

Super heavy loader robot

# MC1000DL

Tool cables and hoses routed inside the hollow arm provides excellent life.



*The MC1000DL is specifically designed for heavy and repetitive lifting tasks up to 1000Kg capacity.*

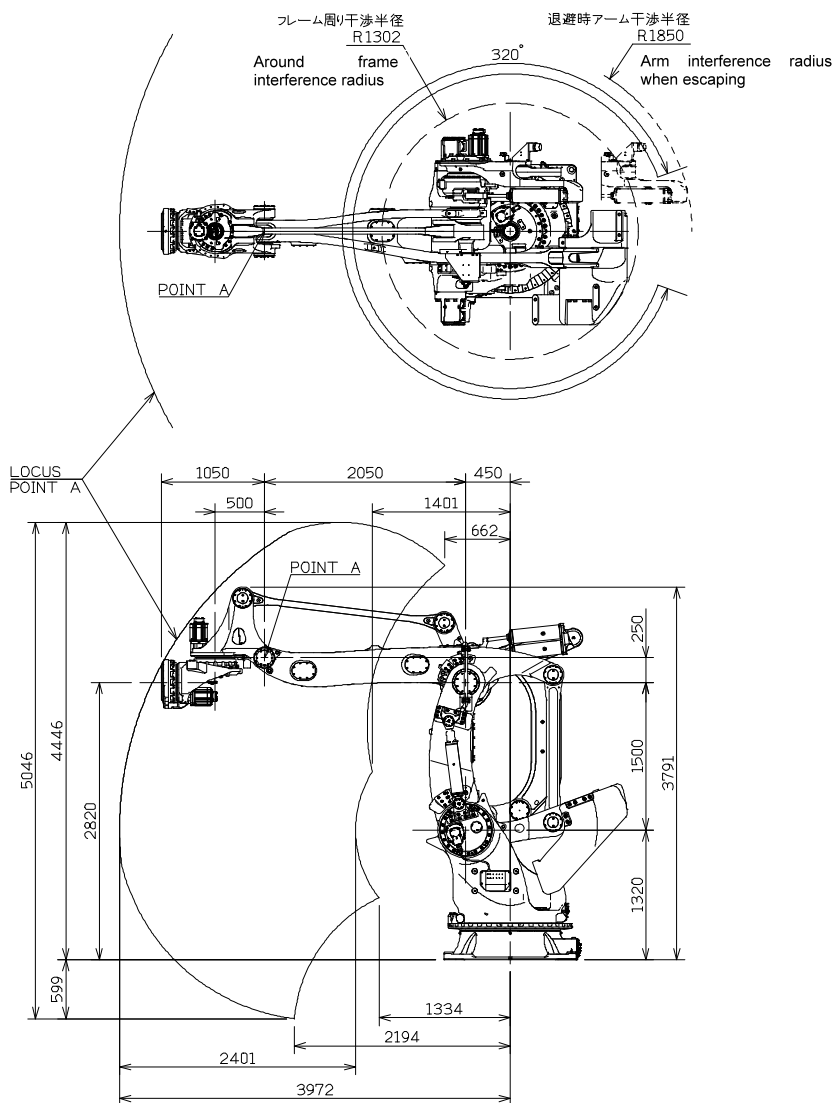
*Provides an impressive work envelope to perform work on several products or machines simultaneously.*

- *Number of controlled axes*      6 axes
- *Payload*                              1,000kg
- *Maximum reach*                      3,972mm

## List of basic specifications

Item	Specifications	
Robot Type	MC1000DL	
Structure	Articulated	
Axis	6	
Drive System	AC servo motor	
Maximum motion range	Axis 1	$\pm 2.79$ rad ( $\pm 160^\circ$ )
	Axis 2	$-1.48 \sim +0.79$ rad ( $-85^\circ \sim +45^\circ$ )
	Axis 3	$-1.57 \sim +0.79$ rad ( $-90^\circ \sim +45^\circ$ )
	Axis 4 *1	Wrist payload is less than 300kg; $-0.17 \sim +1.57$ rad ( $-9.7^\circ \sim +90^\circ$ )
		Wrist payload is 300kg or more; $-0.17 \sim +0.17$ rad ( $-9.7^\circ \sim +9.7^\circ$ )
	Axis 5 *2	$\pm 2.18$ rad ( $\pm 125^\circ$ )
Axis 6	$\pm 0.17$ rad ( $\pm 9.7^\circ$ )	
Maximum Velocity	Axis 1	0.79 rad/s ( $45^\circ/s$ )
	Axis 2	0.70 rad/s ( $40^\circ/s$ )
	Axis 3	0.70 rad/s ( $40^\circ/s$ )
	Axis 4 *3	0.35 rad/s ( $20^\circ/s$ )
	Axis 5	1.13 rad/s ( $65^\circ/s$ )
	Axis 6 *4	1.22 rad/s ( $70^\circ/s$ )
Maximum pay load	Wrist	1000 kg
Maximum static load torque	Axis 4	21000 N·m
	Axis 6	4410 N·m
Maximum moment of inertia *5	Axis 4	5200 kg·m <sup>2</sup>
	Axis 5	4000 kg·m <sup>2</sup>
	Axis 6	1740 kg·m <sup>2</sup>
Position repeatability *6		$\pm 0.3$ mm
Mounting Condition		Floor
Ambient conditions	Temperature: 0 to 45 °C *7 Humidity: 20 to 85%RH (No dew, nor frost allowed) Vibration to the installation face: Not more than 0.5G (4.9 m/s <sup>2</sup> )	
Noise *8		80 dB
Robot weight		9000 kg

## Outline dimensions and Motion range



**NACHI**  
ROBOTIC SYSTEMS INC.

[www.nachirobotics.com](http://www.nachirobotics.com)

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●The specifications are subject to changes without notice.

●In case that an end user uses this product for military purpose or production of weapon, this product may be liable for the subject of export restriction stipulated in the Foreign Exchange and Foreign Trade Act. Please go through careful investigation and necessary formalities for export.