Techma360

Techma360. is ranked amongst the leading **Importers** and **Suppliers** of broad assortment of **CNC Fiber Laser Cutting Machine, CNC Fiber Laser Welding Machine, CNC Fiber Laser Marking Machine, CNC Press Brake Machine, CNC Shearing Machine, CNC Turret Punching Machine, Busbar Processing Machine etc** The products provided by us are manufactured at our suppliers end by using high quality approved components with highly advanced technology by team of professionals. These products are highly acknowledged among our renowned customers for the outstanding features such as long service life, optimum strength, flawless finish, highly durable & effective service support etc.

Techma360 aim to provide durable, affordable & easily operable Sheet Metal Processing machines. Apart from the premium standard quality, **our brand also focuses on providing the best pre & post-sale customer service support**

LASER CUTTING MACHINE

Working principle:

It is mainly used for plate cutting into the required shape workpiece laser machine. Using a laser beam to the realization of thermal cutting equipment.
Laser cutting is a laser beam to the surface to the energy released when the workpiece melting and evaporation, to achieve the purpose of cutting and carving, has high precision, fast cutting, cutting pattern is not limited to restrictions, automatic typesetting save materials, incision smooth, low processing cost etc, gradually improve or replace the traditional cutting process equipment.

Features of Fiber Laser Cutting Machine

High quality

Smaller focus diameter and high work efficiency.

High cutting speed

2-3times faster than YAG or Co2 Laser.

Low cost

Photoelectric conversion rate is up to 25%-30%.Low electric power consumption, it is only about 20%-30% of traditional co2 laser cutting machine.

Low mainte n-ance

Fiber line transmission, no adjustment of optical path.

High efficienc y

Compare with co2 laser cutting machine, fiber laser cutting machine has three times photoelectric conversion efficiency.

Flexible

Compact design, easy to flexible manufacture requirements.

Stable

Adopting the top world import fiber lasers, stable performance, key parts can reach 100000 hours.

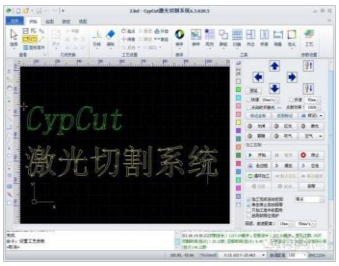
Easy

Fiber line transmission no need reflect lens, save maintenance cost.

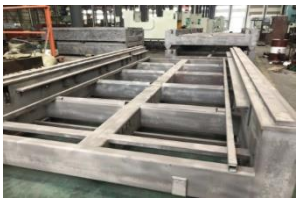
Applicable materials

Suitable for stainless steel, carbon steel, silicon steel, aluminum alloy, titanium alloy, galvanized steel, pickle plate, aluminum-plating Zinc plate, metallic copper and other metals

■ Configuration of the Machine

Parts Name	Picture	Brand & Origin	Function
Laser sourse		IPG PHOTONICS IPG 4000W	1:Direct control of all the fiber laser functions; 2:Synchronized control of the laser source; 3:Overall power control; 4:High speed perforation; 5:Edge machining function; 6:Cutting data library; 7:High speed
Cutting Head		PRECITEC Precitec	1: Automatically focal position adjustment; 2:No-contact height sensor; 3:Horizontal lens adjustment; 4: Switzerland brand
Control System		柏楚电子 Friendess Co., Ltd. Cypcut(China. Shanghai)	1:Recognized by over 300 domestic and foreign laser companies; 2:Approved by over 100000 clients; 3:Stable operation on over 20000 sets cutting machine;ple 4:Able to complete from the design,map and process; 5:Simple,efficient,powerful and reliable

Square Guide Rail		HIWIN(Taiwan)	1:Precise design,easy to install; 2:High rigidity and overweight load capacity; 3:Low noise,smooth movement
Control Center		Advantech(Taiwan)	1:CPU:G1820，2:RAM:4G, 3:SSD:120G
Rack and Pinion system		YYC/KH(Taiwan)	1: High hardness; 2: 6H precision; 3: easy to install.
Driving System		Panasonic Or Yaskawa (Japan)	1:Servo Motor with high precise; 2:Able to control cutting speed and position; 3:Stable running,lower speed without vibration phenomenon; 4:Better overload capacity
Reducer		Shimpo(Japan)	1:Helical gear replacing previous spur gear,lower noice; 2:Back to the gap below 0.05 are points; 3:Low pulsating roration smooth

