

Seydelmann



KONTI-KUTTER

EMULSIFIERS WITH UNIQUE TECHNOLOGY



Table of content

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Konti-Kutter

| | |
|---------------------------------|-------|
| Applications | 4-5 |
| Konti-Kutter KK 140 ultra/ AC-6 | 6-7 |
| Konti-Kutter KK 250 AC-6 | 8-9 |
| Vacuum-Konti-Kutter KK 254 AC-6 | 10-13 |

Loading and integrating possibilities

| | |
|---|-------|
| Mixer and Konti-Kutter | 14-15 |
| Mixer and Konti-Kutter with conveyor pump | 16-17 |
| Cutter and Konti-Kutter | 18-19 |
| Konti-Kutter with vertical loading device | 20 |
| Konti-Kutter with inclined conveyor belt | 21 |
| Production Line | 22-23 |
| | |
| Hole- and cutting plate system | 24-25 |
| Details Konti-Kutter | 26-29 |
| Technical Data | 31 |

Applications

The Konti-Kutter is perfectly suited for the production of excellent, finely emulsified sausages, such as Lyoners, Wieners, Hot-dogs and fine-cut cooked sausages. Even raw rind and sinews can be emulsified structure-free by the Konti-Kutter.



Boiled and cooked sausages

Furthermore, a production of high quality emulsions with coarser chunks for sausage types like Jagdwurst, Krakauer, Bierwurst, breakfast sausages and coarser cooked sausage is possible in the Konti-Kutter - all in one working step.



Boiled sausages with coarser chunks

Even sausage types that consist solely of coarser materials and are usually produced in a grinder or a cutter, e. g. Bauernbratwurst or coarse liver sausage, can be manufactured in the Konti-Kutter by using a cutting set with fewer plates and larger holes. In this case, the Konti-Kutter is operating with a lower, pre-set speed.



Coarse cooked and boiled sausages



Pâté



Pasta fillings



Ready-made dishes and convenience-food



Surimi and fish products



Fruits



Pet food and reward treats

Konti-Kutter KK 140 ultra/AC-6

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Konti-Kutter KK 140 ultra/AC-6

The Ultra-drive

The acquisition costs of a two-speed Ultra-drive are lower compared to the AC-6-drive. Still, the Ultra-drive also fulfills the requirements for the manufacture of diverse high quality products. The rotating cutting plates can be set to run in the first or second speed, depending on the desired grain size. For final products with a coarser structure, the first speed with lower rotations is used. For fine products, the fast second speed is available.

The optional soft starter ensures an ultra-smooth start with constant acceleration and, thus, an efficient torque control. The significant reduction of the start-up peaks, keeps the energy consumption low.

The AC-6-drive

The continuous three-phase AC-6-drive fulfills the highest demands on safety, application, technology, operating life and speed.

For the rotating cutting plates, six speeds can be preset in a steplessly mode. This guarantees the ideal rotating speed for any product and desired grain size.

Designed for utmost efficiency, the extremely robust AC-6-drive works without high-maintenance intensive carbon brushes or air filters. A long service life is guaranteed.

Current peaks when starting the machine or changing speeds are fully avoided reducing the energy consumption considerably. Furthermore, back-up fuses or big cable cross-sections for absorbing start-up peaks become redundant. The AC-6-drive reduces running and maintenance costs to a minimum.

Konti-Kutter KK 250 AC-6

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Unique cutting technology

The Konti-Kutter is an emulsifier with a cutting technology unique in the market. It reduces the material to any desired size and produces high quality emulsions.

A rotating pump wheel sucks the pre-mixed product through a specially developed system of vertically arranged hole- and cutting-plates. During this process, the product is reduced and emulsified. The rotation speed of the pump wheel controls the throughput speed and capacity.

The number of the fixed hole- and rotating cutting-plates together with the size and number of the holes on each plate determine the emulsion fineness. The more plates are used and/or the smaller the holes are, the finer the cut becomes. A cutting set of a Konti-Kutter consists of up to seven plates. The vertical plate adjustment allows an easy adding and removal of the single plates.

The hole- and cutting plates are positioned at a minimal distance yet without any actual contact to each other. Thus, they do not rub against each other, completely avoiding material contamination with metal particles and significantly reducing the wear-off of the plates.



Konti-Kutter KK 250 AC-6

Vacuum-Konti-Kutter KK 254 AC-6

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Technology in the Vacuum-Konti-Kutter

Cutting and emulsification under vacuum produces a firm emulsion free of air and reduces the volume by 5-7% at constant weight. This saves packaging costs and less casings are needed. The homogeneous vacuum emulsion ensures consistent sausage weight and size in case of cold cuts. Most accurate and uniform portioning when filling.

