

World Manipulator®

LOW HEADROOM. HIGH CAPACITY. ERGONOMIC.



WM shown with optional pedestal and OD gripper end-effector.

Positech's pneumatic World Manipulator® (WM) is a low headroom solution for maneuvering payloads up to 1,000 pounds, providing rigid support and reach-in capability. This ergonomic lift assist can be used as an alternative to a sling and hoist or a forklift to improve safety, functionality and performance.

The World Manipulator offers extended reach and lift allowing an operator to reach into, over and around the work cell. The device's off-center moment loading feature allows the operator to extend the end-effector and payload well beyond the end of the arm.

The World Manipulator is available in three model configurations. It provides up to 60 inches of vertical lift and flexible mounting options.

❖ Applications



Pedestal mounted WM with ID gripper used for handling rolls of paper.



Trolley mounted WM used for servicing work cells with low headroom.



Pedestal mounted WM with vacuum end-effector loading product into boxes.

World Manipulator®

LOW HEADROOM. HIGH CAPACITY. ERGONOMIC.

For Performance and Quality

- 360° continuous rotation around main post vertical axis
- Includes air filter/regulator system. Does not require line lubrication
- Standard flange mounting for adaptability to a variety of custom end-effectors
- Pneumatically operated, requires clean dry input pressure
- Precision bearings and thrust washers at rotation axes for smooth motion and long life
- Standard pistol grip or optional ergonomic twist grip controls
- End of arm rotating axis has up to 36,000 inch pounds of end of arm moment loading
- Mounting Options: overhead, trolley, pedestal, wall mount, column, machine or mobile/portable base
- Vertical axes brakes available

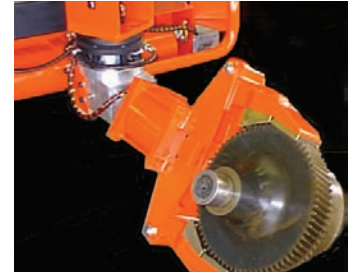
Positech Advantages

- 5:1 design factor minimum on all structural components
- Pilot operated lock valve on lift cylinder and gripper cylinders prevent downward arm movement and loss of payload if supply pressure is interrupted
- Gripper Safety Circuitry available, prevents accidental release of unsupported payloads
- Lost Load Cylinder is a separately sealed hydraulic device that protects the operator from any sudden, uncontrolled upward motion of the manipulator arms
- Parallel linkage arms allow end-effector to remain parallel to the floor
- Minimum Lift Circuit is standard, allowing controlled downward movement of payload
- Floor mounted pedestal is provided with concrete anchor bolts, mounting hardware and leveling jacks for ease of installation (No grout required)
- Does not require air lubricator
- Main post adjustable friction brake allows the operator to set arm motion for ease of operation
- Complies with CE and other National Standards

Technical Specifications

Model	Capacity* lbs (kg)	Reach in (mm)	Lift in (mm)
WM200	440 (200)	115 (2921)	55 (1397)
WM300	660 (300)	115 (2921)	55 (1397)
WM450	1000 (450)	112 (2845)	60 (1524)

Requires 90 psi (6.21 bar) clean, dry air to operate at capacity
*Increasing arm length reduces payload capacity



End-effector with OD gripper places gears on pallets in assembly process.



OD gripper end-effector loads and unloads parts from press.



Vacuum end-effector handling parts in the assembly process.



Expanding mandrel end-effector handling rolls of paper.

Custom End-Effectors

Customized end-effectors, operator controls, and specialized pneumatic circuitry are available to meet your requirements.

Positech
CORPORATION
The Leader in Positioning Technology