Automatic Pallet Systems

Affordable State of the Art Technology

Engineered and manufactured in the USA... Supported throughout the world
CUSTOMER SATISFACTION

"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."

VARIOUS SYSTEMS AVAILABLE

Various pallet sizes, manual, rotary and double systems are available along with other accessories designed to meet your needs.

- Manual Pallet System
- Dual Automatic System
- Rotary Pallet System
- A15/20SD Pallet System
- Manual "Lift Off" System
- Pallet Transfer Cart

AUTOMATIC PALLET SYSTEMS

Note: Diagram Shows Optional CE Package

<table>
<thead>
<tr>
<th>Series 15SD</th>
<th>Series 20SD</th>
<th>Series 30SD</th>
<th>Series 40SD</th>
<th>Series 50/20SD</th>
<th>Series 50/20/25SD</th>
<th>Series 60SD</th>
<th>Series 80SD</th>
<th>Series 120SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping Force</td>
<td>4500</td>
<td>4500</td>
<td>5200</td>
<td>5200</td>
<td>7500</td>
<td>7500</td>
<td>15400</td>
<td>15400</td>
</tr>
<tr>
<td>Receiver Weight</td>
<td>85</td>
<td>85</td>
<td>243</td>
<td>243</td>
<td>243</td>
<td>243</td>
<td>513</td>
<td>513</td>
</tr>
<tr>
<td>Pallet Weight</td>
<td>60</td>
<td>80</td>
<td>140</td>
<td>170</td>
<td>250</td>
<td>250</td>
<td>513</td>
<td>513</td>
</tr>
<tr>
<td>Pallet Thickness</td>
<td>75</td>
<td>100</td>
<td>150</td>
<td>170</td>
<td>200</td>
<td>200</td>
<td>513</td>
<td>513</td>
</tr>
<tr>
<td>Pallet Load Capacity**</td>
<td>300</td>
<td>500</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>A (Pallet &quot;X&quot; Dims)</td>
<td>22</td>
<td>24</td>
<td>30</td>
<td>40</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>B (Pallet &quot;Y&quot; Dims)</td>
<td>11/13</td>
<td>14/15</td>
<td>15/19</td>
<td>15/19</td>
<td>15/19</td>
<td>15/19</td>
<td>15/19</td>
<td>15/19</td>
</tr>
<tr>
<td>C</td>
<td>3.38</td>
<td>3.38</td>
<td>5.17</td>
<td>5.17</td>
<td>5.17</td>
<td>5.17</td>
<td>5.17</td>
<td>5.17</td>
</tr>
<tr>
<td>D</td>
<td>2.00</td>
<td>2.00</td>
<td>2.56</td>
<td>2.56</td>
<td>2.56</td>
<td>2.56</td>
<td>2.56</td>
<td>2.56</td>
</tr>
<tr>
<td>E</td>
<td>44.5</td>
<td>44.5</td>
<td>44.5</td>
<td>68</td>
<td>68</td>
<td>68</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td>F</td>
<td>35.2</td>
<td>35.2</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>G (Min, Height)</td>
<td>32.5</td>
<td>32.5</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>H, Max, Height</td>
<td>42</td>
<td>42</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>J (Receiver)</td>
<td>11.0</td>
<td>11.0</td>
<td>15.5</td>
<td>15.5</td>
<td>15.5</td>
<td>15.5</td>
<td>15.5</td>
<td>15.5</td>
</tr>
<tr>
<td>K (Receiver)</td>
<td>21.0</td>
<td>21.0</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>L (Door Opening)</td>
<td>14</td>
<td>14</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>M (Optional Package)</td>
<td>20.0</td>
<td>20.0</td>
<td>20.8</td>
<td>20.8</td>
<td>20.8</td>
<td>20.8</td>
<td>20.8</td>
<td>20.8</td>
</tr>
<tr>
<td>N (Optional Package)</td>
<td>33.0</td>
<td>33.0</td>
<td>42</td>
<td>61</td>
<td>61</td>
<td>81</td>
<td>81</td>
<td>81</td>
</tr>
</tbody>
</table>

Weight Capacities shown in Lbs. (kgs). Dimensions shown in inch (mm).
*At 100 PSI (6.9 bar)  **At 120 PSI (8.2 bar)  ***Optional 2000 Lb. (909 kgs) pallet load capacity includes 2" (50.8 mm) pallets on 40 Series.
Patented. Specifications subject to change without notice. Manual and Automatic Rotary Pallet systems are also available.

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 EAST TOUHY AVENUE
ELK GROVE VILLAGE, IL 60007 USA
PHONE: 847.593.8420
FAX: 847.593.8451
www.midaco-corp.com

Visit our website at www.midaco-corp.com or contact us today for a free CD-ROM highlighting the benefits of MIDACO's pallet systems.

08D4
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

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.

---

**OPTIONAL CE ENCLOSURE**

- 3-sided enclosure includes hinged front and back doors that are lowered for easy accessibility. End door is removable.

- Pallet change will not occur if any of the 3 doors is opened.

- With no overhead obstructions, an overhead crane can easily load parts.

---

Since 1969, MIDACO has been a leader in providing innovative and quality solutions to improve manufacturing efficiency for companies worldwide.