

Seydelmann

In the hands of the best

Mixers Mixer-Grinders

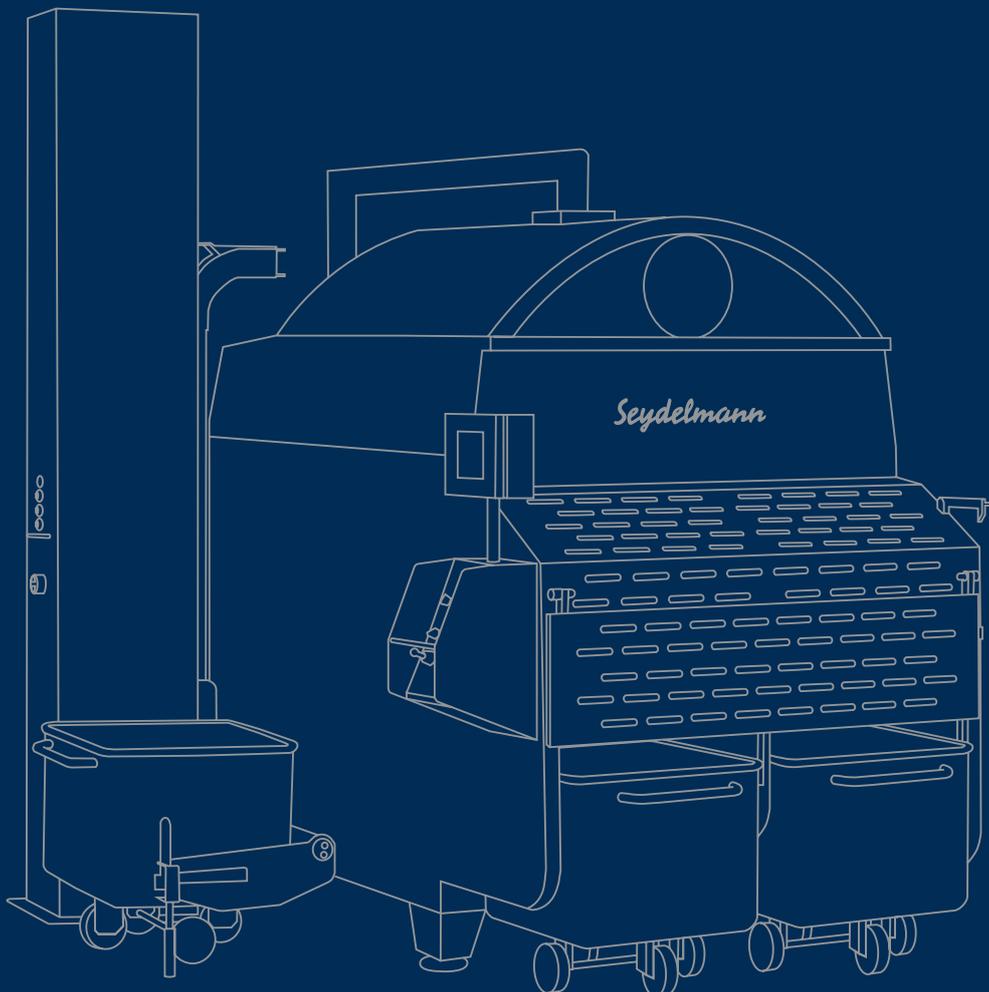




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Applications

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Minced meat



Various mince products



Cheese products



Pasta fillings



Boiled sausage with coarser chunks



Boiled sausage and cooked sausage



Convenience and fast food products



Doner Kebab



Sliceable dry sausage



Fish based products



Confectionary and nut based products



Vegetable and fruit products

Overview machine variant types

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Mixers

- Two mixing shafts each with its own motor, independently switchable - forward and reverse at high and low speed (MR 700 with one mixing shaft)
- Standard mixing shafts with paddles and ribbons in the discharge direction for a fast discharge
- Two hydraulic discharge flaps (MR 700: One discharge flap)

Vacuum-Mixers

- Two mixing shafts each with its own motor, independently switchable - forward and reverse at high and low speed
- Standard mixing shafts with paddles and ribbons in the discharge direction for a fast discharge
- Two hydraulic discharge flaps
- Hydraulic hopper lid and maintenance-free water-ring vacuum pump

Mixer-Grinders and Automatic Mixer-Grinders

- Two mixing shafts each with its own motor, independently switchable - forward and reverse at high and low speed
- Standard mixing shafts with paddles and ribbons in the discharge direction for a fast discharge

(a) For flexible use and for mid-range throughputs

- Two discharge possibilities: Via discharge flap as a Mixer or via Grinder housing
- Long In-line Grinder worm at the bottom of the hopper collects the material directly

(b) For high-range throughputs: Automatic Mixer-Grinders

- Discharge only via Grinder housing
- Long discharge worm positioned centrally underneath the hopper bottom above the working worm

Mixers/Vacuum-Mixers/Mixer-Grinders with cooling function

- Cooling via nozzles at the hopper bottom or snow horns in the machine lid
- Hydraulic hopper lid

Mixers/Vacuum-Mixers/Mixer-Grinders with cooking function

- Heating by direct steam or indirectly via the double-walled hopper
- Hydraulic hopper lid

Mixers/Vacuum-Mixers/Mixer-Grinders with indirect cooling/heating

- Indirect cooling/heating with various means via Pillowplates



Mixer MR 1800 with vertical loading device

Perfection to the last detail

The special mixing geometry of Seydelmann Mixers achieves intense and consistent mixing in a short time as well as a nearly complete discharge. Seamless welds and joints combined with the heavy duty stainless steel construction of the machine frame and hopper make these machines extremely robust, reliable and long-lasting. Embedded covers in the machine frame and a closed bottom prevent water from getting into the machine or dirt from getting trapped in the openings. The discharge flaps have hydraulic locking. All cables, hoses, cylinders, cooking- and cooling valves, motors and other parts are integrated in the machine.

All Mixers and Vacuum-Mixers with a hopper capacity of 1300 l and above and the Automatic Mixer-Grinders are equipped with double side walls, in between which the cooking and cooling valves are fitted. The machine surfaces are continuous, smooth and even without attached covers. All surfaces are rounded, polished and designed with a slope for water to drain easily.

Mixing technology

Mixers are ideal machines to mix pre-ground meat and fat with salt, nitrite, spices or additives for the production of hamburgers, ground meat, coarse sausages, dry sausages, doner kebab, vegetables, cheese and more. A Cutter, Emulsifier or Grinder may be installed before or after the Mixers. When employed in production lines, Mixers are often used as buffers between the Grinder and Cutter or Emulsifier. While a Cutter or an Emulsifier are cutting one batch, the preceding Mixer is simultaneously mixing and standardizing the following batch. The working processes are optimized and the working time reduced to a minimum.



Two Mixers MR 3500 with conveyor belts and vertical loading device



Vacuum-Mixer VMR 1800 with vertical loading device

Vacuum-Mixers

Mixing under vacuum results in an enlargement of the meat cells. The cells on the meat surface open up and discharge liquid cell plasma that covers the meat surface as a binding protein film. This way, additives can be best absorbed by the meat cell and the taste intensifies significantly.

Furthermore, under vacuum the temperature increase of the mixed material is significantly lower. In further processing steps, the cut of the product becomes dense and clear because the meat cells contain less air.

Chemical effect of vacuum

With less air inside the meat product, the reaction of oxygen with fatty acids i.e., fat oxidation, decreases significantly. The product stays longer fresh and has an extended shelf life. The low amount of air in finely grained mixtures significantly improves taste preservation in the final product.

Biological effect of vacuum

The oxygen exclusion, or more precisely, the replacement of residual atmosphere by the chemically and biologically neutral nitrogen, greatly suppresses the growth and spread of germs. Thus, the aroma degradation and aging of the sausage start significantly later, resulting in a longer shelf life.