Better protein extraction due to better separation of the meat cells increases moisture and fat absorption and improves binding and stability at the same time. The higher protein extraction leads to an increased release of flavor essences out of the meat. The aroma of spices can develop better and becomes more intensive. In some cases less spices are necessary.



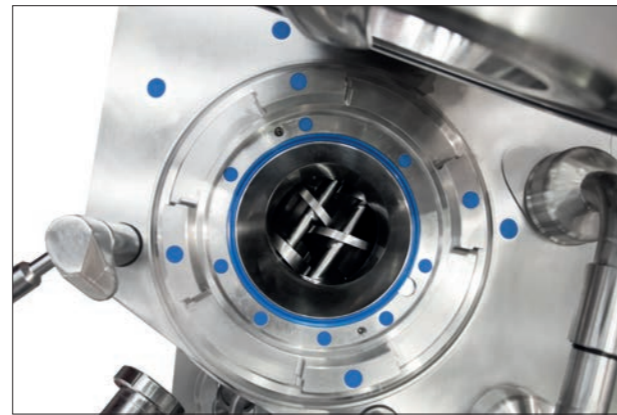
Vacuum-Konti-Kutter
KK 254 AC-6

The final product tastes more intense and has a tighter bite. The higher adding of water and ice into the emulsion is possible. Desired final temperature can be set via temperature control. Intelligent control regulates the pressure via the stepless pump depending on inlet and outlet temperature, cutting speed and the cutting set used.

The computer-based solution Auto-Command 2000 displays all relevant parameters, allows a variable pre-programming of speeds. Including an automatic switch-off system for temperature and running time. Possesses also a data recording of all important process parameters.



Contact-free conveyor screws of the pumping unit



Pressure or temperature controlled pump

The construction principle of the Vacuum-Konti-Kutter

The product is sucked in via a large DN 250 suction pipe with adjustable inlet valve. The vacuum value in the hopper can be controlled individually. The filling level is measured permanently and visualized on the display. A scraper mounted in the hopper prevents product residues from sticking to the hopper wall. From there, the material enters the pump evenly without product tearing off. Here, individual adjustment of the vacuum value is possible, too. The pump controls the pressure depending on the product or temperature and regulates the material flow to the cutting set via a stepless drive, where the product is emulsified. In the multi-stage vacuum system, individual, product-oriented vacuum extraction is possible at three points: in the hopper, in the pump and in the cutting set. This ensures the highest possible protein extraction with a consistently very high product quality.

The biological effect of vacuum

As oxygen is excluded, the growth of germs and the loss of aroma is greatly reduced. Due to the extended shelf life, more time remains for transporting and storing the product. Even with recipes poorer in protein, the heat stabilization of the emulsion is better.

The chemical effect of vacuum

The improved emulsifying effect of the Vacuum-Konti-Kutter KK 254 has tremendous advantages for cold cuts and vacuum-packed goods. The low intake of air leads to a fast, bright and more durable reddening and to a much longer lasting

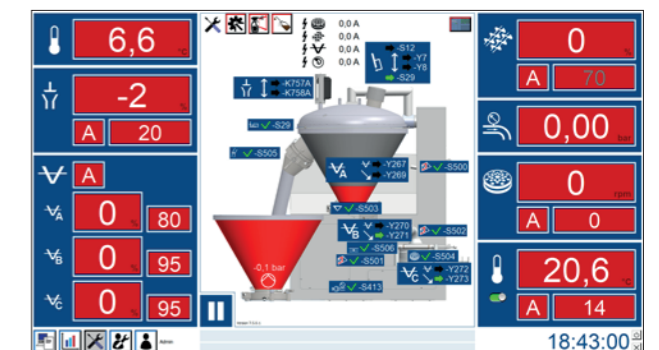
color and taste in the finished product. Due to the lower penetration of atmospheric oxygen and fatty acids (fat oxidation) are considerably reduced. The product shelf life is considerably extended.

The mechanical effect of vacuum

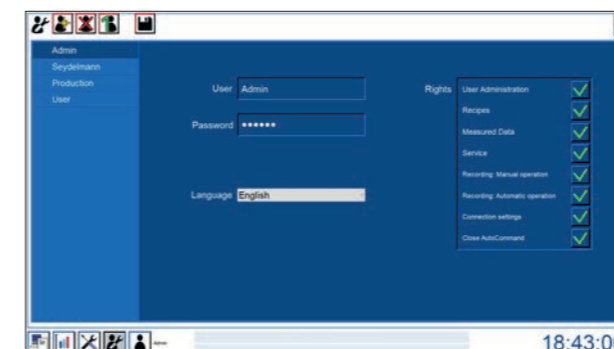
The three-stage vacuum system will be turned on time-delayed before the cutting set. Because of negative pressure, the material will be pulled from the hopper into the pump and cutting set. It ensures that the cutting set does not start dry. A start-up of the machine with water is not required.



