# INDUSTRIAL MIXERS

OPTIMUM MIXING EFFECT FOR FOOD PRODUCTION

<table>
<thead>
<tr>
<th>Model</th>
<th>Power (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME 500 N</td>
<td></td>
</tr>
<tr>
<td>ME 1000</td>
<td></td>
</tr>
<tr>
<td>ME 1000 N</td>
<td></td>
</tr>
<tr>
<td>ME 1500</td>
<td></td>
</tr>
<tr>
<td>ME 2000</td>
<td></td>
</tr>
<tr>
<td>ME 3000</td>
<td></td>
</tr>
<tr>
<td>ME 4500</td>
<td></td>
</tr>
</tbody>
</table>

[Image of industrial mixers]

LASKA
FOOD PROCESSING MACHINERY
LASKA mixers are used for the precise mixing of meat and fat, as well as the gentle mixing in of chunks and/or ingredients into meat and other materials. Exact mixing is necessary to be able to produce consistent product quality. LASKA customers use mixers to produce:

- Boiled sausage
- Minced meat and burgers
- Raw sausage
- Cooked sausage
- Pies
- Standardization of raw materials
- Vegetable and salads

**STRENGTHS AND BENEFITS**

The intermeshing mixing shafts ensure a much larger operating range than mixers with shafts arranged side by side. The low central web between the mixing shafts provides for good transverse mixing of the products. This demonstrably results in very fast and even mixing and gentle treatment of the mixture. Mixers are used for large quantities to be processed, mainly to standardize the raw materials. Feeding is effected either via feeding plants or via conveyor belts, worm conveyors, or pumps.

**QUALITY PROVEN IN USE**

Just like all other LASKA machines, the mixers are made of solid stainless materials. They meet strict hygienic requirements and are easy to clean. The design allows for unusual operating conditions and provides easy and safe operation as well as good access for servicing.
LASKA MIXERS
YOUR BENEFITS AT A GLANCE

PRODUCTION
- Gentle mixing in, exact and fast distribution of pieces of meat and ingredients
- Ideal, even mixing at consistent quality; also in the case of delicate mixtures which can be difficult to mix
- No smearing caused by “overmixing” of the mixture
- Intermeshing mixing shafts for the largest possible operating range (including hopper corners)
- All models and sizes also available as vacuum version

OPERATION
- Easy handling and user-friendly, robust operating elements
- Optional automatic mixing to control speed, direction of rotation, and mixing time
- Optional PMS Production Management System for automatic, recipe-controlled mode of operation

HYGIENE AND SAFETY
- Special double sealing system of the mixing shafts with cleaning ducts for perfectly hygienic cleaning
- Polished surfaces for highest possible hygienic standard
- Safety equipment for optimum working safety
- Perfect access to mixing shafts and mixing hopper due to cleaning treads and/or platform

SERVICE AND MAINTENANCE
- Minimum maintenance required due to proven, field-tested machine concept
- Easily accessible inspection doors
- Worldwide service network and support on all continents

DESIGN
- Compact and space-saving design with integral control cabinet
- Long service life
- Low operating noise
- Attractive, elegant design

ELECTRICAL EQUIPMENT
- Low current consumption due to state-of-the-art drive and control technology
- Infinitely variable feed worm
- Programmable logic controller with microprocessors in many user languages

www.laska.at
FEATURES
TILTABLE MIXER
ME 500 N - 1000 N
- Hopper size: 500 / 1000 litres
- With 2 paddle shafts, or optionally with Z-mixing arms

APPLICATION
TILTABLE MIXING MACHINE
ME 500 N - 1000 N
- For tough and/or dense products
- Unloading at the push of a button by tilting the mixing hopper
- Shortest unloading time due to tilting the mixing hopper and actuation of the mixing shafts (two-hand control)

FEATURES
MIXER WITH SIDE DISCHARGE
ME 1000 - 4500
- Hopper size: 1000 - 4500 litres
- Unloading flap provided with safety cover and trolley safety check
- Cleaning platform for better access

APPLICATION
MIXER WITH SIDE DISCHARGE
ME 1000 - 4500
- For standardization
- Unloading is effected via a large unloading flap into a standard tote bin/trolley
- With 2 paddle mixing shafts and/or 1 paddle and 1 spiral mixing shaft as an option