Vacuum-Mixer VMR 600 with vertical loading device



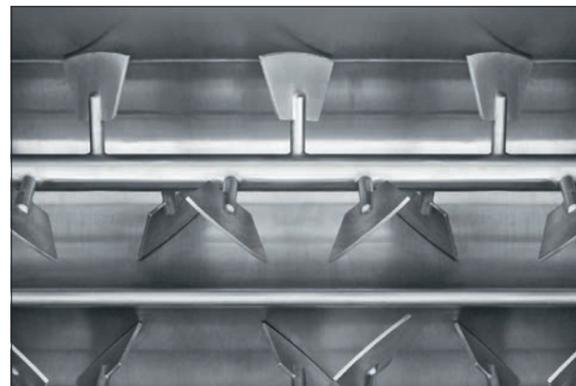
Vacuum-Mixer VMR 1000 with vertical loading device



Combined design with mixing paddles as well as -ribbons



Design with mixing ribbons



Design with mixing paddles

Mixing shafts

The two mixing shafts are each driven by a two speed three-phase motor, independently switchable forward and reverse, at high and low speed. The MR 700 is equipped with one mixing shaft.

Thanks to the special arrangement and position of the paddles, the product is mixed gently and in the best way possible.

In the discharge direction, the shafts are equipped with short ribbons for a gentle and fast discharge.

Adaptable designs of the mixing shafts:

- Depending on the application, different combinations of mixing paddles and mixing ribbons are available.
- When processing special products e.g., kebab or cheese, the mixing shafts can be equipped with a reinforced drive.

Frequency controlled AC-drive

Optionally, the mixing shafts of all Mixers and Mixer-Grinders can be equipped with a frequency controlled three-phase motor. With the AC-4-drive four speeds can be preset via the control.

The ideal mixing speed can be preset for the most diverse types of materials e.g., fresh meat, cooked meat, fish, vegetables, fruits, and other food products. This way, the best possible mixture of raw materials and very efficient throughputs are achieved, satisfying highest demands.

Differently from conventional three-phase drives, the AC-4-drives in Seydelmann Mixers, Vacuum-Mixers and Mixer-Grinders completely avoid current peaks. Precisely the needed power is consumed. Up to 25 % of energy can be saved this way. Furthermore, the AC-4-drive has an overload protection, protecting the machines from sudden power surges.

Mixer-Grinders

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For flexible use: MRG 1300, MRG 1800, MRU 1300 and MRU 1800

The Mixer-Grinders MRG 1300, MRG 1800, MRZ 1300 and MRU 1800 are made for medium capacities. They have a 1300 or 1800 l hopper.

The two mixing shafts are each driven by a two speed three-phase gear motor, independently switchable forward and reverse, at high and low speed.

As standard, the mixing shafts are equipped with paddles and ribbons in the discharge direction for a complete discharge.

Discharge via the hydraulically operated discharge flaps is possible only if a trolley is positioned underneath the outlet or via the Grinder housing with 160 mm or 200 mm hole plate diameter.

The Mixer-Grinder, therefore, can be used as either a Mixer-Grinder or an efficient Mixer. Processing options, otherwise possible only with two separate machines, are available within one machine.

An example of usage: Premixing, standardization and grinding before reloading material into the hopper for mixing with additives and subsequent discharge through the hydraulic discharge flap.



Mixer-Grinder MRU1800 with vertical loading device and cooling function with hydraulic lid

Automatic Mixer-Grinders

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Mixer-Grinder AMR 2500 with cooling function with hydraulic lid and snow horns

Fast processing and discharge through grinder outlet: AMR 1800, AMR 2500, AMR 3500

The mixer grinders AMR 1800, AMR 2500 and AMR 3500 are made for high capacities. They have a hopper of up to 3500 l.

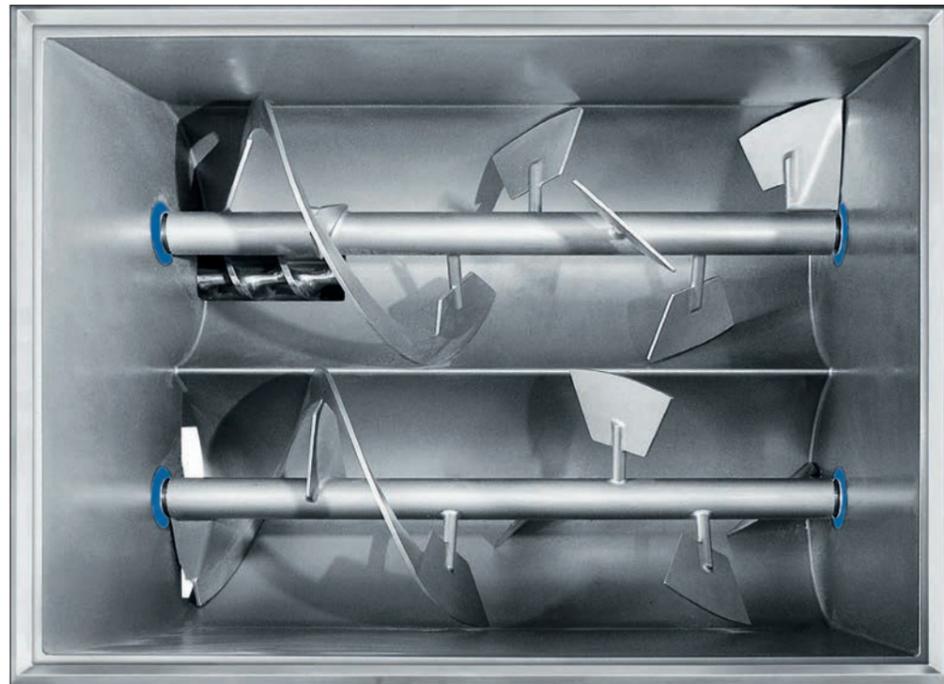
The Automatic Mixer-Grinders AMR 1800, AMR 2500 and AMR 3500 have a long discharge worm underneath the hopper center. Its short-time reverse gear ensures that even the smallest quantities of the mixture are repeatedly fed to the mixing unit for a completely homogeneous mixture. Therefore, it guarantees a smooth and rapid discharge of the mixture via the Grinder housing with 200 mm, 250 mm or 300 mm hole plate diameter.

The two mixing shafts are each driven by a two speed three-phase gear motor, independently switchable forward and reverse, at high and low speed. As standard the mixing shafts are equipped with paddles.

The Automatic Mixer-Grinders have a long discharge worm underneath the hopper center. It guarantees a smooth and rapid discharge of the mixture to the working worm. Its short-time reverse gear ensures that even the smallest quantities of the mixture are repeatedly fed to the mixing unit for a completely homogeneous mixture.

Automatic Mixer-Grinders are perfect for the production of ground meat, dry sausage, hamburger products, and much more.

Measuring of the current consumption at the main motor (working worm & cutting set), automatic arrangement and adjustment of the discharge worm speed.



