

Seydelmann

In the hands of the best

Industrial Grinders

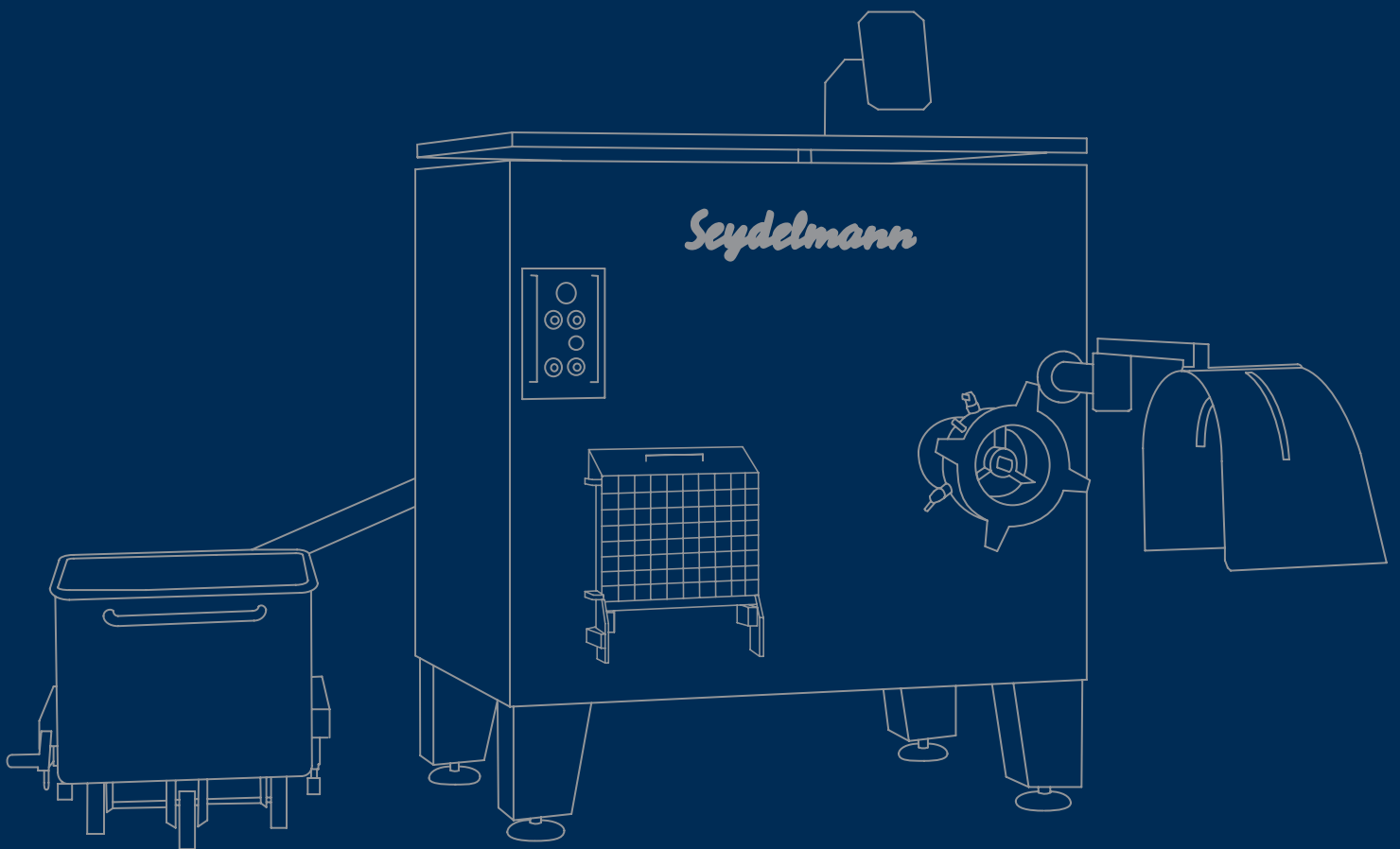




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Overview machine variant types

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Automatic Grinders

- Working worm at 90° to feeding worm
- Feeding worm wide and conical

Automatic Grinders K (Cheese)

- Working worm at 90° to feeding worm
- Enlarged feeding worm with crushing teeth, wide and conical
- Special hopper design

Automatic Mixing Grinders

- Working worm at 90° to feeding worm
- Feeding worm wide and conical
- Mixing unit with ribbons or paddles above the feeding worm

Mixing Grinders

- In-line working worm through hopper
- Mixing unit with arms or paddles above the working worm
- Mixing unit for mixing or as automatic feeder

Universal Grinders

- Working worm at 90° to feeding worm
- Feeding worm with breaking contour and cutting edge as well as very wide and deep windings

Frozen Meat Grinders

- In-line working worm through hopper
- Working worm with breaking contour and cutting edge as well as very wide and deep windings



Automatic Grinder AE 130/3 with integrated, hydraulic loading device and separating set

Perfection in detail

Seydelmann Industrial Grinders prove themselves by their very high output and the clear cut of the end product. Seamless welds and joins combined with the heavy duty stainless steel construction of the machine frame and hopper make these machines extremely robust, reliable and long-lasting.