MACHINE TYPES
THE VERSATILE LASKA PRODUCT RANGE
INTERMESHING PADDLE MIXING SHAFTS
- Short mixing time and even mixing
- Large effective operating range due to large diameter of the mixing shafts

INFINITELY VARIABLE SPEED OF MIXING SHAFTS
- Particularly gentle mixing of the material
- Perfect adaptation of mixing shaft speed to the respective mixture
- Prevents overmixing of the mixture

UNLOADING
- Shortest unloading time due to tilting of the mixing hopper (compared with mixing machines with lateral unloading flaps)
- Excellent unloading of the mixture even in case of very compact products

HYGIENE
- Double sealing of mixing shafts between product and drive areas
- Product area is reliably protected against the penetration of bearing lubricants and/or gear oils
- Drive areas are reliably protected against the penetration of product residues
- Cleaning ducts for perfectly hygienic cleaning

EQUIPMENT FOR YOUR TILTABLE LASKA MIXER
INTERMESHING PADDLE MIXING SHAFTS

- Short mixing time and even mixing
- Large effective operating range due to large diameter of the mixing shafts
- Short unloading time due to large unloading flap
- Unloading flap located in the deepest area of the mixing hopper, thus permitting perfect and quick unloading

INFINITELY VARIABLE SPEED OF MIXING SHAFTS

- Particularly gentle mixing of the material
- Perfect adaptation of mixing shaft speed to the respective mixture
- Prevents overmixing of the mixture

UNLOADING

- At the push of a button via a large unloading flap opening pneumatically
- Special design of the flap ensures fast unloading
- Flap can be actuated only if safety cover is closed

HYGIENE

- Double sealing of mixing shafts between product and drive areas
- Product area is reliably protected against the penetration of bearing lubricants and/or gear oils
- Drive areas are reliably protected against the penetration of product residues
- Cleaning ducts for perfectly hygienic cleaning

EQUIPMENT FOR YOUR LASKA MIXER WITH SIDE DISCHARGE
OPTIONS
FOR YOUR LASKA MIXER

Z-SHAPED MIXING ARMS
ME 500 N - 1000 N
› Ideal design for tough products that are to be kneaded
› Perfect for mixing in of fillings in meat as well as for fluid products
› Ideal for frequent product changes
› Especially easy to clean
› Complete unloading

PADDLE AND SPIRAL MIXING SHAFTS
ME 1000 - 4500
› Ideal for standardization of products
› Provided with large, inclined paddles
› Additional spiral shaft for particularly efficient mixing

VACUUM VERSION
› Little air entrapped, therefore longer shelf life of products
› For quality and taste improvement
› For nice, flesh-coloured, and compact sausage meat
› Intensive, even reddening
› Fresh and attractive appearance

CO₂ OR NITROGEN (N₂) COOLING
› Via cover or bottom nozzles for various applications
› Automatic temperature control due to temperature sensor
› Stainless mixing hopper lid, actuated hydraulically or pneumatically
› Suction flange
COOKING AND/OR COOLING FACILITY VIA CLOSED STEAM OR COOLING CIRCUIT
- Closed steam or cooling system due to double jacket of mixing hopper
- Stainless mixing hopper lid
- Automatic temperature control
- Electric control

HEATING AND COOKING FACILITY VIA DIRECT STEAM INJECTION
- Direct steam injection into the mixing hopper
- Stainless mixing hopper lid
- Automatic temperature control
- Electric control

WEIGHING EQUIPMENT
- Various versions depending on application and requirement
- Display of the weights of mixed quantities, added quantities, removed quantities
- Automatic starting and stopping of loading and unloading processes possible

HYDRAULIC LOADING HOIST FOR 200 LITRE STANDARD TRANSPORT TROLLEY
- Stainless, hydraulic
- Easy to operate
- Robust, low-maintenance, and durable due to hydraulic drive

PMS MIXING PROCESS CONTROL SYSTEMS
- Freely programmable, automatic work sequence
- Creation, storage and automation of recipes and production lists
- Presetting of speed and time of mixing shaft rotating direction (forward, reverse, pause)
- Programming of machine options
- Up to 999 programmes depending on customer requirement

