Jinan MORN Technology Co., Ltd.

MORN GROUP LIMITED

Tel: +86 531 8869 2337

Web: www.morntech.com

Address: 13F, Building 5, Qisheng Mansion, Xinluo Street,

High-Tech Zone, Jinan, China, 250101



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# [COMPANY] PROFILE

Jinan MORN Technology Co., Ltd. was founded by Mr. Li, Ms. Dong and their supporters in 2008. They have long harbored the dream of consistently providing quality equipment to the global market. MORN LASER is the trademark registered by the Laser Business Division of MORN GROUP.

Headquartered in Jinan, our company is committed to the ongoing innovation, high quality and consistent manufacturing while providing and maintaining exemplary after sales services to support an ever growing portfolio of world class Industrial Laser products and related solutions. These products are used extensively throughout the industry for cutting, welding, engraving, cleaning and marking of materials with unrivaled laser precision. The company is also perfectly positioned to provide very specific and proprietary laser solutions wherever these might be needed.

All of our products are certified CE compliant and have also obtained FDA approval.

Since inception the company has been geared towards the international market and to date we have successfully applied for brand and patent protection across 55 countries. We have successfully established warehouse operations and regional after sales service centers in America, Britain, Philippines and Romania.

Our core philosophy is to build value with our clients, we do this by understanding and analyzing their specific challenges and are thereby able to provide a tailored solution to match, in so doing we are able to directly contribute to the success of our clients business.



#### epresentative Requirement

- Proven sales performance within 1 year
- Promotional equipment showroom
- ·Professional services team

#### Manufacturer support provided

- •very competitive rates & regional trade protection
- Generous incentives & complimenting finance terms
- ·Significant promotional resources offered
- Priority Service response and Professional training

2008

tablished in 200

155

Exporting to 15 countries

60,000+ We currently serve over 60,000 satisfied

# RESEARCH AND DEVELOPMENT PHILOSOPHY

MORN attaches great importance to the transformation that takes place in the scientific and technological fields, with ever progressive advancements and breakthroughs that occur in these fields new opportunities arise for the enhancement and improvement of our products. For this reason, MORN has established a long-standing cooperation with the National Engineering Research Center for Laser Processing at Huazhong University of Science and Technology.

Our co-developed multi-functional laser cutting equipment and multi-functional laser welding equipment represent the advancement in this field made both domestically and abroad. These advancements have successfully been applied across many industries including Mechanical Engineering, Electronics, Metallurgy, Energy and Petrochemicals to name a few examples.

Our fiber laser cutting equipment has proven to be extremely reliable and recognized for the high productivity, stability and consistency that are achievable in sheet and tube processing applications. The fiber welding system serves a wider scope of applications depending on whether these are integrated with an auto welding or handheld gun. The wobble laser gun widens the weld seam in a uniform and controlled manner while simultaneously reducing the required laser power. The laser is designed in such a manner that it will not emit unless the laser welding gun comes into contact with the workpiece to which the ground wire is connected following the practices inherent to conventional welding. Both innovations have received significant recognition from users across the industry.

We now hold 36 patents and 13 patents are currently pending. With the advent of the 4th Industrial revolution, MORN will provide more and more industry-leading intelligent solutions.



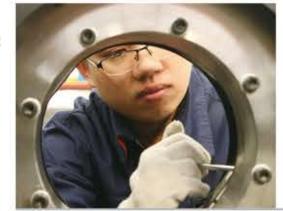






#### Research and Development

Continue to increaseR & D funding, develop advanced products that meet the needs of the laser industry.



#### Fine Manufacturing

Be attentive to details and keep improving products, constantly strive for excellence.



#### Technology Upgrading

Utilize the latest advances in laser technology, keep upgrading technology to sharpen the edge of MORN products.



#### Technical Exchange

Keep paces with international top-notch brand laser manufacturers, organize technical exchange meetings and learn advanced production experience.



#### **Technical Service Team**

Develop multi-level tech service system, improve the service process, reduce the response time, and provide the professional and efficient solutions.



#### Skilled Worker Training

Pay attention to workers' technical skill training and organize regular skill assessments, only those who pass the assessments can go on post.

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# **CERTIFICATES AND HONORS**

















# ALL COVER FIBER LASER CUTTING MACHINE

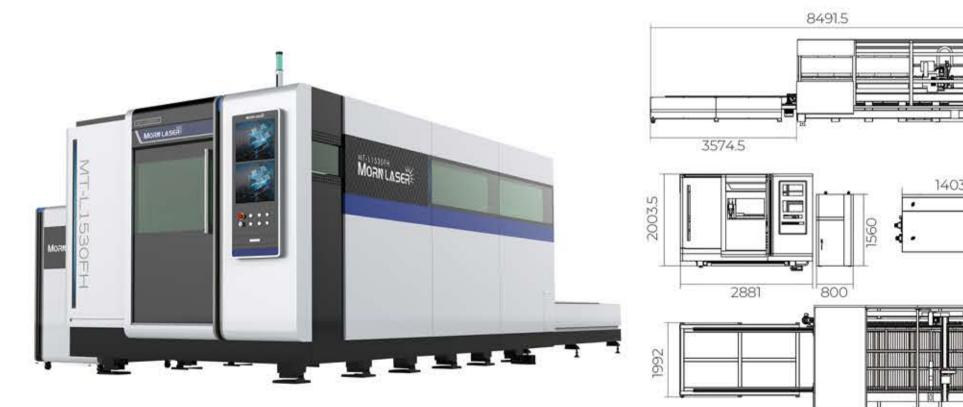
MORN's fully enclosed laser cutting machine is designed for metal cutting applications within a demanding industrial production environment.

The machine is fully contained by the robust enclosure while the exhaust system ensures safe and pollution free operations.

The glass viewing window is fitted with a special laser protection lens that ensures there is no risk of harm to human eyes. A tube cutting attachment can be fitted for multi-functional processing.

#### Features

- Fully enclosed with powerful exhaust system to protect the operators from noise, smoke, sparks and slag splashes;
- Auto shuttle pallets cut feeding idle time and improve your processing efficiency:
- · Automated lens height adjustment ensures burr-free cuts for all material thickness.