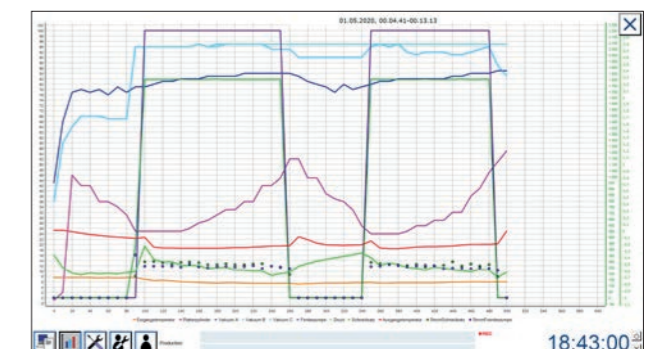
Standard view in automatic mode



Settings menu



User administration



Graphical data recording

Loading and integrating possibilities

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Mixer MR 1800 and Konti-Kutter KK 140 AC-6

High throughput capacity

The KK 254 AC-6 as well as the KK 250 AC-6 processes up to 15 tons per hour while the KK 140 AC-6 manages up to 9 tons per hour. The hourly throughput in a KK 140 Ultra reaches up to 5.5 tons. In a KK 140 Ultra v up to 7 tons are processed in an hour.

High economy of operation

Another big advantage of the Seydelmann Konti-Kutter is the great durability of the cutting set.

Until the regrinding of the cutting set, the KK 254 AC-6 as well as the KK 250 AC-6 can process between 200 and 1,500 tons, depending on the raw materials used and between 4,000 and 30,000 tons until the cutting set needs to be replaced. With the KK 140 AC-6, the durability is approximately 100-750 tons; until the cutting set needs to be replaced, approximately 2,000-15,000 tons can be processed.

The regrinding itself occurs, like with grinder hole plates, very fast, convenient and cheap, resulting in enormous possible savings over conventional systems.



Mischer MR 2500, hopper with conveyor pump and Konti-Kutter KK 250 AC-6



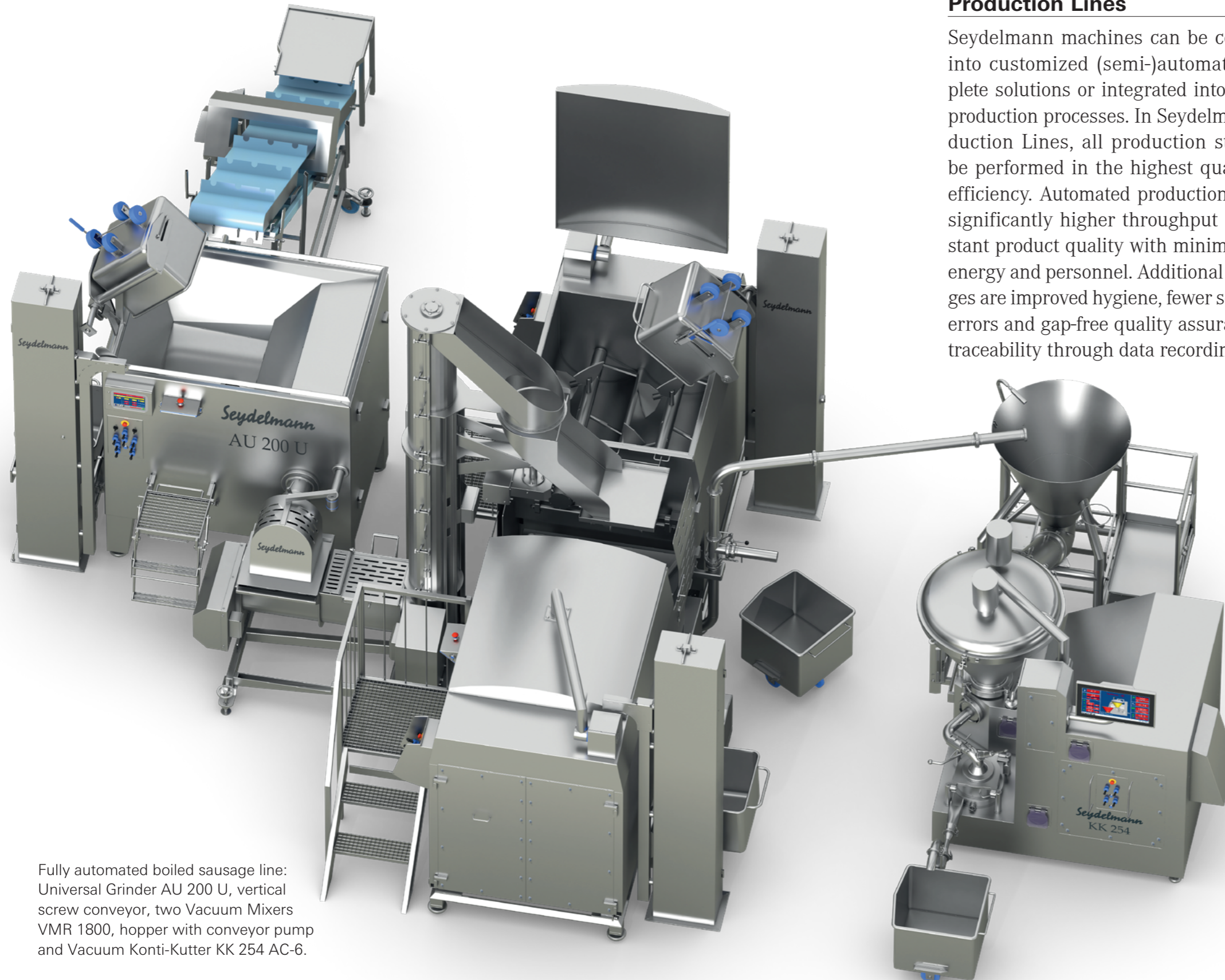
Vacuum-Cutter K 204 AC-8 with Konti-Kutter KK 140 AC-6



