

FANUC Robot M-2000iA



FEATURES

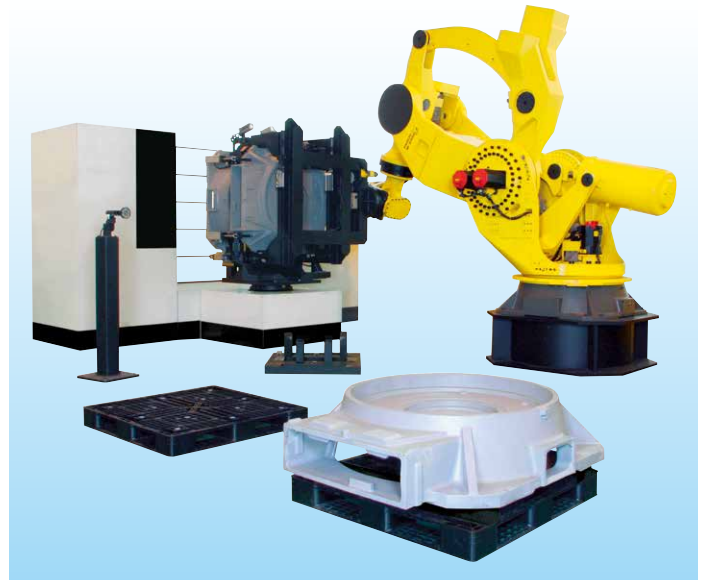
“Super Heavy Payload Robot” FANUC Robot M-2000iA is the heavy payload robot with a payload capacity of 900kg - 2300kg.

- Four models are available to meet a variety of applications.
 - **FANUC Robot M-2000iA/1200**
FANUC Robot M-2000iA/2300
These models are heavy payload Types which have 1200kg (1350kg option) and 2300kg payload capacity, and have 3.7m reach and 4.6m vertical stroke.
They can be applied to handling of heavy work piece such as large castings and structures.
 - **FANUC Robot M-2000iA/900L**
FANUC Robot M-2000iA/1700L
These models are long arm Types which have 900kg and 1700kg payload, and have 4.7m reach and 6.2m vertical stroke. These models have a wide motion envelope and can be applied to lifting and handling large size structures.
- The wrist can be used safely in harsh environment because it has IP67-equivalent resistance to environmental conditions (dust and dips).
- Latest intelligent functions with *i*RVision (integrated vision) are available.

Application Examples



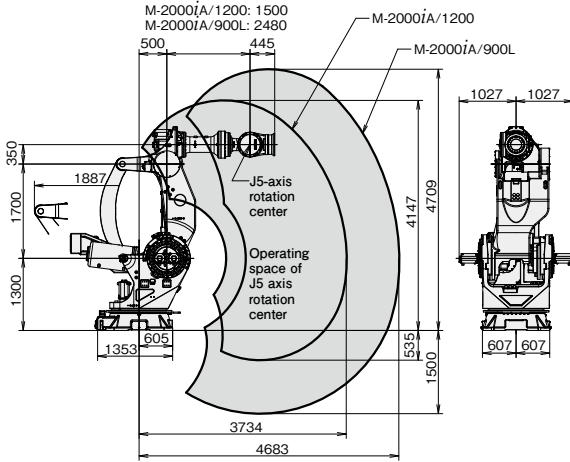
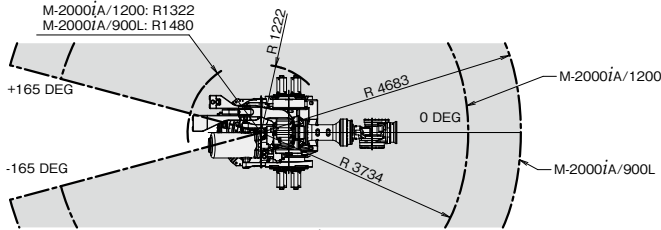
Completed car handling by M-2000iA/1700L



