Y-Axis Shift Pallet Systems

Affordable State of the Art Technology

Available with CE guarding
AUTOMATIC PALLET SYSTEMS

Quality control tested with over 250,000 pallet changes before bringing product to market.

Load, unload, inspect parts and set up jobs while alternate pallet is in the machine
Reduce set up time on repeat jobs by dedicating tooling onto pallets
Heavy/large workpieces easily loaded outside the machine
Increase machine and operator productivity
Up to 8000+ lbs. (3636 kgs.) capacity
Dual air blast at each contact pad
Equipped with Mitsubishi controls
Jobs can be easily interrupted for emergency
Fully integrated with CNC machine by using two M-Functions
Pallets easily interchanged between machines or departments
Exchange pallet in seconds with +/- .0001" (.0025 mm) repeatability

Retrofits to Any
New or Existing
Machining Center

STATE OF THE ART VERSATILITY

- MIDACO’s PLC is fully integrated with the machine.
- While the alternate pallet is on the machine, the operator sets up the next pallet. Once ready, the operator pushes the "Pallet Ready" button (A) and walks away to attend other activities. When the pallet in the machine is complete, the next pallet shuttles in automatically.

The PLC allows the operator to program pallet acceleration and deceleration according to the weight of the fixture to optimize performance.

Keypad (B) Provides:
- Optional modem for online diagnostics or upgrades
- Password protected access
- Parameters page access
- Manual functions access
- Single block functions
- Current I/O status
- Diagnostic pages

Electric Servo Drive Provides Proven Reliability

MIDACO’s precision engineered Servo Drive assembly (C) extends into the machining center, tilts and engages with the pallet coupler (D) to remove the pallet from the machining center. The Servo Drive then delivers the next pallet into the machine in seconds.
(A) Cast Iron receiver mounts directly to the machine table.

(B) Hardened and ground locating pins assure +/- .0001" (.0025 mm) repeatability.

(C) MIDACO’s patented “Dual Air Blast” blows air up through and across the contact pads for chip removal. (see inset)

Precision ground steel rails (D) include hardened and ground bushings (E) to assure accuracy and durability.

Standard Plain cast aluminum pallets (F) offer extreme versatility.

Cast Iron, T-Slotted, Tapped Hole and custom pallets are optional.

For Traveling Column Machines Where the Table Does Not Move in “Y”

When Pallet A comes out of the machine the shuttle moves to put Pallet B in position and sends Pallet B into the machine. This operation is reversed for the next pallet change.

Since 1969, MIDACO has been a leader in providing innovative and quality solutions to improve manufacturing efficiency for companies worldwide.
"Since I've added 5 MIDACO pallet changers, I've increased my productivity OVER 600%.”

"100% plus increase in productivity without suffering quality."

"Productivity has increased over 90% and downtime due to loading and unloading parts was greatly reduced."

"25% savings in job set up time, eliminating lifting of heavy devices such as vises and rotary heads."

"We have achieved a 2 hour savings in production during an 8 hour shift, a 25% increase in productivity."

"I've been in the industry for over 25 years and have seen a lot of different machines and pallet changers. MIDACO's product is the best and most user friendly I've seen."

