KEVRON™

KUB 4 in 1

Dual Axis Swing

Laser Welding Machine

A revolutionary multifunctional solution combining welding, cutting, cleaning, and weld seam finishing capabilities in one portable, high-performance system designed for precision metalwork.

Four Functions in One Machine

Precision Welding

High-quality welding on iron, copper, aluminum, stainless steel, carbon steel, and alloys. Fine weld seams with minimal heat-affected zones and versatile pattern capabilities.

Laser Cutting

Fast, flexible cutting of metal sheets and pipes. Simple operation for quick blank preparation and material processing in various manufacturing scenarios.

Weld Seam Finishing

Quick post-weld cleanup removes oxides, rust, and residues. Ensures aesthetic quality and structural strength while improving overall weld integrity.

Surface Cleaning

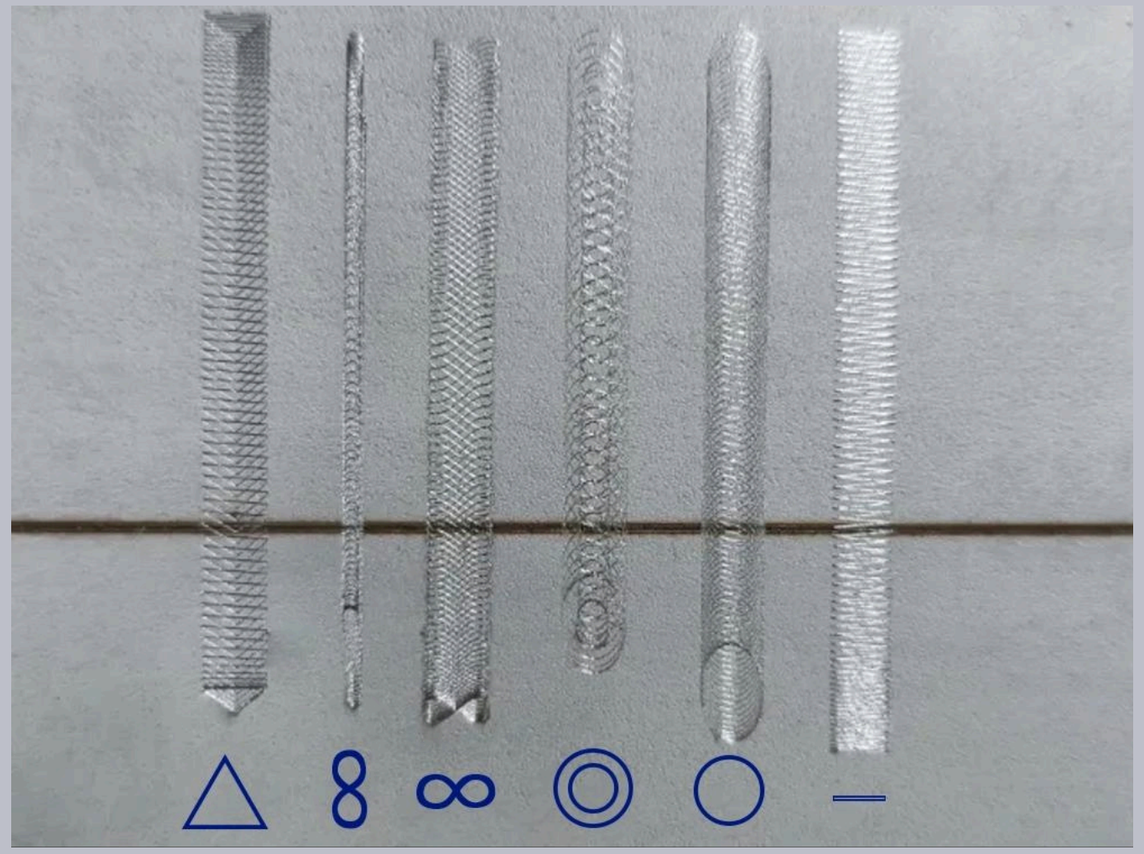
Rapid removal of rust, grease, and oxide layers using laser technology. Fast, effective cleaning without traditional method damage or chemical residue.

