LC/LCL
LAUFFER Card Lamination Systems

The smart choice for your card production
YOUR REQUIREMENTS FOR CARD LAMINATION

Final product quality

- **BLISTER-FREE LAMINATES**
  Pressure control
- **PERFECT FLATNESS**
  Parallelism of heating platens and cassettes
- **NO DELAMINATION**
  Process control
- **COLOR FASTNESS**
  Temperature control
- **CONTROLLABLE DISTORTION**
  Minimized thermal shock

System requirements

- **HIGH UP-TIME**
  Verified and robust design
- **HIGH OUTPUT**
  Minimized cycle times
- **MAXIMAL YIELD**
  Process control and repeatability
- **LOW LIFECYCLE COSTS**
  Energy efficiency
- **SMALL FOOTPRINT**
  New optimized design

Process and operation

- **SMART CONTROL**
  Intuitive operation and standard recipes
- **PROCESS FLEXIBILITY**
  Capable of numerous materials

Facts

- **High speed**
  Optimized program flow and system control provide for short cycle times.

- **High flexibility**
  Modular units easily upgradable from single to twin stack and from manual to fully or semi-automatic transfer.

- **High quality**
  Vacuum system and press force reduction guarantee highest yield for the production of contactless cards, inlays and e-passports.

Strengths and advantages

- Suitable for all kinds of materials: e.g. PETG, Polycarbonate and combinations
- Minimum footprint
- Optional mixed-process for twin-stack systems (PC material lamination)
- Remote access support via modem or internet
- Smart user friendly PC-control
- Comprehensive statistics to optimize your process

Smart control

Precise temperature distribution due to thermo oil heating

Vacuum for higher productivity and yield as well as reduced energy consumption
Lauffer LC Single-Stack System
Available as manual, semi-automated and fully-automated system

» One hydraulic lamination press used for heating and cooling process
» Depending on your production capacity requirements and the available investment capital you can choose between three alternative equipment designs, from manual to fully automatic.

Lauffer LCL Twin-Stack System
Available as semi-automated and fully-automated system

» Hydraulic lamination and cooling press with fully automatic tooling transfer
» Easy tool loading and unloading
» Minimized energy costs (heating / cooling)
» Increased productivity due to minimized cycle times
» Capable of mixed processes
» Optional storage functions

Optional System Features
1. Fully automated storage tower for cassette management. Retrofit possible at any time.
2. Vacuum function to eliminate entrapped air and moisture. The vacuum function prevents against convection heat and saves energy.
3. Weight compensation guarantees same imposed load in every daylight.
4. Hardened steel cassettes with any possible bracket configuration.

<table>
<thead>
<tr>
<th>Model</th>
<th>Single LC</th>
<th>Twin LC</th>
<th>Single LCL</th>
<th>Twin LCL</th>
</tr>
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<tbody>
<tr>
<td>Sheet format</td>
<td>ID 1</td>
<td>ID 2</td>
<td>ID 3</td>
<td>ID 1</td>
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<tr>
<td>Openings</td>
<td>6</td>
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<td>Pressure heating press</td>
<td>44/88</td>
<td>110/220</td>
<td>138/276</td>
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<td>Pressure cooling press</td>
<td>44/88</td>
<td>110/220</td>
<td>138/276</td>
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<tr>
<td>Possible sheet formats</td>
<td>6 x 4 (up to 10 x 4)</td>
<td>8 x 6</td>
<td>2 x (8 x 3)</td>
<td>10 x 6</td>
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</tbody>
</table>

* Twin-stack system and additional single-stack function

Sizes
- Card per sheet
- Platen size
- Openings
- Pressure heating press
- Pressure cooling press
- Possible sheet formats
LAUFFER PRESSEN –
Forming your ideas

As a family-owned company, LAUFFER PRESSEN belongs to the leading manufacturers of modern press technologies. Founded in 1872, our company is building hydraulic presses and automated systems for different industries and applications since over 80 years. Worldwide, thousands of LAUFFER systems are in use with our customers, 24/7, 365 days a year.

Today, LAUFFER produces presses and automated systems with a team of more than 200 skilled employees at our modern, 10,000 square meter facility in Horb am Neckar, Germany. Our main product lines are:

- Laminating Technology
- Plastic Processing & Encapsulation Technology
- Metalforming Technology
- Powder Technology