Multi-station thermoformer for trays, food packaging, perforated parts and blister packaging.
TECHNICAL FEATURES

TCM is a series of continuous and automatic machines, ideal for the production of thermoformed parts from rolls. These machines may have three or four stations, and may be ordered in the following configurations:

<table>
<thead>
<tr>
<th>SETUP</th>
<th>FUNCTION ON 1ST STATION</th>
<th>FUNCTION ON 2ND STATION</th>
<th>FUNCTION ON 3RD STATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCM 3 stations</td>
<td>Thermoform</td>
<td>Cut</td>
<td>Stack</td>
</tr>
<tr>
<td></td>
<td>Thermoform and cut</td>
<td>Perforate</td>
<td>Stack</td>
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<tr>
<td>TCM 4 stations</td>
<td>Thermoform</td>
<td>Perforate</td>
<td>Cut</td>
</tr>
</tbody>
</table>

After molding, cutting, and/or perforating the machines also stack and count the pieces automatically. TCM is modularly assembled (unwinder, transport system, oven, press1, press 2, press 3, stacker and output conveyor) and its modules can be individually customized, to meet every client’s needs. This product line works with PS, PP, PET, PVC rolls, among others.

Oven (S)

ENERGY SAVING

- Heating distribution in zones through ceramic elements.
- Individual temperature control for each zone (PID auto tuning).

Lakatos 4.0

Connectivity, integration and remote maintenance for your shop floor.

Preheater rolls (optional)

In accordance with safety standards

Unwinder

AVARDS TIME LOSS

1st Option: "Jumbo" roll.
2nd Option - Holding structure for 2 rolls.
3rd Option – Rolls lifter.
**SERVOPRESS 1**

**MOLDING OR MOLDING + CUTTING**
- Pressure and Vacuum Forming.
- Automatic upper and lower tool height adjustment.
- Clamp frame system (optional).
- Plug servo system (optional).
- 20, 40 or 60 ton force.
- Cutting force sensor (optional).

**SERVOPRESS 2**

**CUTTING ACCURACY**
- Upper height adjustment to adjust cut.
- Knife heating plate system (optional).
- X/angle searching system (optional).
- 40 or 60 ton force.
- Cutting force sensor (optional).

**SERVOPRESS 3** (optional)

**CONVEYOR**

**TRANSPORTER OF FINAL PRODUCT**
- Discharge in conveyor belt.
- Has a winder for the scraps to be recycled.
- Centralized automatic lubrication.
- In-line Crusher (optional).

**CHAIN SYSTEM**

**ACCURATE STEP**
- Powerful servomotor for fast, accurate indexing.
- Edge heaters (optional).
- Manual or automatic self-centring width control at various points.

**SERVO STACKER OR ROBOT UNIT** (optional)

**DETACHES, COUNTS AND SEPARATES PARTS IN CONVEYOR BELT**
- Servomotor stacker in two levels.
- Stacking upper movement for male pieces.
Why is TCM2 better?
• Robust for a 24h work.
• Energy saving.
• Fast Cycle rate! Up to 50 cycles/min (Depending on the mold geometry, material and thickness).

QUALITY OF FINISHED PRODUCT
• Best forming quality.
• Best product thickness distribution.
• Lighter and more resistant finished product.

MOLD ADVANTAGES
• Quick mold setup/change.
• Mold / tooling costs saving.

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**BENEFITS**

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**TECHNICAL FEATURES / MACHINE MODEL**

<table>
<thead>
<tr>
<th></th>
<th>TCM 2F</th>
<th>TCM 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of plastic</td>
<td>PS, PET, PVC and PP (with optional items)</td>
<td></td>
</tr>
<tr>
<td>Plastic thickness (mm)</td>
<td>0,1 to 1,3</td>
<td></td>
</tr>
<tr>
<td>Productivity (cycles/min)</td>
<td>13 to 33 (PP) / 30 to 60 (PET and PS)</td>
<td></td>
</tr>
<tr>
<td>Maximum of molding area (mm)</td>
<td>680 x 500</td>
<td>720 x 580</td>
</tr>
<tr>
<td>Maximum of negative molding (mm)</td>
<td>85 (standard) or 135 (optional)</td>
<td></td>
</tr>
<tr>
<td>Maximum of positive molding (mm)</td>
<td>85 (standard) or 135 (optional)</td>
<td></td>
</tr>
</tbody>
</table>