Brass 1-40mm CS 1-45mm SS 1-50mm

Equipment model

Laser type

Laser wavelength

Rated output power

Effective cutting range

Table

Workbench axial positioning accuracy

Workbench repositioning accuracy

Cutting speed

Max no-load speed

Cutting head

Transmit way

Reducer

Drive system

Water chiller

Software

Electrical requirements

MT-L1530FH / MT-L2040FH / MT-L2560FH

Fiber laser generator

1080±5nm

1000W-12000W optional

1500\*3000mm/2000\*4000mm / 2500\*6000mm optical

Two, automatic exchange

≤±0.03mm

≤±0.02mm

Dependent on material and thickness

120m/min

Switzerland Raytools laser head

Dual Rack & Pinion type

Japan Shimpo

Japan Yaskawa servo motor and driver

Industrial water chiller

Cypcut control software

# EXCHANGE TABLE FIBER LASER CUTTING MACHINE

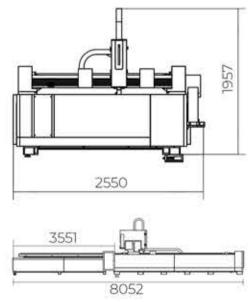
MORN's exchange table fiber laser type is developed to improve the production turnaround efficiency. With double auto-switched pallets, cutting and loading/unloading can be performed concurrently.

The equipment is extremely cost-effective. It is preferred by enterprises with large processing volumes where equipment has to work on an ongoing basis.

#### Features

- Auto chain-type parallel pallets system, fast exchange speed, convenient loading:
- · High productivity, high precision cuts, low operating cost:
- Smooth and accurate processing of complex graphics:
- Narrow kerf, small heat-affected zone and nearly no thermal deformation.













SS 1-50mm

Aluminum 1-40mm

CS 1-45mm

SS 1-50mm

Equipment model

Fiber laser source

Effective cutting range

Tables

Tables exchanging time

Laser wavelength

Laser source

Laser cutting head

Control system

Reducer

Drive system

Pneumatic elements

Electrical parts

Guide rail

Cooling system

Oiling system

Electrical requirement

MT-L1530FE / MT-L2040FE / MT-L2560FE

500W-12000W optional

1500\*3000mm / 2000\*4000mm / 2500\*6000mm optional

Two, automatic exchange

10s

1080±5nm

Raycus / IPG / Photonics optional

Raytools

Cypcut

Japan Shimpo

Japan YASKAWA servo driver and motors

Japan SMC

France Schneider

Taiwan square guide rail

Constant temperature controller water chiller

Automatic oiling system

# METAL SHEET FIBER LASER CUTTING MACHINE

MORN's metal sheet fiber laser stands out on precise cutting of complex, intricate contours. Perfect industrial design is more in line with man-machine engineering.

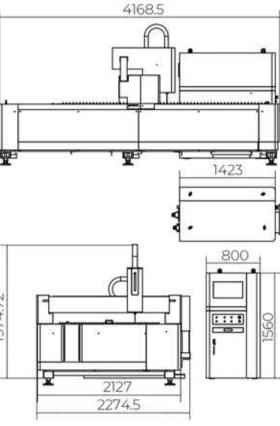
It works great with CS, SS, MS, aluminum, brass, copper, bronze, gold, silver, titanium alloy, galvanized plates, etc.

The machine is affordable and tailored for sheet metal processing enterprise.

#### Features

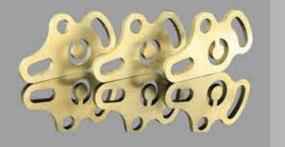
- · Stand-alone electrical cabinet, wireless remote control.
- · High configuration, stable performance, long service life.
- High quality finishing, no need for any post-processing.
- LED light strips, stylish design.













Aluminum 1-40mm

SS 1-50mm

Brass 1-40mm

CS 1-45mm

Equipment model

Laser type

Rated output power

Effective cutting range

Reposition accuracy

Laser wavelength

Laser source

Laser cutting head

Control system

Reducer

Drive system

Pneumatic elements

Electrical parts

Guide rail

Cooling system

Oiling system

Electrical requirement

MT-L1530F / MT-L2040F / MT-L2560F

Fiber laser

500W-12000W optional

1500\*3000mm / 2000\*4000mm / 2500\*6000mm optional

0.02mm

1080±5nm

Raycus

Raytools

Cypcut

Japan Shimpo

Japan YASKAWA servo driver and motors

Japan SMC

France Schneider

Taiwan square guide rail

Constant temperature controller water chiller

Automatic oiling system

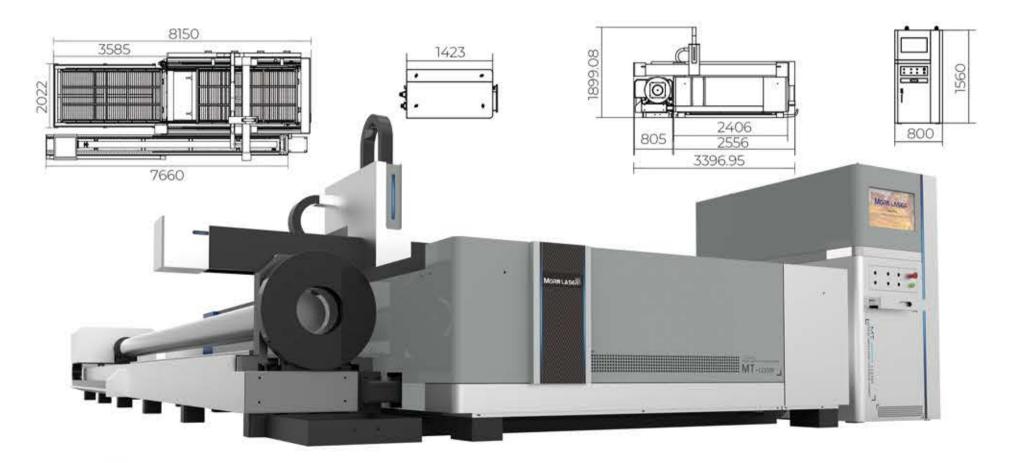
# SHEET & TUBE FIBER LASER CUTTING MACHINE

MORN's sheet and tube fiber laser cutting machine, engineered for comprehensive metal fabrication, enables you to develop new market opportunities without the heavy investment and floor space requirement of two separate machines.

Your productivity for either tube or sheet is not compromised compared to dedicated single purpose laser machines.

#### Features

- One machine, dual use, cost-effective.
- · Auto self-centering fixture system, quick and stable pipe/tube fixing.
- Dual temperature cooling and lubricating system ensuring durability and longevity.
- •Top brand parts ensure high cutting precision and powerful cutting ability.











