

SAM[®]

SIMPLE AIR MANIPULATOR

MANEUVERABILITY. MINIMAL EFFORT. ERGONOMIC.



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

For jobs that require the compliance and float of a pneumatic manipulator, this ergonomic lift assist provides the operator with the highest level of feel and position of the payload. The Positech Simple Air Manipulator[®] (SAM) uses pneumatic power to provide quick response and superior maneuverability with loads up to 940 pounds.

The SAM's lift cylinder uses compressed air for vertical lifting and positioning. This industrial manipulator comes equipped with a standard operator-controlled pistol grip metering valve for vertical lift.

The SAM is the industry's only manipulator that can be changed from floor to ceiling mount without arm disassembly.

An optional ergonomic twist grip controller for vertical lift is available. Ergonomic design incorporates precision bearings to minimize resistance to movement.

Positech[™]

❖ Applications



Pedestal mounted SAM used for lifting and positioning parts in assembly process of agricultural equipment.



Overhead trolley mounted SAM and hydraulic powered end-effector installing tractor tires.



Overhead trolley mounted SAM and seat handling end-effector.

Positech[™]
CORPORATION
The Leader in Positioning Technology



Quality System Registered
ISO 9001:2008/Q9001-2008
Certificate QSR-498

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SAM0210

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For Performance and Quality

- End-of-arm rotating axis has up to 18,000 inch pounds of end-of-arm moment loading and 360° rotation
- Pantograph design allows for a rectangular working window
- End-effector mounting surface deflects less than 2° when fully side loaded
- Designed for low maintenance and high productivity
- Special circuitry available to meet application requirements
- Precision bearings and thrust washers for smooth motion and long life
- Standard pistol grip or optional ergonomic twist grip controls
- Mounting Options: overhead, trolley, pedestal or mobile/portable base

Positech Advantages

- 5:1 design factor minimum on all structural components
- Main post adjustable friction brake allows the operator to set arm motion for ease of operation
- Enclosed parallel linkage minimizes visual obstruction and protects operator from potential harm at pinch points
- 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
- Minimum Lift Circuit is standard, allowing controlled downward movement
- Floor mounted pedestal provided with concrete anchor bolts, mounting hardware and leveling jacks for ease of installation (No grout required)
- Does not require air lubricator
- Complies with CE and other National Standards

Technical Specifications

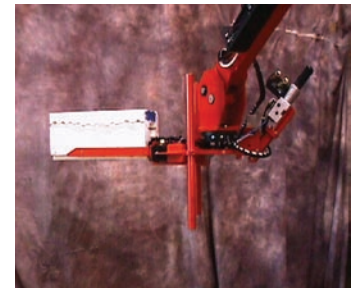
Model	Capacity* lbs (kg)	Reach ft (m)	Lift in (m)	Overhead Clearance ft (m)
G	150-390 (68-177)	6-11 (2-3)	45-87 (1-2)	9-16 (2-5)
K	240-680 (109-308)	6-12 (2-4)	45-100 (1-3)	9-19 (2-6)
P	350-940 (159-426)	6-12 (2-4)	45-100 (1-3)	9-19 (2-6)

Requires 80 psi (5.52 bar) clean, dry air to operate at capacity

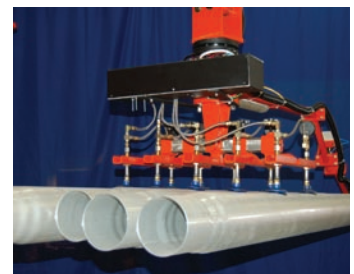
*Includes payload and end-effector; increasing arm length reduces payload capacity



Vacuum end-effector handling parts in furniture assembly process.



End-effector handles plaster based investment molds.



Vacuum end-effector handling multiple steel tubes.



ID gripper end-effector handling electric panels.

Custom End-effectors

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

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