

# xTool MetalFab

Your All-in-One Metal Workshop: Cut, Weld, Clean, and Engrave.



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A person wearing a red protective suit and sunglasses is working in a workshop. They are holding a piece of metal and looking down at it. The background is dark and filled with various tools and equipment.

# Metalworking Made Simple, **Let's** **Make It Popular**

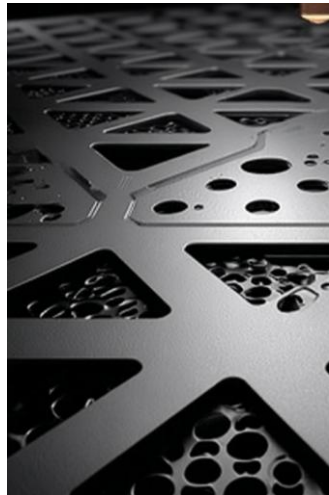
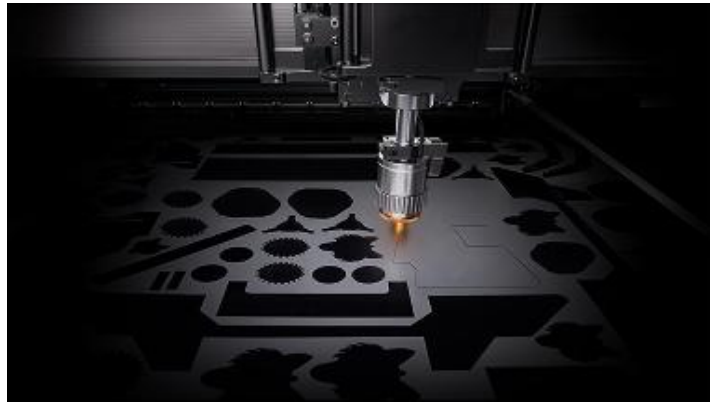
Metalworking used to be daunting—complex tools that stifle creativity, unfriendly to beginners, and prohibitively expensive.

With Tool MetalFab, that changes. Industrial power meets garage simplicity. Weld and cut with pro-level precision from Day 1. No jargon. No frustration. Just pure, limitless creativity.

Together, let's turn metalworking into the next woodworking—accessible, inspiring, and completely yours.

# Wide Applications

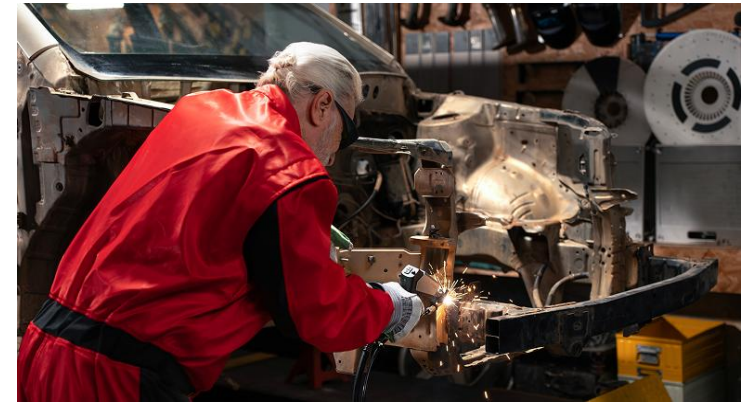
## Sheet Metal Fabrication



## Custom Sign Making



## Repair and Maintenance



# Wide Applications

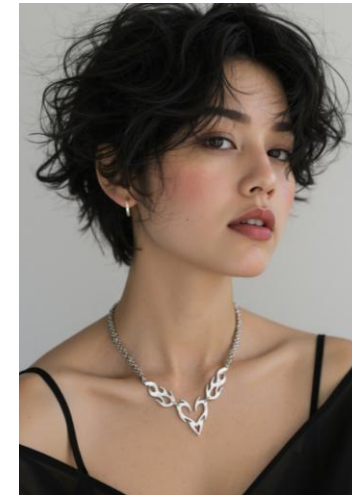
## Home Decor & Furniture



## Metal Arts & Sculpture



## Jewelry Making



# Key Features

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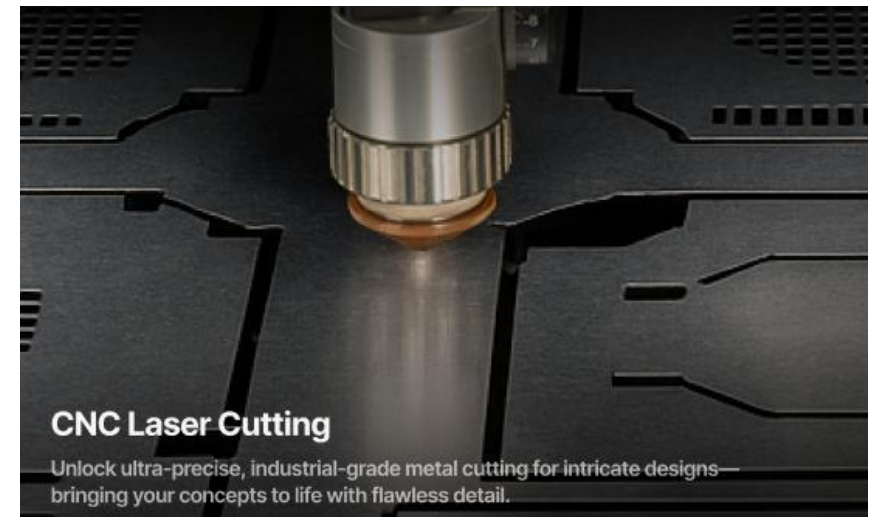
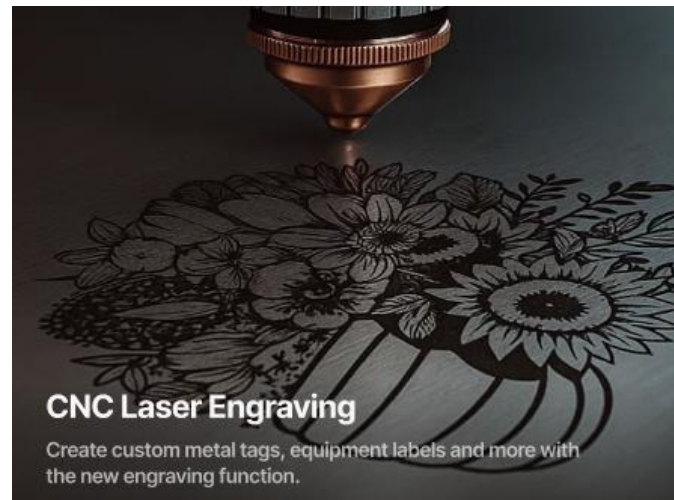
- All-in-One Metal Workshop: Cut, Weld, Clean, Engrave
- Industrial-Grade Technology: Weld Perfectly, Cut Precisely
- Dual-Camera: Accurate Cutting, Saving Your Metal
- Exclusive SaveGas™ Solution Cuts Your Cost Down
- Powerful Software Makes Creating Effortless
- Highest Safety Standards with 10 Features



# All-in-One Metal Workshop

The xTool MetalFab Laser Welder combines welding, cutting, and cleaning functions in one device. When paired with the xTool MetalFab CNC Cutter, it offers CNC cutting, cleaning, and engraving functions. This all-in-one solution is designed to meet all your metal fabrication needs with ease and efficiency.

Only applicable to non highly-reflective metals like stainless steel, carbon steel, galvanized sheet, anodized aluminum, etc. Not for brass, copper, silver, etc.