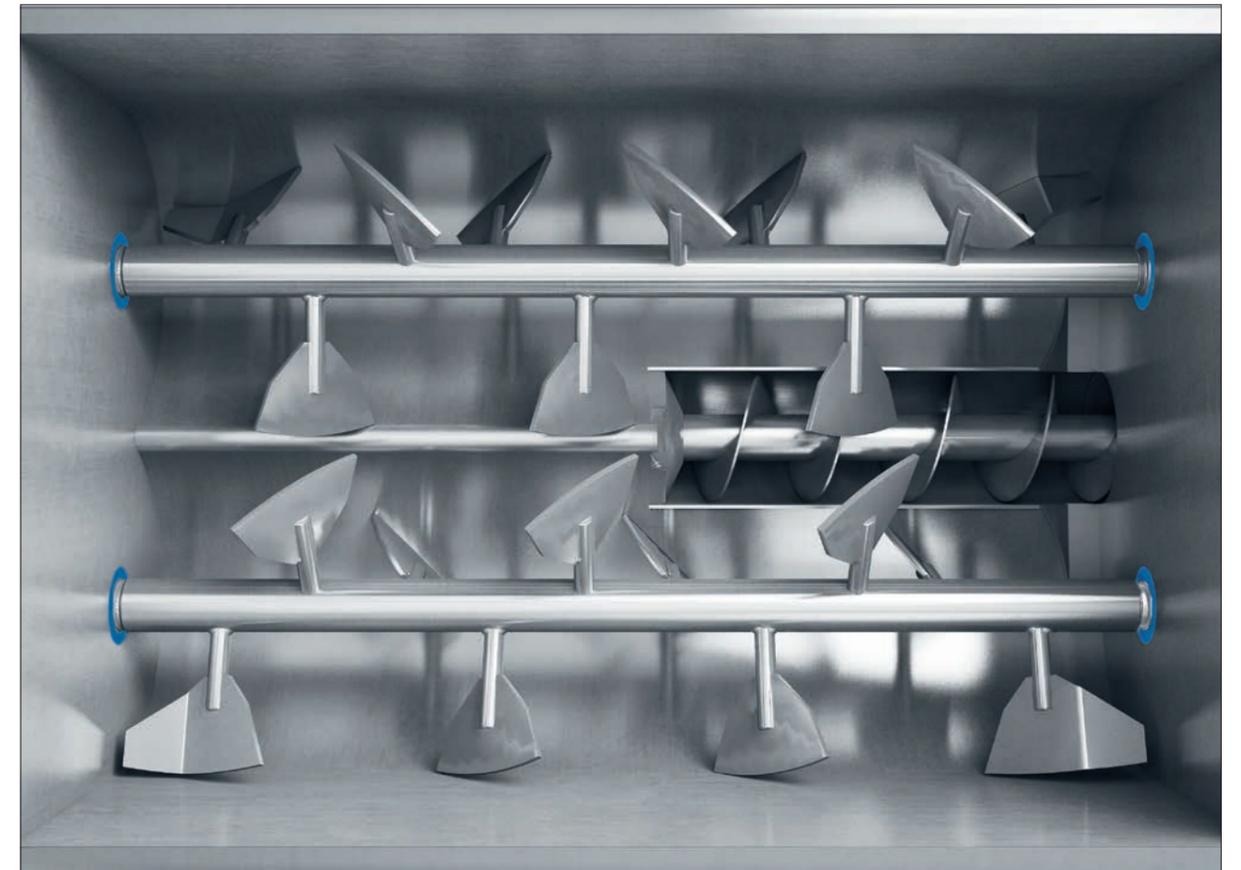
Hopper MRU 1800

Mixer-Grinders

The mechanical wear-off of the worm housing is largely prevented due to the use of a special material. Moreover, the worm housing is equipped with a trapezoidal thread, which in comparison to the conventional fine pitch thread withstands the toughest use in the long term.

Direct v-belt drive

The particularly strong working worm is driven directly by v-belts. No gearbox is needed. The v-belt drive is very strong and not susceptible to breakdowns.



Hopper AMR 2500

Two speed Grinding worm

First speed

For semi-frozen and fresh meat as well as the production of coarse inclusion meat, granulated meat and dry sausage using the recutting knife.

Second speed

For fresh meat, cooked meat, liver, vegetables and spinach and for grinding with hole plates with bigger holes.

Reverse gear

The grinding worms of the Mixer-Grinders MRG 1300, MRG 1800, MRU 1300 and MRU 1800 as well as the discharge worms of the AMR 1800, AMR 2500 and AMR 3500 are equipped with a short term reverse gear. The smallest amounts of the mix can be fed through the mixing unit again and again as required.

Cooling function

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Mixer MR 1800 with cooling function with hydraulic lid, cooling nozzles and vertical loading device



Hydraulic lid with snow horns, expansion room and preparation for exhaust



Hopper with mixing paddles and cooling nozzles



Temperature sensor



Cooling valves and nozzles behind the cover

Precise temperature control

The optional cooling system on a Mixer, Vacuum-Mixer or Mixer-Grinder ensures ideal processing temperatures. CO₂ (carbon dioxide) or LN₂ (liquid nitrogen) can be injected into the hopper via nozzles at the bottom of the hopper or CO₂ snow can be added via snow-horns in the lid of the machine. The temperature or consistency of the product is controlled by a temperature sensor or optionally the current demand of the mixing shafts. The semi-circle design of the lid creates sufficient expansion room, from which the gas can be exhausted. The hopper lid is opened hydraulically.

The models with cooling function are equipped as a standard with the temperature control unit PT 100 with digital display and pre-adjustable switchoff. The cooling will be switched off automatically when the pre-adjusted temperature is reached. Mixers and Mixer-Grinders with an own cooling system replace a separate cooling room and thereby increase production efficiency. Cooling is necessary to reach the perfect consistency with formed/shaped products like hamburgers.

Cooking function

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Mixer MR 1800 with hydraulic lid, vertical loading device and cooking function

Cooking-Mixer

In the Cooking-Mixer the products are heated very rapidly by means of direct steam. The Cooking-Mixer cooks the raw material for cooked sausage production, considerably decreasing the working time on the Cutter. The cooking system results in a material gain of about 10%. Complete retention of taste, aroma and proteins that would otherwise be lost with the boiling water. Due to the extremely short cooking time in the Cooking-Mixer at an ideal temperature, the taste and aroma-forming ingredients are completely preserved in contrast to cooking in the kettle or steam cabinet. The Cooking-Mixer is ideal for the production of cooked sausage, soups, cooked meat stuffings of various kinds, etc.

Apart from the direct heating, the Cooking-Mixers and Cooking-Mixer-Grinders are also available with indirect heating via a double-walled hopper. After the required cooking temperature has been reached, the product can be cooled using cold water in the double-walled hopper.

The models with cooking function are equipped as a standard with the temperature control unit PT 100 with digital display and pre-adjustable switch-off. The heating is switched off automatically when the pre-adjusted temperature is reached.



Integrated Steam nozzle for direct heating

Indirect cooling/heating

Pillowplates

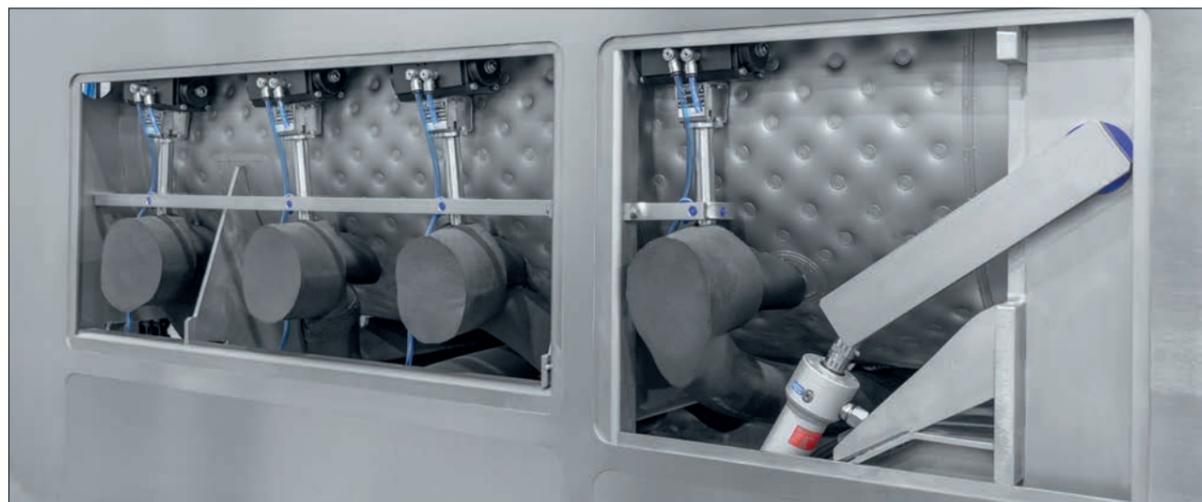
The optionally available Seydelmann Pillow Plates form a double-walled hopper for mixers, vacuum mixers or mixer grinders. This can be perfused with water, glycol, steam or other media to heat the product, to cool or to keep the desired temperature constant.