WATER DOSING
- Automatic addition of freely selectable amount of water
- Can be preselected and called during production at the push of a button
- Other liquids than water up to +90 °C can be added

OPTIONS FOR YOUR LASKA MIXER

Mixer ME 1000

www.laska.at
THAT’S WHAT OUR CUSTOMERS SAY
ABOUT THEIR LASKA MIXER

KERRY FOODS
IRELAND

“We are very pleased with our decision to purchase LASKA ME 3000 Mixing Machines. LASKA’s quality of design, build and their ability to supply us with a turnkey solution was a key factor in our final decision. These machines offer us more flexibility to process our products. We have worked with LASKA for many decades and they understand our needs in this very competitive market place.”

MR. PHELAN
PROJECT MANAGER

LIEBHART HOLDING GMBH & CO. KG
GERMANY

“As early as 1980 we started with a LASKA mixer producing fruit preparations. Currently, we use 9 mixers of various sizes. To us, the main advantages are the excellent mixing result, the solid and robust workmanship, the technical handling of the operating equipment, as well as easy cleaning. Last but not least, we also appreciate the excellent customer service just in case that a malfunction should occur, and very good availability for questions and ordering.”

MR. LIEBHART
MANAGING DIRECTOR
AND TECHNICAL MANAGER

ÖZTAS FLEISCHHANDEL & DÖNERPRODUKTION EK
GERMANY

“LASKA enjoys our full confidence. Our mixer runs almost without trouble and maintenance, and better and/or more efficient than other mixers we tested with our products. What we find particularly intriguing is the cleaning procedure, which works extraordinarily well. To us, LASKA is not only a reputable contact partner, but they also give us production safety due to their long experience with the construction of mixers.”

MR. ÖZTAS
MANAGING DIRECTOR
### PERFORMANCE CHARACTERISTICS

<table>
<thead>
<tr>
<th>TYPE</th>
<th>ME 500 N</th>
<th>ME 1000 N</th>
<th>ME 1500</th>
<th>ME 2000</th>
<th>ME 3000</th>
<th>ME 4500</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mixing hopper</strong></td>
<td>ltr</td>
<td>500</td>
<td>1000</td>
<td>1500</td>
<td>2000</td>
<td>3000</td>
</tr>
<tr>
<td><strong>Max. filling quantity</strong></td>
<td>kg</td>
<td>400</td>
<td>800</td>
<td>800</td>
<td>1200</td>
<td>1600</td>
</tr>
<tr>
<td><strong>Unloading</strong></td>
<td>tiltable</td>
<td>tiltable</td>
<td>lat. flap</td>
<td>lat. flap</td>
<td>lat. flap</td>
<td>lat. flap</td>
</tr>
<tr>
<td><strong>Motor rating</strong></td>
<td>kW</td>
<td>7.5</td>
<td>11.1</td>
<td>11.1</td>
<td>15.0</td>
<td>22.0</td>
</tr>
<tr>
<td><strong>Fuse</strong></td>
<td>A</td>
<td>25</td>
<td>50</td>
<td>35</td>
<td>50</td>
<td>63</td>
</tr>
<tr>
<td><strong>Feed pipe cross section</strong></td>
<td>mm² CU</td>
<td>4</td>
<td>10</td>
<td>10</td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td><strong>Intermeshing mixing shafts - standard</strong></td>
<td>2 paddles</td>
<td>2 paddles</td>
<td>2 paddles</td>
<td>2 paddles</td>
<td>2 paddles</td>
<td>2 paddles</td>
</tr>
<tr>
<td><strong>Intermeshing mixing shafts - option</strong></td>
<td>2 Z-arms</td>
<td>1 paddle 1 spiral</td>
<td>1 paddle 1 spiral</td>
<td>1 paddle 1 spiral</td>
<td>1 paddle 1 spiral</td>
<td>1 paddle 1 spiral</td>
</tr>
<tr>
<td><strong>Infinately variable speed of mixing shafts</strong></td>
<td>rpm</td>
<td>35</td>
<td>30</td>
<td>29</td>
<td>29</td>
<td>25</td>
</tr>
<tr>
<td><strong>Vacuum version</strong></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td><strong>Suction capacity vacuum pump</strong></td>
<td>mm³/h</td>
<td>63</td>
<td>160</td>
<td>160</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td><strong>Safety switching strip mixing hopper</strong></td>
<td>–</td>
<td>o CE</td>
<td>o CE</td>
<td>o CE</td>
<td>o CE</td>
<td>o CE</td>
</tr>
<tr>
<td><strong>CO₂ or nitrogen (N₂) cooling</strong></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td><strong>Cooking and/or cooling facility (closed system)</strong></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td><strong>Heating and cooling facility (direct steam injection)</strong></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td><strong>Machine elevation</strong></td>
<td>–</td>
<td>–</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td><strong>Water dosing</strong></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td><strong>Weighing equipment</strong></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td><strong>Temperature display</strong></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td><strong>Loading mast/hoist</strong></td>
<td>–</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td><strong>Conveyor belt charging</strong></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Electrical data: degree of protection</strong></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