Konti-Kutter KK 250 AC-6 with vertical loading device



Konti-Kutter KK 250 AC-6 with inclined conveyor belt



Fully automated boiled sausage line:
Universal Grinder AU 200 U, vertical
screw conveyor, two Vacuum Mixers
VMR 1800, hopper with conveyor pump
and Vacuum Konti-Kutter KK 254 AC-6.

Production Lines

Seydelmann machines can be combined into customized (semi-)automated complete solutions or integrated into existing production processes. In Seydelmann Production Lines, all production steps can be performed in the highest quality and efficiency. Automated production enables significantly higher throughput and constant product quality with minimal use of energy and personnel. Additional advantages are improved hygiene, fewer sources of errors and gap-free quality assurance and traceability through data recording.

Seydelmann Production Lines are used in all areas of food processing, e. g. when producing meat, sausages, fish, cheese, vegetable and fruit products, soups or sauces as well as pharmaceutical products.

Planning

The immense expertise and decade-long experience enables Seydelmann to provide extensive support during the planning of a Production Line. Seydelmann plans, manufactures and develops each Production Line individually, to meet precisely the requirements of the particular user. The level of automation and the points of intersection can be determined individually. Each machine is connected with others through conveying systems. Machines can be operated manually and individually or one person can control the entire production line from a central operating terminal.

All steps are carried out ensuring highest quality and efficiency of production, including cutting, emulsifying and mixing under vacuum, standardizing, heating, infra-red or X-ray analysis, gas flushing and cooling with carbon dioxide (CO₂) and/or liquid nitrogen (LN₂).

