LASKA

FOOD PROCESSING MACHINERY

EMULSIFIER

INNOVATIVE SOLUTION FOR THE EFFICIENT MANUFACTURE OF YOUR PRODUCTS

FZ 175
FZ 225

EN

APPLICATIONS
OF THE LASKA EMULSIFIERS

The most impressive thing about the emulsifier is the unrivalled product quality in this class of emulsifiers permitting production volumes in the medium and high range. The machine produces stable and fine emulsions while being gentle on the material, keeping entrapped air at a minimum, and optimizing energy consumption. The decisive aspect is the innovative electro-hydraulic knife adjustment which ensures high production quality at a very low wear of the cutting set. The elaborate system is successfully applied worldwide for the following applications:

- **Production of scalded sausage**
- **Production of cooked sausage and pies**
- **Vegetable, cheese, etc.**

STRENGTHS AND BENEFITS

The homogeneous base material to be processed is pumped through the cutting set at partial vacuum conditions. This leads to emulsification and ensures the desired fineness of the product, with the fineness of the sausage meat being determined by various holeplates. After the emulsification process the desired final temperature is controlled via the outlet valve.

The emulsifier can be perfectly integrated into various forms of production processes. Together with the LASKA SuperCutter or LASKA mixers it stands for highest flexibility in terms of recipe and raw materials composition. The convincing features of the emulsifier are its very high throughput, easy handling, its unrivalled product quality and highest efficiency. Being provided with a filling level sensor and automatic emptying function as optional features, it turns to account as an important element in production lines for fine sausage meat.

QUALITY PROVEN IN USE

Just like all other LASKA machines, the emulsifiers are made of solid stainless materials. They meet strict hygienic requirements and are easy to clean. The design allows for the rigorous operating conditions, easy and safe operation, and good access for servicing.

Emulsifier FZ 175

THE LASKA NANOCUTTER
YOUR BENEFITS AT A GLANCE

HYGIENE AND SAFETY

- Safety ensured through closed attachment and integral safety measures
- Polished surfaces for highest possible hygienic standard
- Safe handling due to safety guard in front of cutting set

OPERATION

- Easy handling and user-friendly operating elements
- Swivelling touchscreen with language selection
- Substantial reduction of operating and maintenance errors

PRODUCTION

- Stable emulsions of maximum fineness due to innovative knife adjustment
- Gentle processing of the material
- Minimum amounts of air entrapped
- High stability of emulsion
- High hourly output

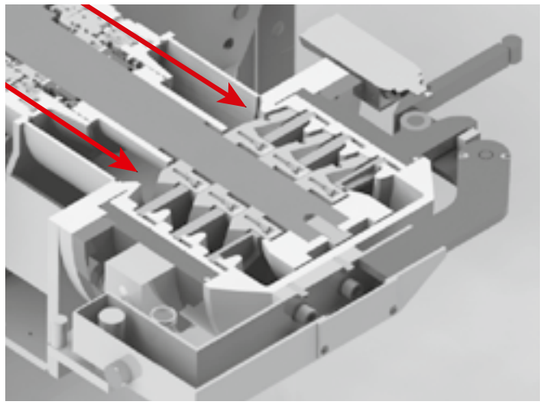
LOW OPERATING AND MAINTENANCE COSTS

- Cutting geometry and innovative knife adjustment result in constant pressure conditions at the cutting edges and holeplates
- This reduces wear and cutting set abrasion by up to 50%.
- The cutting set is monitored continuously and can be maintained preventively.
- Display of servicing times
- Easily accessible inspection doors
- Worldwide service network and competent local support on all continents

DESIGN

- Compact and space-saving design with integral control cabinet
- All drive elements accommodated in the machine housing to prevent soiling
- Automatic stop of the machine in case of running idle (extended service life of the cutting set)
- Flow-optimized cutting geometry to reduce energy consumption
- Noise reduction due to sound insulation inside the machine and low-noise drive technology

THE PATENTED KNIFE ADJUSTMENT
OF THE LASKA EMULSIFIERS

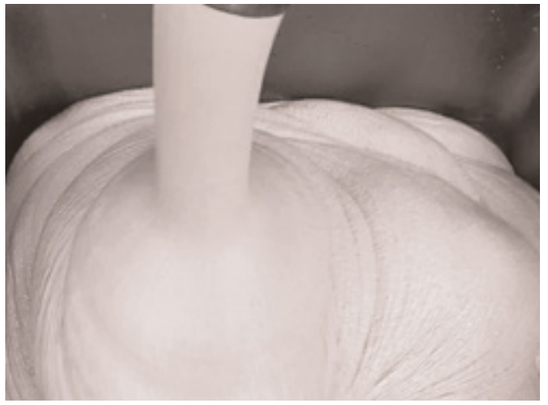


INNOVATIVE CONTROL CONCEPT

The key element of the NanoCutter is the patented electrohydraulic knife adjustment. The selectable pressure between the rotating cutting knives and the holeplates determines the fineness of the end product. It is controlled and corrected via a hydraulic system hermetically sealed against the product area.

