V-factory

Processing for thin, medium and thick plates High speed, high production fiber laser machine

LC VALSTER 3015 AJ @





Rugged machine body adapted to various situations

Equipped with Beam-shape control technology and processing visualization functions. LC-VALSTER-3015AJ G debut!

LC-VALSTER-3015AJ G enables high speed stable processing of thin to thick materials by utilizing beam-shape control technology.

High quality processing is possible thanks to i-Process Monitoring system.

Additionally various automated systems for detecting processing defects realizing more stable and high quality laser cutting are also included

Rugged design



High speed, high production fiber laser machine

LC VALSTER 3015 AJ @

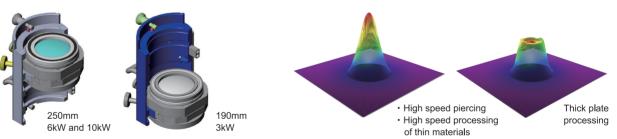


1 One Lens operation according to the machine power output

High power oscillator uses longer focus lens for stable thick material processing



High speed piercing and high speed processing by beam-shape control

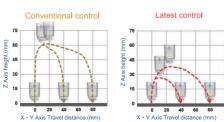


Improved machine controllability





Optimization of head control



2 Adjustment of the joint amount during operation

Joint amount can be adjusted during operation. No need to change the CAM data to adjust the joint amount, this provides continued processing without stopping the machine.



Stable processing and Easy operation

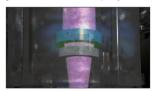
options

We reviewed various operations that tended to rely on work knowledge and know-how. VALSTER is equipped with various functions that do not interfere with the work flow.

i-Optics Sensor

Diagnoses the condition of the protective glass (LIS*)

Periodically diagnoses the protective glass to ensure stable cut quality.



Latest processing technology

Medium thick plate incredibly high speed

By using the high power oscillator (6kW&10kW) and the new nozzle in the medium-thick plate, Incredibly high speed processing and operation at low running costs are possible by new sing technology "Clean Fast Cut" and " EZ Fast Cut".

i-Process Monitoring

Monitoring Piercing and cutting condition (LIS*)

Piercing penetration detection and processing defects are detected by



Automatic nozzle changer (8st)

Automatic nozzle replacement according to material and thickness. Periodic replacement is also possible



Preventing damage due head collision

Protecting the head and stable processing (LIS*)

When a head collision is detected, the Z-axis instantaneously moves upward to prevent damage to the cutting head.



HP EZ Cut

Reduction of processing cost

HP EZ Device can produce nitrogen rich gas that can be used as an assist gas. A separate compressor is required. (1300L/1.37MPa



HP FZ Device

Cooling cut WACS II (Tank:20L)

Stable processing of thick mild

Water mist spray from nozzle to cool the material for stable processing for thick material and improved yield ratio.



Oil shot

High quality processing of medium mild steel

Oil spray for protection from adhesion of the spatter before the piercing.



*LIS (Laser Integration System) is a generic term for operation support functions, which greatly shortens the setup



Visualization of themachine maintenance and utilization status

- · Condition of the machine
- · Cause of the machine not running
- · Machine operation analysis

Visualization of machine operation, production, and consumption

- · Operating condition of the whole factory
- · Machine operation volume (Production & operation Results)
- · Consumption of materials and energy



Example Conventional CO₂ lasers (6kW) vs LC-VALSTER-AJ G (6kW)



•Material : Mild Steel

•Thickness: 2.0mm

•Size: 2438 x 1219mm

Assist gas : Nitrogen



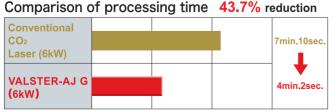
•Material : Mild Steel

•Thickness: 6.0mm

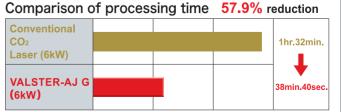
•Size: 2000 x 1000mm Assist gas : Nitrogen

	Conventional CO ₂ lasers (6kW)	LC-VALSTER-AJ G(6kW)
Process command speed	F5200	F25000

Process command speed F5200		F25000
		40.70/



	Conventional CO2 lasers (UKW)	EC-VALSTER-AS G(UKVV)
Process command speed	F2400	F6000



■Dimensions Unit : mm



■Machine specifications

Model			LC-VALSTER-3015AJ G	
Registered model r	name		VS3015AJ	
Axis travel method			X-axis and Y-axis: Rack & pinion Z-axis: Ball screw	
Max. processing size X x Y mm		mm	3070 x 1550	
Max. avis travel X x Y x Z mm		mm	3070 x 1550 x 150	
Rapid feed rate	X x Y Axis	m/min	120	
	Z Axis	m/min	80	
Cutting feedrate m/min		m/min	0-120 (maximum commendable speed)	
Pass line mm		mm	940	
Max. material weight kg		kg	920	
Oscillation method			LD-excitation Fiber laser	
Rated laser power W		W	3000 / 6000 / 10000	
NC model			AMNC-3i Plus	
Partition			Full-partition ceiling open / close integrated telescopic type	
Machine weight (main body only) kg		kg	8600	

■LST specifications

Shuttle table		LST3015G
Maximum material dimensions	mm	3070 x 1550
Passing line	mm	940
Maximum work weight	kg	920
Machine weight	kg	3000
Protective device		Area sensor

*Specifications, appearance and equipment are subject to change without notice by reason of improvement.

*The official model names of machines and units described in this catalog are non-hyphenated like LC VALSTER 3015 AJ G.

Use these registered model names when you contact the authorities for applying for installation, exporting, or financing.

The hyphenated spellings like LC-VALSTER-3015AJ G. are used in some portions of this catalog for sake of readability. This also applies to other machines.

*The specifications described in this catalog are for the Overseas market



For Your Safe Use Be sure to read the operator's manual carefully before use.

 $\bullet \mbox{Use}$ of this product requires hazard prevention measures to suit your work.



This laser product uses a Class 4 invisible laser for processing and a Class 3R visible laser for positioning.

Class 4 invisible laser: Avoid eye or skin exposure to direct or scattered radiation.
Never look into the radiation nor touch it.
Class 3R visible laser: Avoid direct eye exposure.

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