CS φ 160mm-320mm

Brass 1-40mm

CS 1-45mm

CS φ 160mm-320mm

Equipment model

Fiber laser source

Effective cutting range

Rotary diameter

Max. metal tube length

Laser wavelength

Laser source

Laser cutting head

Control system

Reducer

Drive system

Pneumatic elements

Electrical parts

Guide rail

Cooling system

Oiling system

Electrical requirement

MT-L1530FR / MT-L2040FR / MT-L2560FR

500W-12000W optional

1500\*3000mm / 2000\*4000mm / 2500\*6000mm optional

160mm / 220mm / 320mm optional

6m

1080±5nm

Raycus / IPG / Max Photonics optional

Raytools

Cypcut

Japan Shimpo

Japan YASKAWA servo driver and motors

Japan SMC

France Schneider

Taiwan square guide rail

Constant temperature controller water chiller

Automatic oiling system

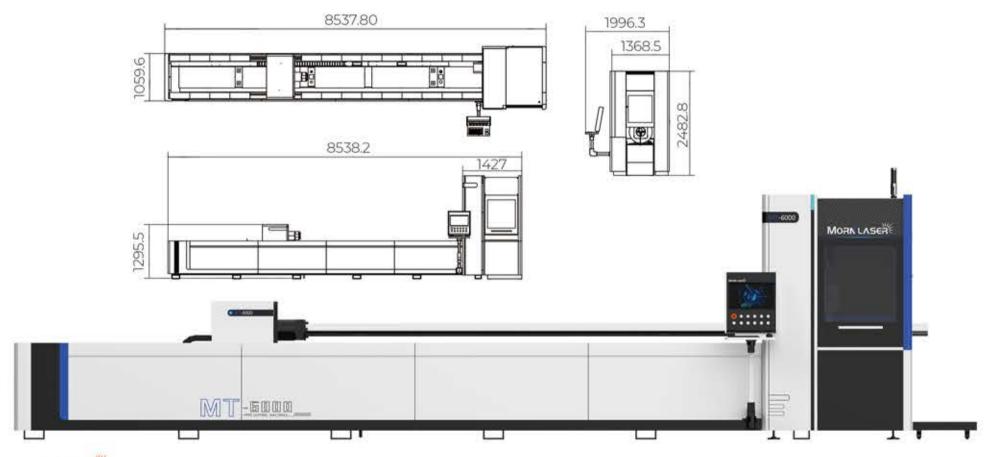
# TUBE FIBER LASER CUTTING MACHINE

MORN's tube fiber laser cutting machine is a professional tube profile laser cutter and supports cutting of round tube, square tube, rectangular tube, elliptical tube, waist tube, D-shaped tube, hexagonal tube, shaped tube, etc.

Equipped with self-centering jig system, the productivity is highly improved. Tube cutting lengths can be customized.

#### Features

- Dedicated operating system, simple operation, low operating cost.
- Auto chucking chucks, high fixing efficiency, superior performance.
- Extremely robust, minimum size, maximum production rate.











GS φ 160mm-320mm CS φ 160mm-320mm

m-320mm Brass φ 160mm-320mm

Equipment model

Laser type

Laser wavelength

Rated output power

Effective pipe cutting length

Effective pipe cutting diameter

SS φ 160mm-320mm

Workbench repositioning accuracy

Cutting speed

Cutting head

Pneumatic elements

Drive system

Reducer

Electrical parts

Water chiller

Oiling system

Control system

Electrical requirements

MT-6000

Fiber laser generator

1080±5nm

500W-12000W

6000mm

20mm - 165mm/220mm/320mm optional

≤±0.02mm

Depend on material and thickness

Switzerland Raytools laser head

Japan SMC

Japan Yaskawa servo motor and driver

Japan Shimpo

France Schneider

Industrial water chiller

Automatic oiling system

Cyptube / Tubepro

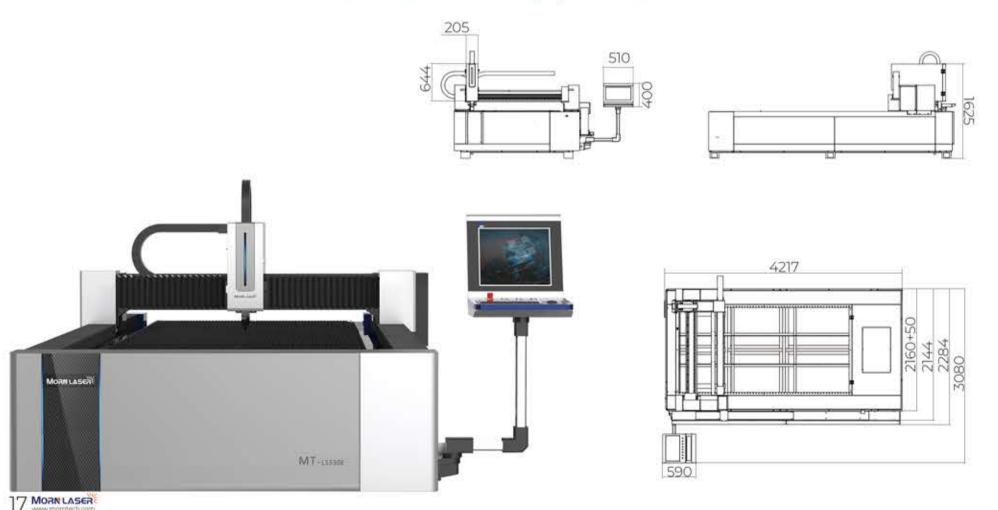
# ECONOMICAL SHEET FIBER LASER CUTTING MACHINE

MORN's economical fiber laser comes standard with a Raycus 1000W laser source for mid-thickness plate cutting.

It is the first choice for processing of metal words, advertising signs, billboards, decoration, panels, crafts, electrical cabinet, kitchen appliances, elevators, etc.

#### Features

- •Integrated design, small footprint, low cost.
- Fast and accurate processing of complex graphics.
- Non-contact processing, fine cutting edge, no need for post-processing.
- •Wireless remote control, easy operation, free maintenance.











