Positech’s hydraulic Taurus® Positioning Arm (TPA) design emulates the movement of the human arm. This industrial manipulator allows for reaching in and maneuvering over or around work cell obstructions. When the handling process requires precise positioning of heavy payloads of up to 2,500 pounds, the TPA hydraulic system makes it the ideal choice. Safe, low-voltage, variable speed controls can be hand held, machine mounted or built into ergonomically designed controls.

The TPA is available in four model configurations, providing up to 64 inches of vertical lift and flexible mounting options.
For Performance and Quality
- Up to 48,000 inch pounds of moment loading for extended reach payload applications
- Optional electric collector ring available for continuous main post rotation
- Standard flange mounting for adaptability to a variety of custom end-effectors
- Precision bearings and thrust washers at rotation axes for smooth motion and long life
- Mounting Options: overhead, trolley, pedestal or mobile/portable base
- Vertical axes brakes available
- Adjustable drag brakes at each vertical axis of rotation
- Infinitely variable up/down vertical speeds; easily adjustable minimum/maximum speed controls
- Self-contained power unit
- Vertical lift provided by single action hydraulic ram cylinder
- Designed for minimal deflection

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
- Parallel linkage arms allow end-effector to remain parallel to the floor
- Floor mounted pedestal provided with concrete anchor bolts, mounting hardware and leveling jacks for ease of installation (No grout required)
- Low-voltage signal on all operator’s controls
- Overload sensors prevent lifting more than machine capacity
- Optional temperature sensors shut down system automatically to prevent overheating
- Motor runs only when a handling function is activated

Technical Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity* (lbs (kg))</th>
<th>Reach (in (mm))</th>
<th>Lift (in (mm))</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPA5</td>
<td>500 (225)</td>
<td>112 (2845)</td>
<td>64 (1626)</td>
</tr>
<tr>
<td>TPA10</td>
<td>1000 (450)</td>
<td>112 (2845)</td>
<td>64 (1626)</td>
</tr>
<tr>
<td>TPA15</td>
<td>1500 (680)</td>
<td>113 (2870)</td>
<td>64 (1626)</td>
</tr>
<tr>
<td>TPA25</td>
<td>2500 (1130)</td>
<td>113 (2870)</td>
<td>64 (1626)</td>
</tr>
</tbody>
</table>

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

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