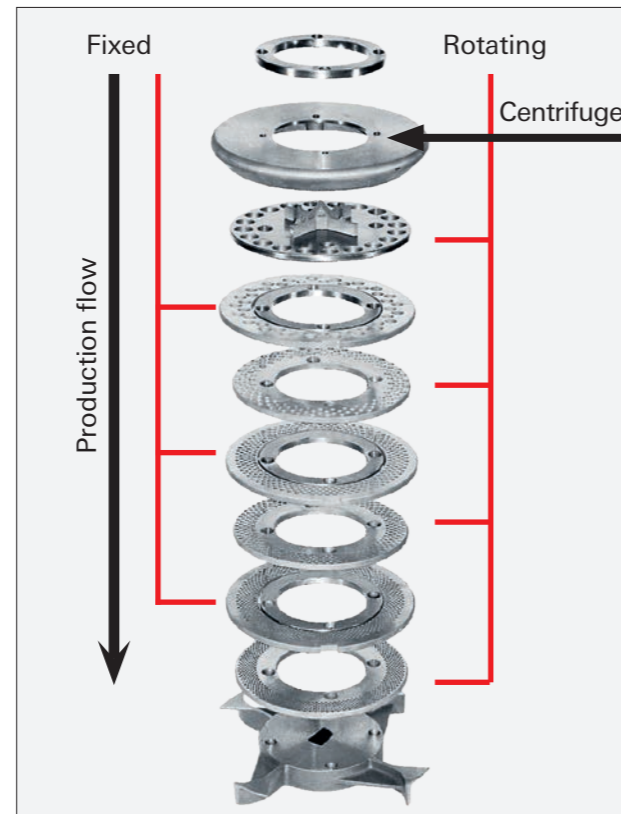
Hole- and cutting plate system

Plate system

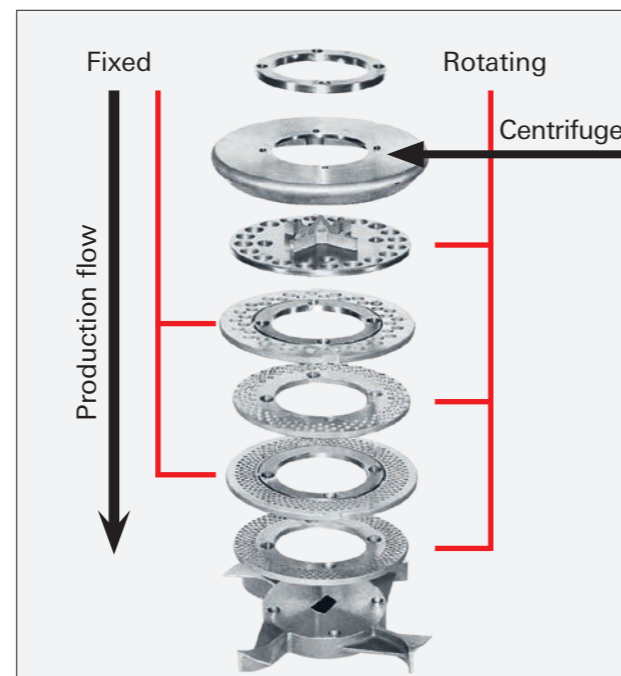
The more plates are used and/or the smaller the holes in the plates are, the finer the cut. The cutting set can be equipped with up to seven plates, e.g. four cutting plates and three hole plates. Accordingly, fewer plates and/or larger holes in the plates produce coarser types of sausages. The centrifuge protects the cutting set of damage by foreign particles. Hard parts like metal clips, as well as gristles, will be collected safely in the centrifuge in front of the cutting set. The KK 140 AC-6 is able to reach a cutting capacity of 350,000 cuts per second while the cutting capacity of the KK 250 AC-6 and the KK 254 AC-6 achieves up to 700,000 cuts per second. Thus, the Konti-Kutter produces extremely fine and perfectly homogeneous emulsions. Depending on the desired product, the rotating speed in the Konti-Kutters with an AC-6-drive can be preset in a continuous mode. The Ultra-drive offers two speeds, a fast speed for fine emulsion and a slower speed for final products with a coarser structure.

Contact free arrangement

The fixed hole plates and the rotating cutting plates are positioned vertically at the minimum possible distance from each other, yet without any actual contact. Since they do not rub against each other, a contamination of the product with metal particles is impossible. This also increases the service life of the plates by reducing their wear-off.



Hole plate/cutting plate system for finest emulsion

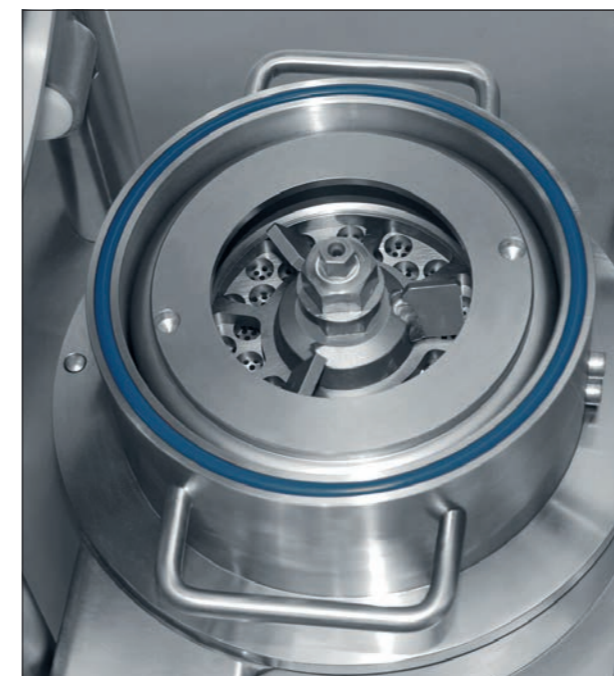


Hole plate/cutting plate system for final products with a coarser structure



Unique product quality

The enormous cutting capacity leads to an extreme fineness and the highest possible protein extraction. The firmness and the bite of the sausages are strongly improved. Cold cuts, fine sausages or fine emulsions with coarse chunks have a remarkably good looking and appetizing cut, because the emulsion produced is homogeneous and structure-free without air pockets. In addition to the meat protein, taste carrying substances in the meat, like enzymes and ferments, are released more easily and in a greater amount. The taste and aroma of the sausage become more intense and authentic.