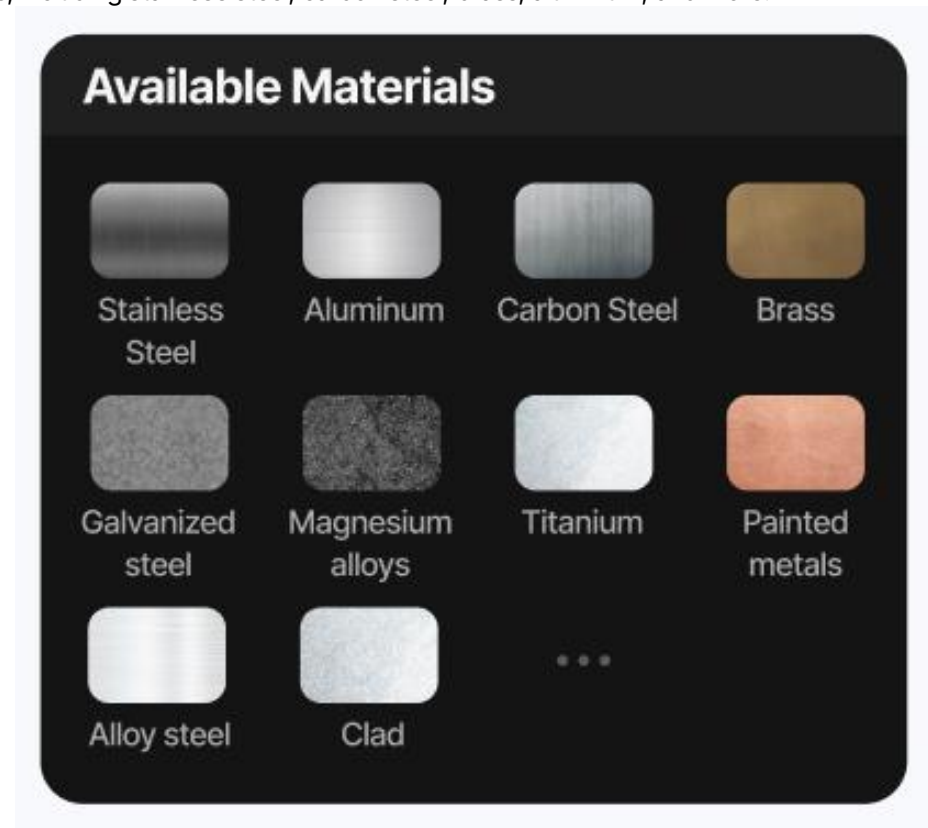


# Cut. Weld. Stunning Metalwork in One Seamless Workflow



# Industrial-Grade Technology Weld Perfectly, Cut Precisely

The xTool MetalFab features **industrial-grade Coherent chips** that efficiently convert electrical energy into a powerful 1200W, 1080nm fiber laser beam. With dynamic galvo-mirror oscillation technology, it ensures stable and precise cutting and welding. It is suitable for various metal materials, including stainless steel, carbon steel, brass, aluminum, and more.





## Master Every Weld, No Matter the Metal, Thickness, or Joint Type

Fiber laser technology minimizes heat-affected zones to  $\leq 0.002$  inches (0.05mm), enabling precise welding of thin metals without distortion. Its high-energy output ensures rapid metal melting, allowing **single-pass welding for materials up to 0.2 inches (5mm) thick**. This technology produces deep and narrow welds, regardless of the metal or joint type, delivering consistent and reliable welding quality.

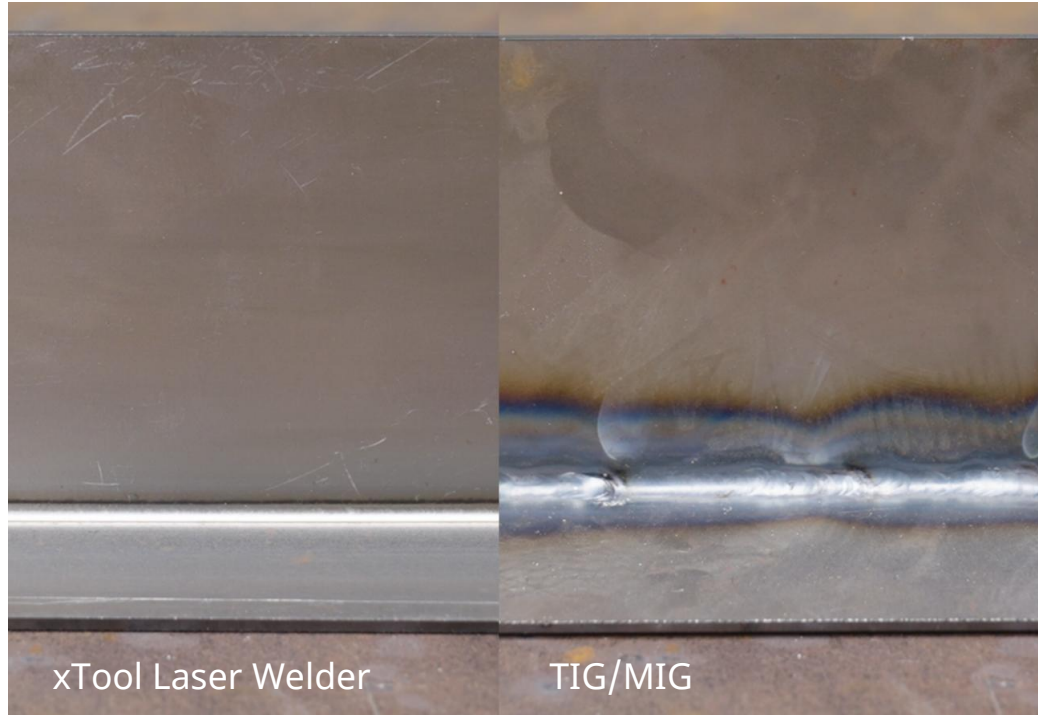


# xTool MetalFab vs. Traditional TIG/MIG:

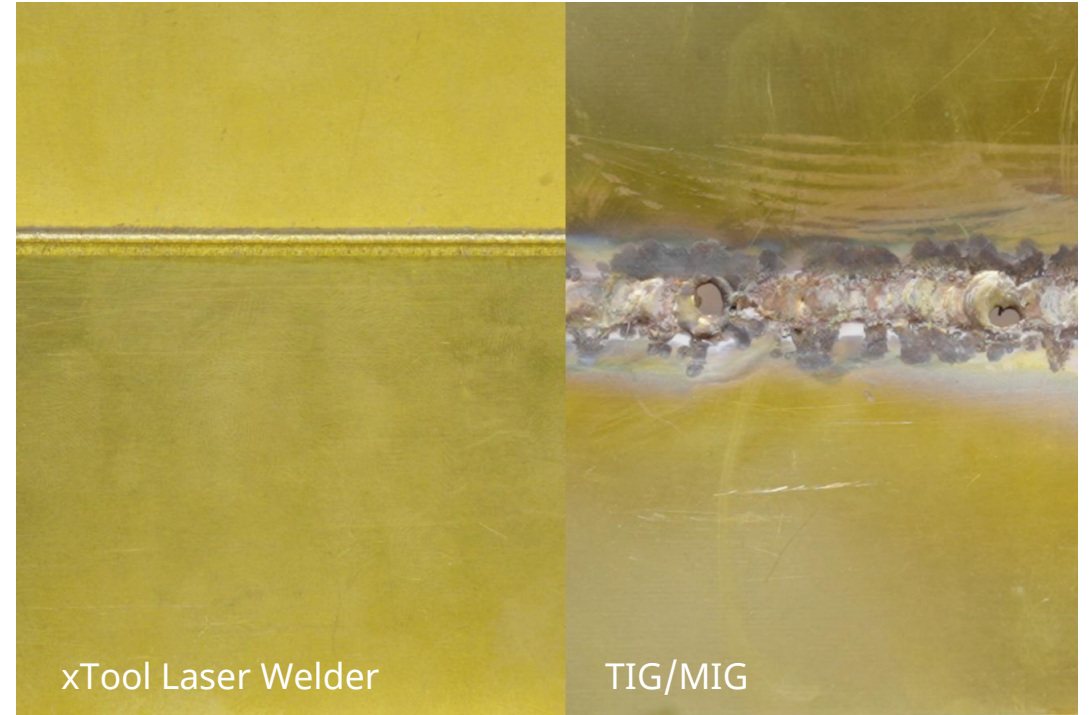
- **Easier to Use**
- **Faster Speed**
- **Better Results**

	 xTool Laser Welding	 Traditional Welding (TIG/MIG)
Learning Curve	Master in 30 mins Beginner Friendly	Master in 3 months Experience Required
Welding Speed	4-8X Faster than TIG/MIG	Low Welding Speed
Welding Seams	Perfect, Smooth Seams No Grinding Required	Imperfect, Ugly Seams Heavy Post-processing Required
Thin Metal Welding	Perfect, Min. 0.05 mm HAZ Almost No Deformation	Failed, 1-10 mm HAZ Obvious Deformation
Wire Feeding Method	Auto Wire Feeding Just Follow the Torch	Manually Wire Feeding Speed Adjustment Required
Welding Settings	108+ Ready-to-use Presets No Tests Required	Current Adjustment Required Repeated Tests

