Mixer
Mixer-Grinders

Seydelmann

Maschinenfabrik Seydelmann KG

SALES OFFICE
Hölderlinstraße 7-9
DE-70174 Stuttgart
Telefon: +49 711 29 95 21
Telefax: +49 711 29 95 20
E-mail: sales@seydelmann.com

FACTORY
Burgstallstraße 1-3
DE-73431 Aalen/Württ.
Telefon: +49 7361 565-0
Telefax: +49 7361 35951
E-mail: aalen@seydelmann.com

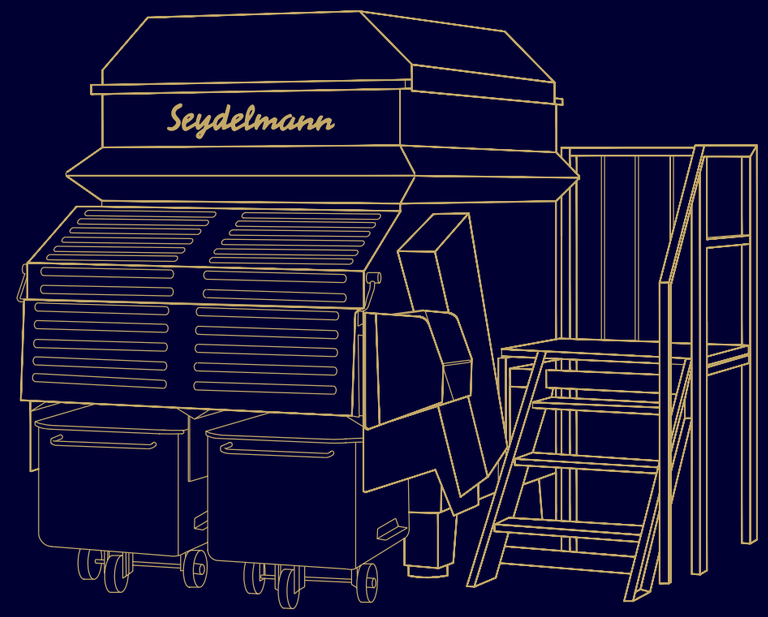
Internet: http://www.seydelmann.com

Gegr. 1843

Seydelmann

In the hands of the best

Mixer
Mixer-Grinders



Seydelmann Mixers P 450, P 500, P 750, P 1000, P 1500, P 2000, P 3000, P 4000

Table of contents

Mixer technology

Mixers are ideal machines to mix pre-ground meat and fat with salt, nitrite, spices or additives for the production of hamburger, coarse frying sausage, coarse spreading sausage, kebab, various types of raw sausage, vegetables, cheese and salads.
A cutter or grinder may be installed before or after the mixers.

Mixer as standardization unit

A weighing device at the mixer determines the current weight of the mixture in the machine. The necessary corrections are added relative to this weight. Therefore, the mixers are essential in production in order to strictly adhere to the composition of recipes.
When employed in production lines, mixers are often used as buffers between the grinder and cutter. While a batch is being cut in the cutter, the upstream mixer simultaneously mixes and standardizes the next batch. This achieves optimised work processes and the shortest working times possible. If the mixer is installed upstream of a batch preparation system, it mixes the various types of meat. The batch preparation system is supplied by mobile containers, belt conveyors or screw conveyors from the mixer.

Mixer P 1500

Mixers with 580, 650, 990, 1300, 1800, 2500, 3800, 4700 Liters hopper volume

Mixer P 2000

On the new Seydelmann Konti-Kutter type KK 250 AC-6 made of solid stainless steel (an emulsifier with a completely new hole plate/cutting plate system), the pre-mixed material is being vertically sucked through a system of successively-arranged hole plates/cutting plates.

Mixers as tumblers

Mixers from Seydelmann can also be used as tumblers, with the major advantage that products can be cooled easily in the mixer.

The vacuum-mixer

The use of vacuum mixers results in the volume of the meat cell being increased. Intensive mixing opens the cells on the meat surface. Liquid cell plasma comes out and covers the surface of the meat pieces as a binding protein film.

In this manner, additives can best be absorbed by the meat cell. The taste of the raw goods is significantly improved in this manner. The mixed goods are heated only little due to the use of vacuum. In further processing, the cut

Vacuum-mixer PV 450 with unloading into one trolley

material becomes denser and clearer, as the mixed product has fewer air inclusions.

Chemical effect of vacuum

Considerably longer freshness and shelf life of the meat products. The low amount of air inclusion, primarily in fine-grained mixtures, results in significantly improved taste preservation in the product. Due to the small amount of oxygen from air entrained in the vacuum-mixer, the reaction of oxygen with fatty acids (fat oxidation) is significantly reduced. The product has better keeping qualities.

Vacuum-mixer PV 750 with loading device

Vacuum-mixer PV 1500 with hydraulic cover

Biological effect of vacuum

Due to the exclusion of oxygen, respectively the replacement of residual atmosphere by chemically and biologically neutral nitrogen, the propagation of germs is greatly suppressed. Aroma degradation and ageing of sausage starts significantly later. Longer shelf life.

