High-Efficiency Cutters
Seydelmann Ultra-Cutter, strong and universal

The sturdy design allows the Ultra-Cutter to be universally used, for dry and boiled sausages as well as for chilled or frozen material. With two bowl speeds, two knife speeds and two mixing speeds for the addition of coarse material into the emulsion.

On option the bowl speeds can be used in combination with each knife speed. There is a digital display for temperature and running time. With reverse mixing speeds as an option.

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High-Efficiency Cutters with 200, 325, 550, 750, 1200 and 1800 litres

The AC-8 Cutter and the DC-8 Cutter
6 gears forward, 2 gears reverse

The DC 8 Cutter with its proven DC-drive, and the AC 8 Cutter with frequency converter are equipped with 6 gears forward and 2 reverse mixing gears or as an option with 8 gears forward. All speeds, from the mixing speed to the highest speed, can be steplessly pre-programmed.

On request, the AC 8 and the DC 8 can be equipped with a stepless speed by means of a cross-lever switch. This speed, independent of the pre-programmed ideal values, lowers or raises the speeds from zero to the highest number of revolutions.
High-Efficiency Cutters – quality for gene rations
A coarse and very uniform texture can be achieved with a relatively low cutting speed. A regular, uniform spread of the product to be processed by means of the mixing speeds improves the appearance and therefore the sales potential is also improved.

The AC-Cutter and the DC-Cutter allow the production of still more profitable emulsions. The stepless programming of the 8 speeds offers numerous effective applications. The technical design of the AC-Cutter and of the DC-Cutter allow speeds, that are up to 50% higher than usual machines. This high speed extracts considerably more protein from the meat cell.

An extremely stronger binding can be realised already at the beginning of the chopping process. Due to the high speed of the knives, inertia of the meat particles increases and the breakdown of the meat cells is complete. Not even the smallest cell compounds are missed by the knives and are cut again. This results in tougher, stronger and more homogenous emulsions.

The very high speed guarantees an extremely degree of fineness.
Seydelmann – worldwide the embodiment of state-of-the-art developments

Not only cellular protein, but also taste influencing substances of the meat, like enzymes, can be better released. The sausage has a better taste. To emulsify the product, the knife speed is programmed slightly lower. The required firm consistencies of the different recipes are achieved by means of the variable adjustable speeds during the emulsifying process. The combination of all these features improves in particular the visual appearance of the sausage. A good-looking and delicious, mouth-watering sausage will attract the consumers and increase their willingness to buy.

Rind emulsion in the AC-Cutter and in the DC-Cutter

The processing of raw rinds to fine rind emulsion creates a new potential market for the highest speed of the AC-Cutter and the DC-Cutter. After only a short running time, the rind is reduced to a fine even emulsion.
The AC-Cutter – highest quality of technology
The challenge to the power

Individual solutions

In order to meet individual requirements, Seydelmann machines are generally manufactured especially to order and on order.

The production of the biggest cutters proves our potential.

Seydelmann machines are manufactured of best material, with best design and technology to create a top-quality product that always exceeds even the highest expectations.

“In the hands of the best”

Bi-Cut - The Dry Sausage Cutter

Bi-Cut 552 with 550 litres bowl content

The Dry Sausage Cutter Bi-Cut, almost made of solid stainless steel, is equipped with 2 separate knife shafts which are staggered by 90°.

Both, the AC-technique and the DC-technique offer the possibility of pre-programming the two knife heads with stepless variable speeds.

For ideal loading of the Bi-Cut with even distribution of the material, a horizontal screw conveyor with a product store developed by Seydelmann can be provided separately on request. There is also an option for simple integration in a conveyor belt. The Bi-Cut has a considerably higher capacity than ordinary machines, at almost the same space requirements.

For optimised loading of the Bi-Cut, and even distribution of material inside the bowl, a screw conveyor can be connected to the cutter.

The dry sausage cutter fulfils highest demands on quality and selected products due to its sophisticated and efficient technology.

The steplessly pre-programmable eight knife speeds ensure the exact binding for all particle sizes, regardless of uneven temperature of the raw material. Due to the knife heads being fixed at right angles, a perfect mixing can be achieved, already after short operating times.

K 1200 ultra 1200 l, designed for loading via automatic feeding systems

Dry Sausage Cutter Bi-Cut K 552 AC 8, 550 l - Bi-Cut K 552 DC 8, 550 l with special loading device
The fascinating talents of the Bi-Cut

The Bi-Cut proves its extremely economic features by means of the AC-drive or the DC-drive. There are no more peak loads when starting or changing speed. The knives always operate at an ideal speed related to product requirements. On request, variable, programmable bowl speeds with four gears are available.