**GS 1-5mm** 

SS 1-5mm CS 1-10mm

Equipment model

Laser type

Rated output power

Effective cutting range

Reposition accuracy

Laser wavelength

Laser source

Laser cutting head

Control system

Reducer

Water chiller

Electrical parts

Oiling system

Electrical requirement

MT-LF1530E

Fiber laser

1000W

1500\*3000mm (59" \* 118")

±0.05mm

1080±5nm

Raycus

Raytools

Cypcut

Japan Shimpo

Industrial water chiller

France Schneider

Automatic oiling system

3 Phases 380V±10% 50HZ/60HZ or 3 Phases or single Phase 220V±10% optional

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# MINI FIBER LASER CUTTING **MACHINE**

MORN's mini fiber laser cutter is known for its compact design, mature technology and high cutting precision, which is preferred by small workshops and DIY enthusiasts. It is popular for small and exquisitely detailed metal cutting such as decorative jewelry manufacture, advertising and general craft industries, etc.

#### Features

- Centralized operation, fast and precise cutting.
- •Compact and enclosed design, small footprint, easy to move.
- · High precision, simple operation, maintenance-free.
- Low cost, fast returns.











Aluminum 1-40mm

CS 1-45mm

SS 1-50mm

Equipment model

Laser type

Laser wavelength

Rated output power

Effective cutting range

Workbench axial positioning accuracy

Workbench repositioning accuracy

Cutting speed

Max no-load speed

Cutting head

Penumatic elements

Drive systom

Reducer

Water chiller

Oiling system

Software

Electrical requirements

MT-L6090F

Fiber laser generator

1080±5nm

500W-1500W

900\*600mm

≤±0.1mm

≤±0.02mm

Depend on material and thickness

60m/min

Switzerland Raytools laser head

Japan SMC

Japan Yaskawa servo motor and driver

Japan Shimpo

Industrial water chiller

Automatic oiling system

Cypcut control software

# HANDHELD LASER WELDING MACHINE

#### Advantages

- 1. Latest generation of fiber laser, self-developed wobble/common welding gun with safety sensing function and adjustable weld seam width;
- 2. Easy welding of large objects over long distances, and hard-to-reach places;
- 3. High strength and fine weld seam, no need for polishing, no consumables, no deformation:
- 4. 3-10 times the speed of conventional argon arc welding plasma welding:
- 5. Power consumption is 10-20% less than traditional process, save 2-3 labor costs;
- 6. Simple operation, long service life.

#### **Applications**

Applicable for welding both same type materials and dissimilar materials.

Widely used for welding of metal words, kitchen cabinets, steel structures, stairs, shelves, ovens, stainless steel door and window guardrails, elevators, distribution boxes, stainless steel houses etc.

#### Materials

Titanium, aluminum, copper, zinc, gold, silver, carbon steel and stainless steel, and also cooperbrass, cooper-titanium, nickel-cooper, cooper-titanium and many other dissimilar metals.







Relative humidity

Power supply

NW





AC 220V,50 / 60Hz, Single Phase AC 380V,50 / 60Hz, Three Phase



Equipment model	MT-W500P/MT-W1000P/MT-W1500P/MT-W2000P	
Laser source	Raycus	
Laser power	500W/1000W/1500W/2000W	
Output power tunability (%)	10-100%	
Laser head	Handheld	
Laser wavelength	1080±5nm	
Fiber diameter	100 µ m	
Frequency of pulse	50~20khz	
Fiber laser optic length	8m	
Spot size	Φ0.2-1.8mm	
Welding depth	0.8-1mm	
Water chiller	S&A 500w / 1000w / 1500w / 2000w	
Total power	5KW/6KW/8KW/10KW	
Ambient temperature	10℃~40℃	

Max welding thickness					
Power	Stainless steel	Carbon steel/Galvanized sheet	Aluminum	Brass	
500W	3mm	2mm	0.5mm	0.5mm	
1000W	4mm	3mm	1mm	lmm	
1500W	4.5mm	3.5mm	1.5mm	1.2mm	
2000W	5mm	4mm	2mm	2mm	

220kg



# AUTOMATIC LASER WELDING MACHINE

#### Advantages

- 1. Accurate and fast welding of complex parts, logo, metal words, etc.
- 2. Solid and perfect welds fully meet the welding requirements of different industries;
- 3. CCD camera monitoring system, real-time display of welding effect;
- 4. 360° rotation welding, large welding range, flexible welding of hard-reach position;
- 5. Can be upgraded with a handheld welding gun to achieve manual welding;
- 6. High electro-optic conversion rate, low energy consumption;
- 7. Suitable for 24h industrial mass production.





#### Applications

- \*Auto parts: hydraulic ejector, filter, sensor, solenoid valve, etc.
- \*Lithium-ion battery: extreme materials, cylindrical caps, etc.
- \*Mobile phone industry: mobile phone backplane, studs, card slots, etc.
- \*Electronic industry: sensors, motor rotors, capacitors, relays, etc.
- \*Kitchen and bathroom appliances: kettle, faucet, hook, sink, range hood, etc.

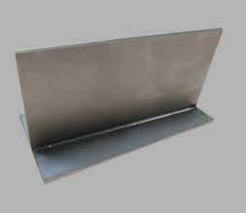
#### Material:

Titanium, aluminum, copper, zinc, gold, silver, carbon steel and stainless steel, and also cooper-brass, cooper-titanium, nickelcooper, cooper-titanium and many other dissimilar metals.









Model

Laser source

Laser head

Welding depth

Output power tunability

Emission wavelength

Modulation Frequency

Spot size

Power supply

Electric current

Total power

Operating tempereature

Cooling method

Rotary

Material

Weight

Package Dimension:

MT-W1000 / MT-W1500 / MT-W2000

1000W/1500W/2000W

Automatic

0.8-1mm

10-100%

1080±5nm

50-20kHz

Ф0.2-1.8mm

AC 220V 50Hz single phrase / AC 380V 50Hz three phrase

10-32A

6kw/8kw/10kw

10-40°C<70% Humidity

Water cooling S&A 1000w/1500w/2000w

For option

SS, CS, Brass, Aluminum, Galvanized sheet

400kg

161\*127\*145cm

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# HANDHELD YAG LASER WELDING MACHINE

#### Advantages

1.Integrated energy negative feedback laser energy control technology can achieve consistency of welding results from start to finish:

2. High power density, extremely fast melting process, low heat input, small heat affected zone:

3. Suitable for spot welding, butt welding, overlap welding, sealing welding of thin-walled materials and precision parts:

4.Aesthetically pleasing weld seam with strength comparable to substrate material, no need for polishing, no consumables, no deformation.



