and-Play Deployment: Eliminate weeks of complex field installation. This factory-pre-calibrated system arrives feady to run, allowing you to begin production within hours of delivery;
- Superior Precision & Speed: Powered by industry-leading fiher laser technology, it delivers ultra-smooth edges and micron-level accuracy, significantly reducing processing times for high-strength alloys and stainless steel;
- Fully Enclosed Safety & Reliability: The integrated protective housing ensures a clean, smoke-free environment and maximum operator safety. Built with industrial-grade components for 24/7 stability in heavy-duty manufacturing.

Technical Parameters

Item Name	Parameter
Model Number	UK-YG-JXQ15
Laser Wavelength	1070±10nm
Operating Mode	Continuous
Recommended Cutting Thickness	Stainless Steel/Carbon Steel: 0.5-5mm
Repeat Positioning Accuracy	±0.05mm
Aiming and Positioning Mode	Red Light Indication
Power of Complete Equipment	8-12kW
Working Voltage	AC 220V/330V 50-60Hz
Optional Power	1500-2000W
Manipulator Travel	1.6m、1.7m、2.0m (Optional)

Fiber Laser Marking Machine



Product Features

- Design: Desktop is small in size,convenient for handling and transporting, saving customers production space and convenient for installation and operation;
- Maintenance: air-cooling, maintenance-free, stable and reliable;
- Consumables: high electro-optic conversion rate, no power coupling loss, no consumables, obviously reducing the operationcost at customers side;
- Service life: the service life of optical fiber is longer than 100000 hours;
- Speed: high marking speed and efficiency, up to 600 characters (3mm height single line)/second, more than3-8 times of the traditional laser;
- Not only can the machine mark static products, but also do flying marking on moving products;
- Support 360-degree rotating marking.

Technical Parameters

Item Name	Parameter
Laser Wavelength	1064±10nm
Beam Quality	1.5/1.8/2.0
Minimum Characters	0.05mm
Repeat Positioning Accuracy	0.15mm
Laser Repetition Frequency	20kHz-80kHz
Engraving Depth	0.4mm/0.6mm/1.0mm
Laser Power	20W/30W/50W
Power Consumption	220V/50Hz/3A
Marking Accuracy	±0.002mm
Appearance Dimension	795*600*1350mm
Marking Area	100mm*100mm(Optional Parts)
Marking Speed	≤15000mm/s

UV Laser Marking Machine



Product Features

- UV laser is the first choice for customers who have higher requirements for marking effect because of its small focus spot and small heat-affected zone;
- In addition to copper material,the materials suitable for processing are more extensive, making up for the lack of infrared laser processing ability;
- The heat-affected area isvery small, to avoid the damage of processed materials, and the yield is high;
- Fast marking speed, high efficiency and high precision;
- Stable performance,small volume, low power consumption, long-term operation;
- No consumables, low cost of use and maintenance;
- High electro-optical conversion rate,long service life of the non-linear array design is convenient for installation and maintenance;
- It can be equipped with a two-dimensional automatic workbench to realize multi station continuous marking or large format marking.

Technical Parameters

Item Name	Parameter
Laser Wavelength	355±10nm
Power Stability(12h)	<1.5%
Minimum Line Width	0.01mm
Minimum Characters	0.1mm
Pulse Repetition Rate	100kHz
Cooling Mode	Water-Cooling/Air-Cooling
Moving Temperature	+10°C+30°C
Peak Power	125ul/10kw
Power Demand	220V/50Hz
Laser Power	3W-5W
Appaarance Dimension	795*600*1350mm
Frequency	20-100kHz
Marking Area	100mm*100mm(Optional parts)
Marking Speed	⩽15000mm/s