All surfaces are polished by hand to a high quality finish and are designed with a slope. All edges are rounded off. As a result of the high quality finish the Industrial Grinders are very easy to clean and comply with the highest hygiene standards.

The working worm is driven directly by v-belts and no gear box is needed. The direct v-belt drive is very strong and is not susceptible to breakdown.

The electronic controls of the machine are built into the machine frame and are sealed against moisture ingress.

The machine frame is closed underneath and conforms to protection class IP 69 K. All Seydelmann Industrial Grinders are equipped with vibration resistant feet that are height adjustable and made from stainless steel.

The worm housing has a trapezoidal thread which will withstand the highest demands over a long period of time.

All Industrial Grinders are equipped with a worm ejector, which enables a quick and easy changeover of the working worm.

The outlet height of the Industrial Grinders is suited to the height of a standard 200 L trolley, although non-standard heights are also possible.

Well thought-out details like the mirror over the hopper, the interlocked safety step and the robust buttons, knobs and cross-switches of the control panel enable easy operation.

Automatic Grinder AE 130/3

The working worm and the feeding worm of the Automatic Grinder AE 130/3 each have a strong 2-speed drive.

The speeds of the working and feeding worm can be switched independently of one another.

As an option the feeding worm can be switched to work in reverse.



Automatic Grinder AG 160, AU 200, AV 250 with integrated, hydraulic loading device

**AE 130/3, AG 160,
AU 200, AV 250**

Hole plate diameter

130 mm, 160 mm, 200 mm and 250 mm.

Hopper content

400 l (AE 130/3 300 l).

On request 800 l or 1.000 l (not available for AE 130/3).

Drives

Two-speed working worm, three-speed feeding worm (AE 130/3 two-speed). On request frequency-controlled six-speed working worm and/or frequency-controlled four-speed feeding worm.

Application

Fresh meat, pre-broken frozen meat, cooked meat, fish, vegetables, fruit and other food products from -18 to 85 °C.

Output per hour

Up to 14.000 kg/h.



Automatic Grinders

Three speed working worm

The wide conical feeding worm is equipped with a powerful, three-speed drive and has a diameter up to 400 mm.

With its extremely wide windings it is able to grab large pieces of meat or fat e.g. whole pork bellies or beef primals and feed them straight into the working worm without bridging.

The right speed can be selected depending upon the raw material and its consistency and temperature.

Slow feeding speed

For processing firm, frozen, tough material or for using hole plates with very small holes.

Middle feeding speed

For fresh meat processing.

High feeding speed

For using hole plates with middle to large holes.

As an option, the feeding worm can be switched to run backwards so that circa 25% of the contents of the hopper can be mixed.

Two speed working worm

The particularly powerful two speed main drive of the working worm is almost wear and maintenance free.

Direct v-belt drive

The working worm is driven by v-belts and no gear box is needed. The v-belt drive is very strong and is not susceptible to breakdown.

First speed

The first speed is suitable for pre-cut frozen meat and fresh meat as well as for the production of coarse meat pieces, granulated meat and dry sausage for which the outside knife is added.

Second speed

The second speed reduces fresh meat, cooked meat, liver, vegetables and spinach evenly and reliably.

Six possible speed versions

The speeds of the feeding and the working worm can be adjusted separately.

Thus, there are six possible speed variants for each specific product available.

Ideal set up for temperature

The Automatic Grinder can be set up to both, high and low temperatures as well as to the dedicated hole plates.

Special transmissions are available for certain products such as vegetables.

Automatic Grinders K (cheese)

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**AE 130/3 K, AG 160 K,
AU 200 K, AV 250 K**

Hole plate diameter

130 mm, 160 mm, 200 mm and 250 mm.

Hopper content

400 l (AE 130/3 K 300 l).

On request 800 l or 1.000 l (not available for AE 130/3 K).

Drives

Two-speed working worm, three-speed feeding worm (AE 130/3 K two-speed). On request frequency-controlled six-speed working worm and/or frequency controlled four-speed feeding worm.

Application

Cheese, butter, fat blocks and similar food products.

Output per hour

Up to 8.000 kg/h.

Automatic Grinder K (cheese) AG 160 K, AU 200 K, AV 250 K with vertical loading device, 800 Liter hopper, raised outlet height for standard 300 L trolleys and hydraulic pressing device



Automatic Grinders K (cheese)

The Automatic Grinder K is manufactured for the requirements of processing cheese, butter and blocks of fat. The feeding worm is equipped with crushing teeth.