For further information on the programme control Memory 2000, refer to page 18.

The Bi-Cut with either AC-drive or DC-drive is a high-performance machine, designed with the best technological know-how for the production of dry sausage.

The high-tech concept of the Bi-Cut will cover all future demands.
**Operation of the machine**

The cross lever switches on the operators’ panel are ideally arranged according to ergonomic aspects. Contrary to common controls which are susceptible to interference, the machine and all its functions can almost be operated without opening one’s eyes. The machine is electrically interlocked to prevent incorrect or faulty operation. With wear-free immediate stop of knives, even when opening the cover.

**Quality in every detail**

The generously rounded and polished body of the machine without corners and edges, proves the high standard of Seydelmann workmanship. Even the rear and invisible areas of the machine have the same perfect finish.

**Controls**

The whole electronic programming unit is placed within sight distance remote of the machine. All parameters are shown on a specially large digital display, even well legible from distances.

**Automatic balancing system with control of unbalanced state**

As from K 326, the automatic balancing system with control of unbalanced state is available as an additional feature. Knives can be automatically balanced whilst machine is running. Additional manual balancing is no more necessary. The control of unbalanced state with safety stop is also available without balancing system as an option. This system will stop the machine automatically in case of excessive unbalance, i.e. break of knives during cutting process.

**Temperature sensors**

Immediate and very accurate temperature control.

The temperature sensor is integrated in the top end of the perfectly-shaped scraper. Even smallest amounts of emulsion can be accurately measured. It is almost impossible for coarse material to stick to the sensor and hinder temperature measurement.
**Easy cleaning**
All surfaces on the machine are designed with a slope so that cleaning water will drain completely from all surfaces.

**The ejector**
The ejector on the right hand side is a standard feature, without any space requirement for swinging motion.

The hydrodynamic design of the entire ejector ensures quick and complete unloading and no emulsion will remain on the ejector disc.

The specially Seydelmann-designed ejector disc profile allows quick and efficient unloading, even with liquid materials. The hydrodynamic design of the entire ejector ensures quick and complete unloading of the emulsion.

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**Loading device**
The loading device is designed for standard loading trolleys BW 200, incorporated into the machine.

There are no components outside the machine like housings or claddings which have to be cleaned separately and need additional space.

The loading device lifts the trolley vertically until the trolley is above the rim of the bowl. Then the trolley is tilted and completely emptied. Liquids are also poured without spilling.

As loading is effected from the left in direction of the rotation of the bowl, the whole trolley content is spread evenly without building up of material.

In order to meet the individual requirements of flow of production, the loading device can also be fitted to the right hand side and the ejector on the left hand side of the cutter.
Relaxing comfort for safe operation

**Loading via screw conveyor***

As loading via screw conveyor is effected evenly in direction of the rotation of the bowl, there is no risk of building up of material.

The whole bowl content is chopped uniformly with the same number of cuts, gaining an even particle size in the finished product. This optimised loading process reduces the batch time considerably.

Loading is effected with noise absorbing cover closed. A hydraulic sliding valve will close the screw conveyor when the loading is finished.

Therefore no chunks of material can fall into the bowl.

Due to its large hopper, the screw conveyor has additionally the function to buffer the material.

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**DGA 33 for Ras and Ultra Cutter**

Digital display for running time and product temperature on request with automatic switch-off for time and temperature. Switch-off data can be variability preprogrammed.

**Micro 13 with AC Cutter**

Digital controller Micro 13 for knife speed, gear indicator, temperature and run time. Eight speeds can be steplessly programmed and then activated by means of the practical knee lever switch at the cutter. Automatic shutdown for run time and temperature. Temperature is measured in seconds and very accurately.

**Memory 2000 - for all cutter types on request**

The programmable microprocessor controller Memory 2000 for fully automatic cutting provides user-guided programming. The screen display is freely programmable as a color display. Certain program steps already include logical work sequences. The memory 2000 allows you to store complete daily and weekly work schedules. Required customer service work is displayed in the service program of the Memory 2000 in a timely manner in advance.

For comprehensive information about numerous additional applications, please refer to our special catalog.
The new K-knife types can be balanced and mounted much quicker and easier with utmost possible safety. They guarantee better flow of material and pre-balancing.

Knife balancing scale for clamping sets
Knife balancing unit for balancing of knife pairs for vibration-free operation.

K - for extremely fine emulsion and for fine rind emulsion. Mostly used on high-speed cutters.

Y - in a balancing clamping set with spacer, no building up of product. Little friction, less power consumption.

E - efficient universal knife for most possible fineness and intensive emulsifying.