#### Applications

- Auto parts: engine cylinder gasket, hydraulic tappet seal welding.
- Filter seal welding, the sport plug welding, valve push rod welding.
- Anti-collision airbag electric detonator seal welding, crankshaft or cylinder liner or heat treatment, etc.
- Stainless steel advertising words, microelectronics components, precision parts, high digital components, optical fiber connector, medical apparatus and instruments, etc.

#### Materials

Titanium, aluminum, copper, zinc, gold, silver, carbon steel and stainless steel, and also cooper-brass, cooper-titanium, nickelcooper, cooper-titanium and many other dissimilar metals.









Laser model

Model

Welding held

NW

Wavelength

Machine dimension

Fiber laser optic length

Laser power

Pulse frequency

Pulse width

Max signal pulse energy

Max signal pulse

Viewing system

Power

Rated power

Cooling

Working area

YAG

MT-WY200P/MT-WY400P

handheld

300kg

1064nm

159\*79\*137cm

5m

200W/400W

1-100

0.1-20ms

90J

0.1-0.5mm

CCD

380v±10% 50Hz/60Hz

≤6kw

Water cooling

300\*200 (500\*300, 700\*500 for option)

# LASER CLEANING MACHINE

#### Advantages

1.No need chemical cleaning solution, no consumables, safe and environmental protection;

2.Non-contact cleaning, no damage to parent material;

3. Precise position and specific size cleaning, efficient and good surface cleanliness;

4. Suitable for long-distance and large object cleaning;

5.Easy removal of almost all kinds of impurities, including oxides, greases, rust, paints, chlorides and many other organic and inorganic residues.

#### Applications

Applicable for cleaning of mold, aircraft old paint, weapons and equipment, tough oil paint, grease, mineral oil, building exterior, ancient currency, cultural relics, etc.



Model	MT-CL100/MT-CL200/MT-CL300/MT-CL500/MT-CL1000
Power	100W/200W/300W/500W/1000W
Optional	100W-1000W
Power consumption	800W-6000W
Working environment	Flat, no vibration, no impact
Size	1180mm×750mm×1280mm
weight	200Kg
Fiber length	5m
Cleaning head weight	2.5Kg
Moving way	Hand pushing
Scanning width	10-80mm
Power adjustment range (%)	10-100 (Adjustable gradient)
Center wavelength (nm)	1064
Cooling model	Air-cooled(100W): Water-cooled(≥200W)
Electrical requirement	220V±10% 50Hz/60Hz









Comparison	Chemical cleaning	Mechanical polishing	Ultrasonic cleaning	Laser cleaning
Workpiece damage	Yes	Yes	No	No
Cleaning effect	Uneven	Uneven	Excellent, small cleaning range	Very good, high cleanliness
Cleaning accuracy	Uncontrollable, poor	Uncontrollable, nomal precision	Unspecified range cleaning	High
Environmental pollution	Serious	Yes	No	No
Operation	Protective measures required	Safety protection required	Manual replacing of consumables	Handheld or integrated automation
Consumables	Chemical cleaning agent	Sandpaper, grinding wheel, oil stone, etc.	Special cleaning solution	Only power

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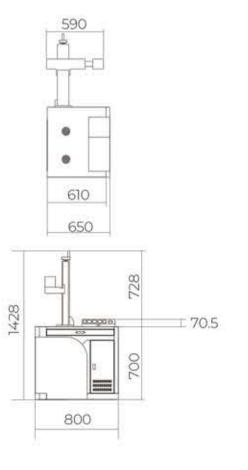
# DESKTOP FIBER LASER MARKING MACHINE

Desktop fiber laser marking machine, equipped with a large area working table, is the bestselling laser marker. Owing to the four casters, you can smoothly change the positions of your marking jobs.

#### **Applications**

Jewelry, animal rings, electric parts, hardware, machinery agricultural implements, sports equipment, shower accessory, advertising, construction works, energy & mining, etc.





#### **Features**

- Movable: With 4 caster wheels, suitable for mobile working environments;
- Large space: The space on desk provides platform for different size material marking.
- 3. Standout performance: High marking quality with high speed(up to 7000mm/s); 2-3 times higher than traditional marking:
- Long Lifetime: advanced laser generator, lifespan is 100,000h;
- 5. Easy operation: Marking software preinstalled and machine parameters pre-set, plug and play.









Model

Laser power

Marking area

Cooling mode

Laser wavelength

Pulse frequency

Marking speed

Minimum line width

Minimum character

Marking content

Operation system

Control software

Graphic format supported

Unit power

Operation temperature

Power supply

Optional

MT-F20A / MT-F30A / MT-F50A / MT-F70A / MT-F100A

20W-100W

110\*110mm/200\*200mm/300\*300mm

Air Cooling

1064nm

20-100 Khz

0-7000mm/s

0.01mm

0.15mm

Text, pattern, date, bar code, etc

Windows xp/7/8/10

EZCAD Control Software

JPG, AI, DXF, PLT, PNG, etc.

≤0.8 KW

5°C-40°C

110V/220V±10%, 50Hz/60Hz

Rotary device/2D work table



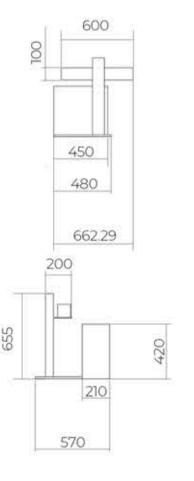
# MINI FIBER LASER MARKING MACHINE

Mini fiber laser marking machine is lightweight and compact. You can easily take it anywhere to start your marking. A rotating device can be added for easy marking of round objects.

#### Features

- •One-piece design: space-saving, lightweight, wide working applications.
- Portable type: easy to move and to change working places.
- Fixed head: suitable for batch marking of materials with same size and height.
- Standout performance: consistent marking quality with high speed(up to 7000mm/s), 2-3 times higher than traditional marking.





#### Applications

Auto parts
Electronic components
Mechanical parts
Instrumentation
Hardware tools
Daily necessities
Etc.