Note: Each function requires appropriate nozzle replacement and control system configuration for optimal performance.

Technical Specifications

Parameter	Specification
Laser Source	MAXPHOTONICS Laser Source
Welding Power	1500W, 2000W, 3000W
Focus Distance	200mm (150mm for single wire feeder)
Collimating Focal Length	50mm
Wavelength Scope	1070±20nm
Regulating Scope of Light Spot	0~8mm (0~5mm for single wire feeder)
Cable Length	10m
Swing Types	Single, Dual, Circle, Figure-8, S-Pattern (—, ∞, O, ⋈, ⊙, △, OOO)
Operating Mode	Continuous-wave
Cooling System	TEYU S&A Industrial Water Chiller
Control System	Relfar V4 (RUiDA) 7" touchscreen
IoT Connectivity	RDWelder Mobile App, WiFi, OTA firmware updates
Live Monitoring Parameters	Temperature, Flow, Pulse Graph, Power Output
Power Input	9kW, 11kW(220-240V AC) 15kW (380V AC), 50Hz
Supported Materials	Stainless Steel, Mild Steel, Aluminium, Copper, Brass, Titanium, Galvanized Steel
Machine Weight	200Kgs (approx)

Key Advantages & Features



Performance Benefits

- Dual-Swing laser head with two galvanometer systems for complex 2D welding patterns
- Multiple welding processes: butt joint, tee joint, corner, lap, and edge joint welding
- High-quality welds with fine seams and low porosity—no secondary processing required
- Small heat-affected zone minimizes deformation and thermal damage

System Components & Specifications

1

Dual-Swing Welding Gun

Features red light positioning and interchangeable copper nozzles with excellent thermal conductivity and high-temperature resistance. Prevents metal residue buildup while ensuring stable performance.

2

Comprehensive Accessories

Complete set includes multiple nozzles for various scenarios, precision lenses, scale connectors, and all related components for versatile processing applications.

3

Premium Laser Source

MAX laser source standard configuration with optional Raycuus laser sources available. Delivers concentrated energy and stable power output for consistent weld quality.

4

Integrated Cooling System

Space-saving rack-mounted water cooler designed specifically for handheld systems. Simultaneously cools laser source and welding gun while fitting inside the cabinet.

Single vs. Dual-Swing Technology

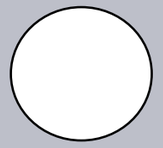
Single-Swing System

One galvanometer motor enables laser movement in a single direction. Creates simple welding patterns like sinusoidal waves. Ideal for precision welding of small products requiring straightforward seam patterns.

Dual-Swing System

Two galvanometer motors allow simultaneous movement in two directions. Produces complex patterns including circular, square, elliptical, figure-8, and S-shaped trajectories. Enhanced molten pool control reduces defects—perfect for large-area welding.

Dual-Swing Welding Patterns



Circular

Optimizes penetration and width distribution while suppressing porosity defects

Sinusoidal

Evenly distributes energy, reduces penetration differences, optimizes flow

S-Shaped

Improves heat distribution and overall weld quality

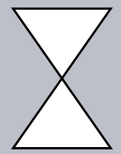
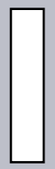


Figure-8

Suppresses porosity and stabilizes keyhole for improved quality



Linear

Straight trajectory ideal for simple structural welding requirements

Dual-Wedge

Spiral-like welds for thick-walled pipes and flanges with high repeatability

Additional patterns include ring-shaped Swing for complex structures requiring uniform heating, and dot-shaped mode for precision welding and localized heating applications.

The KEVRON Promise

> When you choose KEVRON, you aren’t just purchasing a machine — you are investing in precision, reliability, and a long-term technology partner.

Let's build the future of manufacturing.

CNC KEVRON PVT. LTD.

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