**Y-AXIS AUTOMATIC Pallet SYSTEMS**

<table>
<thead>
<tr>
<th>Y-Shift Series</th>
<th>A16SDY</th>
<th>A30SDY</th>
<th>A40SDY</th>
<th>A45SDY</th>
<th>A50SDY</th>
<th>A55SDY</th>
<th>A60SDY</th>
<th>A80SDY</th>
<th>A90SDY</th>
<th>A120SDY</th>
<th>A140SDY</th>
<th>A150SDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifications</td>
<td>lbs. / in.</td>
<td>kg. / mm</td>
<td>lbs. / in.</td>
<td>kg. / mm</td>
<td>lbs. / in.</td>
<td>kg. / mm</td>
<td>lbs. / in.</td>
<td>kg. / mm</td>
<td>lbs. / in.</td>
<td>kg. / mm</td>
<td>lbs. / in.</td>
<td>kg. / mm</td>
</tr>
<tr>
<td>Receiver Weight</td>
<td>95</td>
<td>43.4</td>
<td>91</td>
<td>6.7</td>
<td>91</td>
<td>6.7</td>
<td>91</td>
<td>6.7</td>
<td>91</td>
<td>6.7</td>
<td>91</td>
<td>6.7</td>
</tr>
<tr>
<td>Pallet Thickness</td>
<td>7</td>
<td>1.6</td>
<td>1.8</td>
<td>1.6</td>
<td>1.8</td>
<td>1.6</td>
<td>1.8</td>
<td>1.6</td>
<td>1.8</td>
<td>1.6</td>
<td>1.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Pallet Load Cap.*</td>
<td>50</td>
<td>21.7</td>
<td>69</td>
<td>16.1</td>
<td>100</td>
<td>1.9</td>
<td>100</td>
<td>1.9</td>
<td>100</td>
<td>1.9</td>
<td>100</td>
<td>1.9</td>
</tr>
<tr>
<td>A(Pallet X BRm)</td>
<td>19</td>
<td>8.6</td>
<td>27</td>
<td>6.8</td>
<td>50</td>
<td>12.7</td>
<td>50</td>
<td>12.7</td>
<td>50</td>
<td>12.7</td>
<td>50</td>
<td>12.7</td>
</tr>
<tr>
<td>B(Pallet Y BRm)</td>
<td>16</td>
<td>7.3</td>
<td>25</td>
<td>5.7</td>
<td>50</td>
<td>11.7</td>
<td>50</td>
<td>11.7</td>
<td>50</td>
<td>11.7</td>
<td>50</td>
<td>11.7</td>
</tr>
<tr>
<td>C</td>
<td>4.7</td>
<td>1.1</td>
<td>10.4</td>
<td>2.7</td>
<td>15</td>
<td>3.4</td>
<td>15</td>
<td>3.4</td>
<td>15</td>
<td>3.4</td>
<td>15</td>
<td>3.4</td>
</tr>
<tr>
<td>D</td>
<td>3.8</td>
<td>0.8</td>
<td>10.6</td>
<td>2.4</td>
<td>15</td>
<td>3.4</td>
<td>15</td>
<td>3.4</td>
<td>15</td>
<td>3.4</td>
<td>15</td>
<td>3.4</td>
</tr>
<tr>
<td>E</td>
<td>3.8</td>
<td>0.8</td>
<td>10.6</td>
<td>2.4</td>
<td>15</td>
<td>3.4</td>
<td>15</td>
<td>3.4</td>
<td>15</td>
<td>3.4</td>
<td>15</td>
<td>3.4</td>
</tr>
<tr>
<td>F</td>
<td>5.5</td>
<td>1.3</td>
<td>12.9</td>
<td>3.3</td>
<td>20</td>
<td>5</td>
<td>20</td>
<td>5</td>
<td>20</td>
<td>5</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>G(High Height)</td>
<td>9.5</td>
<td>3.6</td>
<td>16.9</td>
<td>4.3</td>
<td>30</td>
<td>7.2</td>
<td>30</td>
<td>7.2</td>
<td>30</td>
<td>7.2</td>
<td>30</td>
<td>7.2</td>
</tr>
<tr>
<td>H(Maux Height)</td>
<td>6.5</td>
<td>1.9</td>
<td>14.8</td>
<td>3.6</td>
<td>30</td>
<td>7.2</td>
<td>30</td>
<td>7.2</td>
<td>30</td>
<td>7.2</td>
<td>30</td>
<td>7.2</td>
</tr>
<tr>
<td>J(Max Receiver)</td>
<td>13</td>
<td>3.0</td>
<td>15.0</td>
<td>3.4</td>
<td>30</td>
<td>7.2</td>
<td>30</td>
<td>7.2</td>
<td>30</td>
<td>7.2</td>
<td>30</td>
<td>7.2</td>
</tr>
<tr>
<td>L(Opening)</td>
<td>16</td>
<td>6.9</td>
<td>20</td>
<td>9.1</td>
<td>30</td>
<td>7.2</td>
<td>30</td>
<td>7.2</td>
<td>30</td>
<td>7.2</td>
<td>30</td>
<td>7.2</td>
</tr>
<tr>
<td>M(Optical CE Package)</td>
<td>20</td>
<td>9.1</td>
<td>26.6</td>
<td>6.4</td>
<td>37.5</td>
<td>17</td>
<td>37.5</td>
<td>17</td>
<td>37.5</td>
<td>17</td>
<td>37.5</td>
<td>17</td>
</tr>
<tr>
<td>N(Enhanced CE Package)</td>
<td>20</td>
<td>9.1</td>
<td>26.6</td>
<td>6.4</td>
<td>37.5</td>
<td>17</td>
<td>37.5</td>
<td>17</td>
<td>37.5</td>
<td>17</td>
<td>37.5</td>
<td>17</td>
</tr>
</tbody>
</table>

*M at 100PSI (6.9 bar) **M at 120PSI (8.2 bar)

MIDACO pallet systems are designed for machines with stationary guarding. Some machines require options or customization. Contact your sales representative to confirm model and specifications for all applications.

MIDACO CORPORATION
2000 E. Touhy Avenue
Elk Grove Village, IL 60007 USA
Phone: 847.593.8420
Fax: 847.593.8451
Email: midaco@midaco-corp.com

See how we fit your application
www.midaco-corp.com

0313