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 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

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.















Uninterruptible power supply (UPS)



Mitsubishi-Electric-Platz 1 · 40882 Ratingen · Germany Tel: +49-(0)2102-486 6120 · Fax: +49-(0)2102-486 7090 www.mitsubishi-laser.de

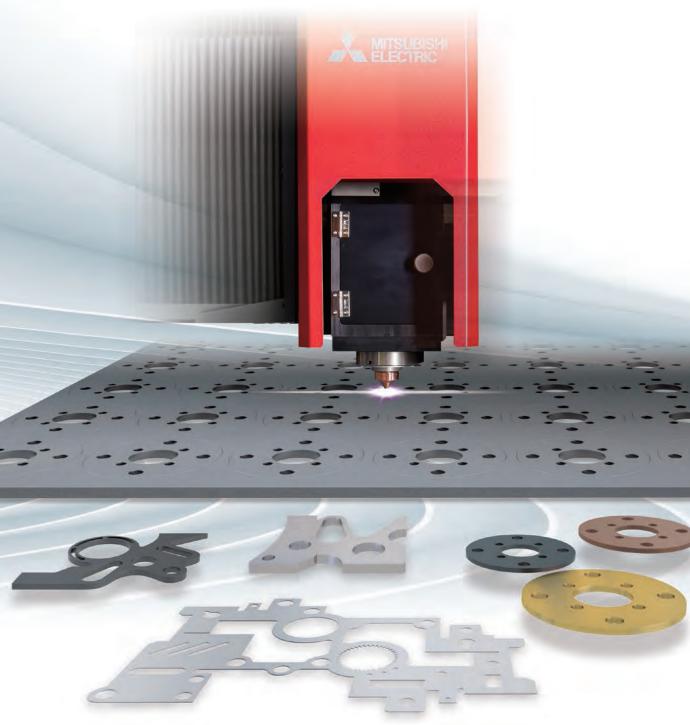


CO₂ 2-Dimensional Laser **Processing Systems** ML3015SR-32XP



Mitsubishi Electric **Laser Processing Machines**

supporting the world's production sites







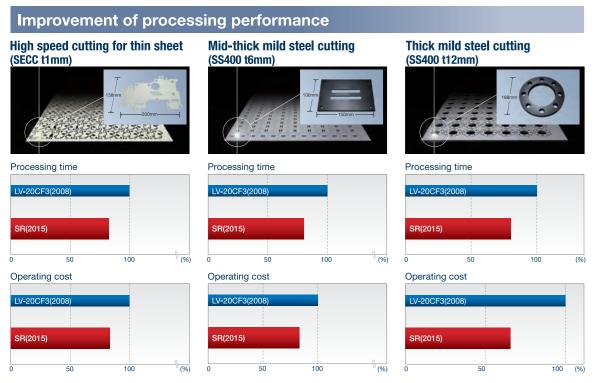
^{*} Not all the models are supported in all the countries and regions.

^{*} The machine specifications differ according to the countries and regions. Please check with your dealer.

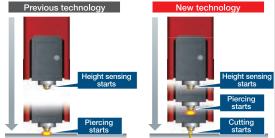
* The processing data provided in this brochure is for reference only.

Laser Processing Systems

All-around machine that covers all plate thickness

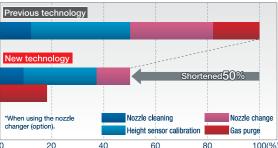


Reduction in processing time of thin sheet



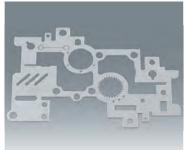
Minimizes the time before starting the piercing operation by performing the beam on and gas on processes before the height sensing completes.

Reduction in non-actual processing time



Total productivity has been improved with the high-speed and parallel operation of each movement before processing.

Cutting sample



Material/Thickness Galvanized steel (SECC)/t1mn



Mild steel (SS400)/t12mm



Stainless steel (SUS304)/t10mm *When using f254mm(f10") lens (option)

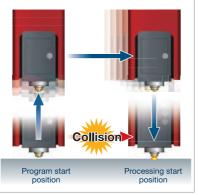
Reliable and comfortable operation attained with the latest technology

Support for reliable operation

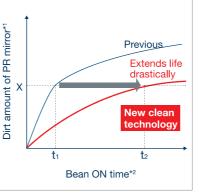
Night mode

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.

Upward Z-axis at program start New clean technology



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



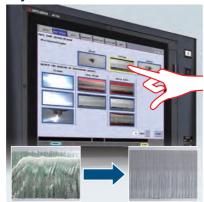
Enhanced clean technology extends the life of the PR mirror drastically.

*1: Dirt limit value X of PR mirror differs depending on the processing contents, required specifications, etc.