The 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 in the cutter. The cooking system results in about 10 % material gain. Complete retention of taste, aroma and proteins that would otherwise be lost by the boiling water. Due to the extremely short cooking time in the cooking-mixer at an ideal temperature, the taste and aroma-forming constituents 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 or fillers of various kinds, etc..

Mixer with cooler

Ideal processing temperatures can be achieved by adding LIC (carbon dioxide) or LIN (liquid nitrogen) using a temperature measuring device. The mixer with cooler then replaces refrigerator capacity in an ideal manner. It creates the ideal thermal conditions for all further processing.

Technic of Mixers / Vacuum-mixers / Cooking-mixers

Mixer sizes

Mixers / Cooking-mixers

- ***P 450 with 580 l hopper volume***
- ***P 500 with 650 l hopper volume***
- ***P 750 with 990 l hopper volume***
- ***P 1000 with 1300 l hopper volume***
- ***P 1500 with 1800 l hopper volume***
- ***P 2000 with 2500 l hopper volume***
- ***P 3000 with 3800 l hopper volume***
- ***P 4000 with 4700 l hopper volume***

Vacuum-mixers

- ***PV 450 with 580 l hopper volume***
- ***PV 750 with 990 l hopper volume***
- ***PV 1000 with 1300 l hopper volume***
- ***PV 1500 with 1800 l hopper volume***
- ***PV 2000 with 2500 l hopper volume***
- ***PV 3000 with 3800 l hopper volume***

Mostly of solid stainless steel. 2 mixing axles each driven by 2-speed 3-phase gear motor, independently switchable forward and reverse, at high and low speed. The P 500 with one mixing axle. The product is optimally and gently mixed by the special arrangement and position of the paddles.
In the discharge direction, short spirals are mounted to the stainless housing, the interval time is set and displayed, i.e. the shift from forward to reverse gear, as well as the total mixing time. Program control with adjustable interval and mixing time for a maximum of 10 processes, or program control to program various mixing speeds and mixing intervals, for LIC or LIN injection, for vacuum or total mixing time is available on request.

Digital control SPM 27

Large digital display for easy operation and programming (on request special execution). Data input and storage of up to 10 programmes. Pre-adjustable intervals and mixing time, mixing speeds and mixing intervals, total mixing time, temperature and vacuum.

Digital control SPM 27

Frequency control

The mixing shafts can be equipped with a stepless frequency drive unit. By means of this frequency drive the optimised speeds can be pre-selected for the mixing and unloading.

Discharge

Discharge via the pneumatically operated discharge flaps is possible only with the loading bin BW 200 pushed in.

Working platform

The mixed goods can easily be controlled from a stainless safety working platform normally mounted on the right – mounting on the left 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.

Loading

The mixers are loaded either by means of a column twist, conveyor belt or screw conveyor, each as optional equipment.

Optionally, the column hoist is mounted to the machine or to the floor (exclusively in the design with weighing unit). It is fitted to accept loading bins BW 200.

Processing special products

The mixers can be equipped with a stronger gear ration for processing special products, such as cheese, kebab or dough.

Weighing unit with batch preparation unit

On request, the mixers can be fitted with a weighing unit to determine the hopper content, or with a weighing unit with batch preparation unit and programmable discharge.

Hopper covers

On request, special, hydraulically operated hopper covers are available for each mixer for all requirements: one cover, for example for dust-producing products, or a hopper cover to attach feeding connections for liquid nitrogen or carbon dioxide. For the P 1000 and P 1500 mixers, this is also available in combination with sliding hopper walls. For low room heights, a special, 2-piece cover with hydraulic operation is available for all mixers from P 3000.

Cooling

As a standard all mixers are prepared with connections for cooling with either liquid nitrogen (LIN) or LIC. In addition, there is an expansion chamber above the hopper.