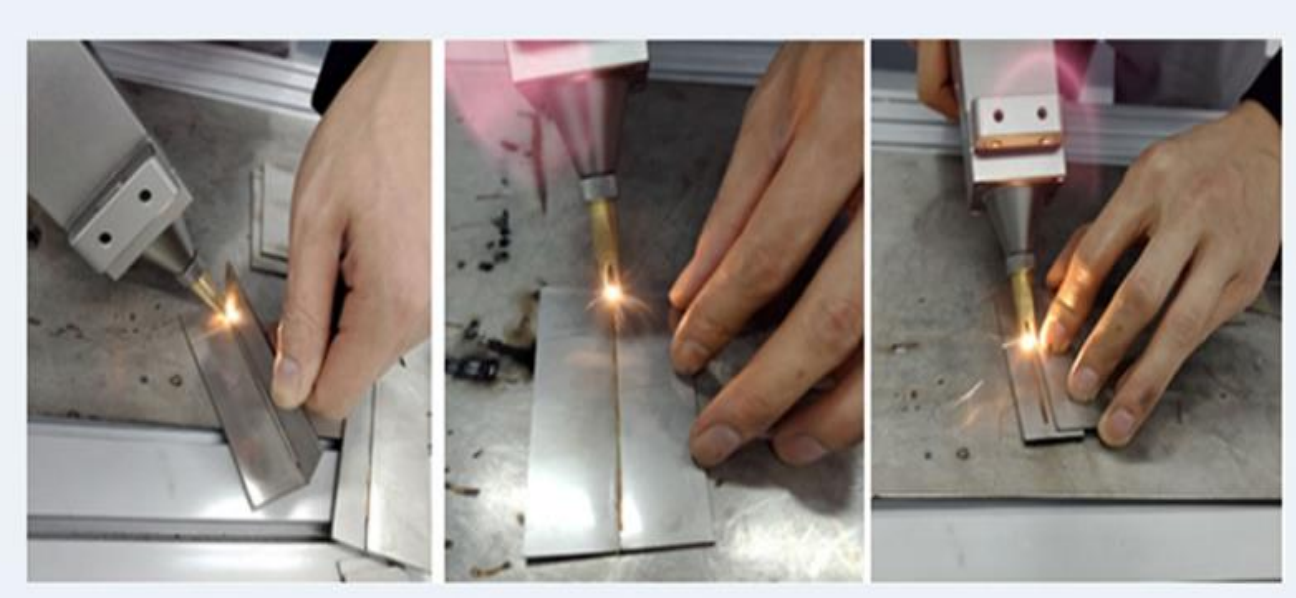
Oil Injection System		China.Zhejiang	After using some time,Rack&Pinion and guide rails always need maintained by inject oils.Make sure the machine keep moving fluently and in good precision.
Machine Tool Process	 	Self-research and development	1：Steel welding 2：tempering processing
Machine crossbeam		Self-research and development	1：Steel welding 2：tempering processing

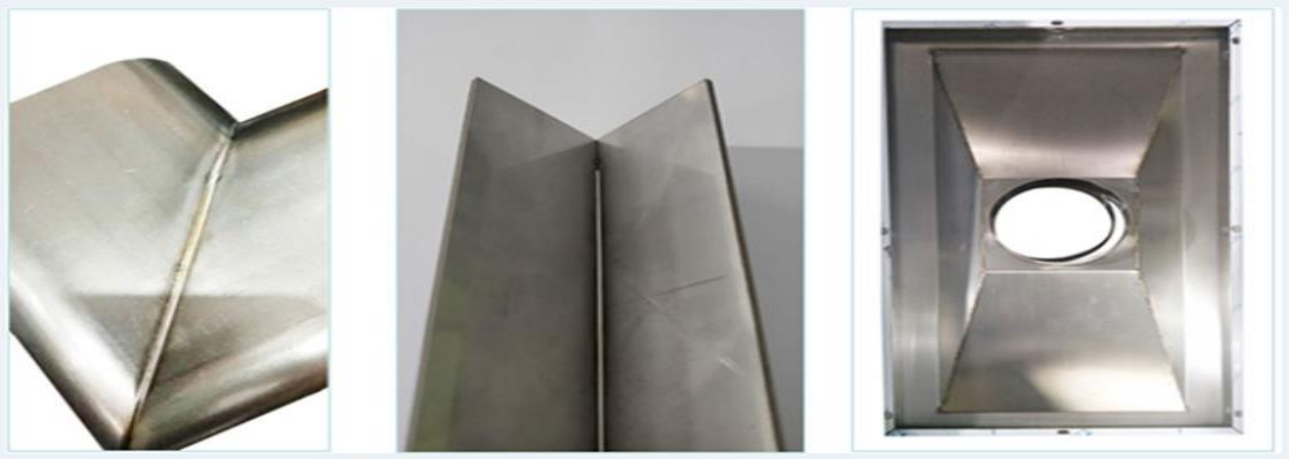
Fiber Laser Welding Machine

■ Applicable materials

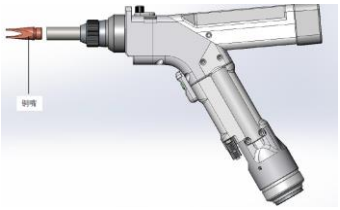
Suitable for stainless steel, carbon steel, silicon steel, aluminum alloy, titanium alloy, galvanized steel, pickle plate, aluminum-plating Zinc plate, metallic copper and other metals