*2: Time of t1 and t5 that reaches to the dirt limit value of PR mirror differs depending on the deterioration condition of the

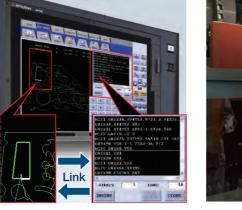
Comfortable operability

Simple processing condition



High quality processing regardless of proficiency is possible by selecting the similar picture to processing status.

Simple program editor

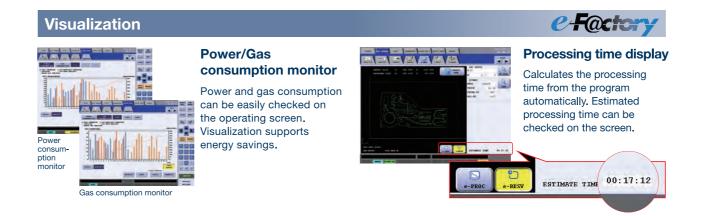


Allows the change of program and processing condition numbers easily while checking the shape on the graphic

Adjusts the processing condition by a

dial while looking at the processing.

Visualization supports energy saving / production plan and reduces operating cost



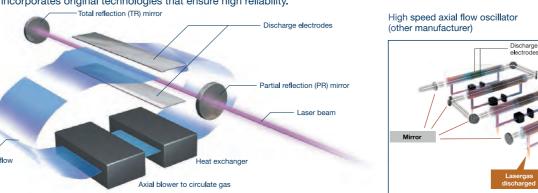
Reduces operating cost and supports energy savings



Cost during standby has been reduced by up to 93% by shutting down each operation in stages after processing completes.

SD Excitation 3-Axis Cross Flow Resonator Unique Technologies Supporting Highly Reliable Processing

Mitsubishi Electric's resonator series realizes further enhancements in performance and stability, and incorporates original technologies that ensure high reliability.





Operating cost

Comparison of operating cost per hour

The Just-on-time discharge method and the seal-off operation significantly reduce power consumption and gas consumption. Also, the simple oscillator structure with few maintenance parts reduces the total operating cost.

2 4 6 8 10 12 14 16 18 20 22 *The above are processing capabilities based on special conditions. The acceptance criteria are as stated in the specification

*Variations in processing performance/guality may occur depending on the part geometry.

f125mm (f5") lens f254mm (f10") lens Barcode reader

FIG	JUES	Silly Ivia	cillie specifica	uons
Mod	lel na	ne		ML3015SR
Driv	e syst	em		Flying optic
Con	trol sy	/stem		Simultaneously 3-axis (X-Y-Z) control (Z-axis emulation control possible)
	Target workpiece dimensions (mm)			3050×1525 (max. mountable workpiece)
Ī	Built-in pallet weight (kg)			950
1	Workpiece support height (mm)			880
9	Stroke		X-axis (mm)	3,100
nan			Y-axis (mm)	1,565
Specification/Performance			Z-axis (mm)	150
/Fe	Speed	Fast feeding	XY-axis(m/min)	Max. 100
atio			Z-axis(m/min)	Max. 65
<u> </u>		Max. processing feed speed (m/min)		50
bec	Accuracy	Positioning accuracy	XY-axis(mm)	0.05/500
			Z-axis(mm)	0.1/100
		Repetition accuracy (mm)		±0.01(X,Y-axis)
	Processing head			Auto-focus preset
				Processing lens (mm) ø50.8{ø2.0"}×f190.5{f7.5"}
Con	npatib	le oscillato	r	ML45CF-R, ML60XF
Pow	er co	nsumption o	of entire system (kW)	8
	Exte	rior dimensi	ions (WxDxH) (mm)	10,180x3,134x2,260
ō		Total system		Approx. 10,600
Exterior	Weig (kg)	Processing machine main unit (excluding oscillator)		Approx. 8,500
		Pallet changer processor		Approx. 2,100

Oscillator	specifications	
Model name		ML32XP
Excitation me	thod	3-axis SD excitation cross flow oscillator
	Pulse peak output (W)	3,200
	Rated output (W)	2,700
Laser output characteristics	Beam mode	Lower order (TEM01*main component)
	Power stability (%)	±1 or less during power control (relative to rated output)
	Output power adjustable range (%)	0 to 100
Laser gas cor	nposition	CO2:CO:N2:He = 8:4:60:28
Laser gas cor	nsumption(L/hr)	Approx. 1
Power require	ement (oscillator)(kVA)	41
External dime	ensions (mm)	2040×450×1620
Weight (kg)		Approx. 1200
Standard feat	ures	Beam shutter, Visible laser, High-speed power sensor

Laser Processing Systems

Cooling system specifications		
Cooling method	Air	
Power requirement (kVA)	21	
Cooling capacity (kW)	45	
External dimensions (mm)	2390×934×1772	
Weight (kg)	Approx. 850	

Control system specifications				
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			