Pillow Plates are made of two sheets of superimposed stainless steel that are laser welded and then pressurized to form spaces. Through these pillows a heating or cooling medium can then circulate. According to the principle of the heat exchanger, this does not result in contact of the product in the mixing hopper with the cooling or heating medium, that is to say no water is introduced into the product.

Thanks to the labyrinth-like flow through the individual cushions, the effect on the entire hopper wall is uniform. Due to the optimal ratio between the surface to be tempered and the volume to be flowed through, there is a fast temperature transition.

To work energy efficient, the cooling or heating medium can be operated as a closed circuit. In addition, the Seydelmann Pillow Plates are much cheaper compared to a system with direct steam or liquid gas cooling, since no machine lid is necessary. Heating or cooling can take place simultaneously with all further process steps, also under vacuum and during the mixing process.

Temperature control takes place in automatic mode via the program or recipe control.



Details



Sloping and polished surfaces

All surfaces are polished by hand to a high quality finish and are designed with a slope.

Therefore, the machine is cleaned easily and quickly and water will drain completely from all surfaces. No water spots remain on the machine.



Embedded covers

All covers are completely embedded in the machine frame. No silicone seals and rubber seals are necessary. Thus the cleaning of the whole machine can be done easily with pressure water.

Closed machine frame

The machine is completely closed at the sides and underneath. Thus humidity and cleaning liquids cannot get into the machine and damage mechanical or electrical components. All cables, valves, cylinders and lines are hygienically placed in the closed machine frame.

Additional equipments

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Hydraulic discharge flaps

The two discharge flaps made of stainless steel open and close hydraulically, and are operated independently from each other. Thanks to special sensors, flaps will open only when a trolley is positioned below the discharge outlet and close when the trolley is full. The hydraulic holding system prevents an involuntary opening of the flaps and product falling on the floor.

Standard equipment for all Mixers, Vacuum-Mixers and Mixer-Grinders. MR 700 and Mixer-Grinders with one discharge flap. MR 600, MR 1000, VMR 600, VMR 1000 with two discharges and one common flap.



Hopper safety frame

All Mixers and Mixer-Grinders without a hydraulic lid are equipped with a hopper safety frame around the complete hopper top. If the safety frame is touched and activated, all drives as well as the loading unit stop immediately. All electrical components relating to the safety frame are hygienically located within the machine frame.

Standard equipment for all Mixers and Mixer-Grinders. On request for all Vacuum-Mixers, Mixers and Mixer-Grinders with hydraulic lid



Hopper lids

For different requirements, e.g., for vacuum and/or cooking function, for dusting products, or for attaching connections for LN₂ (liquid nitrogen) or CO₂ (carbon dioxide) hydraulically operated hopper lids are available. As a standard, the lids are one-piece. Depending on the loading method, they can open to the back, front or either side.

Standard equipment for all Vacuum-Mixers such as Mixers and Mixer-Grinders with cooling- and/or cooking function



On request, lids can be made according to the circumstances on site. For low room height, a special two-piece lid can be constructed, opening longways or sideways of the machine. Another option is the construction of a sliding lid, which opens by sliding horizontally without having to lift it.

On request for all Mixers, Vacuum-Mixers and Mixer-Grinders with hydraulic lid



Additional Hopper safety frame at open lids

On request all Mixers and Mixer-Grinders with a hydraulic lid can be equipped with a hopper safety frame. This allows the mixing process to continue also during the loading with an opened lid. A product pyramid formation and the consequent need to interrupt the mixing process and open the lid are avoided this way.

On request for all Mixers, Vacuum-Mixers and Mixer-Grinders with hydraulic lid



Water-/Liquid nozzle on request with water meter

For exact dosing of water or other liquids. The water volume is displayed and pre-set on the digital control Command 600, Command 1600 or Auto-Command 2000, 3000 or 4000.

On request for all Mixers, Vacuum-Mixers and Mixer-Grinders



Vacuum purge valve

Through the optionally available vacuum purge valve CO₂ or LN₂ is transported from the hopper after cooling is finished. Depending on the machine and the circumstances, the purge valve is installed either on the movable or on the fixed part of the hopper lid of the Mixer or Mixer-Grinder. It is attached to an extraction unit that channels the used CO₂/LN₂ outside of the production room.

On request for all Mixers, Vacuum-Mixers and Mixer-Grinders



Working platform

The control of the mixing material and the cleaning of the machine can be easily done from the stainless steel safety working platform which as standard is fitted on the right side of the machine - fitting on the left side is possible on request. If space is limited, an electrically locked safety step may also be chosen on request in place of the working platform.

Standard equipment for all Mixers, Vacuum-Mixers and Mixer-Grinders



Two-hand operation

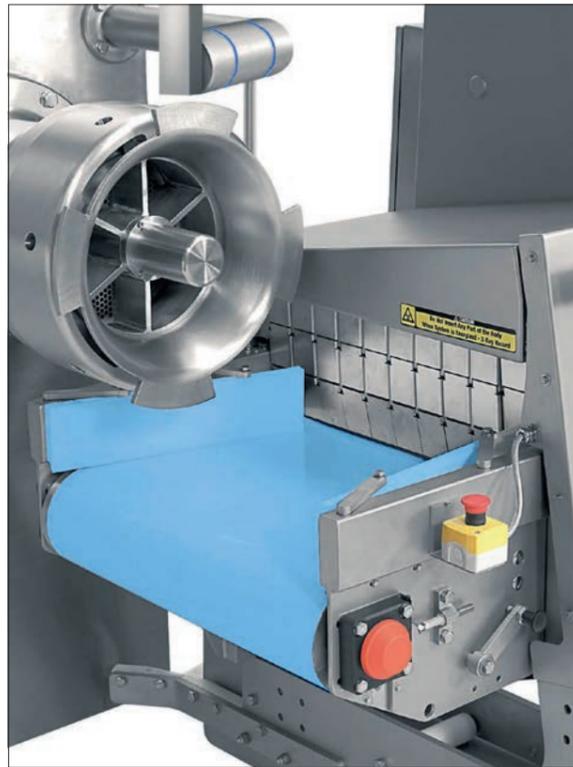
Mixers, Vacuum-Mixers, and Mixer-Grinders can be equipped with a two-hand operation for short-term running of the mixing shafts when safety covers or hydraulic lid are open. The two-hand operation greatly facilitates the cleaning of the machine.

On request for all Mixers, Vacuum-Mixers and Mixer-Grinders

Fat-Analysis

The Fat-Analysis with X-Ray or NIR Technology can be placed in front of the Mixer. The results of the analysis can be integrated into the recipe control of the machine or an external central control station.

On request for all Mixers, Vacuum-Mixers and Mixer-Grinders



Weighing unit for the hopper capacity

The weighing unit determines the current weight of the mixture. Individual ingredients can be added sequentially and the exact composition of a mixture achieved. On request, a weighing unit with a batch preparation device and programmed discharge is also available. Along with an indication of the hopper capacity, it also allows a program controlled batch- and weight-oriented discharge.

