

for a greener tomorrow



FACTORY AUTOMATION

CO₂ 2-Dimensional Laser Processing Systems eX PLUS Series



GLOBAL IMPACT OF MITSUBISHI ELECTRIC



Through Mitsubishi Electric's vision, "Changes for the Better" are possible for a brighter future

Changes for the Better

We bring together the best minds to create the best technologies. At Mitsubishi Electric, we understand that technology is the driving force of change in our lives. By bringing greater comfort to daily life, maximizing the efficiency of businesses and keeping things running across society, we integrate technology and innovation to bring changes for the better.

Mitsubishi Electric is involved in many areas including the following

Energy and Electric Systems

A wide range of power and electrical products from generators to large-scale displays.

Electronic Devices

A wide portfolio of cutting-edge semiconductor devices for systems and products.

Home Appliance

Dependable consumer products like air conditioners and home entertainment systems.

Information and Communication Systems

Commercial and consumer-centric equipment, products and systems.

Industrial Automation Systems

Maximizing productivity and efficiency with cutting-edge automation technology.

Mitsubishi Electric continues challenge of being only FA supplier delivering highest satisfaction to our customers.

e-F@ctory



As the world's leading general electric device manufacturer, Mitsubishi Electric Corporation is engaged in a broad range of businesses from home electronics to space equipment. We are globally operating in the following five business domains: Energy and Electric Systems, Industrial Automation Systems, Information and Communication Systems, Electronic Devices and Home Appliances. For over ninety years since we started manufacturing the general-purpose motors, Mitsubishi Electric FA systems business sector has been supporting the manufacturing of not only Japan, China and other Asian countries but also the countries of the world. Through the years of our accumulation and advancement in

the FA and drive system controls, mechatronics and production technologies, we are expanding the diversity of our product lineup one after another ranging from the controllers, drive units and mechatronics products to power distribution control devices. In addition to such products and units of the factory automation, we are quick in providing solutions such as "e-F@ctory" and "iQ Platform" to innovate the manufacturing scene. From now on also, Mitsubishi Electric as the comprehensive FA supplier is delivering the products that meet our customer needs throughout the world.



Beyond the realm of eX excellence

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2015 eX PLUS series

Advanced high-dimensional performance in response to diversified production needs and the ecology era

xcellent [high performance]

The faster processing speed and optimized control system of the eX PLUS Series reduces thin-plate processing time by approximately 42%*. The cutting-edge piercing technology allows for about a 48% reduction* in processing time of mid-thick and thick mild steel plates. *In-house comparison

asy to use [simple operation]

2 Action Cutting allows for the entire process, from job setup to parts cutting, to be completed in two simple actions. Delivers easy operation and stable performance. CAD/CAM computer, connected via network, is a great aid for operators on the shop floor.









When not processing, the system switches to ECO mode and the resonator stops idling. Minimizes energy consumption, reducing running costs by up to 99%* during standby. Quickly resumes normal operation. Mitsubishi Electric's original resonator reduces CO₂ emissions by approximately 30% compared to standard high-speed, axial-flow resonators.

*In-house comparison

Outstanding Productivity for Thin & Thick Plates



Thin-sheet High-sheet Cutting

Productivity has been dramatically enhanced owing to improved acceleration and the latest control technologies exclusive to Mitsubishi Electric. An example is Dross Reduction (DR) Control, which contributes to high-speed corner processing while maintaining high quality.



Comparison when processing 35 of workpiece samples shown in the left figure



Mild-steel Cutting

Less time is required for piercing and changing conditions, resulting in substantially reduced operating cost and enhanced productivity when cutting medium and thick mild steel plates.

Mid-thick mild steel



Comparison when processing 247 of workpiece samples shown in the left figure



Operating cost(SS400 t6mm) LV-45CF-R(2008) 6,730



Thick mild steel



Calculation conditions

Electricity cost	Laser-gas cost	Assist-gas(N2)cost	Assist-gas(O2)cost
20 yen/kWh	8.94 yen/L	0.15 yen/L	0.13 yen/L
		*Comparison with	LV-45CF-R (2008)

Comparison when processing 55 of workpiece samples shown in the left figure





Operating cost(SS400 t16mm)



Technologies Supporting Thin-sheet Processing

F-CUT

High-speed oscillator and control device communications enable the beam to be turned on/off without stopping the axis.