Heating

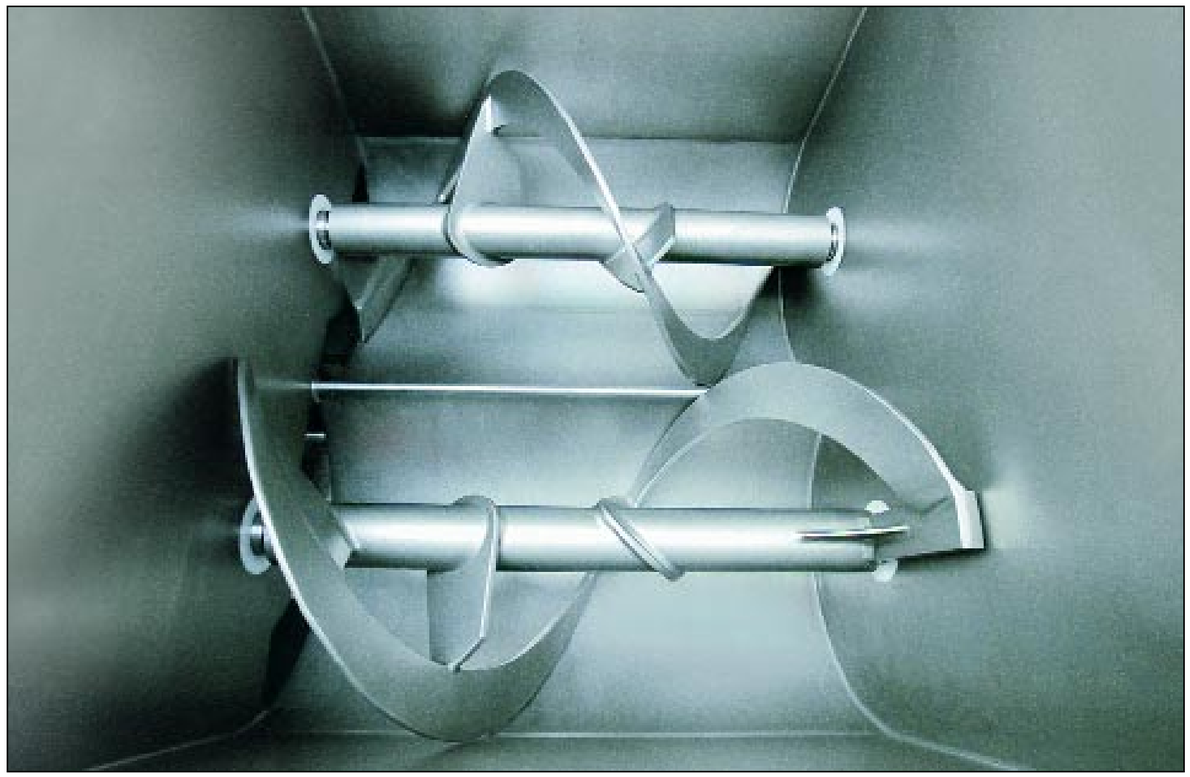
The mixers type P 500, P 1000 and P 1500 can be additionally equipped with direct steam heating. These executions with direct steam heating by LIC or LIN are equipped as a standard with the temperature control system PT 100 with digital display and pre-adjustable switch-off. The heating will be switched off automatically when the pre-adjusted temperature is reached.

All cooking mixers are equipped with nozzles for direct heating of the product for the connection of low pressure steam.

Details mixers

Kebab

The mixer is loaded with beef, veal or turkey pre-ground to 2 or 3 mm. During the mixing process, salt, spices, additive and yoghurt, milk and water if desired are added and intensively mixed within a short period of time. Due to the special mixing geometry of the Seydelmann mixer, intensive and stable blending is achieved within a short period of time. Beef fat is mixed in very homogeneously. It is no longer visible in the cut. This produces a Kebab-Spit of the best, smooth consistency, no grease drips out on the grill, the knife cuts optimally.



Mixing shafts with spirals

Operator comfort

Location on a clearly ordered machine control panel. Easily identified symbols for all machine functions. Simple handling.

Sliding hopper walls on both sides for mixer P 1000 and P 1500

Moving the hopper walls towards the middle of the mixer allows thorough and safe cleaning of the hopper from both sides without problems. Only a minimum of material is lost if batches are changed frequently.

Hygiene

All machines are mostly made of stainless steel and welded without joints. All edges are rounded. The drives of the mixer shafts, gear motors, pneumatics and pneumatic cylinders of the discharge flaps are covered. Easy cleaning is possible.

Safety

The mixers comply with the accident prevention regulations and are certified to CE.

Quality advantage

Innovating thinking, economic acting, quality production; we will continue to safely meet the highest demands in the future. We have the sought-after certificate to ISO 9001.

Hopper walls in cleaning position

Hopper walls in working position

Cooking-mixer P 500 with 650 ltrs. hopper capacity

Seydelmann Mixer-Grinders PG 160, PG 161, PU 200, PU 201

Mixer-grinders PG 161/201 and PU 160/200 with 1.300 ltrs. and 1.800 ltrs. hopper volume with floormounted loading device for loading trolleys BW 200 (unloading as a standard on the left hand side, on request on the right hand side)

Technic of mixer-grinders

- ***PG 160 with hole plate 160 mm dia. and 1800 l hopper volume***
- ***PG 161 with hole plate 160 mm dia. and 1300 l hopper volume***
- ***PU 200 with hole plate 200 mm dia. and 1800 l hopper volume***
- ***PU 201 with hole plate 200 mm dia. and 1300 l hopper volume***

Mostly of solid stainless steel.
2 mixing axles each driven by 2-speed 3-phase gear motor, independently switchable forward and reverse, at high and low speed. The product is optimally and gently mixed by the special arrangement and position of the paddles. In the discharge direction, short spirals are mounted to the paddle axles for gentle and fast discharge. At the display, which is separately mounted in a stainless housing, the interval time is set and displayed by 2 time settings, i.e. the shift from forward to reverse gear, as well as the total mixing time. Program control with adjustable interval and mixing time for a maximum of 10 processes, or program control to program various mixing speeds and mixing intervals, for LIC or LIN injection, for vacuum or total mixing time on request.