# Actual Welding Results Comparison



**2mm Carbon Steel Welding**



**1mm Brass Welding**

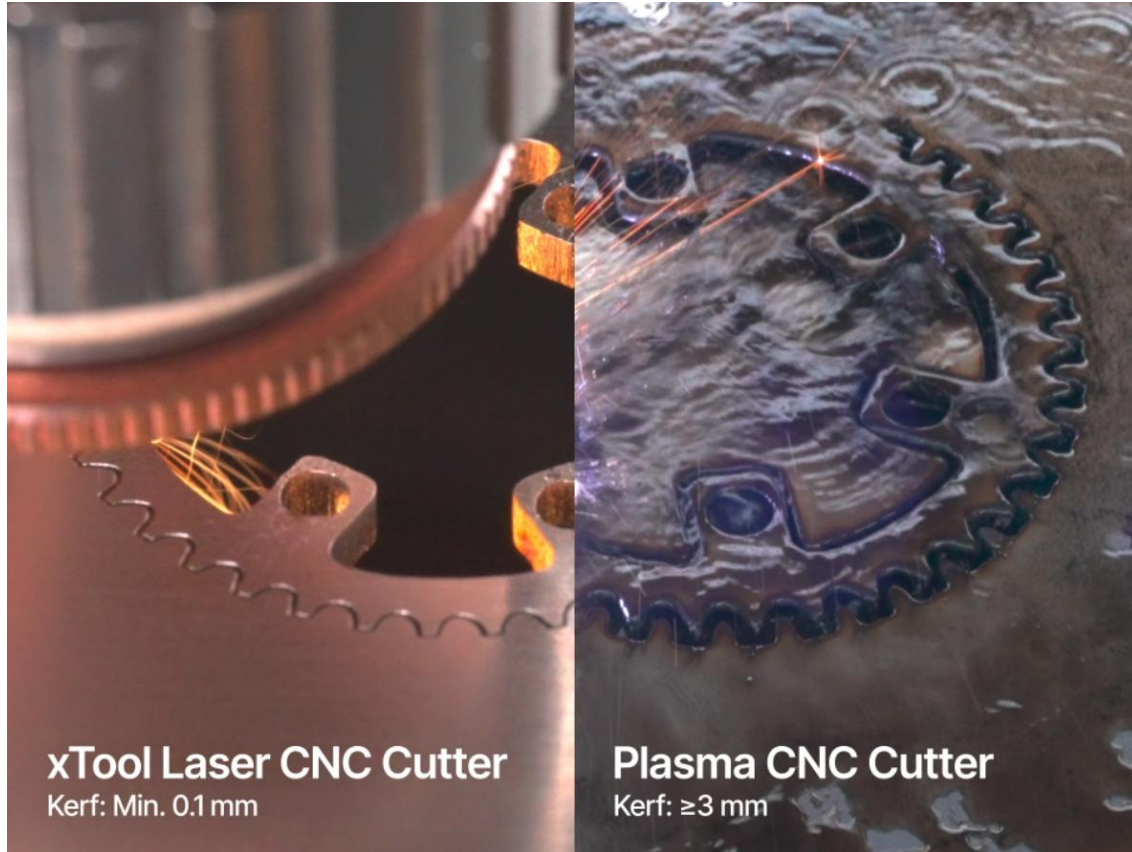


## From 0.008" to 0.39" Thickness, Every Cut is Smooth, Clean, and Flawless

The 1200W high-energy fiber laser effortlessly **cuts carbon steel up to 0.39 inches (10mm) thick** in a single pass. With its minimal heat-affected zone and high laser power, it ensures precise cutting results, delivering smooth, clean surfaces while effectively preventing deformation in thin metals. This significantly reduces the need for post-processing.

CNC Burr-free Cutting Thickness	With 1200w welder	With 800W welder
<b>Stainless Steel</b>	0.008-0.2 in (0.2-5 mm)	0.008-0.16 in (0.2-4 mm)
<b>Carbon Steel</b>	0.008-0.39 in (0.2-10 mm)	0.008-0.31 in (0.2-8 mm)
<b>Galvanized Sheet</b>	0.008-0.39 in (0.2-10 mm)	0.008-0.31 in (0.2-8 mm)
<b>Aluminum</b>	0.008-0.16 in (0.2-4 mm)	0.008-0.12 in (0.2-3 mm)
<b>Brass</b>	0.008-0.12 in (0.2-3 mm)	0.008-0.08 in (0.2-2 mm)
<b>Titanium</b>	0.008-0.2 in (0.2-5 mm)	0.008-0.08 in (0.2-2 mm)

# Precision You Can See, Ultra-Fine in **Every Detail**



## Industrial-grade Technologies

The secret behind precision cutting lies in the exclusive VibeFreeCut™, FlexiTrack™, and ObstacleFree™ technologies, designed to work together to deliver unmatched precision, making every cut flawlessly accurate and effortlessly smooth.

**VibeFreeCut™** integrates advanced motion control algorithms with system recognition technology to eliminate vibrations in real time, ensuring unparalleled stability and precision.

**FlexiTrack™** continuously checks the distance between the laser head and the metal surface in real time, automatically adjusting the Z-axis to maintain accurate focus, ensuring precise cuts and smooth results every time.

**ObstacleFree™** features a proprietary path-avoidance algorithm that intelligently bypasses potential obstacles, ensuring continuous operation and equipment safety.



# Compressing Project Time from One Week to One Hour—**Super Fast**

2.5 hrs

Step 1: 135 mins (CNC Cutter)

Step 2: 15 mins (Laser Welder)



Laser technology enables fast, precise cutting and welding with high energy and stability, minimizing defects and reducing rework. Featuring a minimal Heat-Affected Zone (HAZ) of  $\leq 0.002$  (0.05mm) inches, it prevents overheating and eliminates extended cooling times, significantly improving efficiency.

15.75 ips  
Cutting Speed

8X Faster  
Welding Speed than TIG

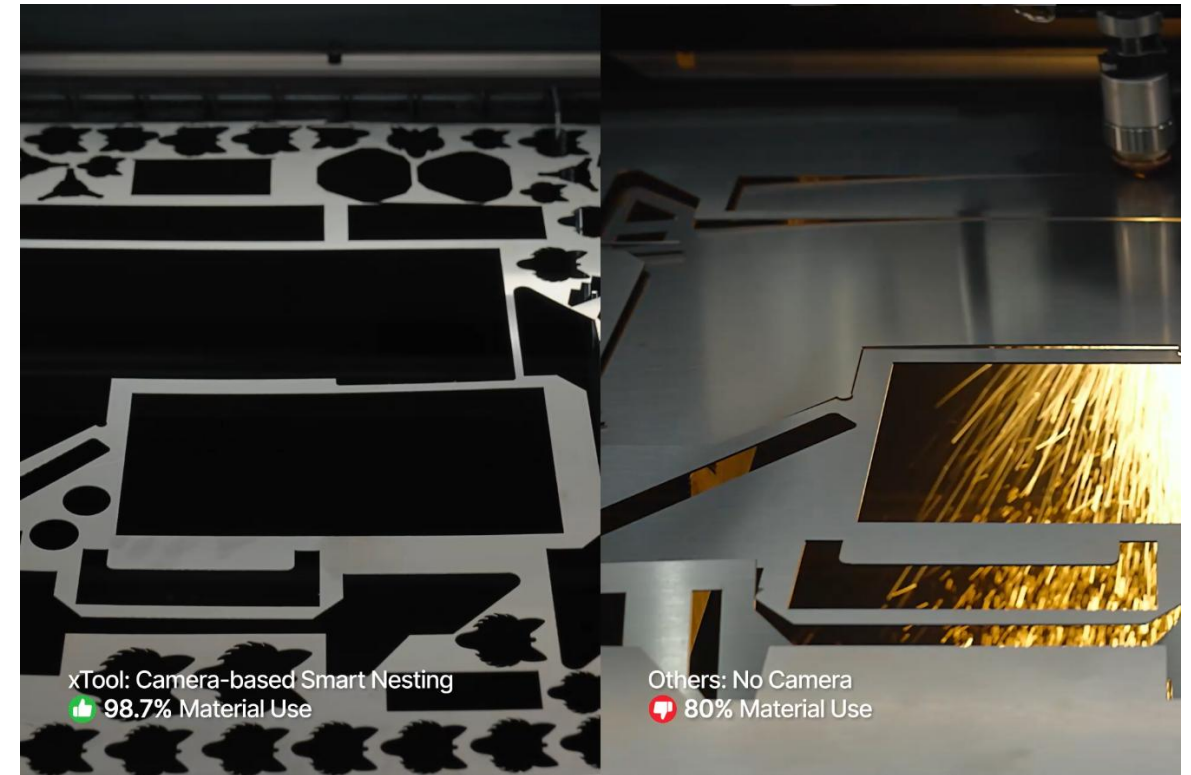
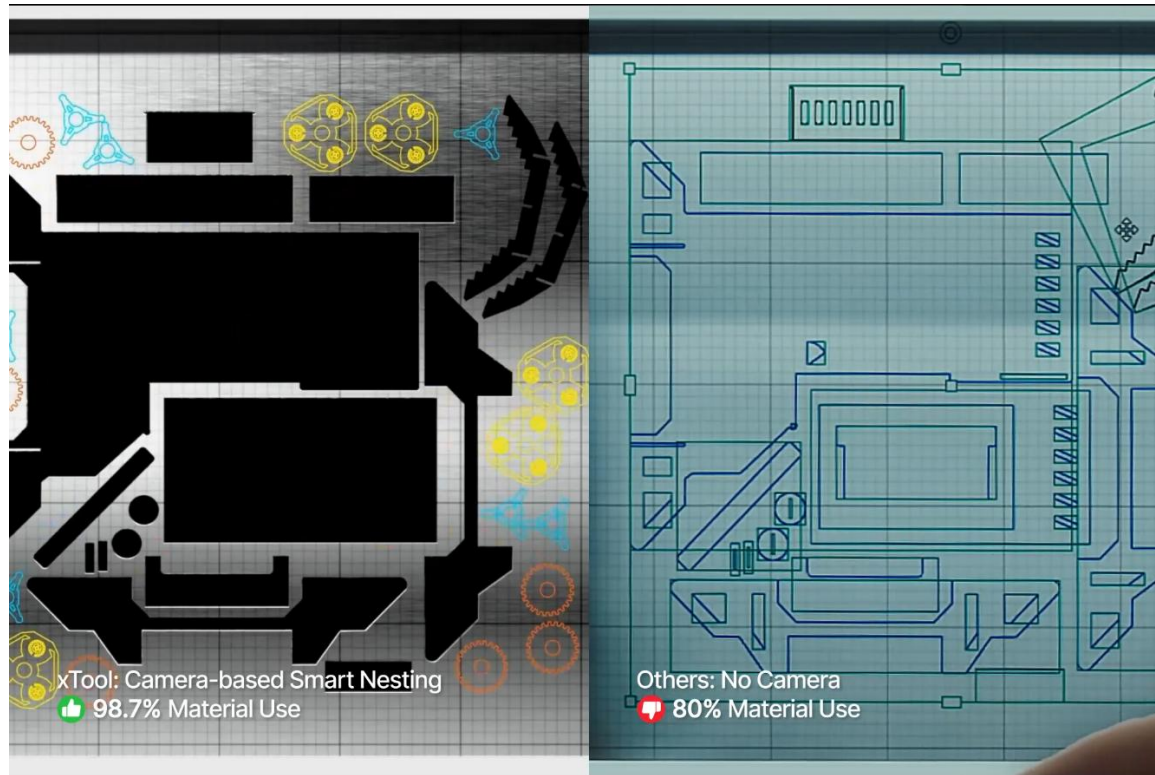
Ultra-Low  
Rework  
Rate