Top view on cutting plate system

Ergonomic operation

The changing of the cutting set is very easy. The hole- and cutting plates are assembled like a cutting set in a grinder. The adjustment of the cutting set pressure is not necessary. This avoids potential damage to the cutting set due to false handling. A later adjustment of the cutting set is avoided as well. The emulsion remains equally fine and homogeneous until the regrinding.

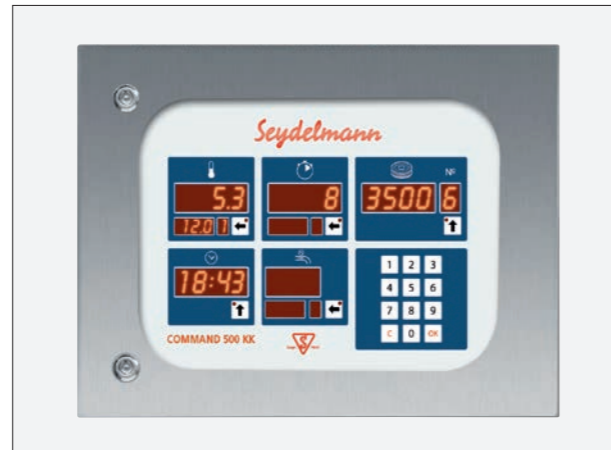
Details Konti-Kutter

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Command 500 KK

Digital display for speed, cutting plate rotations, running time, temperature and time. The speeds can be pre-set in a continuous mode and later retrieved via the practical cross operation. Switch-off for temperature on request. The water-tight stainless steel box is engineered in protection class IP 66 which is rated for easy cleaning.

Standard equipment for KK 140 AC-6 and KK 250.



Auto Command 2000

The production of the emulsion is carried out via individual, automatic programs. The required temperatures, vacuum values, speeds etc. are stored in these programs. The vacuum hopper is filled automatically. A dry-running protection of the pumping unit and cutting set is automatically ensured. Alternatively, production can be carried out via a self-regulating temperature control or a constant pressure control.

Standard equipment for KK 254.



Control panel

All control elements are clearly installed at the operator's position. The control panel of the machine is ergonomically arranged. Clear symbols for the functions of the machine guarantee an ease of operation and avoid errors. The cleaning of the control elements can be done easily by pressure washers as well as all cleaning agents.

Standard equipment of all Konti-Kutters.



Reduction valve

A reduction valve is located on the discharge side of the pipe. By adjusting the reduction valve the according cutting performance (number of cuts per second) as well as the temperature of the emulsion can be defined.

Standard equipment of all Konti-Kutters.

Tube connection with swivelling plate

The product can be fed into the cutting plate system through a tube instead of a hopper. Consequently, a constant material flow with minimum floor space requirements is possible. Therefore, a continuous operation is possible by consistent temperature and sausage-meat structure. Optionally all Seydelmann Konti-Kutters can be equipped with a temperature control. The tube connection can easily be dismantled and mounted in order to be cleaned.

On request for KK 140 und KK 250.



Nitrogen/air supply via valve

The valve below the hopper can be used to regulate either nitrogen or air supply. The addition of nitrogen influences the final temperature of the product. By adding air, the amount of air in the sausage brat can be increased.

On request for all Konti-Kutters.



Sensor for product level

As soon as the hopper runs empty, the machine either stops automatically or directs the loading systems to load the hopper. In this way dry running of the cutting set is prevented. Measurement is made accurately with a laser. The level sensor recognizes material independently of the composition of surface of the material. It is supplied in a closed housing.

*On request for KK 140 and KK 250,
Standard equipment for KK 254.*



Separate panel box

A separate panel box made of strong stainless steel is also available as an alternative to one built into the machine frame. The separate panel box can be equipped with cooling or heating. The separate panel box is engineered according to the protection class IP 66 standard.

Standard equipment for all Konti-Kutters except for KK 140 ultra.



Accessories trolley

The mobile accessories trolley serves for ergonomic and safe storage, transport and cleaning of cutting set parts, supplies and tools.

On request for all Konti-Kutters.



Different hopper sizes

In addition to the standard hoppers of the Konti-Kutters, hoppers with a higher capacity are available as an option: With the KK 140, the hopper capacity can be increased up to 550 l and with the KK 250 up to 900 l. Individual special designs are also possible. Further information can be found in the chapter "Technical Data".

On request for KK 140 and KK 250.



550-/900-l-hopper



180-/270-l-hopper

Safety

All Konti-Kutters conform to current accident prevention regulations and are self evidently CE marked.

Service

- Global service
- Qualified service technicians
- Extensive spare parts supply warranted for many years
- Emergency service 7 days/week
- Loan machine service

Made in Germany

The headquarters and the factory of Maschinenfabrik Seydelmann KG are located in Stuttgart and Aalen. Design and planning as well as the whole manufacturing process including stainless steel working, welding, turning and milling, finishing, electrical panel build, assembly and endbuild take place in Aalen.