Samples





Configuration of the Machine

Parts Name	Picture	Brand and Orignial
Laser sourse		Raycus 1000W
Welding Head		WSX
Control System		WSX
Automatic Feeder		WSX
Chiller		Hanli

TECHNICAL DETAILS

Machine Model ： MF1000Z / MF1500Z / MF2000Z
Laser Source ： Raycus /
Laser Power ： 1000W / 1500W / 2000W
Function： Welding And Cutting
Source Service Life About 100,000 hours
Laser Style ： Fiber Laser
Peneration Depth： Max 2 mm (1000W) / Max 3mm (1500 W) / Max 4 mm (2000W)
Suitable Material ： Stainless Steel, Galvanized Sheet, Carbon Steel , Aluminum etc
Laser Welding head ： WSX
CNC software system ： WSX
Spot Size : 1.8 mm
Fiber length: 8 meter
Power Consumption: Max 5KW
Cooling System: Water Cooling Chiller
Input Voltage : 220V~380V / 50HZ~60HZ

LASER MARKING

* Power : 20 watt / 30 watt / 50 watt / 100 watt

* Software : Ezcard

* Source : Raycus/MAX/ MOPA

* Working Size : 140X140 mm /200x200mm /300x300mm

PRESS BRAKE MACHINE

MAIN FEATURES:

This CNC hydraulic press brake machine is advanced in technology and reliable in metal sheet bending performance. It is widely used in plane, automobile, trucks, shipbuilding, various fabrication industry with high production efficiency.

1.Brand-new industry design combined with modern aesthetic concept, high-quality production technology, simple appearance.

2.Latest high-frequency responding hydraulic control technology, faster, more efficient and accurate.

3.Heat treatment of the rack, rigidity optimization verification on entire machine and the application of hydraulic compensation structure jointly ensure the bending precision of MB8 series PRESS BRAKES.

4.Optimal ratio of parameters and top-level core configuration ensure stable performance and easy operation.

5.MB8 standard 2 shafts back gauge system, as to complex shape work pieces, 4 or 5 shafts back gauge system and corresponding dies are available for your option.

6.Press brake using fully closed-loop electro-hydraulic servo control technology, slider position signals can be feedback to CNC system by bilateral gratings, then CNC system adjusts the amount of fuel tank by changing the synchronous valve opening size, hereby controlling the slider Y1, Y2 running on the same frequency, maintaining the parallel state of the worktable.

7.According to state of sheet metal on the press brake, CNC system can automatically control the table deflection compensation yielding uniform length of all workpieces angles.

8.The use of hydraulic deflection compensation gives access to uniform full length workpieces. Hydraulic deflection compensation consists of a set of oil cylinders under the worktable, which can make the table occurs relative movement and form an ideal convex curve, ensuring the relative positions with slider keep unchanged. Compensation valves are subject to plate thickness and properties of material to be bent.

Standard Equipment:

●CNC system adopts Holland DELEM DA53T

●Grating ruler controls depth Y1 and Y2 axis to 0.01

●Servo motor and servo drive control X axis to 0.01mm, stop fingers can be easily moved along the cylindrical guide.

●Keep the accuracy between Hiwin ball screw and linear guide within 0.01mm

●Front carrier can be adjusted along the linear guide in the worktable direction

●Germany ARGO closed-loop electro-hydraulic servo synchronous controls the system

●Germany EMB oil tube connectors

●Germany Siemens Main Motor

●France Schneider Electrics

●Bergerda Servo driver

●Hydraulic &Electrical overload protection

●Upper are mechanical fast pinching punches. Lower are double-V quick changing dies(86°,R0.6mm)

Top and Bottom Tooling(86°,R0.6mm)

Safety Equipment:

●Front finger Protection(Safety light curtain)

●South Korea Kacon Foot Switch(Level 4 of safety)