Zero Cooling  
Wait Time

# Dual-Camera: Accurate Cutting, Saving Your Metal

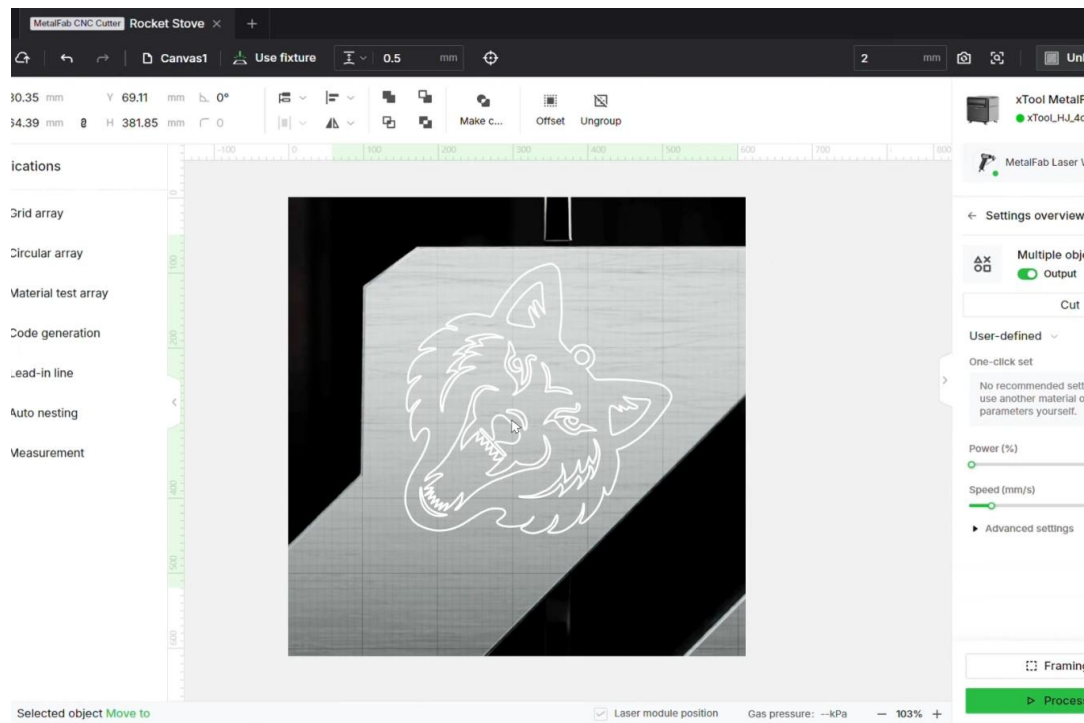
## One-Click Smart Layout Optimization: Save More, Waste Less

Equipped with a **16MP panoramic camera** and **AI algorithms**, the system analyzes materials and generates optimal cutting layouts with one click, achieving a **98.7% material utilization rate**.



# Ultra-Accurate Cutting for Small Objects

The **close-range camera** ensures precise positioning with a **center deviation of less than 0.008 inches (0.2mm)**, delivering exceptional accuracy and reliability—perfectly suited for even the smallest objects.



# SaveGas™ Solution: Cut Your Gas Costs Down

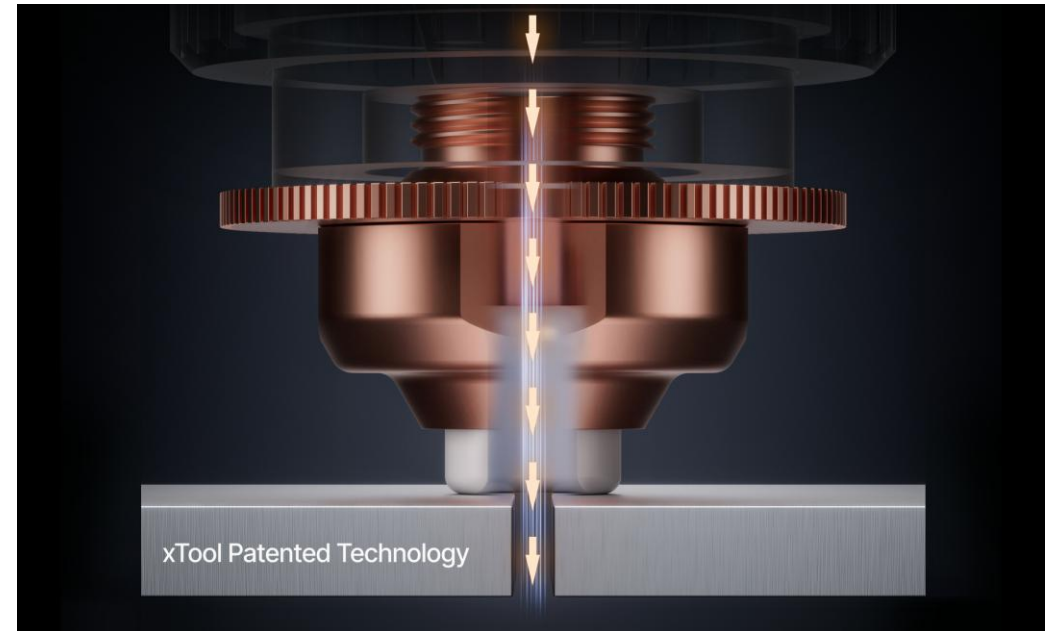
## xTool Selected Air Compressor & Air Dryer

The most cost-efficient gas solution for metal cutting: Provides stable, clean, free air over 0.6MPa to ensure burr-free cutting.



## xTool Self-developed SaveGas™ Cutting Nozzle

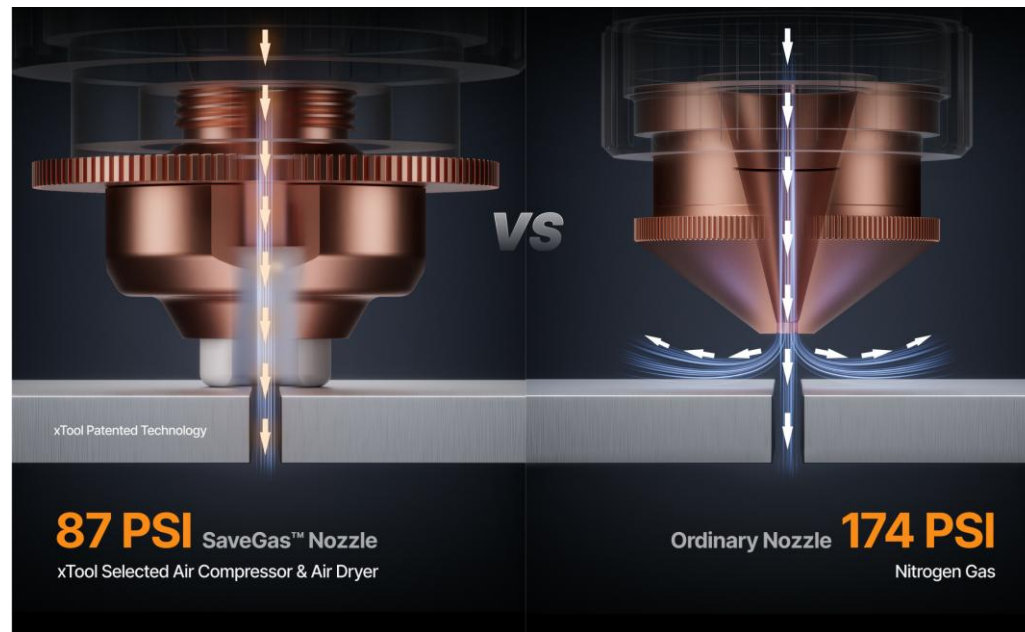
Featuring a unique telescopic design that minimizes gas leakage and concentrates airflow for precise cuts.