Technologies Supporting Thick-plate Processing

K-CUT (Keep on cutting)

Achieved high quality/stable processing of thick mild steel that the processing is difficult previously due to the material composition and surface condition.

Conventional technology





Surface condition Cross section

High-Peak Piercing

Produces smaller piercing holes faster in mild steel up to t25mm in thickness by controlling the oxidation reaction and optimizing beam quality.



Applicable thickness of High-Peak Piercing



Technologies Supporting Higher Productivity

Reduction in non-actual processing time

Achieved total productivity improvement with high-speed and parallel operation of each movement before processing.



Laser Processing Systems

Dross Reduction (DR) Control

DR Control reduces dross adhesion at corners, realizing high-speed processing while maintaining high quality.







DR Control on



* Processing time reduction ratio when combined with new High Peak Pierce.

* Time comparison when processing t16mm mild steel to a shape specified by Mitsubishi Electric with 100 being the time required by the previous model.

* Equipped in eX-45CF-R, 60XF only.

Preceding beam on NEW

Minimizes the time before starting the piercing operation by performing the beam on and gas on process before height sensing completes



Data described in the catalog is a reference value and it may differ from the actual data.

Extremely Versatile-From Simple Processing to Advanced Applications



Simple 2-action Processing

Automatic setup realizes simple operation in two effortless actions. This not only prevents operation and setup errors, but also contributes to enhanced productivity.

Action1





②Automatically loads onto NC

Read barcode



(4) Automatic nozzle change and height calibration

Barcode reader (handle box shown on left)

Automatically measures the tilt of the workpiece on



(6)Starts cutting

picture to processing status.

Comfortable operability

Simple program editor

NEW

BBBBBB

Allows the change of

Processing

time display

Calculates the processing

time from the program

automatically. Estimated

processing time can be

checked on the screen.

Simple processing

High quality processing

regardless of proficiency is

possible by selecting the similar

condition adjustment NEW

program and processing

condition numbers easily

while checking the shape on the graphic screen.

Double-cut function Allows high quality

cutting of poor quality material and protected sheet metal, which often causes cutting defects, in two runs.



0 0

ESTIMATE TIME 00:17:12

Sample using the double-cut feature

Support for reliable operation

Night mode NEW

Switching to the night operation with the preset time is available. Reduction in pallet running noise considering the surrounding environment. Reduction in contact with the workpiece by changing the movement of the processing head.





- * To create instruction sheets with barcodes, a CAD/CAM software capable of producing barcodes is required. * The nozzle changer is optional
- * Barcode reader is optional for eX-S Edition

Laser Processing Systems

Active control

Adjusts the processing condition by a dial while looking at the processing.



NEW LED light

LED light is equipped in the processing machine. Operability during the setup is improved.





New Reset – Restart Function

If the system resets in the middle of processing, it will easily restart cutting once the cause of stoppage is eliminated. Allows the operator to check and adjust the restart position quickly and easily on the control. Red: Processing complete Green: Processing incomplete

Reset position Restart position



Offcut Cutting

Easily cut offcuts into several pieces by using the Offcut Cutting screen





Offcut Cutting screen

Upward Z-axis at program start

Z-axis rises automatically at the same time with the program start. Reduces the risk of processing head collision and supports reliable operation regardless of skill level.



start position



Lower Operating/ **Maintenance Costs**



ECO mode available for increased energy savings

Costs during standby have been dramatically reduced by incorporating Mitsubishi's original just-on-time discharge method. ECO mode allows the processing machine to quickly resume operation.



ECO mode

After processing, equipments automatically shut down one by one. Step 1: Resonator shuts down ► Step 2: Beam path purge stops ► Step 3: Cooling unit shuts down This process reduces costs during standby by up to 99%. Processing machine will resume processing in 1 to 3 minutes* after pressing the LASER key.

* Time required for equipments to resume operation varies depending on the equipment and the conditions of use.



Energy-saving/Low Operating Cost

Reduced assist gas usage (ECO conditions)

A technology that optimally controls assist-gas conditions has realized a large reduction in the consumption of nitrogen gas.



SUS304 8.94yen/ 2 aser-gas cost 0.15yen/ 🛿 t12mm 20yen/kWh

Power/Gas consumption monitor

Power and gas consumption can be easily checked on the operating screen. Visualization supports energy savings.



Work Environment

Partitioned dust-collection function

An automatic flap opens and closes according to the movement of the processing head, offering on-the-spot dust collection during processing



Ease of Maintenance

Self-check

Monitors the main components on a regular basis and displays results on the screen. Supports continuous operation and preventive maintenance.