Discharge

Discharge via the pneumatically operated discharge flaps, or via the grinder housing with 160 or 200 mm hole plate diameter is possible only with the loading bin BW 200 pushed in. This allows the use of the machine both as a mixer-grinder or a rational mixer.

This offers options that otherwise are only available with two separate machines. For example, premixing, standardization and grinding, then reloading into the machine for mixing with additives, then discharge through the pneumatically operated discharge flap.

The screw, screw housing and bayonet lock of the mixer-grinder are made of solid stainless steel. Mechanical wear of the stainless steel screw housing is largely prevented by a special hardening process of the internal housing surfaces. The work screw is fitted with a short-term reverse gear. This allows to return small quantities of the mixing product to the mixing process.

Working platform

The mixed goods can easily be controlled from a stainless safety working platform normally mounted on the right – mounting on the left 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.

Loading

The mixer-grinders are loaded either by means of a column hoist, conveyor belts or screw conveyors, each as optional equipment. On request, the column hoist is mounted to the machine or to the floor (exclusively in the design with weighing unit). It is fitted to accept loading bins BW 200.

Hopper covers

On request, special, hydraulically operated hopper covers are available for each mixer for all requirements: one cover, for example for dust-producing products, or a hopper cover to attach feeding connection for liquid nitrogen or carbon dioxide. For all mixer-grinders, this is also available in combination with sliding hopper walls.

Application example: Westphalian sausages

Cooled pork is mixed and coarsly pre-ground in the mixer-grinder. Then the grinding set is changed to a 5 mm hole plate and 7-winged outside cutting knife. The meat is returned to the mixer-grinder and mixed with salted pork and spices. Grinding is continued as long as the meat has little binding. This gives the sausages a good and clear cut.

Coarse sausage for spreading is made in the same manner, but using the 3 mm hole plate and 9-winged outside cutting knife.

Nuremberg sausage, frying sausage, Krakow and other cooked sausages with coarse show meat can be made in the same manner.

The sausages produced in this manner meet the highest demands for appearance and quality. Working with the mixer-grinder is rational, of high quality and cost-efficient.

Weighing unit for the hopper content

On request, the mixers, vacuum-mixers, cooking-mixers and mixer-grinders can be fitted with a weighing unit with digital display to accurately determine the weight of the hopper content. This allows the adding of individual constituents in sequence in order to exactly achieve the desired composition of the entire mixture. As the desired mixture is maintained without deviations, exactly calculable production is possible. A uniform quality standard is ensured.

Weighing unit with batch preparation unit

A weighing unit with batch preparation unit and programmed discharge is also available on request. Along with indication of the hopper content, it also allows batch and weight-oriented discharge under program control. The current weight of the mixture is determined by the weighing unit of the mixer. The nominal weight of spices and additives are accurately calculated and displayed relative to this weight. At the spice scale, which is available as optional equipment on request, the quantities displayed are added manually and then acknowledged at the terminal. A total of 5 recipes, each with up to 10 different components can be saved with their compositions in percent.

Operator comfort

Location on a clearly ordered machine control panel. Easily identified symbols for all machine functions. Simple handling.

Hygiene

All machines are mostly made of stainless steel and welded without joints. All edges are rounded. The drives of the mixer shafts, gear motors, pneumatics and pneumatic cylinders of the discharge flaps are covered. Easy cleaning is possible.

Safety

The mixer-grinders comply with the accident prevention regulations and are certified to CE.