QUALITY THAT TURNS TO ACCOUNT

To reduce the costs for wear parts such as knives and holeplates, the NanoCutter keeps the contact force as low as possible at all times, thus clearly reducing wear. This means that cutting set costs are reduced by up to 52 % compared to conventional emulsifiers.



ALWAYS AT THE OPTIMUM WORKING POINT

Other than with the NanoCutter, the cutting set of many conventional emulsifiers is either positioned and readjusted manually, or with automatic adjustment only in increments. This results in a loss of contact force, on the one hand, and in high wear and eventually in strongly varying final processing results, on the other hand. The NanoCutter, however, ensures a consistent processing result due to permanent control and automatic regulation of knife adjustment, and thus an optimum end product.

EQUIPMENT
FOR YOUR LASKA EMULSIFIERS

CUTTING SYSTEM

- Optimized design and unique cutting set geometry for high throughput and optimum emulsification while ensuring a cutting effect going easy on the product
- Easy exchange of knives and holeplates without complicated tools
- Automatic knife adjustment
- Exchangeable hardened knives with high durability of the edge

CUTTING CHAMBER AND DRIVE SHAFT

- Smooth installation space facilitates cleaning
- Easy installation of the cutting set
- Best hygiene and error-free operation

MOBILITY

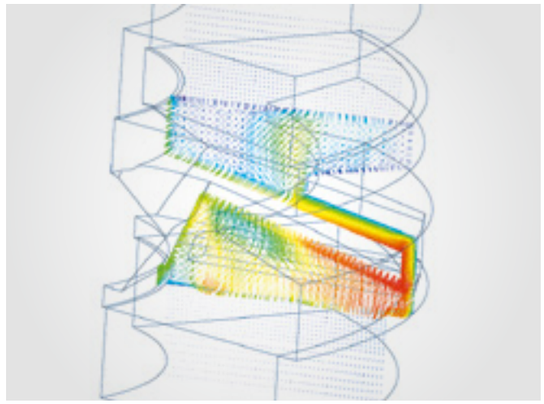
- Electrical equipment integrated in the machine housing
- Flexible and easy combination with other machines possible
- Mobile design with lockable castors
- Easier cleaning

TOUCHSCREEN CONTROL

- User-friendly and clearly arranged
- Large and easily legible colour display
- Swivelling, space-saving
- Language selection
- Automatic malfunction display

MACHINE HOUSING

- Solid stainless construction
- Maximum protection from dirt and comfortable cleaning
- Drive elements in closed machine housing
- Optimum serviceability due to easily accessible inspection doors



PRODUCT FLOW

- Excellent product flow and fluid flow characteristics in the cutting chamber due to intensive research and use of state-of-the-art simulation and analysis methods
- Best possible throughput
- Perfect emulsification effect

AUTOMATIC CLEANING MODE

- Cutting set relieved at the push of a button
- Cleaning process due to relieving of cutting set virtually without wear

RECORDING OF OPERATING DATA

- Continuous recording of temperatures, current consumption and wear of cutting set
- For conclusive data to optimize the production process

Mixer ME 3000 & Emulsifier FZ 225

OPTIONS
FOR YOUR LASKA EMULSIFIER

HOLEPLATES AND CUTTING KNIVES

- Holeplates: with hole diameter 0.8 – 8 mm (standard: 1.2 / 2 / 3 mm)
- Cutting knives: with 5 or 3 blades and exchangeable knife blades

MAGNET

- Removes smallest metallic abrasion completely from the product
- Suitable for highly sensitive products such as baby food

AUTOMATIC TEMPERATURE CONTROL

- Desired final temperature of sausage meat freely adjustable
- Temperature permanently controlled via electrically controlled valves

THAT'S WHAT OUR CUSTOMERS SAY
ABOUT THEIR LASKA NANOCUTTER

ANDRÄ HÖRTNAGL PRODUKTION UND HANDEL GMBH
AUSTRIA

"We use the NanoCutter for manufacturing selected products. The constant product quality has convinced us and our customers. Fineness, little air entrapped, and a regular texture are the ingredients for our products "For Smart Eaters".