Laser-gas change

Gas change time is improved by 50% over previous model.



Laser Processing Systems



Step-by-step

pictures and

illustrations to

help operators perform important

tasks for each

component.

given with

instructions are

Help screen E.g.: Vacuum pump oil change



Greater Flexibility Increases Cutting Capabilities



Material / Thickness:SUS304/t9mm Model: eX-45CF-R Material / Thickness: SUS304/t16mm Model: eX-60XF Brilliantcut

Thick

plate

* The above are processing capabilities based on special conditions. The acceptance criteria are as stated in the specifications.
* The actual performance/quality may vary depending on the surface condition and deviation in the material composition even if materials are of the same specifications.
* Variations in processing performance/quality may occur depending on the part geometry.
* Regarding mild steel (SS400), capacities listed in this catalog are based on LS material (steel plate for laser cutting) of Chubu Steel Plate Co., Ltd.
* Optional features may have been used in the above cut samples.

Laser Processing Systems





Material / Thickness: SUS304/t25mm Model: eX-60XF









Material / Thickness: A5052/t15mm Model: eX-60XF





Material / Thickness: SS400/t25mm Model: eX-45CF-R

High-speed, High-stability ProcessingMachine Key Technologies Ensuring High Stability and High Productivity

Mitsubishi Electric's cutting-edge technologies provide ultimate stability to ensure non-stop operation, realizing higher productivity and ease of maintenance.

Auto Focus Preset Head

Automatically controls the focus according to the given NC command. Lens movement is five times faster*, realizing reduced piercing and processing times.

* Compared to previous model.



Incorporates a magnetic part to hold the processing head in position which allows recovery in less than 1 minute after collision.

Magnetic Damage Reduction Function (Option)

de.

Constant Beam Length System

Maintains consistent beam quality by fixing the system's beam path length regardless of the position of the processing head. Provides stable and superior cut quality.

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* Only for eX-45CF-R, eX-60XF

SD Excitation 3-Axis Cross Flow Resonator



High-speed power sensor

Mitsubishi's high-speed power sensor, which comes standard on the eX, monitors the laser output in real time. Maintains an output true to the desired setting with a power variation less than $\pm 1\%$. Allows processing of highly reflective materials such as aluminum and copper.

Gas-sealed resonator

The seal-off operation reduces gas consumption to only about four gas cylinders per year (operating 250 days per year). Allows 24 beam on hours at rated power between gas changes. Significantly reduces operating cost and eliminates the need to change gas cylinders on a frequent basis.

Just-On-Time discharge method

The Just-on-time discharge method significantly reduces power consumption when the beam is turned off.

Laser Processing Systems

Stable control of output eflected beam Output is - Highly reflective material monitore



Laser beam

Patent No. 1836228 Kokoku (examined patent publication) No. 4-56479





Optional Equipment

NC turn table

Used for cutting tubes. Through combination with a tube support, long tubes can also be processed.



High-precision positioning function

Use of an optical sensor to measure the hole position, which acts as a benchmark, enables multi-task processing with a punch press.



Magnetic damage reduction function

Protects the head and eliminates the need for nozzle centering in the event of a crash. Allows quick recovery.



Automation pack

This combined package includes the magnetic damage reduction and a nozzle changer, realizing shorter setup times and higher productivity.

Magnetic Damage Reduction function

Nozzle Changer

These features reduce setup time and allow automated high-mix, low volume production, while maximizing productivity.



Optional Features

Options		ML3015eX (Auto Pallet Changer)	
		ML60XF	ML45CF-R
	F127mm (F5") Lens Cartridge	Standard	0
	F254mm (F10") Lens Cartridge	Standard	0
	Oil Spray	0	0
	High Peak Piercing(Oil Spray+Side nozzle)	0	0
	Fine Piercing	0	0
Magnetic Damage Reduction Automation Pack (Magnetic Damage Reduction+Nozzle Changer)		0	0
		0	0
Processing	X/Y axis work clamp	0	0
Machine	Workpiece lifter	0	0
	NC Turn Table*1	0	0
	Lifting Type Pipe Holder	0	0
	Pipe Holder	0	0
	High Accuracy Positioning Function	0	0
	Barcode Reader	Standard	Standard
Control unit	Network Download	0	0
Solution	LA(CAD/CAM exclusively for lasers)	0	0
Solution	FRG(F-CUT Route Generator)	0	0

*In the case of ML2512eX, the automation pack and NC turntable cannot be attached simultaneously.

