

## Machine specifications

Max. workpiece size	1525 mm × 3050 mm (60.04" × 120.08")	
Work table height	900 mm (35.43")	
Axis stroke	X-axis	3100 mm (122.05")
	Y-axis	1580 mm (62.2")
	Z-axis	150 mm (5.91")
Rapid traverse rate	X, Y : 60 m/min (2362 IPM) Z : 60 m/min (2362 IPM)	
Max. cutting feedrate	60 m/min (2362 IPM)	
Positioning accuracy	±0.05/500 mm (±0.002"/19.69")	
	±0.01/100 mm (±0.0004"/3.94")	
Repeatability	±0.03 mm (±0.001") (X, Y, Z-axes)	
Machining weight	14000 kg (30865 lbs) [ 2 pallet changer]	
Total electrical requirement (kVA)*	51 kVA	
Machine dimensions	3010 mm × 9959 mm × H 2420 mm (118.5" × 392.1" × 95.3") [2 pallet changer]	
Equivalent continuous sound pressure level at operator position (dependent on equipment)	Less than 80 db	

\*1 : Without dust collector and compressor

## Laser Oscillator Specifications

Resonator type	2.5 kW
Laser gas mixed	He, N <sub>2</sub> , CO <sub>2</sub>
*Gas consumption rate	10 L/h (2.5 kW)

\* : When continuous operation

## CNC Standard Specifications

	MAZATROL PREVIEW 3
CPU	64 bit
Control method	Preview control
Minimum program increment unit	0.001 mm (0.0001")
Programming method	EIA / ISO
Display	15" color LCD (TFT)

# Mazak

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- Specifications are subject to change without notice.
- This product is subject to all applicable export control laws and regulations.  
The accuracy data and other data presented in this catalogue were obtained under specific conditions.
- They may not be duplicated under different conditions. (room temperature, workpiece materials, tool material, cutting conditions, etc.)

OPTIPLEX NEXUS 3015 14.10.3000 G 99J438214E0

OPTIPLEX NEXUS 3015



# OPTIPLEX NEXUS 3015

# Mazak

Simple, Compact,  
High-performance laser processing machine

# OPTIPLEX NEXUS 3015



A variety of Intelligent Functions provides incomparable operator support for exceptional ease of operation and the optimum machine efficiency

## Compact

Less floor space is realized by integrated oscillator and power panel

## Extensibility

Compact Manufacturing Cell and FMS can be selected to meet a wide range of production requirements

## Simple input function for machining shape

Round, square and ellipse shape can easily be programmed by selecting patterned shape and inputting numerical values even multiple hole machining



OPTIPLEX NEXUS 3015 2 pallet changer specification  
\*Chiller unit, \*area sensor, and fences which equipped with next to 2 pallet changer are not included



ISF

## INTELLIGENT SET-UP FUNCTION OPTION

A wide variety of automation functions are optionally available for ease of operation and reduced setup time



### Auto Nozzle Changing

Automatically change to optimum nozzle for continuous automatic operation. Storage capacity: 8 nozzles



### Focus Detection

For unskilled or inexperienced operators



### Auto Focus Positioning

Optimum focus position can be performed by program commands for varied thickness and materials



### Auto Profiler Calibration

Cutting distance position must be maintained for dross free cutting. When installing a new nozzle, gap distance is properly maintained with the use of auto profiler calibration. This automatic calibration maximizes the time between necessary operator intervention



### Auto Nozzle Cleaning

The torch head can be moved to the nozzle cleaning brush by program command which removes spatter that has adhered to the nozzle



IMF

## INTELLIGENT MONITORING FUNCTIONS OPTION

Operation status of laser processing can be monitoring. The sensor is equipped with laser processing head to check piercing and to detect defects (burning or plasma). When sensing defects, the operation is corrected or paused to realize optimum machining. OPTIPLEX NEXUS 3015 is equipped with following INTELLIGENT MONITORING FUNCTIONS.



### Pierce Detection



### Burn Detection



### Plasma Detection