KOMBI-3
Forming machine packer sealer
A BEDI KOMBI Type Motorised Vertical Packing Machine providing the following functions:

A) Arrival and grouping of upright products
- The products are fed to a table inside the boxing machine comprising plastic pallet chains in 3 colours with maximum adjustment.
- Distribution of the products to each feed path is done by a back-and-forth movement of the end of the lanes for each shape to ensure protection of the labels.
- Controlled filling of each lane and feeding at the correct rate creates a batch of products under the grip head.
- The feed table is stopped and the decompression stop is withdrawn during the gripping stage in order to release the batch of products with no accumulation limitations therefore providing full protection for the labels at the pick-up point.

B) Feeding of upright containers
- 2 pneumatic cups equipped with suction cups pick up the boxes from the magazine to form them. After forming, the boxes are sent to the boxing unit, they are picked up by 2 lateral motorised belts (75 mm in width with 2 HP 0.18 motors). The bottom flaps are sealed using adhesive tape applied by a K11 taping head.

C) Boxing of upright products
- After checking the presence of the container, a boxing hopper descends into the containers making sure that the flaps are half-open and that the products are guided accurately.
- The gripping head, suitable for the format being handled, is mounted on a motorized transfer module fitted with linear bearings.
- The semi-circular transfer movement of products to the right container and control of the cycle speed provide flexibility during the pick-up and placement of products.
- Filled packages are then automatically removed from the machine.

Option: Depending on the products to be boxed, the machine can be equipped with an adjustable gripping tool for boxing several formats.
D) **Upright box closing**
- The top and bottom flaps of boxes are closed automatically
- Lateral drive belts, 75 mm height
  0.18 HP motors, Speed 21 m/min
Top-side flap press wheels

**Possible rates based on groupings:**

3,000 bottles or flasks per hour or **4.2 cycles per minute**

**A safety system stops the KOMBI** in the event of an anomaly during pick-up or placement of products.

**Permissible cardboard boxes:**

<table>
<thead>
<tr>
<th>(in mm)</th>
<th>LENGTH</th>
<th>WIDTH</th>
<th>HEIGHT</th>
<th>HEIGHT + FLAPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>As per application</td>
</tr>
<tr>
<td>MAX</td>
<td>660</td>
<td>330</td>
<td>350</td>
<td>As per application</td>
</tr>
</tbody>
</table>

**Gripping tools**

There are a variety of gripping tools (tulips, suction cups, foam, clamps etc...) to handle a range of products: bottles - flasks - jars - containers - cardboard, metal and other boxes - bags - etc.

**Note:** An in-depth study of your project will determine the correct gripping tool and the most appropriate groupings for your products and containers.

**This packing machine also includes forming and sealing functions,** forming a combined machine with reduced dimensions.
Accessibility:
- Both sides of the machine must be clear to allow for adjustment and maintenance.

Specifications for bottle and flask products:
- For bottles and flasks, an adjustable or non-adjustable gripping module for the format and product to be handled is equipped with deformable membrane “tulips” mounted on supports with extensions to facilitate re-centring of the bottles or flasks for the product.
- A type of boxing hopper with tabs guides the bottles and flasks during insertion of a batch into the non-partitioned cardboard boxes.
- In case of insertion into boxes with bonded partitions, the hopper is equipped with conical tabs which guide the bottle or flask deep into the box and protect their labels as far as is possible.
- Each conical tab hopper is designed for one specific format.

Permissible dimensions of bottles or flasks:

<table>
<thead>
<tr>
<th>(in mm)</th>
<th>PRODUCT DIAMETER</th>
<th>PRODUCT HEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN</td>
<td>62</td>
<td>50</td>
</tr>
<tr>
<td>MAX</td>
<td>108</td>
<td>350</td>
</tr>
</tbody>
</table>