LA

A CAD/CAM system designed for 2D CO2 laser processing machines.

Simple "One-click" Operation

After loading the DXF/IGES data, register parts and diagrams, and create NC programs with a single click.

DXF data



⊖: Available —: Not Available

Setting Optimal Processing Machine Conditions

Processing conditions programmed into eX Series processors can be read to a LAN or USB storage device, making it easy to create NC programs with optimal conditions.*

*Hole-diameter detection conditions and piercing conditions are set automatically.

F-CUT program creation function*1

Programs compatible with F-CUT processing applications, such as the FRG*2 connection mode and F-CUT output mode, can be created. *1 Optional function for LA. *2 FRG option is required.



Diameter correction can be used/pierce line included

Specification

Cutting Canability

Cutting Capabi	iity		
Resonator	Material	Assist gas	Thickness(mm) 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
	Mild steel(SS400)	Oxygen	
ML60XF	Stainless steel(SUS304)	Nitrogen	When using f254mm (f10") lens
A	Aluminum alloy(A5052)	Air	
		Nitrogen	When using f254mm (f10") lens
	Mild steel(SS400)	Oxygen	
ML45CF-R Stair	Stainless steel(SUS304)	Nitrogen	When using f254mm (f10") lens*
		Air	
	Aluminum alloy(A5052)	Nitrogen	When using f254mm (f10") lens*
ML45CF-R	Aluminum alloy(A5052) Mild steel(SS400) Stainless steel(SUS304) Aluminum alloy(A5052)	Air Nitrogen Oxygen Nitrogen Air Nitrogen	When using f254mm (f10") le When using f254mm (f10") le When using f254mm (f10") le When using f254mm (f10") le

The above are processing capabilities based on special conditions. The acceptance criteria are as stated in the specifications.
 The actual performance/quality may vary depending on the surface condition and deviation in the material composition even if materials are of the same specifications.
 Variations in processing performance/quality may occur depending on the part geometry.
 Regarding mild steel (SS400) with a thickness over t19mm, capacities listed in this catalog are based on LS material (steel plate for laser cutting) of Chubu Steel Plate Co., Ltd.
 Optional

Processing Machine Specifications

Drive system Light-scanning method (X-axis, Y-axis: light transfer) Control system Simultaneously 3-axis (X-Y-Z) control (Z-axis emulation control pose dimensions (mm) Target workpiece dimensions (mm) 3,050×1,525(max. mountable workpt 950 Built-in pallet weight (kg) 950 Workpiece support height (mm) 880 X-axis(mm) 3,100	
Control system Simultaneously 3-axis (X-Y-Z) control (Z-axis emulation control pose Target workpiece dimensions (mm) 3,050×1,525(max. mountable workp Built-in pallet weight (kg) 950 Workpiece support height (mm) 880 X-axis(mm) 3,100	
Target workpiece dimensions (mm) 3,050×1,525(max. mountable workpiece under the second seco	sible)
Built-in pallet weight (kg) 950 Workpiece support height (mm) 880 X-axis(mm) 3,100	iece)
Workpiece support height (mm) 880 X-axis(mm) 3,100	
X-axis(mm) 3,100	
Stroke Y-axis(mm) 1,565	
Z-axis(mm) 150	
Fast XY-axis(m/min) Max.100	
Performance Created feeding Z-axis(m/min) Max.65	
Max. processing feed speed 50 (m/min)	
Positioning XY-axis(mm) 0.05/500	
Accu- racy Z-axis(mm) 0.1/100	
Repetition accuracy (mm) ±0.01(X, Y-axis)	
Auto-focus preset	
Processing head Processing lens (mm) o50.8{o2.0*}×f190.5{f7.5*}	
Compatible oscillator ML45CF-R, ML60XF	
Power consumption of entire system (kW) 8	
Exterior dimensions (W×D×H) (mm) 10,180×3,134×2,260	
Total system Approx.10,600	
Exterior Weight Processing machine main unit (kg) (kg) (excluding oscillator) Approx.8,500	
Pallet changer processor Approx.2,100	