# SaveGas™ Solution: Cut Your Gas Costs Down

Our proprietary SaveGas™ Solution combines the SaveGas™ nozzle with the xTool-selected air compressor and dryer, designed to maximize cutting efficiency. When cutting 0.16 inches (4 mm) stainless steel to a burr-free finish, xTool accessories require only 87 PSI (0.6 MPa)—saving up to 50% in gas compared to nitrogen cutting at 174 PSI (1.2 MPa).

## Half Pressure, Same Results



## 0.6 MPa Burr-free Cutting Marvel



# Save \$20,000+ /year than Gas Cylinders

A single 40L nitrogen cylinder lasts just 30 minutes, costing over \$20K annually for continuous metal cutting. So why not switch to xTool SaveGas™ solution and stop wasting money on gas tanks? No more nitrogen, argon or oxygen refills. Invest once, cut forever.

## xTool SaveGas™ Solution **Best Value**

**≈\$1,000** / year

 \$1,700 machine investment

 Free Air

 Continuous application

 \$1.5 electricity per day

## Nitrogen Cylinders

**≈\$21,000** / year

\$100 40L Nitrogen cylinder

Expensive Nitrogen

40L lasts for 30min @174 PSI

\$96 Nitrogen per day

## Industrial Compressed Air System

**≈\$4,000** / year

\$7,000 machine investment

Free Air

Continuous application

\$4.5 electricity per day

Calculation method: 4-hour processing per day, 248-day processing per year. The cost of nitrogen gas charging is calculated at \$0.30 per liter. The actual usage duration and costs vary by region.

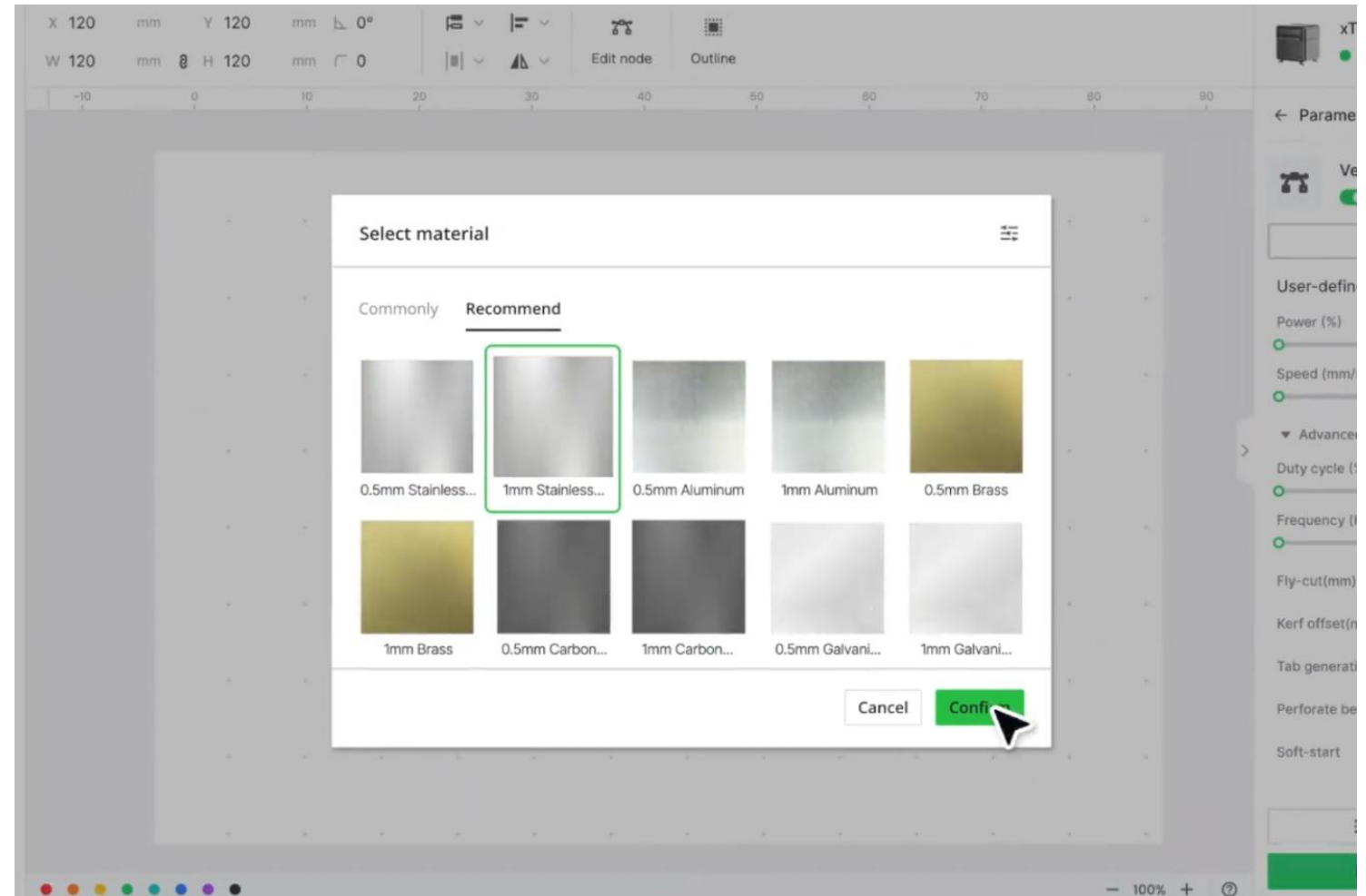
# Powerful Software Makes Creating Effortless

## One-Click Parameter Setup, No Material Testing Required

No more wasting time testing parameters or wasting materials! Simply select the corresponding material in the software, and apply it instantly with just one click.