On request for all Mixers, Vacuum-Mixers and Mixer-Grinders



Bayonet locking

The solid stainless bayonet locking ensures a fast and easy change of the hole plates and knives. As the outer ring remains on the housing, the front part of the bayonet is considerably lighter than the whole screw nut. The bayonet locking also protects the thread of the worm housing.

Standard equipment for all Mixer-Grinders



Outlet protection device

The outlet protection device is required by law for all Mixer-Grinders. Its electrical interlocking virtually prevents injury from the cutting set. In the standard version the outlet protection device is swung open to one side. As an option, the outlet protection device can be opened upwards if for example the product is fed into a screw conveyor or onto a belt conveyor.

Standard equipment for all Mixer-Grinders



Outlet tube

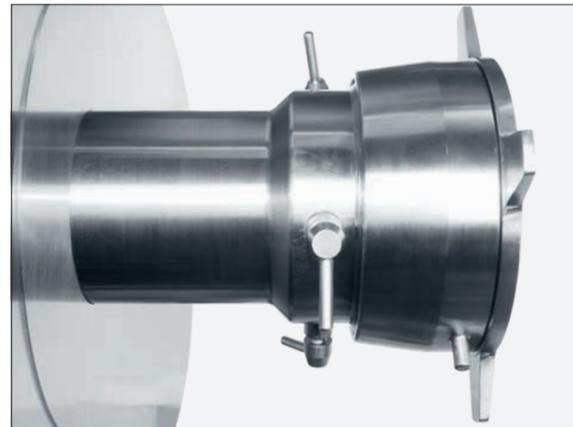
As an alternative to the outlet protection device an outlet tube can be fitted. Additionally a safety switch with control is mounted, which ensures the safe position of the outlet tube. As per safety guidelines the device is at least 850 mm long.

On request for all Mixer-Grinders

Holding device

The holding device for the precutting plate guarantees a low friction and careful cut. The grinding set is not pressed together under the high pressure of the meat flow. The wear-off of the hole plates and knives is reduced considerably.

On request for all Mixer-Grinders



Worm cradle

The sturdy mobile worm cradle of stainless steel serves for storing and cleaning the Grinder worm and cutting sets.

On request for all Mixer-Grinders



Thermal Overload Control

The thermal overload control will switch off the machine if for any reason the Grinder worm is overloaded.

Standard equipment for all Mixer-Grinders

Anti-block unit

The anti-block unit with power switch prevents any mechanical and electrical damage that might be caused if the working worm is blocked due to foreign bodies in the hopper.

On request for all Mixer-Grinders

Control panels

The layout of the control panel is designed ergonomically. The symbols for the machine functions are self-explanatory and prevent operating errors. All Mixers, Vacuum-Mixers and Mixer-Grinders depending on the machine type are operated via rotary switch, push buttons or cross-switches. The operating panel can be easily cleaned using a high pressure hose and other standard cleaning liquids.

Standard equipment for all Mixers, Vacuum-Mixers and Mixer-Grinders



Swivel mounted control panel

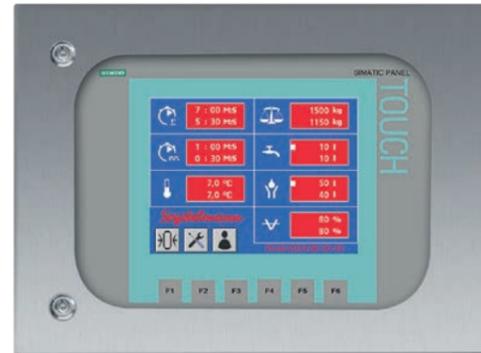
The swivel arm for the control panel has two ball joints which allows the operator to find the best angle for operation.

On request for all Mixers, Vacuum-Mixers and Mixer-Grinders



Command 600

The Command 600 is a touch screen control installed in a separate stainless steel housing. The standard screen shows all basic functions such as mixing time, intervals, temperature, water quantities, vacuum values, liquid dosing and weights in connection with a weighing unit. Times can be programmed for switching between forward and reverse mixing as well as the total mixing process.



Command 600

Command 1600

In addition to the features of the Command 600, the Command 1600 shows the rotating direction of the mixing shafts and in Mixing-Grinders the speed of the discharge and working worm. It includes a program control with pre-adjustable interval- and mixing times as well as different mixing speeds and mixing intervals. The addition of CO₂ and LN₂, vacuum time, the addition of water and the total mixing time can also be pre-set.

On request for all Mixers, Vacuum-Mixers and Mixer-Grinders



Command 1600



Auto-Command 4000 with 24" Touch Screen monitor

Auto-Command Touch

The Windows based recipe control Auto Command is equipped with a 24"-touch screen which guarantees an intuitive and save operating. The display is compliant to IP 69K and can be cleaned easily as water and dust cannot enter the display by any means. The recipe control Auto Command is available in 3 different versions:

Auto-Command 2000

The starter version of the Windows-based solution "Auto-Command" for the automated control of Seydelmann Mixers. On a 24" wide screen monitor, the Auto-Command 2000 displays all relevant parameters, allows a variable pre-programming of all actions and offers up to 9 automatic switch-offs, including an automatic switch-off system for temperature and running time. Furthermore, the **data-recording function** of the Auto-Command 2000 documents the entire production process allowing subsequent evaluation of the pro-

duction and providing data for auditing purposes. The service module displays service and maintenance intervals. If desired, the Auto-Command 2000 can be upgraded to more extensive versions 3000 and 4000 at any time.

Auto-Command 3000

Apart from the data-recording function, the Auto-Command 3000 is equipped with all the functions of Auto-Command 2000 as well as a **production plan** and **recipe calculator**. It allows an automated processing according to stored recipes and pre-set values. All individual program steps and the corresponding ingredients are displayed during the mixing process. All machine functions are executed automatically providing continuous standardization and quality assurance of the products.

Auto-Command 4000

The most extensive version of Auto-Command has all the functions above and various other features. In addition, the Auto-Command 4000 has a user administration function, allowing to define an individual access to different functions according to the user. The total consumption function determines the quantities of all ingredients within a freely selectable time period for calculation purposes. In total the Auto-Command 4000 offers following functions:

- Fully automated execution of all machine functions
- Automated processing according to stored recipes
- Display of all relevant parameters during the production
- Variable pre-programming of all actions
- Up to 9 automatic switch-offs incl. temperature and running time
- Production plan
- Recipe calculator
- Total consumption
- Data recording
- Notices of error
- Display of service and maintenance Intervals
- User administration
- Remote connection



Service module Auto-Command 2000/3000/4000

Loading devices

Vertical loading device

Mixers, Vacuum-Mixers and Mixer-Grinders can be loaded via a vertical loading device which can either be floor-mounted or mounted on the machine. All mechanical parts, such as chains etc., are built into the frame of the loading device, allowing easy and efficient cleaning. The vertical loading device is sturdy and conforms to the highest hygienic standards.

For tipping height of 2500 mm and higher, a ring fence is obligatory by law. On request, a ring fence with a light barrier is available.

On request for all Mixers, Vacuum-Mixers and Mixer-Grinders



Vertical loading device



Double vertical loading device with ring fence and light barriers

Scale for vertical loading device

The vertical loading device can be equipped with an integrated scale.