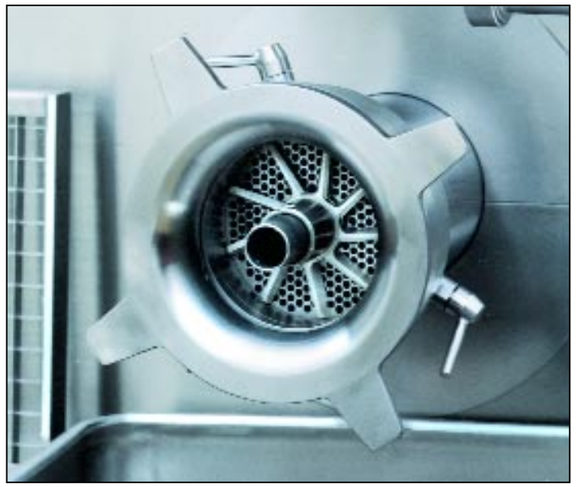
Quality advantage

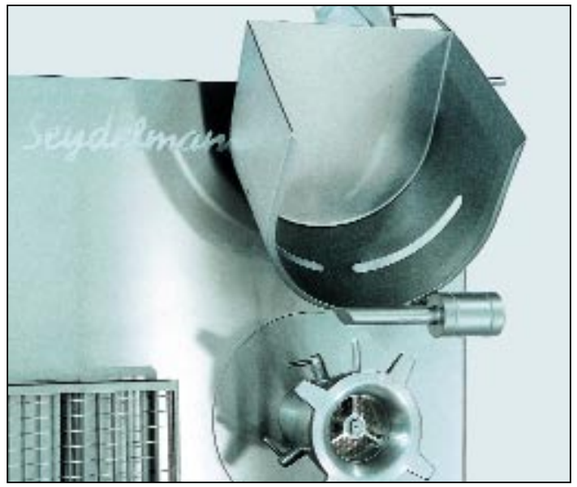
Innovating thinking, economic acting, quality production; we will continue to safely meet the highest demands in the future. We have the sought-after certificate to ISO 9001.

Useful accessories for Seyd elmann grinders

*The aftercutting knife**

The aftercutting knife runs on the last hole disk. Meat leaving the cutting set in strands or strings during grinding is cut by it again. This grains and mixes it to exactly the same size. Ideal for marinated meat, raw sausage, frying sausage, medium-long keeping sausage, etc..





*Outlet hand guard**

According to the European draft standard EN 12331, the outlet hand guard is required for operation with end hole disks ≥ 8 mm hole diameter.

*The aftercutting device**

The aftercutting device drives the aftercutting knife independently from the grinder screw via a separate motor. The speed of the aftercutting device can be steplessly adjusted dependent on the desired length. For a higher speed, the grain is shorter, whereas it is longer at a lower speed. It provides an exactly uniform grain with different raw materials.

Separating set

Grinding separator kit

*The holding device**

The holding device for the precutting plate (kidney plate) allows a smooth and friction-free cut. The cutting set cannot be compressed by the high pressure of the flowing meat. The machine runs softer, the power consumption declines. The wear of the knives and plates is reduced to a minimum.

*Pneumatic unloading device**

The pneumatic unloading device, used with the separating kit or grinding separator kit, ensures even more exact and precise control of separation and sorting out sinew and meat. The pneumatic unloading device controls the desired flow by means of a ball valve (separate compressed air connection required). The interval time between opening and closing of the valve can be set individually as required. The transparent discharge hose allows you to continuously check the quality of the discharged product.

*Separating set**

Separating set for the improvement of the meat quality. Gain of time during deboning. Gristle and sinew, etc. do not have to be cut out. The separating kit sorts out a great portion of the hard components in meat. The grinding separator kit allows you to simultaneously grind the sorted-out hard components. No blocking of the cutting set as the hard particles are removed automatically. Therefore improved throughput with clearest cut. The meat quality ist upgraded by 1 to 2 quality levels (GEHA).