Download xTool Software

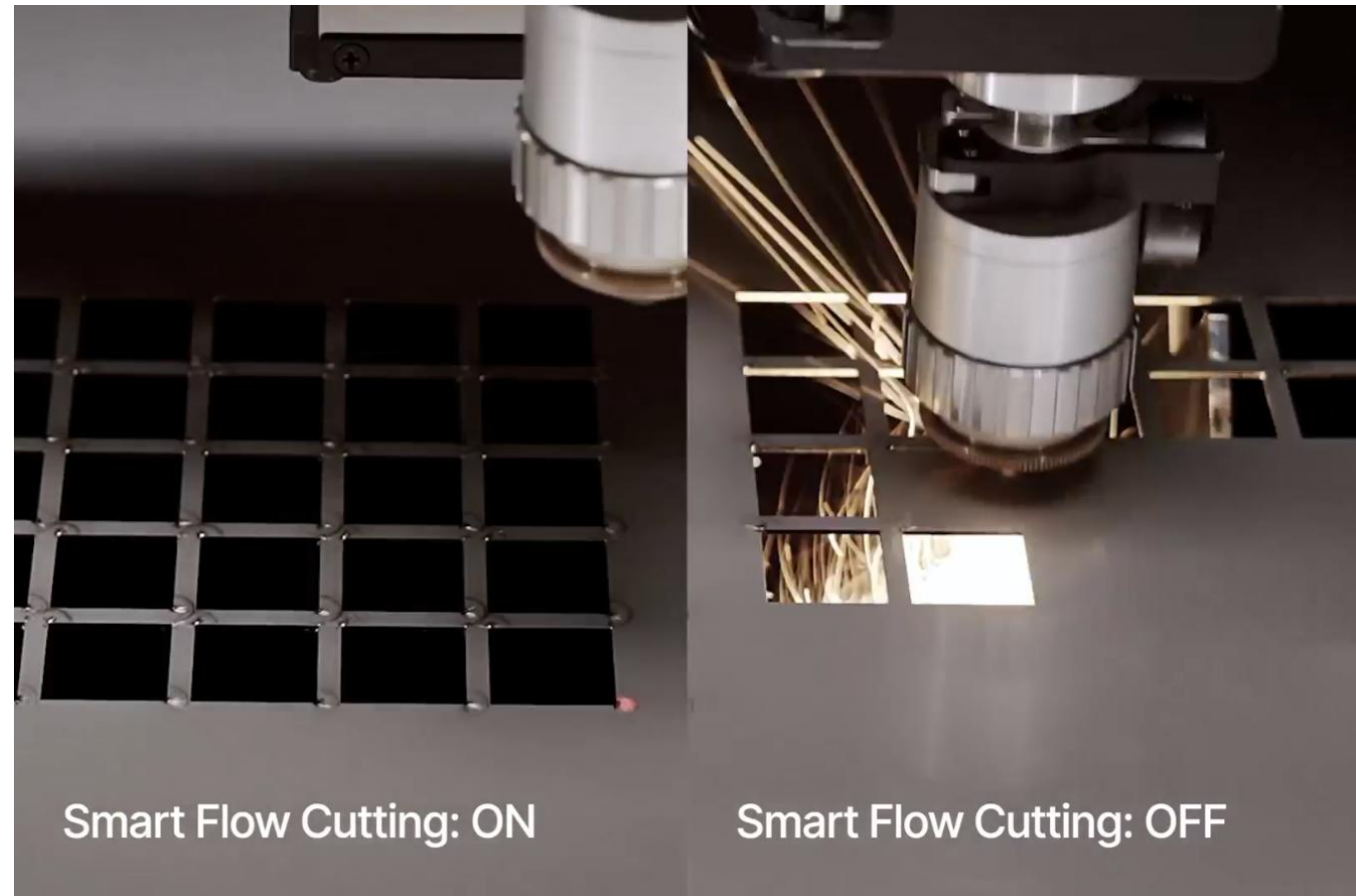


# One-Click Smart Flow Cutting: Up to 50% Faster Cuts

When cutting multiple regular shapes (such as rectangles or circles), the Smart Flow Cutting mode connects line segments in the same direction for continuous cutting. By minimizing redundant movements, it increases efficiency by 50% and significantly enhances productivity.



Download xTool Software



# Create Laser-Ready Designs in Just Seconds with **Almake**

No more struggling with AI using complex prompts—just state your needs in one sentence, and Almake generates precise, ready-to-use designs in seconds!



Download xTool Software

## Choose Style

Vector

3D engraving

Logo

Text & graphics









Monochrome

Blade cutting

Typography

Colorful printing

Screen printing

	Photo to Line Art (Outline only)		Photo to Line Art <span>Popular</span>
	Photo to Papercut Decor		Photo to Minimal Line Decor
	Photo to Stitch Art		Photo to Kawaii Stickers <span>Popular</span>
	Photo to Van Gogh Painting		Photo to Retro Chalk Sketch

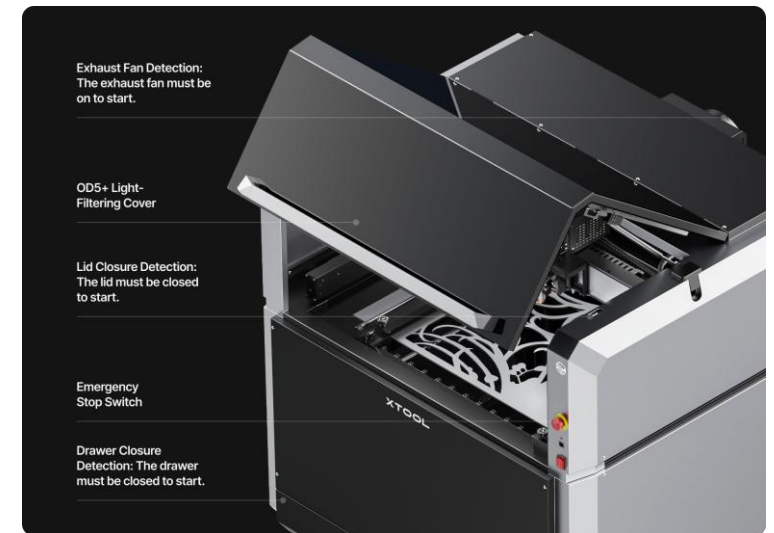
# Control Everything With Just **One Touch**. It's That Simple.

8-inch smart touchscreen with an intuitive interface for effortless operation. Preloaded with 108 material parameters, ready to use instantly. Easily switch between three welding modes with a single click, and fine-tune parameters with precision. Save custom settings and access them effortlessly with just one tap.



# Highest Safety Standards with 10 Features

The xTool Metalfab are certified with CE, FCC, and FDA approvals, meeting rigorous safety and quality standards. These certifications provide peace of mind, allowing you to tackle your welding tasks with confidence and dependability. Enjoy professional-grade protection that lets you concentrate on creativity and performance, free from safety concerns.



LASER DIODES BY  
**COHERENT**



CE

FDA

FC

ICES

SGS

# TCO: What Do You Need to Invest in?

## Machine Purchase: Starts from \$5999



800w welder: \$5999



1200w welder: \$7999



800w combo: \$13999




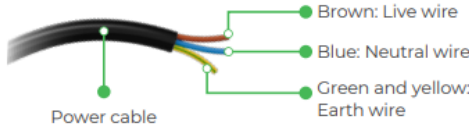

1200w combo: \$15999

\*The costs of electricity setup may vary from regions.

## Electricity Setup: About \$300-\$500

xTool MetalFab laser welder can work with the voltage of 200-240v, operating at full power of 4200W, the max. current is 21A. It is recommended to set an independent circuit of 220V-25A or higher.

For US or CA, we provide a NEMA6-50p or NEMAL6-30 plug, for others, we provide power cables, so an electrician is required to install the correct circuit.

<p>US standard</p> 	<ul style="list-style-type: none"> <li>■ Use a NEMA6-50R outlet</li> </ul>
<p>Other standards</p>  <p>Power cable</p> <ul style="list-style-type: none"> <li>● Brown: Live wire</li> <li>● Blue: Neutral wire</li> <li>● Green and yellow: Earth wire</li> </ul>	<p>Choose one of the following methods:</p> <ul style="list-style-type: none"> <li>■ Use a 32 A CEE industrial socket (blue, IP44 or higher)</li> <li>■ Use the hardwiring method</li> </ul> <div style="border: 1px solid gray; padding: 5px; background-color: #f0f0f0;"> <p> Do not connect the device to a 16 A domestic circuit, as it may cause overload tripping or cable overheating.</p> </div>

# TCO: What Do You Need to Invest in?

## Gas Equipment: Vary from Materials and Processing Modes



xTool Air System:  
\$1698

or



Industrial system:  
\$3000+



99.99% N<sub>2</sub>/Ar (Must):  
\$100-\$200/40L



Flow Valve (Must):  
About \$30



Pressure Valve (Optional):  
About \$30



99.99% O<sub>2</sub> (Optional):  
\$100-\$200/40L

\*Please refer to the appendix I for detailed gas suggestions. The price of gas may vary from regions.

\*xTool MetalFab comes with the gas hose with an OD 10mm so adapters will be needed if your gas cylinders or hoses come with different diameters.

\*Please choose the valve according to processing modes: For cutting with oxygen, the gas pressure should be at 0.05-0.06 MPa; for cutting with nitrogen or argon, the pressure should be over 1.2MPa; for welding, the gas flow should be at 15-30L/min or 0.1MPa-0.2MPa.

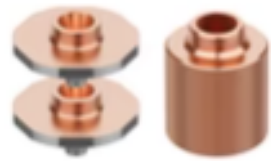
\*Gas cylinder consuming speed reference: A 40L nitrogen cylinder can last for about 30min continuous cutting at 1.2MPa pressure with ordinary cutting nozzle. Actual consuming speed may vary from use, nozzle, and pressure.

# TCO: What Do You Need to Invest in?

## Consumables: Vary from Frequency



Protection Lens:  
\$99/10 pcs



Double-layer Set:  
\$99



SaveGas™ Nozzle  
Set: \$99



Ordinary Nozzle Set:  
\$69/10 pcs



Laser Welding  
Helmet: \$109.99



Welding Table:  
About \$150



Laser Welding  
Goggles: \$29.99



MaxClean™ Lens:  
\$119/5 pcs



CNC Cutter Slats:  
\$119/5 pcs



CNC Cutter Slats:  
\$119/5 pcs



Welding Nozzle Set:  
\$69



Laser Welding  
Gloves: \$14.99



AP2 Max Air Purifier:  
\$2499

\*Please refer to the appendix II for lifespans of different accessories.

\*The costs for metal pieces may vary from using frequency and purchasing channels.

\*For your health, we highly recommend to use the AP2 Max air purifier with the CNC cutter.

