The innovative approach to stacking plates able to meet the high-speed production requirements
Stacker 500 is based on a completely new principle: vacuum plate conveying. The heart of the machine comprises two motor-driven perforated belts linked to a vacuum generator. Air is evacuated through the holes in the belt, to create a vacuum capable of lifting and conveying the grids to the stacking area.

The machine is completely enclosed to avoid the dispersion of lead powder particles into the atmosphere, while equally ensuring easy access to all mechanical parts: the sturdy structure and the application of materials such as stainless steel make the machine durable and reliable, easy to clean and without the need for continual maintenance.

The plates are collected from the drying tunnel and conveyed by rubber-lined chains to the conveyor belts, where they are lifted and collected by the vacuum and conveyed to the stacking area.

A centrifugal fan adjusted by an inverter ensures the required vacuum necessary to lift the plates onto the two belts. The airflow is filtered using a HEPA filter prior to discharge.

The stacking area comprises two completely automatic and independent stacking systems. This avoids the need for intermediate storage to collect the plates while pack unloading is completed.

There is no need for a plate centering system, since the plate arrival and release points are very close to each other. Each plate is pre-selected to ensure that it is accurately positioned and is compatible with the system acceptability tolerances.

The stacking units do not use mechanical alignment systems, as these can damage the plates and are easily worn. Plate alignment is ensured by means of an adjustable vibration unit built into the stacking template.

The plate stacks are supported on a descending mechanism controlled by a photo-sensitive cell, this ensures a constant stack height is achieved. When the pre-set number of plates is reached, the two stacks are unloaded and presented for automatic or manual collection.

Plate stacks unloaded from the stacking area can be temporarily held on the worktable exit without halting the line. This enables the operation of pallet changing or interleaf board positioning to be performed.

The machine is controlled by a PLC and the operator can readily interface with the unit using the convenient control panel.

Key strength of Sovema Stacker 500:
- Maximum plate control
- No mechanical stress
- No need for mechanical synchronization
- Limited number of moving parts
- Flexibility
- High productivity.
<table>
<thead>
<tr>
<th><strong>Product limitations</strong></th>
<th>max line speed</th>
<th>45 m/min</th>
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<tbody>
<tr>
<td></td>
<td>max height of stacks</td>
<td>300 mm</td>
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</table>

**Electrical ratings**

- Power installed: 10 kW
- Voltage: 220/380 V
- Phase: 3 phase
- Frequency: 50 Hz (or as required)

**Compressed air**

- Installed: 70 Nl/min
- Average consumption: 35 Nl/min
- Min. operation pressure: 0.5 MPa (5 bar)

**Exhaust suction**

- 2500 m³/h