Model

Laser power

Marking area

Cooling mode

Laser wavelength

Pulse frequency

Marking speed

Minimum line width

Minimum character

Marking content

Operation system

Control software

Graphic format supported

Unit power

Operation temperature

Power supply

Optional

MT-FP20B/MT-FP30B/MT-FP50B/MT-FP70B/MT-FP100B

20W-100W fiber laser source

110\*110mm-300\*300mm

Air Cooling

1064 nm

20-100KHz

0-7000mm/s

0.01mm

0.15mm

Text, pattern, date, bar code, etc

Windows xp/7/8/10, etc

EZCAD control software

JPG, AI, DXF, PLT, PNG, etc.

≤0.8 KW

5°C-40°C

110V/220V±10%, 50Hz/60Hz

Rotary device/2D work table

# ALL SEALED FIBER LASER MARKING MACHINE

All sealed fiber laser marking machine offers accurate, safe and clean marking. With a closed safety protection system, it can avoid accidental injury caused by incorrect operation as well as exposure to laser radiation, dust and smoke.

- Enclosed cabinet: Prevent eye damage caused by long working time.
- · Laser head: Fully covered, avoid being exposed to outside dirt and dust.
- ·Safe operation: Reduce the damage caused by the generated smoke .
- Electric lift: Saves time of moving manually.
- Europe standard: The enclosure meets Europe standard of safety regulations.

#### **Applications**

Electronics, clocks, cutlery, precision equipment, mobile phone case, auto parts, medical instruments, etc.













Model

Laser power

Marking area

Cooling mode

Laser wavelength

Pulse frequency

Marking speed

Minimum line width

Minimum character

Marking content

Operation system

Control software

Graphic format supported

Unit power

Operation temperature

Power supply

Optional

MT-F20C/MT-F30C/MT-F50C/MT-F70C/MT-F100C

20W-100W

110\*110mm-200\*200mm

Air Cooling

1064nm

20-100Khz

0-7000mm/s

0.01mm

0.15mm

Text, pattern, date, bar code, etc

Windows xp/7/8/10

EZCAD control software

JPG, AI, DXF, PLT, PNG, etc.

≤0.8KW

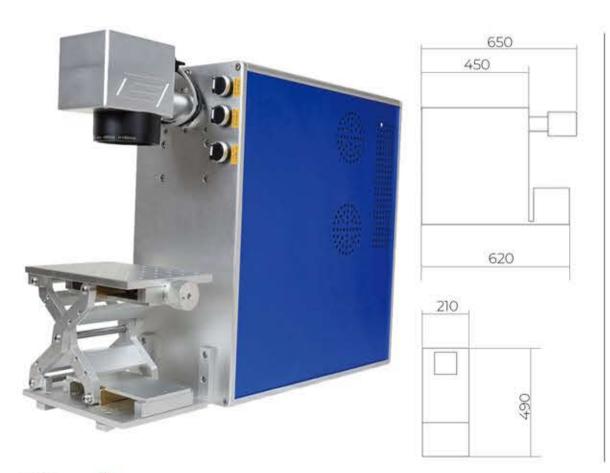
5°C-40°C

110V/220V±10%, 50Hz/60Hz

Rotary device/2D work table

# PORTABLE FIBER LASER MARKING MACHINE

Portable fiber laser marking machine has an overall size as small as a desktop computer. It comes standard with a 2D table for easy adjusting of marking focus. The whole modular design makes it compact, light, and easy to carry in car or be transported by express courier. You could enjoy your marking time freely at the office, home, workshop, yards, craft shop, etc.



#### Features

 One-piece design: space-saving, lightweight, wide working applications;

2.Portable type: easy to move and to change working places;

3.Fixed head: suitable for batch marking of materials with same size and height;

4.Standout performance: consistent marking quality with high speed(up to 7000mm/s). 2-3 times higher than traditional marking.

#### **Applications**

1. Auto Parts: car body, frame, chassis, girders, piston rings, shafts, bushes, clutches, lights, engines, connecting rods, cylinders, pistons, cylinder liners, gears, pumps, spring steel plates, etc.

Electronic Components: resistors, capacitors, chips, printed circuit boards, keyboards, etc.

 Mechanical parts: machine tools, hardware, steel pipes, casings, couplings, cones, pumps, body valves, flanges, fasteners; bearings, gears, standard parts, motor, etc.

4.Instrumentation: panels, signs, precision instruments, etc.

5. Hardware tools: measuring tools, locks, cutting tools, etc.

Daily necessities: crafts, zippers, key chains, jewelry rings, sanitary ware, etc.









Model

Laser power

Marking area

Cooling mode

Laser wavelength

Pulse frequency

Marking speed

Minimum line width

Minimum character

Marking content

Operation system

Control software

Graphic format supported

Unit power

Operation temperature

Power supply

Power Stability

MT-FP20A / MT-FP30A / MT-FP50A

20W-50W

110\*110mm

Air Cooling

1064nm

20-100Khz

0-7000mm/s

0.01mm

0.15mm

Text, pattern, date, bar code, etc

Windows xp/7/8/10

EZCAD Control software

JPG, AI,DXF, PLT, PNG,etc.

≤0.8 KW

5°C-40°C

110V/220V±10%, 50Hz/60Hz

<±1%RPM

# HANDHELD FIBER LASER MARKING MACHINE

Handheld Fiber Laser Marking Machine replaces the previous fixed light path with a handheld head for easy marking of large workpieces and long-distance applications. It comes standard with a 2D worktable for micro adjustment of workpieces during marking process.

#### Features

- · Handheld type: suitable for marking large heavy objects.
- · Highly integrated: suitable for wide range of applications.
- Modular design: compact, easy to move or repair.
- •Simple operation: easy to mark.





#### Applications

Hardware tools
Kitchen utensils
Plastic products
Computer keyboards
Metal accessories
Buttons
Integrated circuits
Packaging bottles
Glasses frames
Sanitary faucets
Etc.









Model

Laser power

Marking area

Cooling mode

Laser wavelength

Frequency of pulse

Marking speed

Minimum line width

Minimum character

Marking content

Operation system

Control software

Graphic format supported

Unit power

Operation temperature

Power supply

Power Stability

MT-FP20C/MT-FP30C/MT-FP50C

20W-50W

110\*110mm

Air cooling

1064nm

20-100Khz

0-7000mm/s

0.01mm

0.15mm

Text, pattern, date, bar code, etc

Windows xp/7/8/10

EZCAD Control Software

JPG, AI,DXF, PLT, PNG,etc.