On request for all Mixers, Vacuum-Mixers and Mixer-Grinders

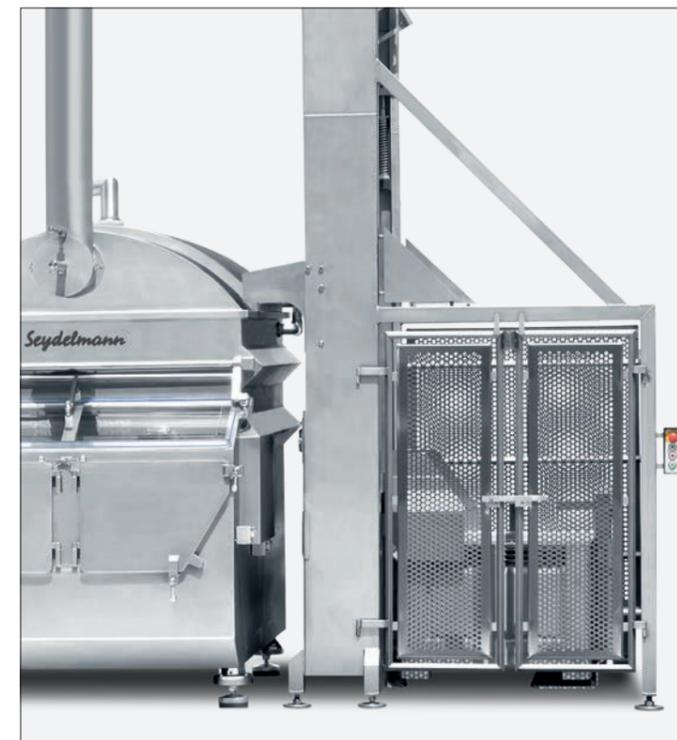


Loading device for large containers

The loading device for large containers allows a quick, efficient loading and can be customized to suit different container sizes.

The loading device for large containers comes as standard with a ring fence or alternatively with a light barrier.

On request for all Mixers, Vacuum-Mixers and Mixer-Grinders



Loading device for large containers with safety doors



Loading device for large containers with light barriers

Separating sets



Separating set

The separating set improves the meat quality and saves time during deboning. Gristle and sinew, etc. do not have to be cut out. The separating set sorts out a great portion of the hard components in meat. No blocking of the cutting set as the hard particles are removed automatically. Therefore improved throughput with clearest cut. The meat quality is upgraded by one to two quality levels (GEHA). Ideal for collagen reduction. Removed sinew material is deep-frozen and chopped in a cutter to a fine emulsion that can be added to certain products.

On request for all Mixer-Grinders



Pneumatic separating device

When using the separating set, the pneumatic separating device ensures an even more exact and precise control of separating and sorting out sinew and cartilage. The pneumatic separating device controls the desired flow with a ball valve (separate compressed air connection required). This improves the separating result even more. The separating outlet device is very compact and hygienic; the product flow is not hindered. The newly developed separating set works with a pneumatic cylinder. As a result, no dead spaces arise. The interval time between opening and closing the valve can be set individually, as required. The transparent discharge hose allows checking the quality of the discharged product continuously.

On request for all Mixer-Grinders



Separating set



two-stage separating set

two-stage separating set

The two-stage separating set separates the material in two stages. Similar to a conventional separating set the hard particles, sinew and cartilages are sorted through the proven system and transferred to the center of the cutting set. There it is not discharged through an outlet device but transferred into a second smaller grinding head. Inside this second separating set the material is sorted again thus less meat and fat is separated through the separating set still making sure all hard particles, sinew and cartilage have been removed.

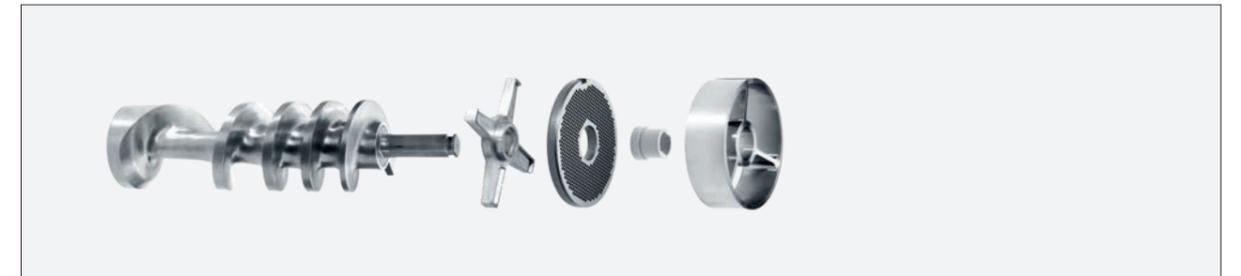
On request for all Mixers and Mixer-Grinders of sizes V250 or W300

Cutting sets

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Standard cutting set 3-pieces



Cutting set for soft or pre-reduced material 2-pieces (Enterprice-System)



Standard cutting set 5-pieces



Cutting set for dry sausage



Cutting set for cooked material 4-pieces



Re-cutting knife

The re-cutting knife is placed directly after the last hole plate on the grinder outlet. It helps to increase the quality of dry sausage, inclusion meat and “Bratwurst”, for example.

It re-cuts meat that comes out of the knife set in strands or threads, thereby ensuring a uniform grain size.

Production lines

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Individual complete solutions

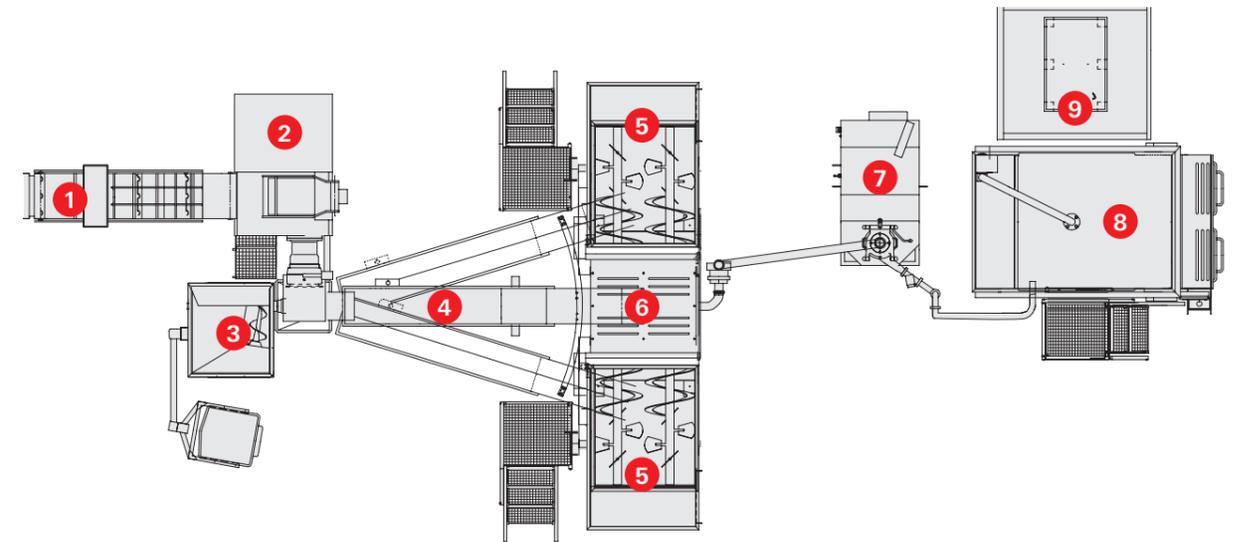
Fully and partly automated production lines are planned, designed, and manufactured as complete solutions for a wide variety of products in the food industry. The project planning is individually tailored to the needs and expectations of each customer.

The individual machines are controlled in an automated series and are perfectly coordinated with one another. The degree of automation and the interfaces can be determined individually. The complete production can be fully automated and controlled by one single person from a central operating terminal.

All steps of the automated process are carried out ensuring the highest quality and efficiency of production, including precutting, cutting, fine cutting, emulsifying and mixing under vacuum, standardizing,

heating of the material, gas-flushing and cooling with carbon dioxide (CO₂)/liquid nitrogen (LN₂) and the analysis of the material by near infra-red or x-ray measurement.