Cooling system specifications

Model name	LCU30WIX	LCU30AIX	LCU20WIX	LCU20AIX
Applicable resonator	ML60XF		ML45CF-R	
Cooling method	Water	Air	Water	Air
Power requirement (cooling unit)(kVA)	51	64	32	40
Cooling capacity (kW)	90	90	60	60
Exterior dimensions (mm)	1,852×1,670×1,720	3,990×1,010×2,027	2,350×735×1,720	2,980×1,010×2,027
Weight (kg)	Approx.1,300	Approx.1,500	Approx.1,000	Approx.1,100

Lavout

ML3015eX-60XF



Laser Processing Systems

Oscillator Specifications

Model name		ML60XF ML45CF-R		
Excitation method		3-axis SD excitation cross flow resonator		
	Pulse peak output (W)	7,000	5,000	
	Rated output (W)	6,000	4,500	
Laser output	Beam mode	Lower order (TEM	*main component)	
characteristics	Power stability (%)	±1 or less during power cor	trol (relative to rated output)	
	Output power adjustable range (%)	0 to 100		
Laser gas composition		CO2:CO:N2:H	CO2:CO:N2:He=8:4:60:28	
Laser gas consumption (L/hr)		Approx.3		
Power requirement (oscillator)(kVA)		90	69	
Exterior dimensions (mm)		2,600×800×1,960	2,500×800×1,810	
Weight (kg)		Approx.2,250	Approx.2,200	
Standard features		Beam shutter, Visible laser, High-speed power sensor		

Control System Specifications

Model name	LC30BX
Display screen	15"TFT (touch panel)
Hard disk (GB)	20
Program input method	Screen creation, USB (ver. 2.0), Ethernet
Operation method	Memory operation, HD direct operation

Unit:mm

ML3015eX-45CF-R



Laser Cell System

Laser cell system improves productivity. Meets onsite needs.

Automation achieves high productivity, minimum operator intervention and shorter delivery times.

Pallet changer/Stocking system PCL Series

- Easy to operate, improves work efficiency and requires minimum operator.
- Troubleshooting reduces downtime
- Small size simplifies locating installation space

Sheet/Pallet changer SCX Series

- Easy to operate, improves work efficiency and requires minimum operator.
- Troubleshooting reduces downtime
- Requires small floor space
- Small size simplifies locating installation space
- Easy role change enables fee work setting



Model	30PCL-eX[6]	30PCL-eX[10]	30PCL-eX[15]	
Equipment height	2,900	3,810	5,000	
Number of pallets (mm)	6	10	15	
Maximum loadable size (mm)		t25 1,525×3,050		
Maximum loadable weight (kg)	930			
Material setting position (mm) 715mm above the floor (Free bearing height)		ring height)		
Fixed table with free bearing unit	Standard (fixed position)			
Material clamp position	Standard: 2 locations on Y-axis of each pallet (manual)			
Work support intervals	Standard: 75mm (options: 25 and 50mm)			

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Model		30SCX-eX [4P4M]	30SCX-eX [6P4M]	30SCX-eX [4P6M]	
Equipment height (mm)		5,230	5,630	6,015	
	Number of pallets	2			
Processing pallet	Standard (mm)	914×1,829 (3'×6'),1,000×2,000, 1,220×1,220 (4'×4') 1,220×2,440 (4'×8'),1,525×3,050 (5'×10')			
(for sheet change)	Loadable sheet thickness (mm)		0.8 to 12		
*Denoted by P	Maximum loadable weight (kg)	450(t12 1,525×3,050)			
	Material clamp	Standard: 2 on Y axis (automatic)			
	Work support intervals	75mm			
	Number of pallets	2	4	2	
	Maximum sheet size(mm)		t25 1,525×3,050		
Processing pallet	Maximum loadable weight (kg)		930		
(for pallet change)	Material setting position (mm)	Approx. 727mm above the floor (Free bearing height)			
*Denoted by P	Fixed table with free bearing unit	t Standard (fixed position)		n)	
	Material clamp	Standard : 2 on Y-axis (manual)		anual)	
	Work support intervals	Standard : 75mm (options:25 and 50mm)			
Material/	Number of pallets	4	4	6	
Product pallet	Maximum loadable weight (kg)	2,000			
*Denoted by M	Loadable height (mm)	Max.160 (skid height :100)		00)	

Notes: 1. Materials that scratch easily such as stainless steel may become scarred when loading/unloading. Please load these materials directly onto the processing pallet. 2. Always make sure to use micro-joints for the sheet changer.