●Back metal safe fence with CE standards

●Safety relay with Monitor the pedal switch and safety protection

MAIN COMPONENTS

No	Name	Model/Manufacture	Benefit	Configuration
1	CNC System	Holland Delem DA53T Controller		Standard
2	Electrics	France Schneider Electrics	Travel switch&Limit Switch	
3	Main Motor	Siemens Motor		
4	Back stopper, Timing belt, Timing Pulley	Taiwan	Positioning Control Guaranteed precision	
5	Servo Motor	Hangzhou Bergerda	Positioning control	
			Guaranteed precision	
6	Servo Drive	Hangzhou Bergerda	Positioning control	
			Guaranteed precision	
7	Pedal Switch	South Korea KACON		
8	Sealing Ring	German Merkel		
9	Hydraulic System	Germany ARGO		
10	Oil Tube Connector	Germany EMB		
11	Front safeguard	China		
12	Back safeguard	China		
13	Die	One set of standard dies		
14	Backgauge	Taiwan Hiwin ball screw and linear guide rail		
15	Clamping	China		
16	Deflection Compensation	Hydraulic Compensation		
17	Grating ruler	France FAGOR		
18	Standard Axis	3+1 (Y1, Y2, X +V)		

SHEARING MACHINE

MAIN FEATURES

1.Streamlined design originated from EU, the machine frame is a whole through overall welding and annealing treatment.
2.Reliable Germany Rexroth integrated hydraulic system and hydraulic transmission, the design can effectively reduce problems caused by leakage of hydraulic fluid.
3.Hydraulic swing beam shearing machine is one kind of equipment by swinging the upper blade to shear plate with smaller shearing angle and distortion, improving shearing quality.
4.Back gauge is adjusted by high precision ball screw driven by E21S controller, during the process frequency converter prevent positioning device horizontal swinging, significantly improving positioning accuracy.

STANDARD EQUIPMENTS
S

●Estun E21sNC control System
●Powered Back gaugeX-axis
●DELTA Inverter controlled back gauge
●HIWIN Ball screws & Polished rod with 0,05mm accuracy.

●Squaring Arm and Front Support Arms
●Germany Bosch-Rexroth Hydraulic
●Germany EMB Tubing connector
●Germany Siemens Main Motor
●Schneider Electrics
●Hydraulic &Electrical overload protection
●Cutting Line Illumination and wire for shadow line cutting
●Top blade with two cutting edges and bottom blade with four cutting edges.(6CrW2Si)

SAFETY EQUIPMENT

●Safety Standards(2006/42/EC):
●Front finger Protection(Safety light curtain)
●South Korea Kacon Foot Switch(Level 4 of safety)
●Back metal safe fence with CE standards
●Safety relay with Monitor the pedal switch and safety protection

STANDARD EQUIPMENT:

No.	Accessory Name	Model/Manufacturer	Other	Configuration
1	NC system	E21S Estun NC system		Standard
2	Electrics	France Schneider Electrics	Travel switch&Limit switch	
3	Main motor	Germany-Siemens Motor		
4	Backgauge, timing belt, timing pulley	Taiwan	Positioning Control	
5	Frequency Converter	Taiwan-DELTA	Guaranteed Precision	
6	Foot Switch	South Korea-Kacon		
7	Hydraulic System	Germany Bosch Rexroth		
8	Oil Pump	America-Suuny		
9	Sealing Ring	German BAUSER and Busak+Shamban		
10	Tube Connector	Germany EMB		
11	Front/Back Safety Guard	China Dacu		
12	Back Blanking Plate	China Dacu		
13	Backgauge	Taiwan Ball Screw		
14	Back motor	China		
15	Safety Standard	CE		

V-GROOVING MACHINE

1. Main features

- CNC V-Grooving machine's frame and beam are designed with frame structure.The overall rigidity of the machine is good and durable.
- Strictly in accordance with the machine tool processing technology,using electric furnace tempering, eliminating welding stress and reducing equipment deformation.
- The metal sheet is fixed by hydraulic clamping system, which has high slotting speed and ensures
- Strong clamping force. The hydraulic system has accumulator compensation and servo motors can save energy and decrease oil temperature.

- The CNC V-Grooving machine uses four knives to make the “V” groove, so the cutting result will be uniform and the deformation of the workpiece will be reduced. The optional micro-cooling system can extend the tool life and reduce production costs.
- This machine can work both vertically and horizontally, also can work on both front and back side of the metal sheet.
- Working speed can be adjusted according to the material and operator.

1. Main configurations

No.	Name	Brand
1.	CNC system	Taiwan HUST
3.	Frequency Converter	MITSUBISHI
4.	Servo Motor	MITSUBISHI
5.	Oil Cylinder Sealing	Japan NOK
6.	Limit Switch	Japan OMRON
7.	Main Motor	SIEMENS
8.	Electric Components	France Schneider
9.	Alloy Blade	South Korea KORLOY
10.	Linear Guide Rail	Taiwan HIWIN