A fully automated production provides a significantly higher throughput and a uniform quality of the final product.



- 1 Conveyor belt with cross flights and metal detector
- 2 Frozen Meat Grinder
- 3 Automatic Grinder with integrated hydraulic loading device
- 4 Screw conveyor, moveable
- 5 Mixer with working platform
- 6 Hopper with emulsion pump and pipework
- 7 Konti-Kutter
- 8 Vacuum-Mixer with working platform
- 9 Loading device for large containers





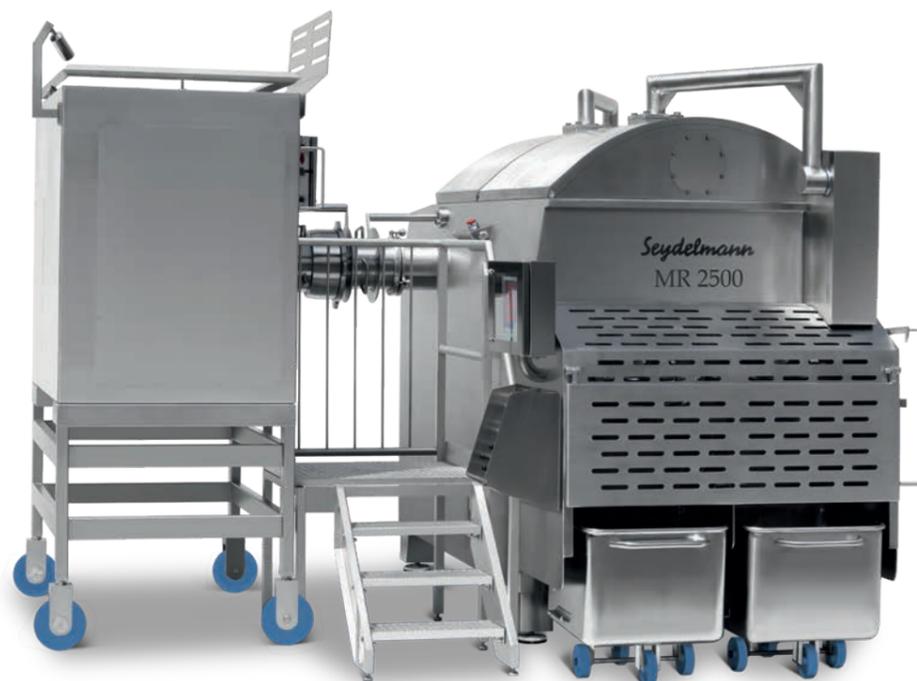
Production Line with two Vacuum-Mixers VMR 4700 with loading device for large containers and Emulsifier KK 250 AC-6

Mixer and Konti-Kutter with emulsion pump



Mixer MR 2500 and Konti-Kutter KK 250 AC-6 with emulsion pump

Grinder with direct connection to Mixer



Automatic Grinder AV 250 with a direct connection from grinder outlet to Mixer MR 2500

Safety

All Industrial Grinders conform to current accident prevention regulations and are self-evidently CE marked. The Mixers are constructed in accordance with the safety standard EN13570 and the Mixer-Grinders are constructed in accordance with the safety standard EN13570/EN12331.

Advanced Quality

Think innovatively, work efficiently, produce quality. Seydelmann implements 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.

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 which can call on the longest experience of manufacturing machinery for meat processing has been owned by one family over six generations. The

large number of long-serving and highly qualified employees ensure the company's wide ranging Know-How.

In the hands of the best

In the hands of the best is Seydelmann's motto. When developing our machines, we uncompromisingly place the highest demands on materials, technology, development, construction, design and hygiene, in order to be able to create a long-lasting top quality product that exceeds even the highest expectations.

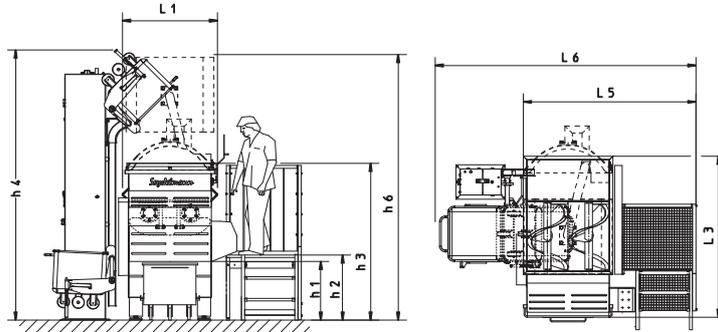
Sustainability

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.

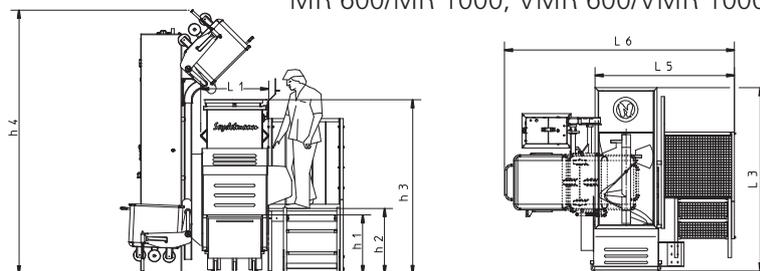
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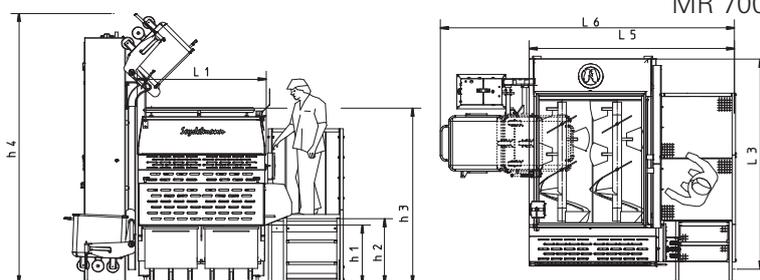
Technical data