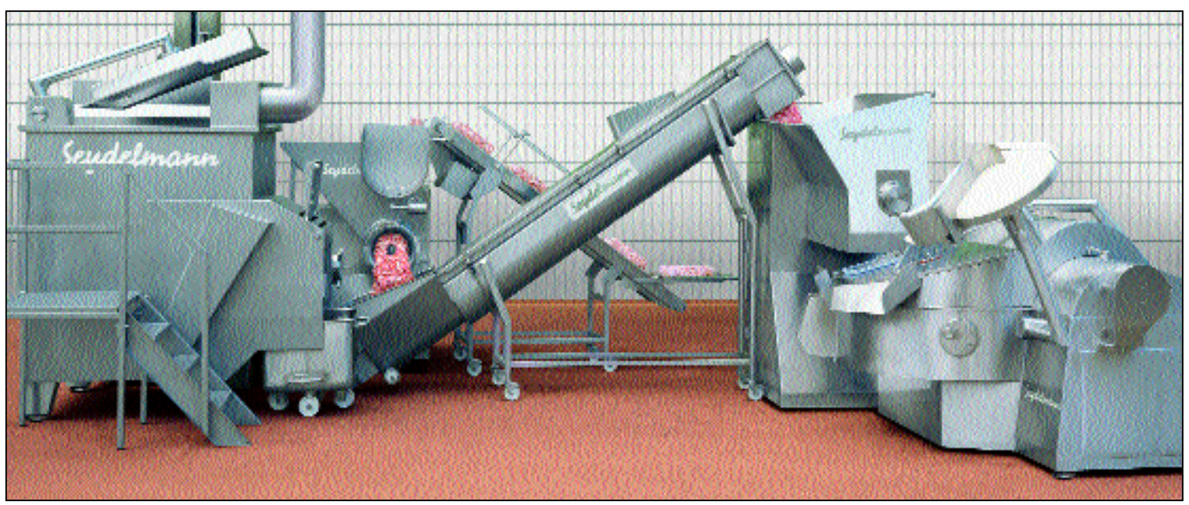
*optional equipment on request

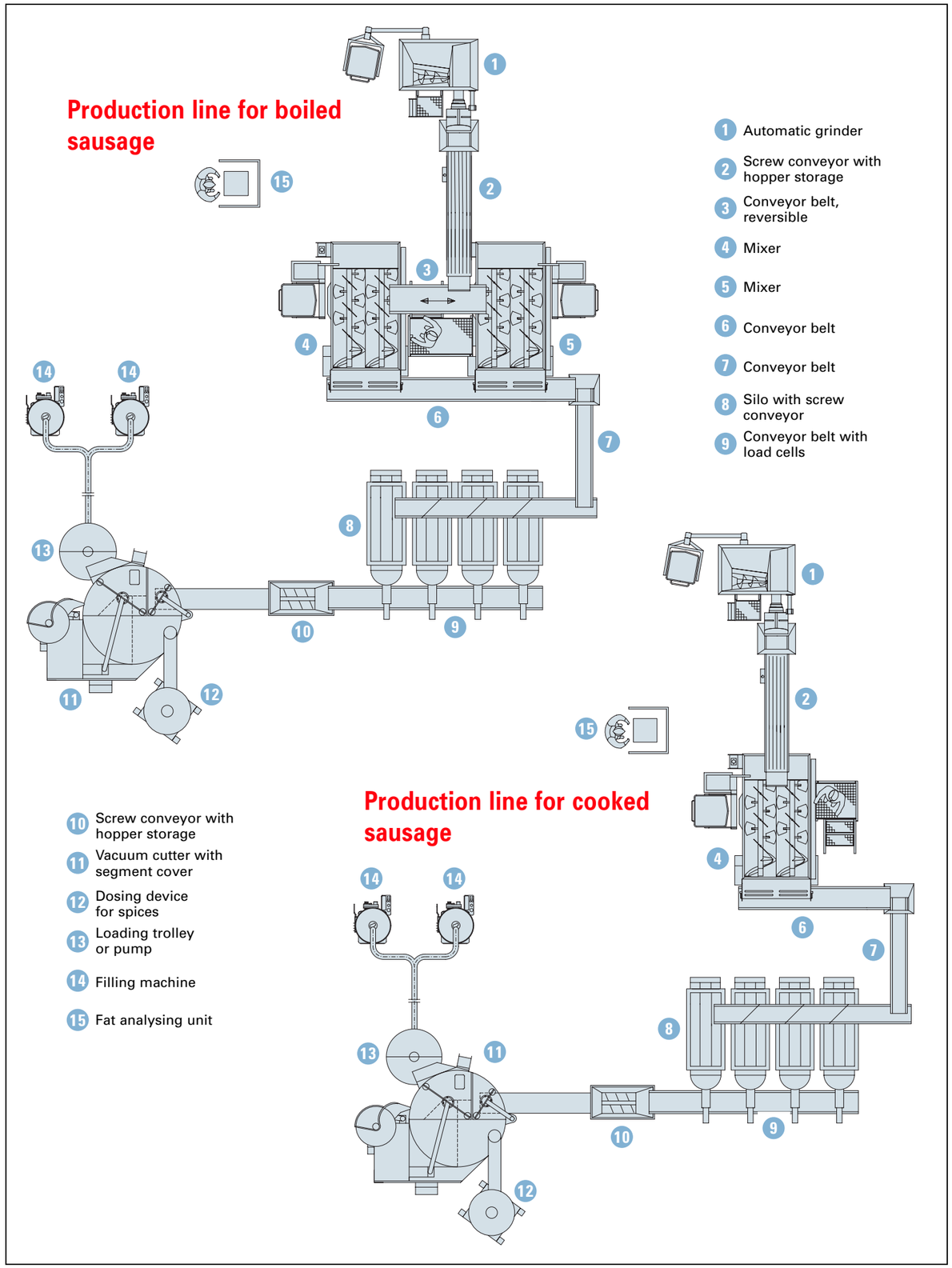
Seydelmann automatic processing line

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

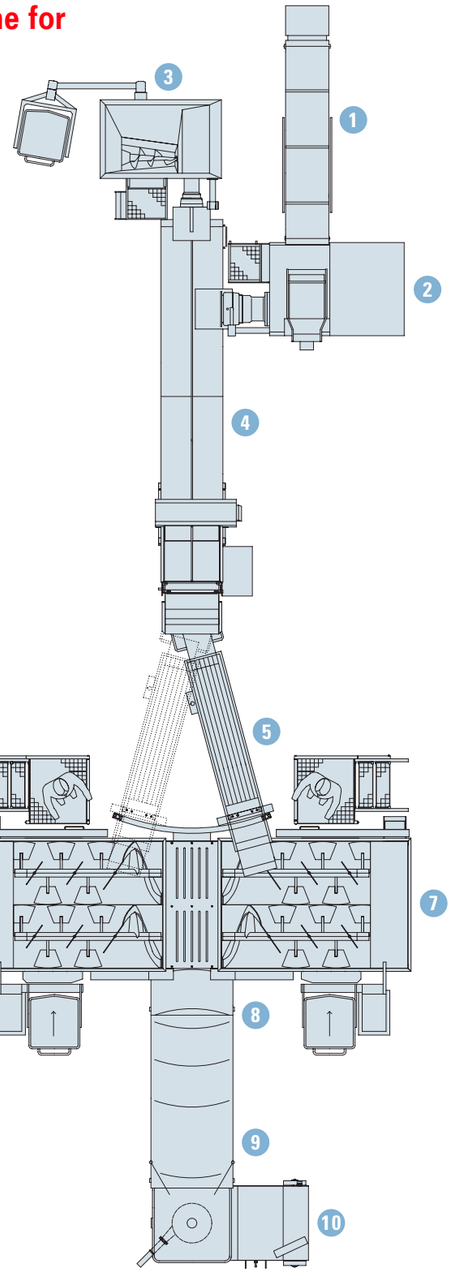
Ideal integration within automatic processing lines