B - perfect for dry sausage due to its drawing cut.

Knife gauge* For exact adjustment of the knives after regrinding. The safety stud is reduced to the correct length.

Clamping nut for knives Safe fixing of knives with smallest energy expenditure.

Balancing unit* Fine balancing of the whole knife set after being pre-balanced in clamping sets. Especially for high-speeds cutters (AC-drive or DC-drive) for very smooth operation.

Knife system KO and EO Each two knives are mounted in one level into the balancing clamping set or into the draw-in balancing clamping set with intermediate spacer.

The new K -knife types can be balanced and mounted much quicker and easier with utmost possible safety. They guarantee better flow of material and pre-balancing.

* available on request (as an option)
Seydelmann machines stand for top quality and steady progress

**Seydelmann Cutters and their drive systems**

1. The AC-Cutter - future-orientated technique for a perfect solution
   - The AC-motor of the AC-Cutter is significantly more efficient than conventional drive systems with given speed.
   - No more changing of carbon brushes or air filters.
   - There are no more peak loads when starting or changing speeds compared to conventional AC-motors.
   - The AC-Cutter will only consume the amount of energy which is necessary in relation to the ideal speed for the individual product.
   - Considerable saving of energy of up to 25 % on the AC-Cutter.
   - The water-cooled AC-motor will always run within its ideal temperature range. The waste heat of the motor can be used in a heat exchanger, for heating industrial water or for a central heating system. No waste heat will go into the production rooms, therefore the air-condition will consume less energy. Double saving!

2. The DC-Cutter
   - No peak loads when starting or changing speeds compared to conventional AC-motors. Therefore no brake current necessary.
   - All DC-Cutters are equipped with a 4-quadrant drive, which results in a very accurate control of speeds and furthermore, the generated current goes back to mains supply when slowing down.
   - Considerable saving of energy of up to 25 % on the DC-Cutter.

3. The Ultra-Cutter - Strong and universal
   - The sturdy design ensures the universal use for all types of sausage.
   - Two cutting speeds, two knife speeds and two mixing speeds for the addition of coarse material into the emulsion.
   - On option the two bowl speeds can be used in combination with each knife speed, resulting in eight different speed combinations. Two reverse mixing speeds as an option.

4. The Rasant-Cutter
   - A robust High-Efficiency Cutter for most intensive use.
   - Two cutting speeds and two independent bowl speeds.
   - Digital display DGA 33, easy legible, for running time and product temperature, on request with automatic switch-off for time and temperature.

**Quality in every detail**

1. Noise absorbing cover
   - Reduces the emission of noise by more than 10 dB(A), i.e. the perceptible noise level is reduced by almost 50 %.
   - Condensation of humidity on dry sausage mix is limited.
   - Preservation of heat on cooked products.
   - Transparent, almost unbreakable and chemically resistant.

2. Balanceable knife sets
   - Easy exchanging of knives and pre-balancing.
   - The knives can be set in any number or arrangement. This results in smooth operation even at extremely high speeds.

3. Electric
   - The motor insulation is water repellent with thermal overload switch-off. For each cutter size, there are three motor sizes available according to performance and number of knives. On request totally closed, i.e. IP 54.
   - As a standard, the separate panel box is made of stainless steel, water and steam proof (protection IP 54).
   - On request, the AC-Cutters and DC-Cutters are equipped with standstill heating - the motor is slightly heated during standstill periods which prevents the motor winding from condensation and humidity.

5. Safety
   - Seydelmann machines are manufactured in accordance to legal safety regulations and have the CE-Declaration of Conformity.

6. Advanced quality
   - Innovatively thinking, economical action and production of quality. This ensures excellent fulfilment of your present and future requirements.
Advantages of the Seydelmann High-Efficiency Cutters

- Exact adjustment of knives against the cutter bowl.
- The robust design of the bowl and lid mean that they are also suitable for use in extreme conditions.
- Easy cleaning due to its seamless and almost solid and robust stainless construction.
- All edges are rounded and polished.
- No screws or areas of hygienic risks on the entire knife hood.
- Permanent surveillance of the product due to the transparent and almost unbreakable noise absorbing cover.
- Machine body of solid stainless steel - no cast-iron or mild steel profiles, clad with thin stainless sheets. No dents in case machine is hit by trolleys etc.
- Practice-orientated, easy, ergonomic and convenient operation of the machine due to its special low construction.
- Digital display for temperature and running time. Temperature probe incorporated in the top end of the scraper.
- Immediate and very accurate temperature control.