**CAPTION**

- standard
- equipped with safety cover (CE compliant)
- option
- not available

### DIMENSIONS AND WEIGHT

<table>
<thead>
<tr>
<th>TYPE</th>
<th>ME 500 N</th>
<th>ME 1000 N</th>
<th>ME 1500</th>
<th>ME 2000</th>
<th>ME 3000</th>
<th>ME 4500</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length mm</strong></td>
<td>X</td>
<td>2010</td>
<td>2890</td>
<td>2480</td>
<td>3100</td>
<td>3100</td>
</tr>
<tr>
<td><strong>Width mm</strong></td>
<td>Y</td>
<td>1120</td>
<td>1180</td>
<td>1950</td>
<td>1950</td>
<td>2220</td>
</tr>
<tr>
<td><strong>Height mm</strong></td>
<td>Z</td>
<td>1650</td>
<td>2300</td>
<td>2070</td>
<td>2070</td>
<td>2270</td>
</tr>
<tr>
<td><strong>Height incl. hopper lid (opened) mm</strong></td>
<td>A</td>
<td>2850</td>
<td>3650</td>
<td>3200</td>
<td>3200</td>
<td>3650</td>
</tr>
<tr>
<td><strong>Height incl. feeding mm</strong></td>
<td>B</td>
<td>2600</td>
<td>3100</td>
<td>2950</td>
<td>2950</td>
<td>3100</td>
</tr>
<tr>
<td><strong>Weight kg</strong></td>
<td>–</td>
<td>1500</td>
<td>2700</td>
<td>2200</td>
<td>2600</td>
<td>3200</td>
</tr>
</tbody>
</table>

**SEAWORTHY CASE**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>ME 500 N</th>
<th>ME 1000 N</th>
<th>ME 1500</th>
<th>ME 2000</th>
<th>ME 3000</th>
<th>ME 4500</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length mm</strong></td>
<td>Z</td>
<td>2350</td>
<td>2900</td>
<td>2700</td>
<td>3300</td>
<td>3300</td>
</tr>
<tr>
<td><strong>Width mm</strong></td>
<td>Y</td>
<td>1600</td>
<td>1600</td>
<td>1700</td>
<td>1700</td>
<td>1900</td>
</tr>
<tr>
<td><strong>Height mm</strong></td>
<td>Z</td>
<td>1900</td>
<td>2500</td>
<td>2200</td>
<td>2200</td>
<td>2300</td>
</tr>
<tr>
<td><strong>Weight kg</strong></td>
<td>–</td>
<td>400</td>
<td>550</td>
<td>500</td>
<td>600</td>
<td>700</td>
</tr>
</tbody>
</table>

* depending on type of transport

Technical data are subject to change.
We have more than 130 years experience of supporting our customers in the production of first-class food.

LASKA develops and manufactures high-quality specialist machinery that has always enjoyed a reputation for durability and reliability. Our experts work with our customers to develop innovative solutions for the finest meat-processing systems. Our robust and capable machines have proven their worth in a range of other application areas as well.

LASKA is a family company with a global reach; our customers are using our machines successfully in more than 140 countries on every continent in the world.

OUR PRODUCT RANGE:
- Cutters
- Grinders
- Frozen meat cutters
- Emulsifiers
- Mixers
- Production lines