≤0.8 KW

5°C-40°C

110V/220V±10%, 50Hz/60Hz

<±1%RPM

### **CUSTOMIZED TYPES**

MORN's customized marking machines include big size marking machine, desktop handheld fiber laser cutting machine, bulb marking machine and super mini fiber laser marking machine. Flying marking, camera position marking and assembly line marking types can also be customized to satisfy varied marking requirements.



Bulb marking machine Large scale bulbs marking: aluminum rotary platform. 8 stations. Super mini fiber laser marking machine All in one design: Laser source, marking software, 8mm high speed scanner, power supply,

Intel IPC.

Desktop handheld Fiber Laser Marking Machine Two-in-one design: It can achieve both standard desktop marking and movable marking. Big size marking machine Provide big marking area: 600x600mm/1000x1000mm Application: Perfect for large size objects marking.

#### Co2 Laser Marking Machine

1. Applicable materials: wood, acrylic, MDF, color board, plastic, carton, paper, leather, fruit (watermelon), etc.

2.Advantage: comparing to CO2 laser engraving machine, CO2 laser marking machine has faster marking speed: 7000mm/s, can save the customers time cost for quantity product marking.

3. Marking head: imported high-speed galvanometer, ammeter type, high accuracy.

4. Industrial computer: ensuring long-term stable work in the harsh industrial environment.

5. Stable performance: stable light output, low failure rate, long-term continuous work, high lifespan, low maintenance cost.

6. High tech: can be integrated into an assembly line with conveyor belt.

#### Fiber Laser Assembly Line Marking Machine

1.Automatic marking process, fast speed, high efficiency.

2. High electro-optical conversion efficiency, small size, low operating cost, no consumables and maintenance-free.

3.The overall performance of the device is stable, the light output system can be adjusted back and forth, up and down, and it has a red-light focus indicating device.

4. Easy operation, wide applications, suitable for marking of multiple materials.

Directly matching the assembly line, it reduces production conversion links and labor cost; owing to 24-hour continuous working ability, it can meet the requirements of industrialized large-scale production.
 The control software adopts WINDOWS interface, which supports automatic coding, variable text, serial number, batch number, date, various barcodes and two-dimensional code marking, and can be flexibly modified according to the different needs of customers' production lines.



# BIG SIZE CO2 LASER CUTTING MACHINE

Big size CO2 laser cutting machine is designed specifically for processing large format materials with superior speed and precision.

Features including the high-cutting speeds, four-sided access mean that you can achieve maximum productivity at all times.

The perfectly matched and high-quality components ensure a very long lifetime. All models of CO2 laser cutters are pre-installed with Rdworks graphic design software supporting commonly used graphic formats.











Model

Max working area

Laser tube watts

Table

Laser tube type

Motion drive system

Control software

Resolution rate

Locating precision

Repetition accuracy Minimum character

Intelligent memory

Compatible software

Graphic format

Electrical requirements

Print interface

MT-L1325

1300\*2500mm

80W-150W

Knife strip/ Honey comb worktable

Hermetic CO2 glass tube

High-speed stepper motors

RD Works

≤4500dpi

0.01mm

0.02mm

Store files up to 128MB

Coreldraw, Autocad, Photoshop

BMP, PLT, DST, AL, DXF

AC 110-220V ±10%

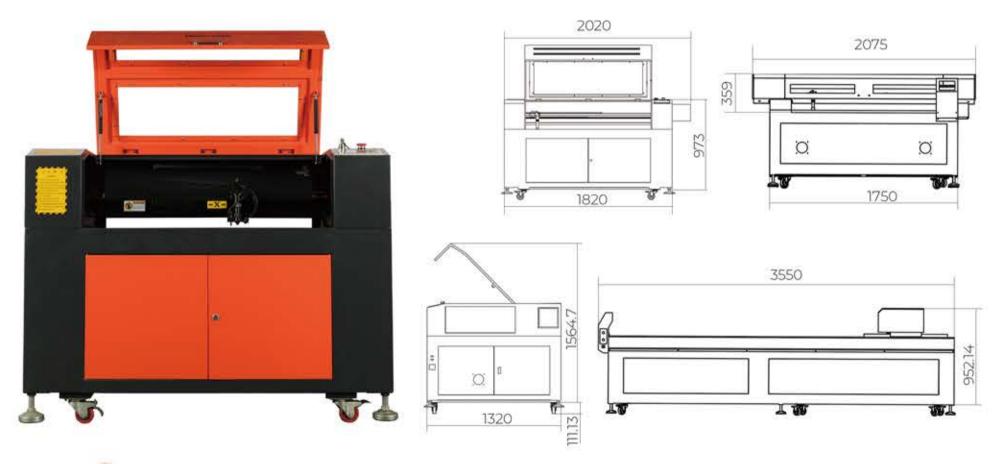
Ethernet or USB interface.Compatible with windows8/7/XP,etc



# CO2 LASER ENGRAVING AND CUTTING MACHINE

MORN CO2 Engraving and Cutting Machine offers precise and aesthetical engraving and cutting of non-metal materials, such as acrylic, leather, paper, MDF, rubber, wood board, glass, and other non-metallic materials.

- •Cover Open Protection: automatically cut off the power when the cover is open, protect the human beings from radiation or hurt by the laser;
- Red-dot Positioning: use red light indication method to achieve precise positioning of the laser beam;
- Worktime Preview Function: real-time display and tracking of machining progress.











Model

Max working area

Laser tube watts

Table

Laser tube type

Motion drive system

Control system

Control software

Resolution rate

Locating precision

Repetition accuracy

Minimum character

Intelligent memory

Compatible software

Graphic format

Electrical requirements

Print interface

Optional

MT-L960 / MT-L1390

900\*600mm / 1300\*900mm

60W-100W/80W-150W

Knife strip/ Honey comb worktable

Hermetic CO2 glass tube

High-speed stepper motors

Advanced DSP control system

RD Works

≤4500dpi

0.01mm

0.02mm

1\*1mm

Store files up to 128MB

Coreldraw, Autocad, Photoshop

BMP, PLT, DST, AL, DXF

AC 110-220V ±10%

Ethernet or USB interface.Compatible with windows8/7/XP,etc

8-axis/rotary

# DUAL HEAD CO2 LASER CUTTING MACHINE

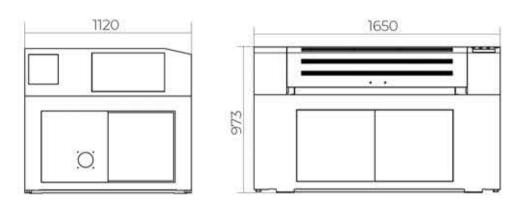
Dual head CO2 laser cutting machine is designed for high speed cutting efficiency.