# ROI Analysis: How Fast Your Machine Pays for Itself?

If you use it improving your business with in-house production:



## Custom Brass Chandelier

Unit Making Costs: \$60

Unit Selling Price: \$300

Monthly Sales Volume: 20

**Paid Back Time: 3.4 Months**



## Metal Art Sculpture

Unit Making Costs: \$250

Unit Selling Price: \$1500

Monthly Sales Volume: 2

**Paid Back Time: 5.2 Months**



## Custom Metal Signs

Unit Making Costs: \$50

Unit Selling Price: \$150

Monthly Sales Volume: 50

**Paid Back Time: 3.2 Months**



## Custom Wall Shelf

Unit Making Costs: \$30

Unit Selling Price: \$100

Monthly Sales Volume: 50

**Paid Back Time: 4.6 Months**

\*The costs, prices, sales may vary from regions, market, and business owners. The data are only for your reference.

# ROI Analysis: How Fast Your Machine Pays for Itself?

If you use it for business like selling signs or projects:



## 3mm 304 Stainless Steel

Outsourcing Costs: \$7

In-house Costs: \$4.2

Monthly Demands Volume: 750

**Paid Back Time: 7.6 Months**



## 2mm C28000 Brass

Outsourcing Costs: \$14.5

In-house Costs: \$8

Monthly Demands Volume: 500

**Paid Back Time: 4.9 Months**

In-house Production Saves  
**20-30%**  
Compared to Outsourcing Costs

# Real User Stories: Real Success, Real ROI



—@Josh E. Clark, the founder of AnglingAI.com

## "No more spending \$250K on outsourcing "

Making tiny metal parts for our fishing lures was difficult with our old CNCs. Now with MetalFab, I can easily make 1,000+ parts in-house and no more outsourcing vendors. It's a game-changer, giving me a quick ROI and making my business much more profitable.



Products Josh made with xTool MetalFab



Learn more

# Real User Stories: Real Success, Real ROI



—@David Picciuto, Make Something

## "Almost no learning curve, totally worth it"

Coming from traditional plasma and TIG, the time I get back is unreal. MetalFab's cuts and welds are so clean they're nearly perfect, slashing my post-processing and finishing work. The software is incredibly easy, massively boosting my workflow and efficiency.



Projects David made with xTool MetalFab



[Learn more](#)

# Real User Stories: Real Success, Real ROI



—@James Hodge, the founder of Javik Laser Ltd

## "From Weeks to Hours, More Value In-house"

Waiting on suppliers for jigs and parts killed our workflow and budget. MetalFab changed everything. Now, we take designs from CAD to finished metal components entirely in-house, slashing our prototype lead times. It's a game-changer!



Projects James made with xTool MetalFab



[Learn more](#)

# Real User Stories: Real Success, Real ROI



—@Tony Smiley

**" The easiest welder I have ever used."**

With over 40 years in welding, this is "by far the easiest welder I have ever used." The CNC adds a whole new level of production and sellable items. Its speed and accuracy slash project times, reduce labor costs and boost my profits. It's a real money-maker that can pay for itself quickly.




Projects Tony made with xTool MetalFab



Learn more

# Why xTool MetalFab is Your **Best Choice?**

Industrial-grade chips and aerospace-grade materials ensures 30% longer lifespan than others, cutting your maintenance costs. Smart dual cameras achieve 98.7% usage rate, while built-in 108+ presets free you from endless testing and wastes, saving your material costs—**xTool MetalFab helps cut down your costs from every aspect.**




**LONG TERM**

Maximize Returns Over the Lifetime



Over 10,000 Hrs Lifespan



Stay Tuned...

Continuous Update



Comprehensive Service & Support

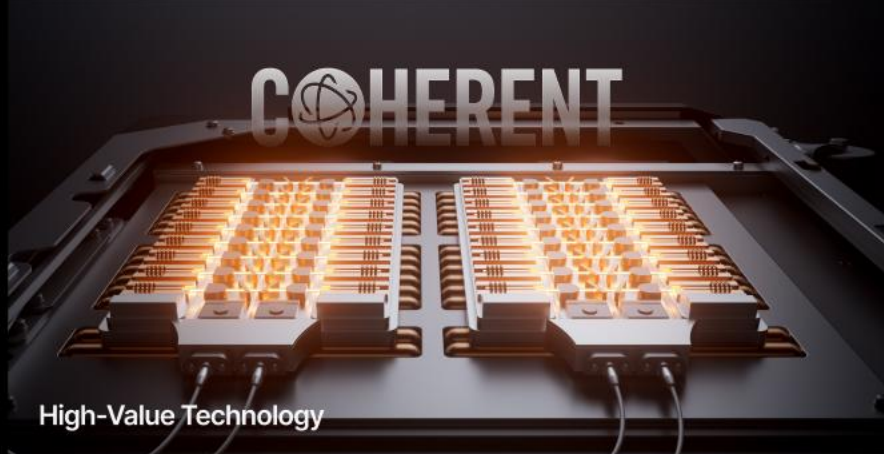


	Wire	Steel	Stainless	Aluminum	Brass	
Material type	Aluminum	Carbon steel	Stainless steel	Aluminum	Brass	
Material thickness	0.5mm	1mm	2mm	3mm	4mm	5mm
Wire diameter	0.5mm	1mm	1.2mm	1.6mm		

Switch to advanced mode with current settings Enable wire feeding Enable lasering

Designed by xTool

Ease of Use



COHERENT

High-Value Technology

# Outperforms Others from Every Aspect



xTool MetalFab

Laser Power	1200W
Max. Welding Depth (Carbon Steel)	0.2 in
Max. Welding Depth (Stainless Steel)	0.2 in
Max. Welding Depth (Aluminum)	0.16 in
Max. Welding Depth (Brass)	0.12 in
Max. Cleaning Width	1.77 in
Max. Handheld Cutting Thickness	0.2 in



Other Laser Machines

1200W
0.16 in
0.16 in
0.13 in
0.06 in
Not Supported
0.12 in

# Last 30% Longer Than Others. Stable Output under $-10^{\circ}\text{C}$ to $40^{\circ}\text{C}$

Built with high-quality industrial-grade materials, a Coherent chip, advanced temperature adaptability, intelligent thermal control, and high-performance cooling, the device delivers stable performance even in extreme temperatures ( $-10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$ ). The design minimizes overheating risks, ensuring long-term reliability and cost-efficiency during high-load and extended operations. With a lifespan exceeding 10,000 hours, it outlasts competitors by 30%.



# Trusted by Top Medias & Brands



# Specification

## xTool MetalFab Laser Welder



<b>Laser Power</b> 1200W	<b>Laser Type</b> Fiber Laser	<b>Processing Mode</b> Welding / Cutting / Rust Removal & Cleaning	<b>Welding Mode</b> Continuous Welding / Spot Welding / Pulse Welding	<b>Supported Materials</b> Stainless steel, aluminum, carbon steel, titanium, nickel alloy, brass, galvanized sheet, magnesium, etc.
<b>Processing Thickness</b> 0.0078 - 0.197 in (0.2 - 5 mm)	<b>Wavelengths</b> 1080 ± 10 nm	<b>Photoelectric Conversion Rate</b> 36%	<b>Recommended Gases</b> Nitrogen and Argon	<b>Cooling System</b> Air-cooling
<b>Safety Certification</b> Class 4 Laser Safety	<b>Rated. Machine Input Power</b> 4200W	<b>Power Adapter Input Voltage</b> 200 - 240V, AC 50/60Hz	<b>Full-load Current</b> Max. 21A	<b>Storage Temperature</b> 14 °F - 140 °F (-10 °C - 60 °C)
<b>Operation Temperature</b> 14 °F - 104 °F (-10 °C - 40 °C)	<b>Machine Dimensions</b> 28.66 × 12.87 × 20.16 in (728 × 327 × 512 mm)	<b>Machine Weight</b> 38.2 kg	<b>Integrated Wire Feeder</b> No (Free Wire Feeder Machine Included)	<b>Cable Length</b> 196.85 in (5 m)

# Specification

## xTool MetalFab Laser Welder



<b>Laser Power</b> 800W	<b>Laser Type</b> Fiber Laser	<b>Processing Mode</b> Welding / Cutting / Rust Removal & Cleaning	<b>Welding Mode</b> Continuous Welding / Spot Welding / Pulse Welding	<b>Supported Materials</b> Stainless steel, aluminum, carbon steel, titanium, nickel alloy, brass, galvanized sheet, magnesium, etc.
<b>Processing Thickness</b> 0.0078 - 0.157 in (0.2 - 4 mm)	<b>Wavelengths</b> 1080 ± 10 nm	<b>Photoelectric Conversion Rate</b> 36%	<b>Recommended Gases</b> Nitrogen and Argon	<b>Cooling System</b> Air-cooling
<b>Safety Certification</b> Class 4 Laser Safety	<b>Rated. Machine Input Power</b> 3000W	<b>Power Adapter Input Voltage</b> 200 - 240V, AC 50/60Hz	<b>Full-load Current</b> MAX 15A	<b>Storage Temperature</b> 14 °F - 140 °F (-10 °C - 60 °C)
<b>Operation Temperature</b> 14 °F - 104 °F (-10 °C - 40 °C)	<b>Machine Dimensions</b> 24.88 × 11.97 × 18.58 in (632 × 304 × 472 mm)	<b>Machine Weight</b> 35 kg	<b>Integrated Wire Feeder</b> Yes	<b>Cable Length</b> 137.8 in (3.5 m)