In terms of operation, the NanoCutter is a very economical machine. The long service life of the cutting set, too, makes things easier for us. The promised features of operator convenience, a low noise level, and easy cleaning have clearly come true."

MR. RESCH
PRODUCTION MANAGER

ZAKŁADY MIĘSNE SILESIA / DUDA
POLAND

„Before deciding for the LASKA NanoCutter we tested a number of other different machines currently on the market from the competition in our works. Until this time we were using a large-scale throughput machine from another manufacturer. The LASKA emulsifier surpassed the other machines with its simplicity, compact structure and the very high homogeneity standard it achieves.

Without needing a highly complicated cutting system this machine achieves a perfect emulsification and a "creamy" consistency in processing the product. In addition to all of this the NanoCutter is very easy to operate and its very compact dimensions mean there is never any problem solving to do finding a place for it in the works."

MR. JĘDRZEJCZYK
PRODUCTION MANAGER

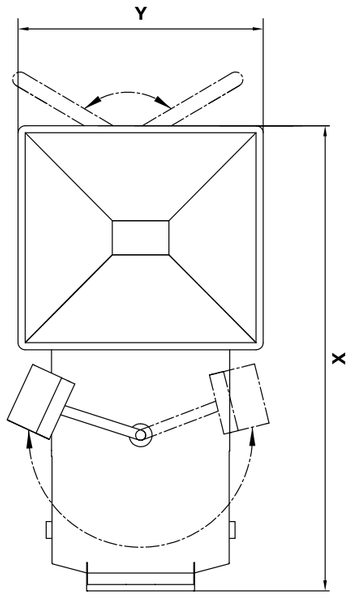
TECHNICAL DATA
PERFORMANCE LIST

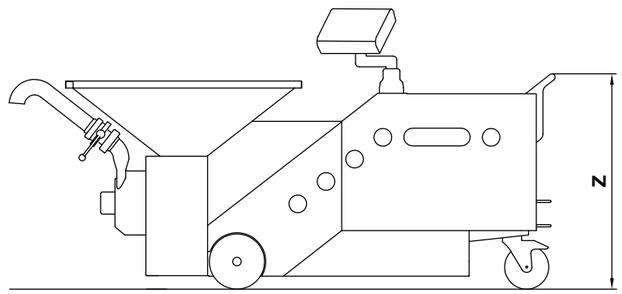
PERFORMANCE CHARACTERISTICS			
TYPE		**FZ 175**	**FZ 225**
Holeplate Ø	mm	175	225
Number of holeplates		3	3
Connected load	kW	90	132
Operating noise	dbA	80	80
Hopper volume	litres	200	200
Throughput[1]	t/h	2,5 - 8	5 - 15
Available holeplate bore diameters	mm	0.8 – 8.0	0.8 – 8.0
Reduced motor output	kW	75	110
Control system		PLC[2]	PLC[2]
Starting reactor "soft start"		o	o
Automatic regulation of discharge temperature		o	o
Special voltage		o	o
Fuse	A	160	250
Feed pipe cross section	mm² CU	70	120

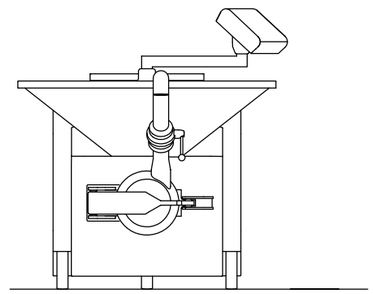
DIMENSIONS AND WEIGHTS		
TYPE	**FZ 175**	**FZ 225**
Length mm I **X**	2130	2216
Width mm I **Y**	1168	1168
Hopper height mm I **Z**	928	972
Weight kg	1300	1500

SEAWORTHY CASE*		
Length mm	2650	2650
Width mm	1500	1500
Height mm	1600	1600
Weight kg	550	550

* depending on type of transport







CAPTION			
o	Option	1	Statistical value; the actual values for your product will be established in a test run on reques
		2	Micro process control

TRADITION & INNOVATION
MORE THAN 130 YEARS OF EXPERIENCE

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

Maschinenfabrik LASKA Gesellschaft m.b.H.
Makartstraße 60, 4050 Traun – Austria
P +43 7229 / 606-0
F +43 7229 / 606-400
laska@laska.at
www.laska.at

DEALER/PARTNER