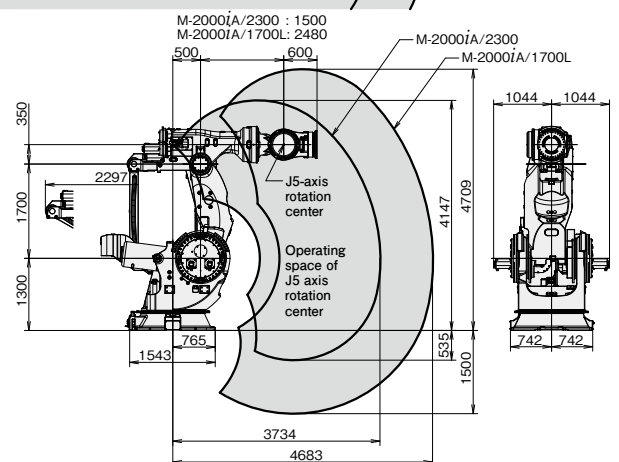
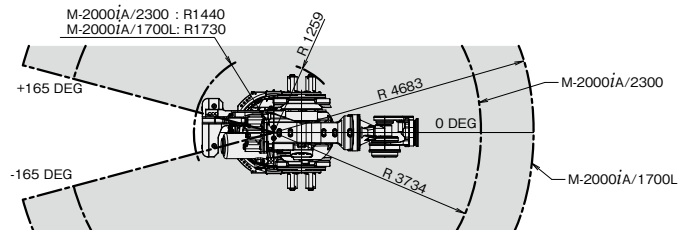
Large casting machine tending by M-2000iA/1200

Operating space

M-2000iA/1200,/900L



M-2000iA/2300,/1700L



Specifications

| Model | | M-2000iA/1200 | M-2000iA/900L | M-2000iA/2300 | M-2000iA/1700L |
|---|------------------------|--|---------------|--|----------------|
| Type | | Articulated Type | | | |
| Controlled axes | | 6 axes (J1, J2, J3, J4, J5, J6) | | | |
| Reach | | 3734 mm | 4683 mm | 3734 mm | 4683 mm |
| Installation | | Floor | | | |
| Motion range (Maximum speed) (Note 1) | J1 axis rotation | 330° (45°/s) 5.76 rad (0.79 rad/s) | | 330° (20°/s) 5.76 rad (0.35 rad/s) | |
| | J2 axis rotation | 160° (30°/s) 2.79 rad (0.52 rad/s) | | 160° (14°/s) 2.79 rad (0.24 rad/s) | |
| | J3 axis rotation | 165° (30°/s) 2.88 rad (0.52 rad/s) | | 165° (14°/s) 2.88 rad (0.24 rad/s) | |
| | J4 axis wrist rotation | 720° (50°/s) 12.57 rad (0.87 rad/s) | | 720° (18°/s) 12.57 rad (0.31 rad/s) | |
| | J5 axis wrist swing | 240° (50°/s) 4.19 rad (0.87 rad/s) | | 240° (18°/s) 4.19 rad (0.31 rad/s) | |
| | J6 axis wrist rotation | 720° (70°/s) 12.57 rad (1.22 rad/s) | | 720° (40°/s) 12.57 rad (0.70 rad/s) | |
| Max. load capacity at wrist | | 1200 kg 1350 kg (Note 2) | 900 kg | 2300 kg | 1700 kg |
| Max. load capacity at J2 base | | 550 kg | | | |
| Max. load capacity at J3 arm | | 50 kg | | | |
| Allowable load moment at wrist | J4 axis | 14700 N·m 1500 kgf·m | | 29400 N·m 3000 kgf·m | |
| | J5 axis | 14700 N·m 1500 kgf·m | | 29400 N·m 3000 kgf·m | |
| | J6 axis | 4900 N·m 500 kgf·m | | 8820 N·m 900 kgf·m | |
| Allowable load inertia at wrist | J4 axis | 2989 kg·m ² 30500 kgf·cm·s ² | | 7500 kg·m ² 76531 kgf·cm·s ² | |
| | J5 axis | 2989 kg·m ² 30500 kgf·cm·s ² | | 7500 kg·m ² 76531 kgf·cm·s ² | |
| | J6 axis | 2195 kg·m ² 22400 kgf·cm·s ² | | 5500 kg·m ² 56122 kgf·cm·s ² | |
| Drive method | | Electric servo drive by AC servo motor | | | |
| Repeatability (Note 3) | | ± 0.18 mm | | | ± 0.27 mm |
| Mass (Note 4) | | 8600 kg | 9600 kg | 11000 kg | 12500 kg |
| Installation environment | | Ambient temperature : 0 to 45°C Ambient humidity : Normally 75 %RH or less (No dew nor frost allowed) Short term Max.95 %RH or less (within one month) Vibration acceleration : 4.9 m/s ² (0.5G) or less | | | |

Note 1) During short distance motions, the axis speed may not reach the maximum value stated.

Note 2) With 1350kg option.

Note 3) Compliant with ISO 9283.

Note 4) Without controller.

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