Ejector with pre-programmable speeds

On request, the ejector can be equipped with three steplessly pre-programmable speeds and AC-technique. Hydraulic components for the movement of the unloader are incorporated into the machine body. Hydraulic piston and limit switches are well protected and the machine is therefore much easier to clean.

- **Speed one:** For coarse and dry sausage emulsion
- **Speed two:** For fine emulsions
- **Speed three:** For fluid emulsions

Soft stop motion device

The hydraulic movement of the ejector has a soft stop motion device - therefore the ejector disc will only touch the bowl very gently. Bearing and ejector disc are protected against wear.

Noise reduction

The knife hood is double-walled and insulated with sound absorbing material. The perfect geometry of the cutting chamber remains unchanged. The outside shape of the cutting chamber is extended to the left hand side of the knife hood to reduce the sound considerably.

Knife systems

The Seydelmann knife types can be balanced and mounted much quicker and easier with utmost possible safety.

Needful features of the Seydelmann High-Efficiency Cutters

All Seydelmann machines can be individually designed for each application. By improvement with special customer-orientated kits the cutter becomes the central machine for completely new applications. Also special custom-built constructions for extraordinary and unusual applications are possible.

- **Water nozzle,** on request with water meter for exact discharge of water. The water volume is displayed and preset using the digital control Micro 13.
- **Nozzle** for adding liquids of any viscosity.
- **Memory 2000** with screen display. Automated chopping cycles freely programmable. Choice of recipes, calculation, selection control of additional transport systems etc. Compatible to existing computers.
- **Loading via screw conveyor** for smooth loading of the cutter, i.e. during one bowl revolution. The whole bowl content is chopped with the same number of cuts, gaining a uniform particle size in the finished product. Loading is effected with noise absorbing cover closed. Only very little emission of noise when frozen material is processed.
- **Loading via screw conveyor** for smooth loading of the cutter, i.e. during one bowl revolution. The whole bowl content is chopped with the same number of cuts, gaining a uniform particle size in the finished product. Loading is effected with noise absorbing cover closed. Only very little emission of noise when frozen material is processed.
- **Sectioned cover with feeding openings** loading via feeding systems or screw conveyors. Integration of the cutter into existing continuous production lines. Ideal for adding of dry material (like flour and soya) - no emission of dust.
- **Control board** positioned above the machine at eye-level of the operator.
- **Remote control** for automated productions for the controlling of several machines by one operator.
- **Gases input** providing correct inert or non-inert atmosphere according to product requirements.
- **N₂** for gas flushing inert atmosphere, ph-neutral, no injection of germs from the surrounding air, avoiding bacteria growth, no oxidative effects of the atmospheric oxygen (fat oxidation).
- **LIN** for constant cooling for cooling of the product down to the perfect temperature for chopping. Best temperature to gain proteins approx. +3°C. For low-temperature chopping and change of consistency of the product.
- **Injection of LIN for freezing.** Liquid nitrogen is injected directly into the product. The low temperature is achieved by shock freezing. Immediate chopping or granulating under low-temperature condition with completely changed consistency of the product, i.e. shock freezing and granulating of freshly-slaughtered, warm meat for conservation of ATP and PH.
- **Stepless bowl drive with four pre-set speeds.** The flow of material can be altered relative to the ideal cutting speed of the knives. Specially for the production of granulated products with uniform structure of required size, i.e. dry sausage etc.
- **Stepless programmable main drive with frequency-controlled AC-motor.** Almost maintenance-free.
Seydelmann automatic processing line

Ideal integration within automatic processing lines
All our industrial machines can be connected via conveyors. As a consequence, all products, i.e. boiled, dry and cooked sausages can be produced automatically.

Konti-Kutter
The new Seydelmann Konti-Kutter type KK 250 AC-6 made of solid stainless steel is an emulsifier with a completely new hole plate/cutting plate system. The Konti-Kutter is the ideal machine for the production of finest emulsions as well as coarse products of perfect quality. For additional information please refer to our special catalog.

Mixer-Grinder PG 160 with movable screw conveyor (unloading as a standard on the left hand side, on request on the right hand side)

Automatic Grinder AG 160, AU 200, AV 250, with protection device and bayonet lock

Konti-Kutter KK 250 AC-6

Automatic processing line
Technical Data

**High-Efficiency Cutters**

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<th>Type</th>
<th>Liters</th>
<th>Power of Motors in kW</th>
<th>Dimensions in cm</th>
<th>Weight in Kg</th>
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Dimensions/data not binding. *with hydraulic noise absorbing cover. Alterations reserved.

**Bi-Cut**

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Dimensions/data not binding. *with two incorporated main motors. Alterations reserved.

Production line for boiled sausage

Production line for cooked sausage