Cost and space saving automated palletizing solutions

The Brenton Box Bot series offers customers pre-engineered, configured robotic palletizing solutions. Modular engineering allows for quality control and complete flexibility in machine “design for your application.” Customers can pick from available options to meet specific application requirements saving precious lead-time.

The Box Bot configurations start in two base designs: modular or skid-based and offer optional slip sheet stations, pallet racks or dispensers integrated into the base robotic cell.

The modular design has configurations for either floor load or conveyor load applications, while the skid-based design fits within a single truckload sized skid enabling rapid on-site installation. All cells are designed to RIA standards and come standard with QBOX pallet building software.

**ISO DRAWINGS**

*Illustrating just one of the configurations available*

A. VENTURI VACUUM GRIPPER
Vacuum style gripper with foam pad can handle corrugate cases, slip sheets and pallets. Distributed vacuum over a larger area than a vacuum cup system ensures the tops of the cases remain flat during transport.

B. ACTIVATED ROLLER BELT (ARB) CONVEYOR
Ensures cases are registered to the correct location prior to picking without the use of clamps or other devices and selectively turns cases when required to form a pick pattern.

C. SLIP SHEET STATION
Slip sheet dispenser reduces labor required to completely automate the pallet building process in your operation. Optional feature on both modular and skid based systems.

D. QBOX PALLET BUILDING SOFTWARE
Full system control, including pallet pattern selection and QBox pallet building via AB PanelView HMI.

E. OPTIONAL AUTOMATIC PALLET DISPENSER
Optional automatic pallet dispenser holds up to 22 GMA or chep pallets dispensing to the build station for quick exchange.

**THE QBOX DIFFERENCE**
- QBOX pallet building software allows operators to design and produce exact pallet patterns.
- Eliminates the need for a service call to build the new recipe saving time and money.
- Easy-to-use, intuitive software resides in the Box Bot PLC eliminating the need to connect an industrial PC.
- QBOX alerts the user to errors with patterns formed and even accounts for label out in orientation.
### CONFIGURATIONS

**Largest Modular Footprint**

**Smallest Modular Footprint**

**Skid Based**

<table>
<thead>
<tr>
<th>Modular Base Design</th>
<th>Skid-Based Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Loading</td>
<td>Yes</td>
</tr>
<tr>
<td>Conveyor Loading</td>
<td>Yes</td>
</tr>
<tr>
<td># of Pallet Build Stations</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Orientation</td>
<td>Right, Left, Both</td>
</tr>
<tr>
<td>Slip Sheet Compatible</td>
<td>Available Option</td>
</tr>
<tr>
<td>Pallet Rack</td>
<td>Available Option</td>
</tr>
<tr>
<td>Automatic Pallet Dispenser</td>
<td>Available Option</td>
</tr>
</tbody>
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### PRODUCT SPECIFICATIONS

**Robot**
- FANUC M710iC/45M

**Payload**
- 60lbs

**Speed**
- up to 25 units/min.

**Tool**
- Venturi style vacuum gripper

**Pallets**
- Standard GMA/CHEP 4-way

**Power**
- 460VAC/60 Hz/3Ph

**Construction**
- Powder coated mild steel

**Air Supply**
- 25 SCFM @ 90 PSI
- Clean, dry, oil-free air

**Infeed Conveyor Height**
- 24-30"

**Outfeed Conveyor Height**
- 18"

**HMI**
- 10" HMI

**PLC**
- Allen-Bradley PLC

**Panel**
- NEMA12

**Safety Circuit**
- CAT3

**FOR MORE INFORMATION:**
(320) 852-7705 - BrentonEngineering.com
Brenton is a global leader in designing and manufacturing integrated end of line packaging systems and machines, specializing in case packing and palletizing using both robotics and other automation. With over 30 years of experience in providing solutions for the consumer packaged goods, food, beverage, pharmaceutical and medical device industries, Brenton centers on creating collaborative, long-standing partnerships across a diverse customer base while remaining in front of the latest technologies and changing market conditions. Brenton is a product brand of ProMach, a global leader in packaging line solutions. As part of the ProMach Robotics & End of Line business line, Brenton helps packaging customers protect their reputation and grow the trust of their consumers. ProMach is performance, and the proof is in every package. Learn more about Brenton at www.BrentonEngineering.com and more about ProMach at www.ProMachBuilt.com.

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