

# Fiber Laser Cutting Machine for Metal Fabrication

This fiber laser cutting machine is designed for high-precision cutting of metal sheets. It features a high-rigidity machine bed and an imported fiber laser for stable performance and long service life.



## ADDITIONAL IMAGES



## Overview

### High-Performance Metal Fabrication Solution

This fiber laser cutting machine is engineered for high-precision processing of carbon steel and stainless steel. It features a high-rigidity machine tool bed treated with a standard annealing process to ensure long-term accuracy and stability. With an electro-optical conversion efficiency of up to 30%, it offers a low-cost, energy-efficient alternative to traditional YAG and CO2 laser systems.

## Performance Metrics

### Key Performance Indicators

**100000 Hours**  
Laser Service Life

**30 %**  
Conversion Efficiency

**3 x**  
Thin Plate Speed vs YAG

## Laser Technology

### Laser Source Efficiency Comparison

| Laser Source Model | Efficiency (%) |
|--------------------|----------------|
| Fiber Laser        | 30%            |
| Disc Laser         | 15%            |
| CO2 Laser          | 10%            |

## Machine Construction

|                  |                                                                                                |
|------------------|------------------------------------------------------------------------------------------------|
| Bed Construction | High-rigidity bed with high-temperature numerical control electric furnace annealing treatment |
| Drive System     | Imported guide-driven original and servo motor                                                 |

## Operational Advantages

### Core Features

- Maintenance-free fiber laser source
- No reflection lens or light path adjustment required
- Instant cutting of complex graphics and text
- Smooth, flat cutting edges with minimal deformation
- Gas-free laser production (supports air cutting)
- Low power consumption (1/3 to 1/5 of VAG power)

### Environmental Impact

Yes

## Material Compatibility

### Compatible Materials

Carbon Steel, Stainless Steel, Thin Metal Plates