Compound and lightweight panel machines
In order to meet the special demands of the individual customers regarding surface quality, glueing quality, constructional requirements or required capacities, TORWEGGE has created a modular system which can meet nearly every customer demand.

TORWEGGE provides solutions for the production of furniture elements, kitchens, doors, window shutters, insulating panels as well as for the booth and store construction and suppliers. The machines of the PWR series are suitable for the production of batch size 1 up to demanding serial production.

From the entry level model PWR 100 up to industrial large-scale plants TORWEGGE offers the appropriate solution for every requirement. Various automation levels of the plants for stacking as well as layer feeding allow to design customer-specific plants with a high performance potential.

A later capacity increase is possible on account of further modules or machine components, such as e.g. belt presses or double calenders. Moreover, the integration into existing systems, such as multi-storey presses can be realized without problems.
Diversity without limits: one machine – processing materials of any kind

The high flexibility of the TORWEGGE compound and lightweight panel machine provide a large combination of different materials for the panel production or the coating of carrying materials.

The basic panels may consist of wooden materials, such as chipboard, MDF-panels, plywood, OSB-panels or many other materials. However, styrofoam, foamed panels, PUR-carriers, aluminium cores or hexagonal paper honeycombs can also be used as central layers.

Electronic thickness measuring system in automated production for individual material thicknesses in one passage

Same as for the carrying materials, the respective coatings of the panels can be of different materials.

The TORWEGGE machines allow to glue the basic carriers with, for example, aluminium sheet, thin steel plate, plumb, different plastics or coating with HPL or CPL already now in a very economic and highly efficient way.

A PUR hotmelt glue is used to glue the individual components.

As the application of the glue can be regulated, the TORWEGGE machines provide excellent results. The gluing leads to very smooth and quiet surfaces, as the PUR glue is a reactive glue and no dispersion glue.

This is an essential feature for the production of high-quality fronts, for example, with high-gloss material.
Future-oriented lightweight technology for handicraft business and industry

The PWR 100 is a machine which allows a cost-efficient and flexible production of compound and lightweight panels. The optimum price-performance ratio of this machine ensures an economic entry as well as an efficient production of the compound and lightweight panels.

The basic machine consists of the following components:

- Driven infeed transport
- Glue application unit
- Panel positioning section with driven roller conveyor
- Single-sided glue application from top
- Pressing calender as well as driven outfeed transport
- Frequency-controlled regulation roller drive
- Outfeed device for glue application

The modular design of the Optimat PWR 100 provides a sensible and efficient use of the options according to customer’s requirements:

- PLC control
- Pre-heating for carrying panels
- Sword brush to clean the carrying panels
- Barrel melting units (20 or 200 litres)
- Turning device at the outfeed
- Returning device of the workpieces
- Motorized positioning rack

These options allow a customer-specific design of the Optimat PWR 100.

Technical Data

<table>
<thead>
<tr>
<th>Workplace dimensions</th>
<th>Length: 800 - 2,500 mm (option 3,000 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width: 200 - 1,300 mm, Thickness: 3 - 80 mm</td>
</tr>
<tr>
<td>Working height</td>
<td>approx. 950 mm</td>
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<tr>
<td>Heating power</td>
<td>9 kW</td>
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<tr>
<td>Feed speed</td>
<td>20 m/min.</td>
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<tr>
<td>Control side</td>
<td>right hand side</td>
</tr>
</tbody>
</table>

Technical data are not binding in every detail. We specially reserve the right to modifications in the course of further developments. Special dimensions on demand.
Automated compound and lightweight panel production

The profiLine PWR 500 is a machine with single-sided glue application which allows a low-cost and economic production of compound and lightweight panels with different production methods and design versions.

The basic machine consists of the following components:
- Driven infeed transport
- Glue application unit
- Positioning section with driven roller conveyor
- Pressing calender as well as driven outfeed transport
- Frequency-controlled regulation roller drive
- Single-sided glue application from top

The large variety of efficient options allows to design and automate the PWR 500 according to the production requirements.

In this product line it is possible to equip the machine with a double-sided glue application which applies the PUR glue on both sides of the carrying panel.

By means of this production method, the compound and lightweight panel is produced in one passage and directly stacked after the pressing without any further processing.

<table>
<thead>
<tr>
<th>Technical Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workpiece dimensions</td>
<td>Length: 600 - 4,500 mm, Width: 200 - 2,200 mm</td>
</tr>
<tr>
<td></td>
<td>Thickness: 3 - 100 mm, Option: 350 mm</td>
</tr>
<tr>
<td>Working height</td>
<td>approx. 950 - 1,200 mm</td>
</tr>
<tr>
<td>Capacity</td>
<td>1 - 6 pcs/min.</td>
</tr>
<tr>
<td>No. of layers</td>
<td>2 - 7 layers/pc</td>
</tr>
<tr>
<td>Glue types</td>
<td>PUR glue, PVAc glue, UF glue</td>
</tr>
</tbody>
</table>

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Compound and lightweight panel systems with automation

According to the requirements and desired capacities TORWEGGE compound and lightweight panel machines can be automated in different ways. The automation systems can be adjusted to the required capacities or to the conditions and dimensions of the products to be manufactured.

The following components are possible:
- Thin panel feeding for top and bottom layers
- Vacuum feeding systems for top/bottom layers
- Feeding systems for central layers
- Automatic turning systems to place layers on central layers
- Robot for rail positioning
- Feeding systems for manual positioning for central layers or top/bottom layers
- Return systems
- Workpiece stacking designed as turning unit or with vacuum suction elements
- Automatic barrel melting unit

As all components of the automated production lines are included in a modular construction system, customer-specific dimensions as well as many different machine equipments are possible.

The aim of these complex and very efficient production lines is to combine several individual steps, for example for the production of door leaf blanks, in one machinery line. As a result, the handling and administration logistics are reduced to a minimum and a considerable cost reduction can be reached.

Technical Data

<table>
<thead>
<tr>
<th>Workpiece dimensions</th>
<th>Length: 600 - 4,500 mm, Width: 200 - 2,200 mm, Thickness: 3 - 100 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working height</td>
<td>Approx. 950 - 1,200 mm (depending on machine configuration)</td>
</tr>
<tr>
<td>Capacity</td>
<td>1 - 6 pcs/min. (depending on machine type and configuration)</td>
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