LSM Fin

ULTRASONIC WELDING TECHNOLOGY
Longitudinal seal module LSM Fin.
The smarter way.

The LSM Fin is a module for the continuous sealing of longitudinal seals on pillow bags or chained bags. The cold ultrasonic tools transfer the vibrations into the film. The vibration generates heat in the film which melts up the sealing layers and thereby joins them. No cold sealing mass is required for this process and the thermal load for film and product is reduced to a minimum.

Quickly adjustable sealing parameters

The pneumatically generated sealing force is set electronically via a proportional valve. The sealing amplitude is set via analog signal or fieldbus on the generator. This enables the rapid adjustment of the force instantly during the process and for constant sealing results to be guaranteed – even with a varying production speed.

Advantages for continuous applications

The success of the ultrasonic sealing technology for continuous applications is based on:
- Tight and strong sealing lines, even with seal contamination
- No thermal influence on the product thanks to cold sealing tools
- Instant on: no heat-up phase of the sealing tools required
- No cold sealing mass required

Especially beneficial for sensitive food applications like:
- Sweets and snacks
- Meats and cold cuts
- Baked goods
**Optimized usability**

The LSM Fin is designed so that all the settings are easy to use and easily accessible. The anvil holder with sealing blade can be easily removed for cleaning – all of the settings are saved for the reassembly.

**Flexible seal design**

Depending on the requirements, various sealing blades are available for determining the seal design.

**Minimized space requirements**

Due to compact design based on the tooling and the functional integration on the solid state hinge, a minimum of construction space is required.

**Consistent film movement**

The film is moved through the fixed installation tools. This means that the synchronization of rotating tools with the film feed is not necessary. This leads to reduced complexity in the installation and compact design. The ultrasonic ensures minimal frictional forces and enables a consistent film movement.
Ultrasonic welding technology.
For packaging.

Ultrasonic generator ULTRAPACK

Versatile digital ultrasonic generator for intermittent and continuous packaging applications, specially developed for use in high-speed packaging machines. Its manifold software functions allow for reproducible control of the weld process resulting in the highest possible sealing quality. Communication via one of the seven available fieldbus types makes it possible to set parameters and analyze process data in real-time on the packaging machine HIMI.

Technical data longitudinal seal module LSM Fin

<table>
<thead>
<tr>
<th>TYPE DESIGNATION</th>
<th>LSM Fin</th>
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<tbody>
<tr>
<td>Frequency [kHz]</td>
<td>35</td>
</tr>
<tr>
<td>Generator output [W]</td>
<td>600</td>
</tr>
<tr>
<td>Weld force min./max. [lbf]</td>
<td>7 / 55</td>
</tr>
<tr>
<td>Sealing velocity* [ft/min.] *depending on film properties</td>
<td>390</td>
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<tr>
<td>Module dimensions (w x h x d) [inch]</td>
<td>15 / 7 / 3</td>
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<tr>
<td>Weight [lbs]</td>
<td>18</td>
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<tr>
<td>Power requirement [V]</td>
<td>230 ±10% -15%</td>
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