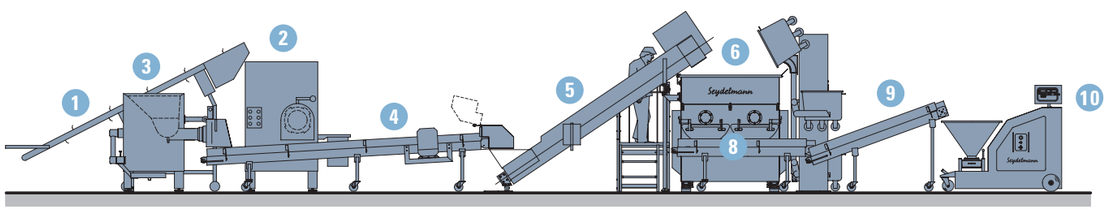
All our mixers, vacuum-mixers, cooking-mixers and mixer-grinders can be connected via conveyors. As a consequence, all products, e.g. boiled, dry and cooked sausages, can be produced automatically.





Continuous production line for boiled sausage





1. Conveyor belt with flights
2. Frozen meat grinder
3. Automatic grinder
4. Conveyor belt with metal detector
5. Screw conveyor, swivable
6. Mixer
7. Mixer
8. Conveyor belt
9. Inclined conveyor belt
10. Konti-Kutter
11. Fat analysing unit

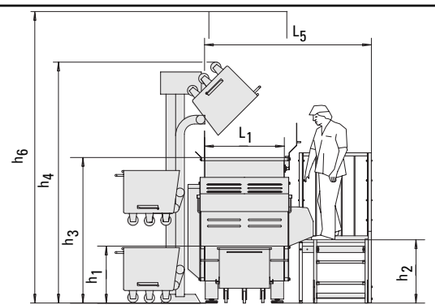
Different mixer types and different varieties

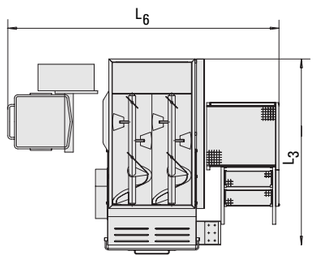
types	standard execution			additional features							
	2 mixing axles	1 mixing axle	vacuum	heated by direct steam	cooling LIN / LIC	sliding side walls	stop of hopper cover: rear	stop of hopper cover: split	stop of hopper cover: undivided	mixing capacity (meat in kgs) (approx.)	hopper capacity (in ltrs) (approx.)
1. MIXERS											
P 450	●	-	-	○	○	-	○	-	on request	325	580
P 500	-	●	-	○	○	-	○	-	on request	350	650
P 750	●	-	-	○	○	-	○	-	on request	550	990
P 1000	●	-	-	○	○	○	○	-	on request	700	1300
P 1500	●	-	-	○	○	○	○	-	on request	1000	1800
P 2000	●	-	-	○	○	-	○	○	on request	1400	2500
P 3000	●	-	-	○	○	-	○	○	on request	2300	3800
P 4000	●	-	-	○	○	-	○	○	on request	3000	4700
2. VACUUM - MIXERS											
PV 450	●	-	●	○	○	-	●	-	on request.	325	580
PV 750	●	-	●	○	○	-	●	-	on request	550	990
PV 1000	●	-	●	○	○	-	●	-	on request	700	1300
PV 1500	●	-	●	○	○	-	●	-	on request	1000	1800
PV 2000	●	-	●	○	○	-	●	-	on request	1400	2500
PV 3000	●	-	●	○	○	-	●	-	on request	2300	3800
3. MIXER - GRINDERS											
PG 161	●	-	-	○	○	○	○	-	on request	700	1300
PU 201	●	-	-	○	○	○	○	-	on request	700	1300
PG 160	●	-	-	○	○	○	○	-	on request	1000	1800
PU 200	●	-	-	○	○	○	○	-	on request	1000	1800

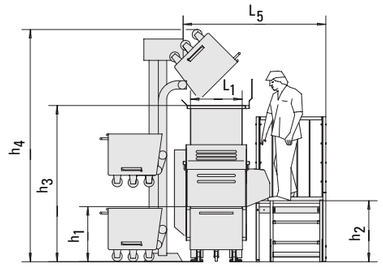
● standard execution (no additional costs)
○ additional features on request (available at additional costs)
- not available