Tradition and Know-How

Since the founding of the company in 1843 Maschinenfabrik Seydelmann KG has led the field in the development of machines for the food industry. In doing so the company uses the most up to date and innovative technologies. The company with the longest experience in manufacturing food processing machinery is currently led by the sixth generation of the family, by which it was founded over 175 years ago. The large number of long-serving and highly qualified employees ensure Seydelmann's wide ranging know-how.

In the hands of the best

In the hands of the best is the principle behind Maschinenfabrik Seydelmann. The highest demands are made of materials and technology without compromise in machine development, construction, build and hygienic design to be able

to create a long lasting top quality product which exceeds even the highest expectations.

Sustainability

Responsible behavior is a regular and permanent feature of Maschinenfabrik Seydelmann's corporate identity. Our production processes are constantly being evaluated, in order to meet the most modern sustainability demands. When developing our machines, from the start, we take their entire life cycle into account including the recyclability of the single machine components. Accordingly, we equip our machines with energy-efficient drives and use harmless fats and oils authorized for consumption. That way, together with our customers, we never lose sight of the wellbeing of the environment.

Advanced Quality

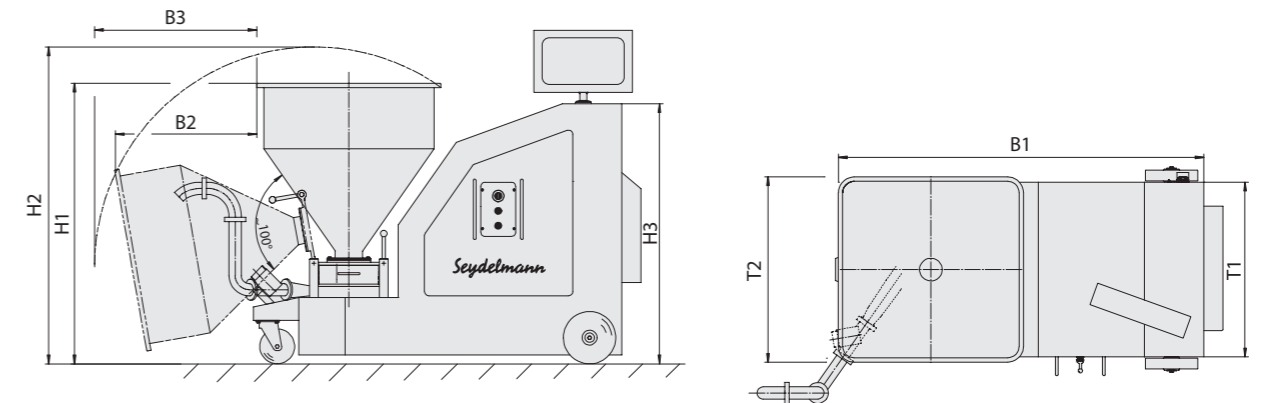
Think innovatively, work efficiently, produce quality. Seydelmann has implemented a quality management system covering the whole production and organization. Certified by the much sought-after ISO 9001 the highest demands in the future can be reliably met.



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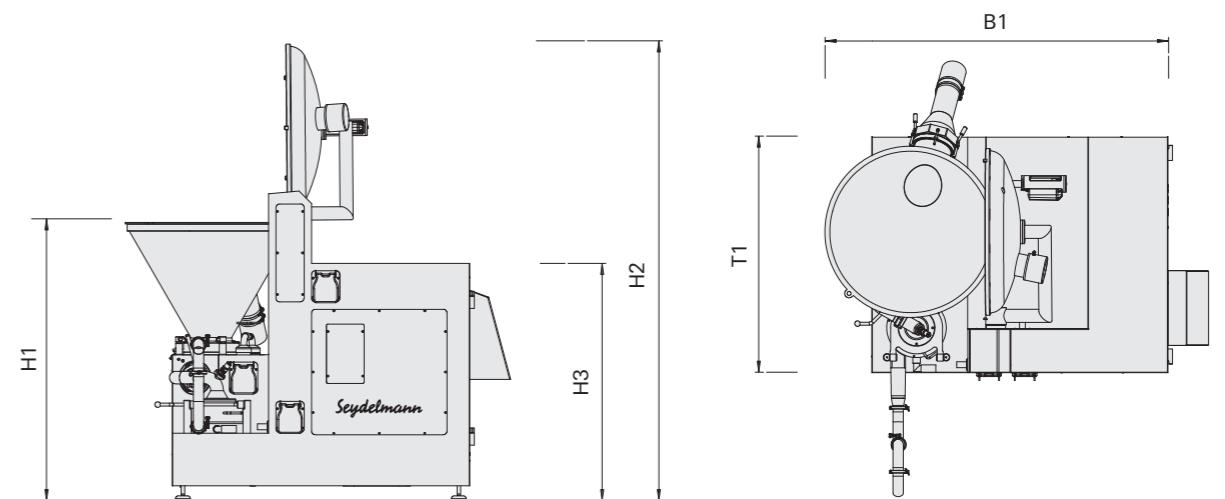
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english 09/2020



