

## GEA EcoCut 225 emulsifier



**The GEA EcoCut 225 continuously produces sausage emulsions ranging from extremely fine to coarse emulsions. It features automated knife adjustment (AKA), allowing product structure, emulsion stability and temperature increase to be carefully controlled. This ensures constant end-product quality and stability, regardless of variations in environmental conditions.**

### PRODUCTION FLEXIBILITY

In addition to production of bulk emulsion in line applications, the GEA EcoCut 225 also has the flexibility to produce smaller batches. The throughput and knife speed are easily set to accommodate a wide range of emulsion types.

### CASSETTE MOUNTED KNIFE SETS

The knife cassette comprises a double or triple cutting set. The double kniveset is recommended for coarser emulsions for products like grilled sausage. For extremely fine emulsions, a triple knife set is better. A complete kniveset is assembled and adjusted prior to fitting to the machine, so cutting sets can be rapidly changed.

### Outstanding emulsifier for continuous in-line production

- Produces fine and coarse emulsions
- Produces pork skin emulsions
- For bulk as well as just-in-time batch production
- Automated knife adjustment guarantees a clean cut
- Cassette mounted double- and triple-knife sets for fast changeover
- Hard particle removal
- Range of pumps and silos for high- and low viscosity products



## QUICK REFERENCE DATA

GEA EcoCut 225	
Capacity	5 to 15 t/h
Cutting head diameter	225 mm (9")
Feeding method	Pump
Knife adjustment	Automatic (AKA)
Knife speed	2100, 2350, 2650 or 3000 rpm
Motor power	110, 132 or 160 kW
Dimension H x W x D (excl. pump)	1725 x 1100 x 2210 mm (67.9 x 43.3 x 87.0")
Weight	1400 kg (3086 lb)



Casste-based knife set is fast and easy to change



Double knife set for course emulsions



Tripe knife set for fine emulsions



GEA EcoBes hard particle removal

The knife positioningsystem also has a 'flying sharpening' procedure where the cutting edges touch briefly to sharpen them to restore optimum cutting performance.

### PRESSURE CONTROL TO MINIMIZE WEAR

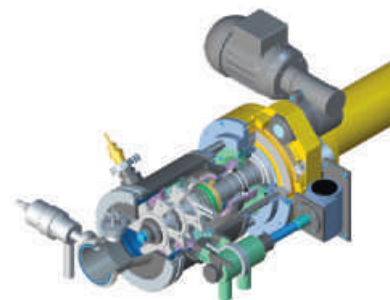
During startup and shutdown, a sensor monitors product pressure in front of the first holeplate. When the pressure reaches a preset startup value, the pump momentarily stops allowing the knife to gain speed. The pump then restarts and product flows resumes. Once the system is empty, the pressure drops below a preset level and the system automatically shuts down. The pressure transducer also registers unstable product flow, shutting down the system when necessary to avoid idle runs and unnecessary wear.

### HARD PARTICLE REMOVAL

Particles of bone, gristle and other impurities such as clips, are removed from the product flow by the GEA EcoBes sorting device. A range of pumps and silos, with pump discharge is available for high and low viscosity products.

## YOUR PERFORMANCE BENEFITS

- Constant product structure and temperature increase
- Cutting set wear reduced with automatic knife adjustment and pressure-controlled start/stop
- Running costs are reduced to a minimum
- Accurate control over emulsion quality, fineness and structure
- Cost-effective production of small batches due to fast knife-set cassette change



GEA EcoCut 225 in action

A servo motor drive axially moves the rotating shaft holding the knives. The shaft assembly can be positioned within a tolerance of  $\pm 0.005$  mm. A hydraulic locking system prevents axial movement caused by product flow pressure, avoiding inaccuracies. During the automatic tightening procedure, the torque-controlled servo drive moves the knives until a pre-programmed force against the holeplates is reached. This value is set as the zero position.

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As a result of constant improvement, drawings and specifications of GEA Food Solutions machines and software are subject to change. Some features and/or equipment mentioned in this publication are options.