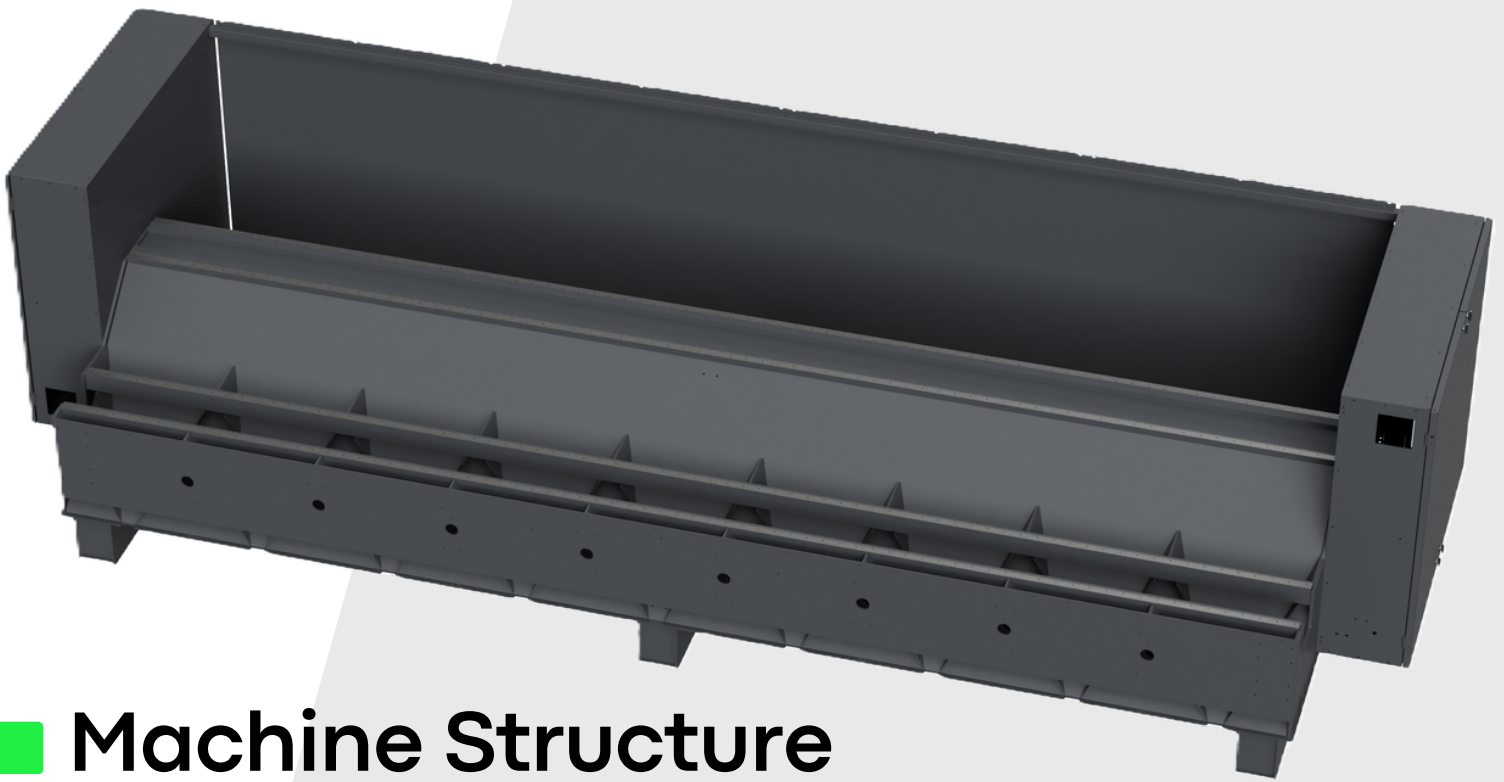


HYBRID OHR

Over-Head Robot

Hybrid Over-Head Robot Systems seamlessly combine traditional machine tools with industrial robots, offering balanced access to the workpiece and outstanding undercutting abilities. With simultaneous nine-axis control, these systems enable precise robot positioning while the robot articulates in six degrees of freedom.