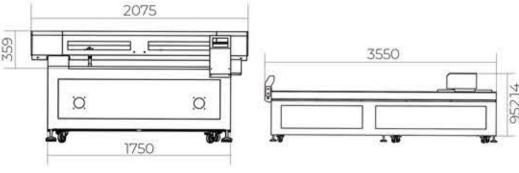
Two independent laser power supplies drive two independent laser tubes, put the moving control into full play.

The sturd y construction with high-end precision linear rails ensure smooth, fast motion.

Bottles and round objects engraving can be achieved with a rotary attachment (sold separately).















Model

Max working area

Laser tube watts

Table

Laser tube type

Motion drive system

Control system

Control software

Resolution rate

Locating precision

Repetition accuracy

Minimum character

Intelligent memory

Compatible software

Graphic format

Electrical requirements

Print interface

Optional

MT-L960D / MT-L1390D / MT-L1325D

900\*600mm / 1300\*900mm / 1300\*900mm

60W-100W/80W-150W/80W-180W

Knife strip/ Honey comb worktable

Hermetic CO2 glass tube

High-speed stepper motors

Advanced DSP control system

RD Works

≤4500dpi

0.01mm

0.02mm

1\*1mm

Store files up to 128MB

Coreldraw, Autocad, Photoshop

BMP, PLT, DST, AL, DXF

AC 110-220V ±10%

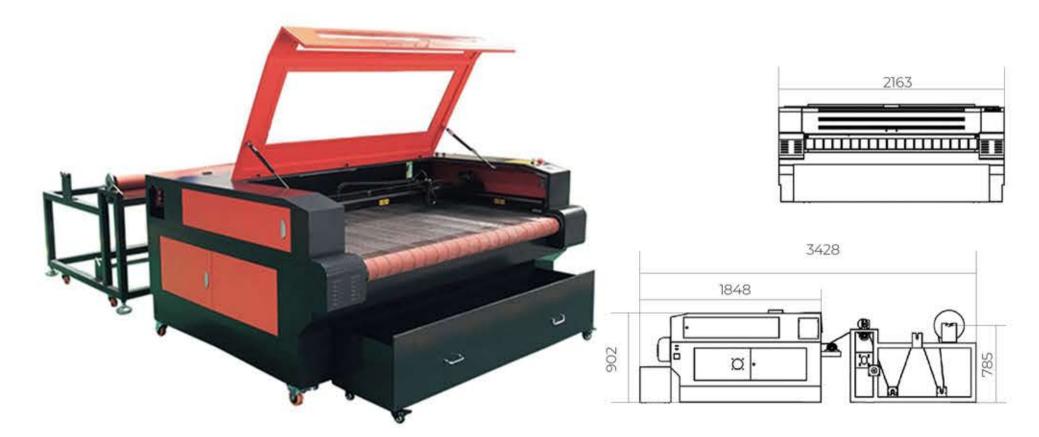
Ethernet or USB interface.Compatible with windows8/7/XP,etc

2 axiz/rotary

# FABRIC CO2 LASER CUTTING MACHINE

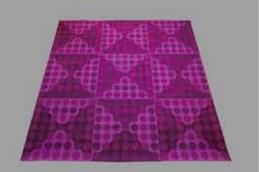
Fabric CO2 laser cutting machine has a motor-controlled automatic feeding system which ensures the flatness of the fabric during cutting and feeding.

It is able to cut a wide range of fabrics and textiles: nylon, polyester, polyester cotton, linen, felt, fleece, lycra, chiffon, mohair, wool, silk, cotton, denim, rayon & hemp, etc.











Model

Max working area

Laser tube watts

Table

Laser tube type

Motion drive system

Control system

Control software

Resolution rate

Locating precision

Repetition accuracy

Minimum character

Intelligent memory

Compatible software

Graphic format

Electrical requirements

Print interface

MT-L1610A

1600\*1000mm

80W-180W

Automatic feeding

Hermetic CO2 glass tube

High-speed stepper motors

Advanced DSP control system

RD Works

≤4500dpi

0.01mm

0.02mm

1\*1mm

Store files up to 128MB

Coreldraw, Autocad, Photoshop

BMP, PLT, DST, AL, DXF

AC 110-220V ±10%

Ethernet or USB interface.Compatible with windows8/7/XP,etc



### **GLOBAL SERVICE**

#### 1. PRE-SALES SERVICE

#### · Focus on Customers' Needs

Conduct comprehensive analysis of customer needs such as metal/ non-metal processing, work environment, packaging& transportation, etc.

#### · Consultation and Market Analysis

We provide technical consultation and feasible laser solutions as well as laser market analysis to assist you building business.

#### · Customized Solutions

Customized solutions are also available for diverse needs.

#### · Sample Making

We make samples on basis of customers' processing requirements to ensure processing quality and precision.

#### 2. AFTER-SALES SERVICE

#### · Installation Service

We will supply the machine with Installation Manual and User Manual in English or other language (if required), as well as videos for installation, operation, maintenance and trouble-shooting of the machine.

Online technical guidance will also be offered via E-mail, Telephone, Skype, WhatsApp, Viber, Imo and Wechat, to further assist your installation.(Recommended).

#### · Training Service

Customers can send technicians to our factory for face to face training on installation, operation, commissioning and maintenance of the machine, where well-assembled machines, all sorts of tools and testing devices are in place. (Recommended)

#### · On-site Service

We can send technicians to customer's factory for machine installation and commissioning as well as operation training.

#### · Lifelong Business Support

Lifelong support will be provided to further assist customers.

We may also pay irregular visits to customer's factory for routine maintenance, problem solving and technical guidance.

#### 3. QUALITY GUARANTEE

We guarantee the quality of the machine are in conformity with relevant manufacturing standards and the terms of contracts and agreements. We provide free main parts during warranty period and fast supply of parts out of warranty period.

#### 4. SERVICE COMMITMENT

We adhere to the service-oriented concept and offer "121" service:

- 1: respond to inquiries within 1 hour.
- 2: provide solutions within 2 days.
- 1: make samples within 1 day.



# **EXHIBITION PICTURES**













## **ON-SITE INSTALLATION**













# **CLIENT FEEDBACK**

