<section-header>Layout00</t



System extension

Duplex cell system (supports PCL and SCX)

- Flexible response to customers' needs
- •PCL Series can be duplex
- Material shelf can be connected with SCX Series
- \bullet Space savings allows a variety of materials to be stocked
- Long-term sequential scheduled operation
- Station can be added for off-line setup



In the case of PCL Series

 Type
 30PCL-eX[10P]+10P

 Specifications
 Plate thickness
 Max 25mm

 Pallet structure
 Processing pallet for pallet changer: 20 pallets

• In the case of SCX Series

Туре		30SCX-eX[4P6M]+12M	
Specifications Pallet s	Plate thickness	Sheet changer part 0.8mm - 12mm	
		Pallet changer part Max 25mm	
		12 material pallets, 6 product pallets	
	Pallet structure	2 sheet changer processing pallets	
		2 pallets changer processing pallets	
	Material pallets	0.000/cs/csellet	
	Loadable weight	2,000kg/pallet	

Layout



30PCL-eX[10P]+10P

Laser Processing Systems

Automatic warehousing system (compact river system)

- Extendable laser FMS. Installation tailored to customer's layout.
- LUL system (FSC) can be retrofit to laser + APC.
- Laser updating is possible. Replacing laser is possible.
- Large item, small-lot production. FMS operation without setup.
- Materials setup operation. Set up materials on other processing machines.



Туре	FSC03015eX flexible sheet changer system
Specifications	Sheet size: 5'×10' max. Loadable weight: 920kg
Sheet size	Max 1,525×3,050mm Min 914×914mm
Plate thickness	0.8mm - 25mm
Material	SS, SPCC SUS, AL
Material weight	920kg / sheet Max 1,525×3,050×25mm
Туре	River Compact510 Plate working compact stocker crane system
Specifications	Sheet size: 5'×10' max. Loadable weight:3,000kg/pallet
Total shelf	12 columns×3 lines×1 row-9-1=26pallets(including skid)

Layout



System dimensions Ex.) 3015FMS 15.9m x 9.9m 158m²

Overseas Support

Service bases are established around the world to provide customer support.



Engineers answer technical questions covering everything from machining to training and after-sale service.



Application vour machining processes though technical consultations via telephone, e-mail or fax.



Show room products of Mit Electric such as laser processors and EDMs are exhibited. Veteran engineers welcome visitors and explain the benefits of our products



After-sales service vice for machine We provide after-sales ser repair and adjustment by an experienced staff. including OEM replacement and accessory parts.



to advanced programming and setup in support of all levels of laser operators.

YOUR SOLUTION PARTNER



Mitsubishi Electric is supplying wide ranging automation equipment from graphic operation terminal and programmable logic controller through CNC and electric discharge machine.

Brand of trust

Our brand name "Mitsubishi" has been used as part of approximately the 45 corporation names in the financial, commercial and industrial areas. At present, "Mitsubishi" is globally renowned as a symbol of high quality. Mitsubishi Electric Corporation is engaged in the business sectors of space development, transportation, semi-conductor, energy system, information and communication processing, audio visual device, home appliance, construction, energy management and automation system with our 237 factories and laboratories over 121 countries.

What is the reason why Mitsubishi Electric automation solution is reliable? Since we check our products by using them for the first time at our factories, they are undeniably highly credible, efficient and easy-to-use automation systems.

Mitsubishi Electric as one of the world's leading corporations, boasting of its sales volume of 4 trillion yen (exceeding 40 billion dollars) and employing over 100 thousand staff, not only provides the best product but also the top-level service and support to our customers.

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Laser Processing Systems



Low-voltage circuit breaker. Magnetic motor start



igh-voltage magnetic contacto High-voltage circuit breaker



Energy-saving support device, Energy monitoring module



mable logic controller (PLC), Graphic operation terminal (HM



se motor, IPM motor, Inverter, Geared motor



Numerical controller (CNC)





Electric discharge machine, Laser processing machine, Electron beam machine



Transformer for power distributio



Pressurized ventilation fan, Uninterruptible power supply (UPS)

MITSUBISHI ELECTRIC CORPORATION HEAD OFFICE: TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN NAGOYA WORKS: 1-14, YADA-MINAMI, 5-CHOME, HIGASHI-KU, NAGOYA 461-8670, JAPAN

* Not all the models are supported in all the countries and regions.
* The machine specifications differ according to the countries and regions. Please check with your dealer.
* The processing data provided in this brochure is for reference only.