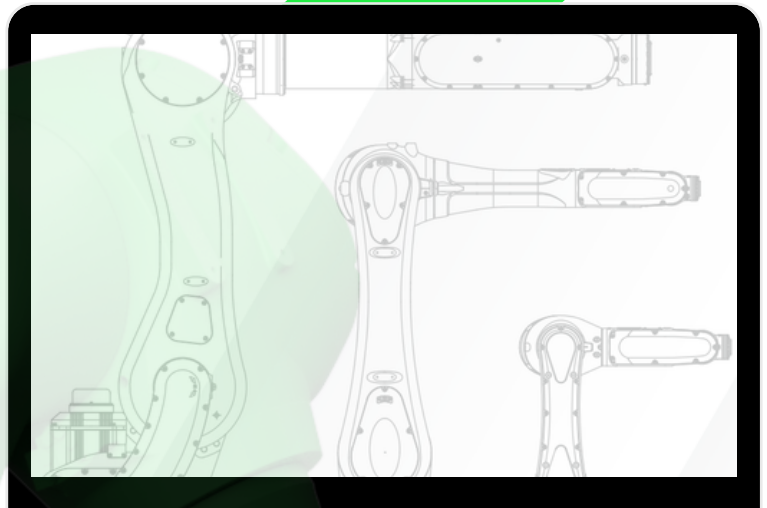


■ Machine Structure

- Machine Frame of welded, US sourced, A36 Structural steel
- Pulse MIG Welding Technology
- Stress Relieved in accordance with ASTM 993
- Machined to precise GD&T straightness, flatness, and positional tolerances with 125micro-inch finishes
- Powder Coated Finish; TGIC Polyester coating platform in compliance with UL-1332
- Electrical Systems according to UL-508A
- X Travel from 10' to 34'
- Y Travel: 72"
- Z Travel: 26"+

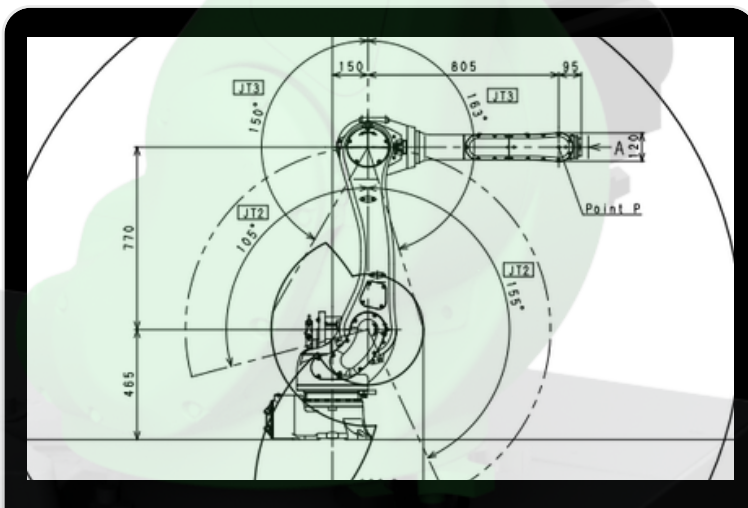


Robot Arm



- Industrial Type Robot, with 6 axes of motion
- 20kg typical load capacity (inertial limitations must be considered)
- 1,725mm (67.9") maximum robot arm reach
- Repeatability at maximum reach $\pm 0.04\text{mm}$ ($\pm .0015"$)
- Conforms to ISO 9283

Motion



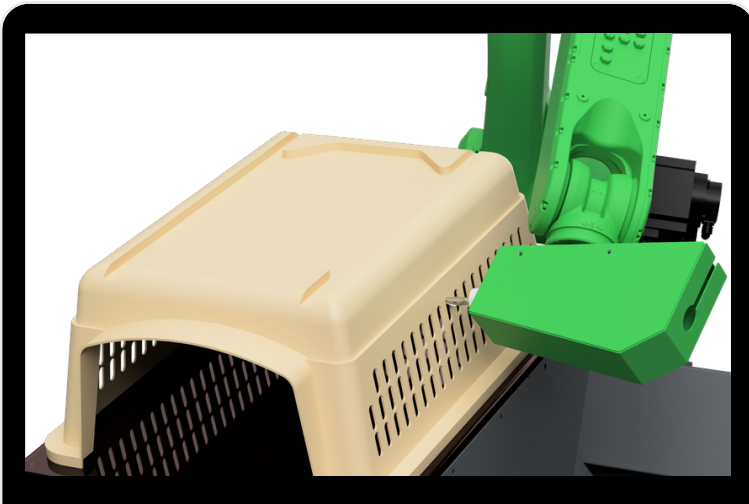
- Joint 1 motion: $\pm 180^\circ$
- Joint 2 motion: $+155$ to -105°
- Joint 3 motion: $+150$ to -163°
- Joint 4 motion: $\pm 270^\circ$
- Joint 5 motion: $\pm 145^\circ$
- Joint 6 motion: $\pm 360^\circ$