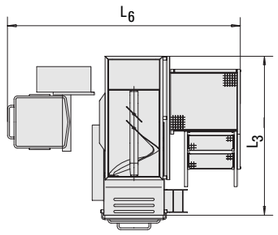
Technical Data

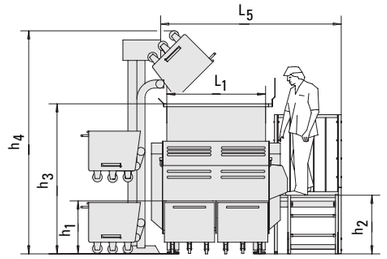
Worldwide Service !

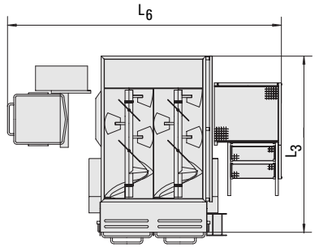


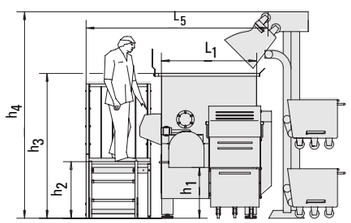


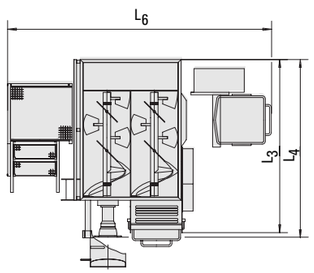


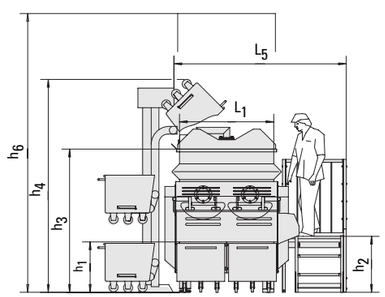


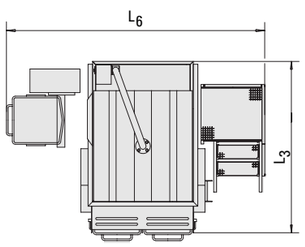












TYPE	mixing capacity in kgs (approx.)	hopper capacity in ltrs (approx.)	main motor kW	2 mixing-motors each kW	weight in kgs	weight with loading device in kgs	dimensions in cm L_1	L_3	L_4	L_5	L_6	h_1	h_2	h_3	h_4	h_6	min. width of door
P 450	325	580	-	2,6 / 3,2	1250	1550	110	191	-	215	330	75	80	184	305	-	110
P 750	550	990	-	2,6 / 3,2	1400	1700	110	246	-	215	330	75	80	184	305	-	110
PV 450	325	580	-	2,6 / 3,2	1530	1920	110	191	-	215	330	75	80	184	305	325	113
PV 750	550	990	-	2,6 / 3,2	1680	2070	110	246	-	215	330	75	80	184	305	380	113
P 500	350	650	-	1 mixing motor KW 6,5 / 8	1200	1500	78	220	-	176	290	75	80	205	305	-	78
P 1000	700	1300	-	6,5 / 8	1750	2050	145	220	-	250	360	75	80	205	305	-	145
P 1500	1000	1800	-	6,5 / 8	2050	2350	145	257	-	250	360	75	80	205	305	-	145
P 2000	1400	2500	-	6,5 / 8	2300	2600	145	312	-	250	360	75	80	205	305	-	145
P 3000	2300	3800	-	10/13,5	2600	2900	181	305	-	280	390	75	80	197	305	-	181
P 4000	3000	4700	-	15 / 20	3100	3400	181	355	-	280	390	75	80	197	305	-	181
PG 161	700	1300	18 / 29	6,5 / 8	1950	2250	145	208	216	255	360	75	80	205	305	-	145
PU 201	700	1300	25 / 37	6,5 / 8	1950	2250	145	208	218	255	360	75	80	205	305	-	145
PG 160	1000	1800	18 / 29	6,5 / 8	2250	2550	145	245	253	255	360	75	80	205	305	-	145
PU 200	1000	1800	25 / 37	6,5 / 8	2250	2550	145	245	255	255	360	75	80	205	305	-	145
PV 1000	700	1300	-	6,5 / 8	2030	2420	158	220	-	250	360	75	80	205	305	375	158
PV 1500	1000	1800	-	6,5 / 8	2330	2750	158	257	-	250	360	75	80	205	305	412	158
PV 2000	1400	2500	-	6,5 / 8	2580	3060	158	312	-	250	360	75	80	205	305	467	158
PV 3000	2300	3800	-	10/13,5	2880	3360	195	305	-	280	390	75	80	197	305	450	195

Dimensions/data not binding alterations reserved

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