# Specification

## xTool MetalFab CNC Cutter



<b>Processing Mode</b>	<b>Cutting Thickness</b>	<b>Cutting Thickness</b>	<b>Working Area</b>	<b>Pass-Through Size</b>
CNC Laser Cutting & Cleaning & Engraving	Up to 0.39 in (10 mm) with xTool MetalFab Laser Welder 1200W	Up to 0.31 in (8 mm) with xTool MetalFab Laser Welder 800W	24.02 × 24.02 in (610 × 610 mm)	24.02 × ∞ in (610 × ∞ mm)
<b>Max. Working Speed</b>	<b>Motion Accuracy</b>	<b>X/Y Axis Max Acceleration</b>	<b>X-Axis Travel</b>	<b>Y-Axis Travel</b>
15.75 ips (400 mm/s)	± 0.0039 in (± 0.1 mm)	0.1G	24.02 in (610 mm)	24.02 in (610 mm)
<b>Z-Axis Travel</b>	<b>Exhaust Fan Capacity</b>	<b>Safety Certification</b>	<b>Rated. Machine Input Power</b>	<b>Power Adapter Input Voltage</b>
3.54 in (90 mm)	2800RPM (± 10%)	Class 4 Laser Safety	250W	100 - 240V, AC 50/60Hz
<b>Full-load Current</b>	<b>Storage Temperature</b>	<b>Operation Temperature</b>	<b>Machine Dimensions</b>	<b>Machine Weight</b>
MAX 2.5A	10 °F - 140 °F (-10 °C - 60°C)	0 °F - 104 °F (0 °C - 40 °C)	46.26 × 45.55 × 48.43 in (1175 × 1157 × 1230 mm)	150kg

# Welding Ability Differences between 1200w & 800w (Laser Welder only)

	1200w welder	800W welder
Stainless Steel	0.2 in (5 mm)	0.16 in (4 mm)
Carbon Steel	0.2 in (5 mm)	0.16 in (4 mm)
Galvanized Sheet	0.2 in (5 mm)	0.16 in (4 mm)
Aluminum	0.16 in (4 mm)	0.08 in (2 mm)
Brass	0.12 in (3 mm)	0.12 in (3 mm)
Titanium	0.12 in (3 mm)	0.08 in (2 mm)

# Cutting Ability Differences between 1200w & 800w (Laser Welder + CNC Cutter)

	With 1200w welder	With 800W welder
Stainless Steel	Max. 0.39 in (10 mm) / Burr-free 0.2 in (5 mm)	Burr-free 0.16 in (4 mm)
Carbon Steel	Max. 0.47 in (12 mm) / Burr-free 0.39 in (10 mm)	Burr-free 0.31 in (8 mm)
Galvanized Sheet	Max. 0.47 in (12 mm) / Burr-free 0.39 in (10 mm)	Burr-free 0.31 in (8 mm)
Aluminum	Max. 0.28 in (7 mm) / Burr-free 0.16 in (4 mm)	Burr-free 0.12 in (3 mm)
Brass	Max. 0.16 in (4 mm) / Burr-free 0.12 in (3 mm)	Burr-free 0.08 in (2 mm)
Titanium	Max. 0.28 in (7 mm) / Burr-free 0.2 in (5 mm)	Burr-free 0.08 in (2 mm)

**We Are #1 in Sales**

# About xTool - The NO.1 Laser Brand

Amazon's #1 Bestseller. Connecting people in 62 countries with our elegantly designed products, honored with both Red Dot and iF Design Awards.

NO.1 laser engraver & cutter brand on Amazon. Data from Amazon, 2022-2023 QMS history.



# We Inspire Creations from Every Aspect



## We Innovate for Unparalleled User Experience

We introduce 12 world-first inventions. Every xTool product is an industry first, including the world's first 10W 20W, and 40W diode lasers, dual lasers, and the 4-in-1 crafting machine, etc. We never follow, we lead.

## We Empower 500K+ Users to Build Their Dreams

Over 500,000 users have chosen us, and 23.53% have shown their continued trust by purchasing two or more xTool machines. With a 4.7/5 Trustpilot rating, we are the highest-rated brand in the desktop laser market.

User data based on xTool backed, as of September 2024

## We Promise Reliable Quality in Every Product

We use advanced technology to ensure reliability. With over 72.4 billion uses by real customers, our products are optimized to meet high standards and backed by ISO 9001 certification

## We Pioneer Innovations for a Safe, Clean Workspace

Your safety is our priority. Our innovative Fire Safety Set features automatic fire suppression, and the SafetyPro" AP2 is the best in class for odor and dust removal. Both offer unmatched peace of mind.

# Professional Tools, Backed by Professional Service



**US&EU Based Local Service**



**24/7 1-on-1 Expert Support**



**Pre-sale Product Demo**






**Machine Training**



# Appendix I: Gas Suggestions for xTool MetalFab

Processing Type	Material Type	Recommended Gas	Recommended Pressure	Recommended Nozzle
CNC Cutting	Stainless Steel Aluminum Brass Carbon Steel Galvanized Sheet (0.2mm-1mm)	99.99% Nitrogen or 99.99% Argon or Compressed Air	Over 87 PSI (0.6 MPa)	Ordinary cutting nozzle (included in CNC cutter package)
	Stainless Steel (2mm-5mm) Aluminum (2mm-4mm) Brass (2mm-3mm)	99.99% Nitrogen or 99.99% Argon or Compressed Air	Over 174 PSI (1.2 MPa)	Ordinary cutting nozzle (included in CNC cutter package)
			Over 87 PSI (0.6 MPa)	SaveGas™ Nozzle (included in CNC cutter package)
	Titanium Alloy TC4 (1mm)	99.99% Argon	Over 174 PSI (1.2 MPa)	Ordinary cutting nozzle (included in CNC cutter package)
	Titanium Alloy TC4 (2mm-5mm)			SaveGas™ Nozzle (included in CNC cutter package)
Carbon Steel (2mm-10mm) Galvanized Sheet (2mm-10mm)	99.99% Oxygen	8.7 PSI-10.2 PSI (0.06 MPa-0.07 MPa)	Double-layer Nozzle & focus extension tube (add-on)	
CNC Rust Removal	Stainless Steel Aluminum Brass Carbon Steel Galvanized Sheet	99.99% Nitrogen or 99.99% Argon or Compressed Air	87 PSI-116 PSI (0.6 MPa-0.8 MPa)	CNC Cleaning Nozzle (included in CNC cutter package)
Handheld Welding	Stainless Steel Aluminum Brass Carbon Steel Galvanized Sheet	99.99% Nitrogen or 99.99% Argon	15-30L/min flow rate or 14.5 PSI-29 PSI (0.1 MPa-0.2 MPa) pressure	Welding Nozzles (included in laser welder package)
Post-weld Cleaning				Cleaning Nozzle (included in laser welder package)
Handheld Rust Removal with MaxClean™		99.99% Nitrogen or 99.99% Argon or Compressed Air	43.5 PSI-87 PSI (0.3 MPa-0.6 MPa) pressure	MaxClean™ Accessory (add-on)
Handheld Cutting				Over 116 PSI (0.8 MPa) pressure

# Appendix II: Accessory Lifespans of xTool MetalFab

Accessory	Image	Lifespan reference	If Included in the Package
Ordinary Cutting Nozzle		About 3 months/1pc	Yes, 1pcs in the CNC cutter package
SaveGas™ Cutting Nozzle		About 3 months/1pcs nozzle, 15 days/10pcs white ceramic rings	Yes, 1pcs nozzle + 10pcs ceramic rings in the CNC cutter package
CNC Cleaning Nozzle		About 3 months/1pcs	Yes, 1pcs in the CNC cutter package
Double-layer Cutting Nozzle Set		About 3 months/1pcs	No, add-on
CNC Cutter Slats		About 3 months/5pcs	Yes, 5pcs in the CNC cutter package
Handheld Cleaning Nozzle		About 3 months/1pcs	Yes, 1pcs in the laser welder package
Handheld Cutting Tip		About 3 months/1pcs	Yes, 1pcs in the laser welder package
Handheld Wireless Welding Nozzle		About 3 months/1pcs	Yes, 1pcs in the laser welder package
Handheld Wired Welding Nozzle		About 3 months/1pcs	Yes, 1pcs in the laser welder package
Protection Lens		About 2 months/10pcs	Yes, 10pcs in the laser welder package
MaxClean™ Cleaning Lens		About 15 days/1pcs	Yes, 1pcs in the MaxClean™ Accessory Package (add-on or purchase for free)