Propulsion



MTC-integrated robots are setting the benchmark for medium-duty industrial robots. Their compact design along with industry-leading speed, reach, and work range makes the R series robots ideal for a wide range of applications throughout diverse industries.

Performance



- Axis 1 Speed: 190° per second
- Axis 1 Speed: 205° per second
- Axis 1 Speed: 210° per second
- Axis 1 Speed: 400° per second
- Axis 1 Speed: 360° per second
- Axis 1 Speed: 610° per second
- Speeds subject to reduction based on mass and inertia



Motion Control System

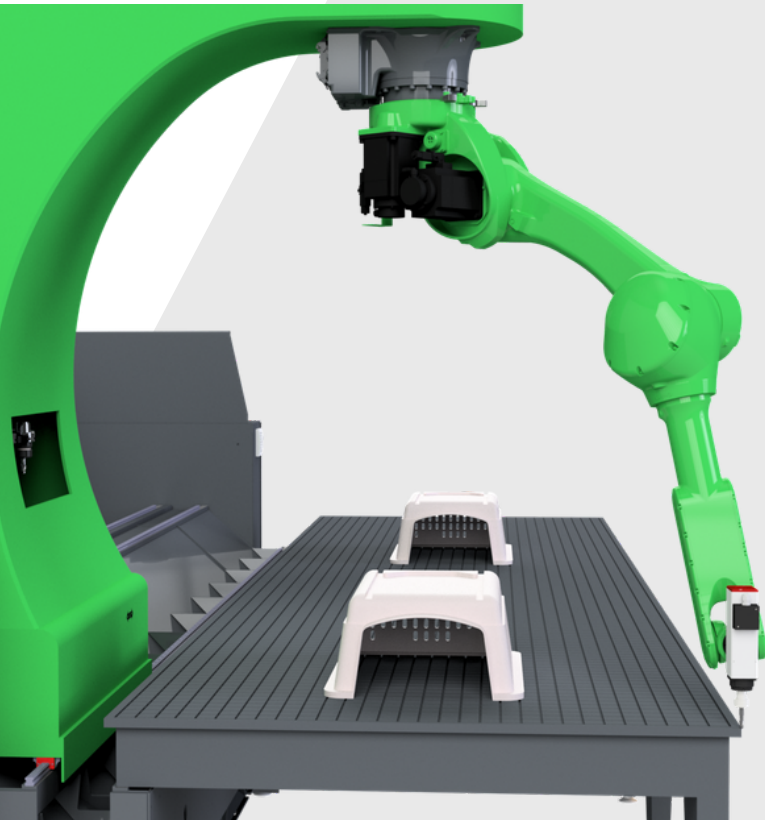
- Robot Motion Control System
- Includes robot control pendant
- With 7" Color Touch Screen
- Full PLC access
- Ready for external IO expansion
- Digital Servo Amplifiers
- Brushless AC Servo Motors and encoders
- Shielded Hi-Flex Servo power and encoder cables
- 24 Volt DC Input/Output modules
- Electrical Systems according to UL-508A
- VFD with spindle speed control
- Absolute Servo Encoders

Safety Systems

- Emergency Stop system with “mushroom” type E-Stop Button
- Over/Under voltage monitoring system
- Routing Spindle equipped with inertia management system
- Compressed air monitoring system
- Digital Fencing via LASER Area Scanner



Reach & Clearance



Applications

- Trimming
- Sanding
- Sawing
- Dispensing
- Routing
- Inspection
- Drilling
- Assembly