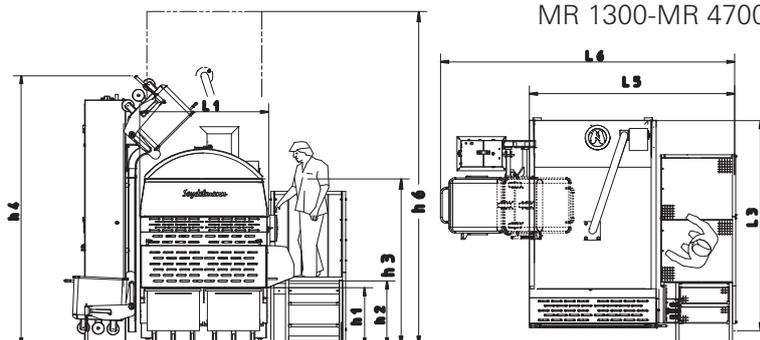
MR 600/MR 1000, VMR 600/VMR 1000



MR 700



MR 1300-MR 4700



VMR 1300-VMR 4700

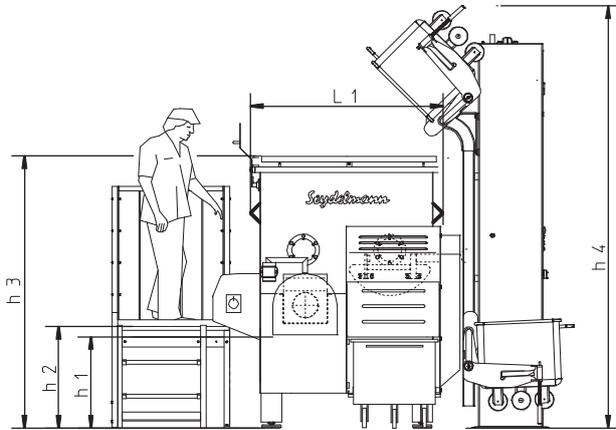
Mixers and Vacuum Mixers

TYPE	2 mixing motors each kw	mixing capacity in kg (approx.)	hopper capacity in ltrs. (approx.)	min. width of door	dimensions in mm											weight in kg netto	weight with loading device in kg netto
					L ₁	L ₃	L ₄	L ₅	L ₆	h ₁ ≤	h ₂	h ₃	h ₄	h ₆			
MR 600	2.6/3.2	325	580	1180	1150	1910	-	2150	3220	750	800	1910	3320	-	1250	1550	
MR 1000	2.6/3.2	550	990	1180	1150	2460	-	2150	3220	750	800	1910	3320	-	1400	1700	
VMR 600	2.6/3.2	325	580	1180	1150	1910	-	2150	3220	750	800	1840	3320	3250	1530	1830	
VMR 1000	2.6/3.2	550	990	1180	1150	2460	-	2150	3220	750	800	1840	3320	3800	1680	1980	
MR 700	1 Misch-motor 6.5/8	350	650	880	850	2200	-	1760	2820	750	800	2120	3320	-	1200	1500	
MR 1300	6.5/8	700	1300	1580	1550	2200	-	2500	3520	750	800	2120	3320	-	1750	2050	
MR 1800	6.5/8	1000	1800	1580	1550	2570	-	2500	3520	750	800	2120	3320	-	2050	2350	
MR 2500	6.5/8	1400	2500	1580	1550	3120	-	2500	3520	750	800	2120	3320	-	2300	2600	
MR 3500	13/17	2300	3500	1950	1920	3050	-	2800	3520	750	800	2040	3320	-	2600	2900	
MR 4700	15/20	3000	4700	1950	1920	3550	-	2800	3520	750	800	2040	3320	-	3100	3400	
VMR 1300	6.5/8	700	1300	1580	1550	2200	-	2500	3520	750	800	2050	3320	3750	2030	2330	
VMR 1800	6.5/8	1000	1800	1580	1550	2570	-	2500	3520	750	800	2050	3320	4120	2330	2630	
VMR 2500	6.5/8	1400	2500	1580	1550	3120	-	2500	3520	750	800	2050	3320	4670	2580	2880	
VMR 3500	10/13.5	2300	3500	1950	1920	3050	-	2800	3820	750	800	1970	3320	4000	2880	3180	
VMR 4700	15/20	3000	4700	1950	1920	3550	-	2800	3520	750	800	1970	3320	4500	3380	3680	

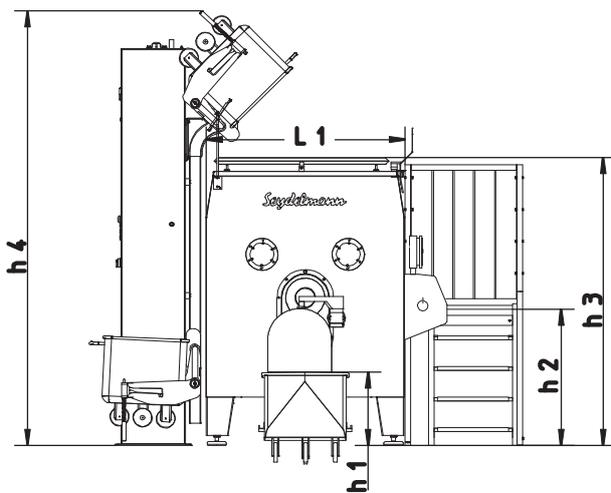
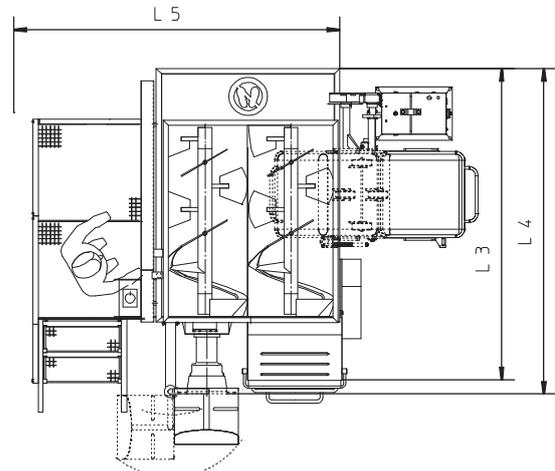
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Technical Data

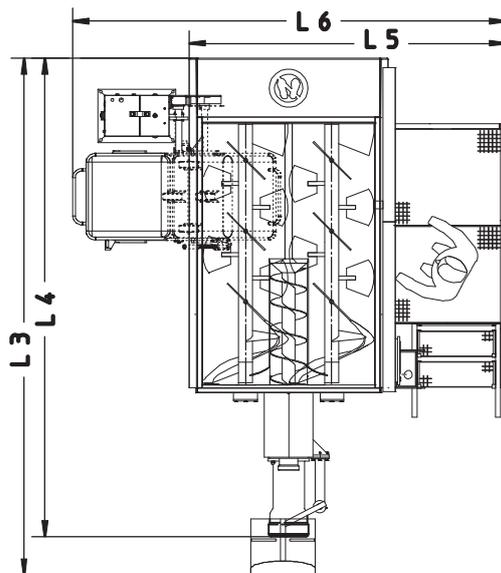
Seydelmann



MRG 1300, MRU 1300, MRG 1800, MRU 1800



AMR 1800/200, AMR 1800/250, AMR 2500/250, AMR 2500/300, AMR 3500/250, AMR 3500/300



Mixer-Grinders

TYPE	main motor		mixing capacity in kg (approx.)	hopper capacity in ltrs. (approx.)	min. width of door	dimensions in mm										weight in kg	
	kw	2 mixing motors each kw				L ₁	L ₃	L ₄	L ₅	L ₆	h ₁ ≤	h ₂	h ₃	h ₄	h ₆	netto	weight with loading device in kg
MRG 1300	18/29	6.5/8	700	1300	1580	1550	2080	2160	2550	3520	750	800	2120	3320	-	1950	2250
MRU 1300	25/37	6.5/8	700	1300	1580	1550	2080	2180	2550	3520	750	800	2120	3320	-	1950	2250
MRG 1800	18/29	6.5/8	1000	1800	1580	1550	2450	2530	2550	3520	750	800	2120	3320	-	2250	2550
MRU 1800	25/37	6.5/8	1000	1800	1580	1550	2450	2550	2550	3520	750	800	2120	3320	-	2250	2550
AMR 1800/200	38/75	6.5/8	400-1000	1800	1600	1550	3620	3140	2500	3520	750	1200	2400	3420	-	4100	4400
AMR 1800/250	45/90	6.5/8	400-1000	1800	1600	1550	3730	3250	2500	3520	750	1200	2400	3420	-	4100	4400
AMR 2500/250	45/90	6.5/8	500-1400	2500	1600	1550	4300	3800	2500	3520	750	1200	2400	3420	-	4500	4800
AMR 2500/300	45/90	6.5/8	500-1400	2500	1600	1550	4300	3800	2500	3520	750	1200	2400	3420	-	4500	4800
AMR 3500/250	45/90	13/17	900-2000	3700	2050	1920	4300	3800	2900	4100	750	1300	2550	3600	-	6000	6300
AMR 3500/300	45/90	13/17	900-2000	3700	2050	1920	4300	3800	2900	4100	750	1300	2550	3600	-	6000	6300

Dimensions/data not binding. Alterations reserved.

Mixers Mixer-Grinders

Seydelmann  Gegr. 1843

Maschinenfabrik Seydelmann KG

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