| Type | hole plate diameter Ø | hopper capacity | power of motors | dimensions in mm | | | | | | | | weight |
|----------------|-----------------------|-----------------|-----------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| | in mm | in litres | in kW/AC | B ₁ | B ₂ | B ₃ | T ₁ | T ₂ | H ₁ | H ₂ | H ₃ | in kg |
| KK 140 Ultra | 140 | 185 | 50/75 | 2135 | 169 | 507 | 1000 | 1145 | 892 | 1233 | 1150 | 1200 |
| KK 140 Ultra | 140 | 270 | 50/75 | 1845 | 210 | 520 | 840 | 1285 | 962 | 1233 | 1150 | 1200 |
| KK 140 Ultra | 140 | 550 | 50/75 | 1816 | 650 | 860 | 840 | 1060 | 1408 | 1620 | 1150 | 1250 |
| KK 140 Ultra-v | 140 | 185 | 55/90 | 2135 | 169 | 507 | 1000 | 1145 | 892 | 1233 | 1150 | 1200 |
| KK 140 Ultra-v | 140 | 270 | 55/90 | 1845 | 210 | 520 | 840 | 1285 | 962 | 1233 | 1150 | 1200 |
| KK 140 Ultra-v | 140 | 550 | 55/90 | 1816 | 650 | 860 | 840 | 1060 | 1408 | 1620 | 1150 | 1250 |
| KK 140 AC-6 | 140 | 185 | 90 | 1786 | 169 | 507 | 840 | 1145 | 892 | 1233 | 1150 | 1200 |
| KK 140 AC-6 | 140 | 270 | 90 | 1845 | 210 | 520 | 840 | 1285 | 962 | 1233 | 1150 | 1200 |
| KK 140 AC-6 | 140 | 550 | 90 | 1816 | 650 | 860 | 840 | 1060 | 1408 | 1620 | 1150 | 1250 |
| KK 250 AC-6 | 250 | 220 | 140 | 2203 | 530 | 675 | 1000 | 1060 | 1260 | 1575 | 1490 | 1600 |
| KK 250 AC-6 | 250 | 550 | 140 | 2203 | 810 | 930 | 1000 | 1060 | 1606 | 1815 | 1490 | 1650 |
| KK 250 AC-6 | 250 | 900 | 140 | 2291 | 900 | 1030 | 1000 | 1250 | 1750 | 2050 | 1490 | 1900 |
| KK 250 AC-6 V | 250 | 220 | 200 | 2203 | 530 | 675 | 1000 | 1060 | 1260 | 1575 | 1490 | 1900 |
| KK 250 AC-6 V | 250 | 550 | 200 | 2203 | 810 | 930 | 1000 | 1060 | 1606 | 1815 | 1490 | 1950 |
| KK 250 AC-6 V | 250 | 900 | 200 | 2291 | 900 | 1030 | 1000 | 1250 | 1750 | 2050 | 1490 | 2200 |

Dimensions/data not binding. Alterations reserved.



| Type | hole plate diameter Ø | hopper capacity | power of motors | Abmessung in mm | | | | | | | | weight |
|---------------|-----------------------|-----------------|-----------------|------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| | in mm | in litres | in kW/AC | B ₁ | B ₂ | B ₃ | T ₁ | T ₂ | H ₁ | H ₂ | H ₃ | in kg |
| KK 254 AC-6 | 250 | 250 | 200 | 2328 | - | 850 | 1600 | 2400 | 1900 | 3100 | 1150 | 3200 |
| infeed hopper | | | | Technische Daten auf Anfrage | | | | | | | | |

Dimensions/data not binding. Alterations reserved.

KONTI-KUTTER

EMULSIFIERS WITH UNIQUE TECHNOLOGY



Maschinenfabrik Seydelmann KG

**HEADQUARTERS
AND SALES**

Hoelderlinstrasse 9
DE-70174 Stuttgart / Germany
Tel. +49 (0)711 / 49 00 90-0
Fax +49 (0)711 / 49 00 90-90
info@seydelmann.com

**FACTORY, BRANCH
AND SERVICE**

Burgstallstrasse 1-3
DE-73431 Aalen / Germany
Tel. +49 (0)7361 / 565-0
Fax +49 (0)7361 / 359 51
info@aa.seydelmann.com

www.seydelmann.com