



# Croucher & Crowder

## ENGINEERING SERVICES

PO BOX 352, 8 NELSON Street, HAWERA, NEW ZEALAND



**Phone:** (06)278 4185  
**Office Fax:** (06) 278 8480  
**Retail Store Fax:** (06) 278 8112  
**Email:** [crouchers@bitworks.co.nz](mailto:crouchers@bitworks.co.nz)  
**Web Page:** [www.croucherandcrowder.co.nz](http://www.croucherandcrowder.co.nz)

**New Plymouth Store:**  
170 Gill Street, New Plymouth  
**Phone:** (06) 758 5133  
**Fax:** (06) 758 0707  
**Email:** [crouchersnp@xtra.co.nz](mailto:crouchersnp@xtra.co.nz)

## ROBOTIC WELDING CAPABILITY

The Welding of Repetitive Componentry in a manufacturing processes can be carried out consistently and economically with our Multi-positional Robot Welding Centre.

Contact us for an obligation free appraisal and a competitive quotation.



# Specifications of EX-MV6L Robot Manipulator

Item		Specifications	
Model		EX-MV6L	
Structure		Vertical articulated type	
Number of axes		6	
Max. payload capacity (at wrist tip)		6 kg	
Positional repeatability		±0.1 mm(Note 1)	
Drive system		AC Servo motor	
Drive capacity		5200 W	
Position feedback		Absolute encoder	
Operation Range	Arm	Rotation (Axis 1)	±170° (±50°)(Note 2)
		Lower arm (Axis 2)	-155° ~ +100°
		Upper arm (Axis 3)	-170° ~ +205°
	Wrist	Swing (Axis 4)	±180°
		Bending (Axis 5)	-50° ~ +230°
		Twist (Axis 6)	±360°
Max. Velocity	Arm	Rotation (Axis 1)	165°/sec(150°/sec)(Note 2)
		Lower arm (Axis 2)	165°/sec
		Upper arm (Axis 3)	175°/sec
	Wrist	Swing (Axis 4)	350°/sec
		Bending (Axis 5)	340°/sec
		Twist (Axis 6)	520°/sec
Wrist load	Allowable Moment	Axis 4	11.8 N·m(1.2 kgf·m)
		Axis 5	9.8 N·m(1.0 kgf·m)
		Axis 6	5.9 N·m(0.6 kgf·m)
	Allowable Moment of inertia	Axis 4	0.30 kgf·m <sup>2</sup> (0.031 kgf·m·sec <sup>2</sup> )
		Axis 5	0.25 kgf·m <sup>2</sup> (0.025 kgf·m·sec <sup>2</sup> )
		Axis 6	0.06 kgf·m <sup>2</sup> (0.0063 kgf·m·sec <sup>2</sup> )
Arm operational cross-sectional area		6.43 m <sup>2</sup> × 340°	
Ambient temperature and humidity		0~45°C, 20~80 %RH (no condensation)	
Mass (Weight)		250 kg	
Upper arm payload capacity		12 kg(Note 3)	
Installation method		Floor, ceiling or wall mounting type	
Paint colour		Arm : skygray, Base : blue	

- (Note) 1. The positional repeatability is a measured value obtained when the manipulator operating conditions are stabilized with the automatic operation of the manipulator repeated sufficiently.  
 2. The value in the parenthesis indicates the wall-mounted condition.  
 3. When Max. payload capacity at wrist tip is 6 kg, Wrist transportable payload capacity+Upper arm payload capacity=18 kg.  
 4. Store battery inside the manipulator for ABSO data protection.

## Working Envelope

□ = 500mm