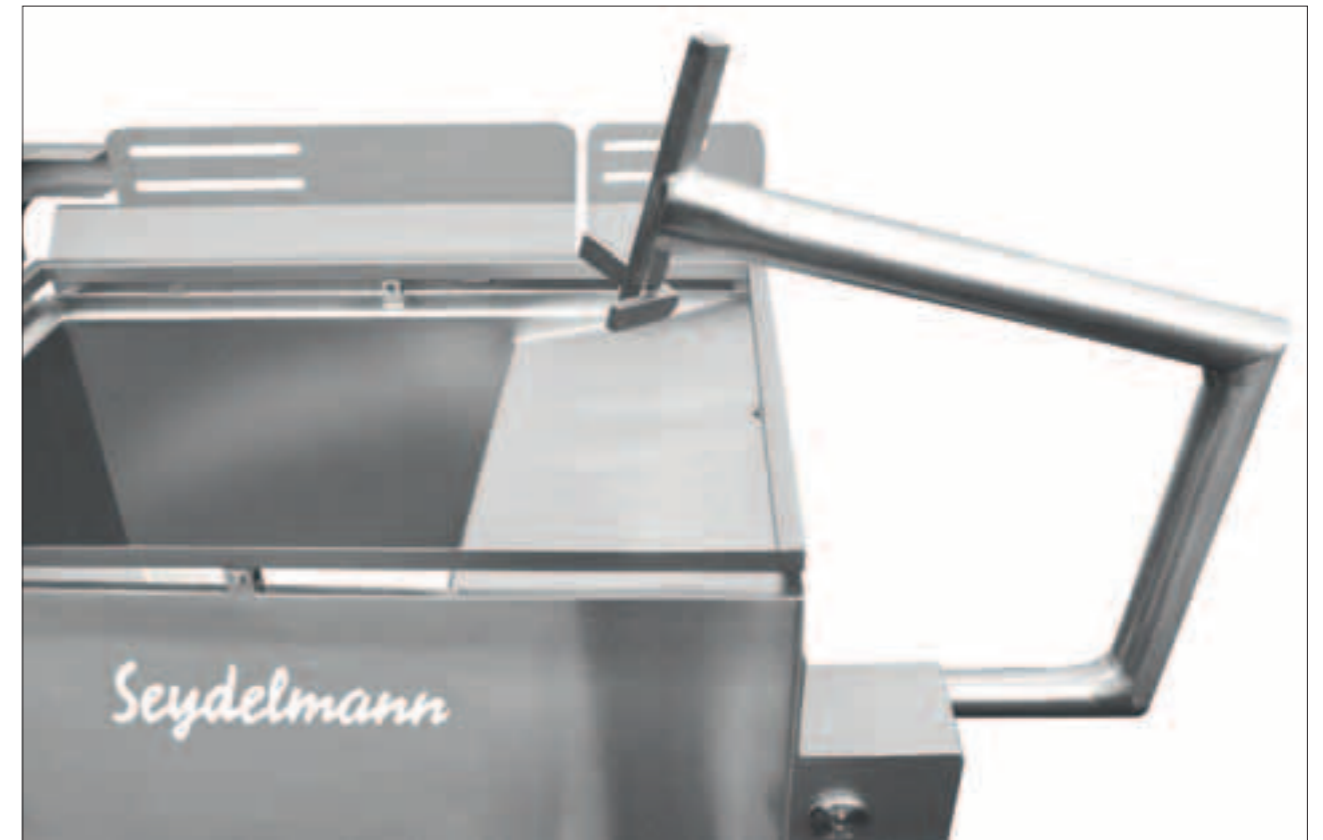
The hopper and the locking nut are specially designed for this application. The Automatic Grinder K is equipped with a two speed working worm and a three speed feeding worm.

There are therefore six speed variants. The suitable speed can be set according to the temperature and consistency of the raw material.

The machine is equipped with an anti-block unit and a reverse speed for the feeding worm.

If the working worm is blocked, for example as a result of foreign bodies in the hopper, the anti-block unit prevents any mechanical and electrical damage via circuit breakers.

If irregular or specially large blocks lead to unsuitable positioning of the material in the hopper, the blocks can be moved into the best position for processing by means of the feeding worm running backwards.



Hydraulic pressing device

The optionally available heavy duty stainless steel hydraulic pressing device can be supplied in different designs according to the product which guarantees that even the most difficult product can be fed reliably into the machine.

The action of pressing the product follows at set intervals.

The hydraulic pressing device can also be controlled manually.

Automatic Mixing Grinders

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Automatic Mixing Grinder AG 160 M, AU 200 M, AV 250 M

**AE 130/3 M, AG 160 M,
AU 200 M, AV 250 M**

Hole plate diameter

130 mm, 160 mm, 200 mm and 250 mm.

Hopper content

620 l (AE 130/3 M 350 l). On request
750 l. (Not available for AE 130/3 M).

Drives

Two-speed working worm, three-speed
feeding worm (AE 130/3 M two-speed).

On request frequency-controlled six-speed
working worm and/or frequency-controlled
four-speed feeding worm.

Two-speed mixing unit with each forward
and reverse.

Application

Fresh meat, pre-broken frozen meat, cooked
meat, fish, vegetables, fruit and other food
products from from -18 to 85 °C.

For material that needs to be mixed and
standardised before grinding.

Output per hour

Up to 14.000 kg/h.



Automatic Mixing Grinder with mixing ribbon

Automatic Mixing Grinders

Two operations can be combined on Automatic Mixing Grinders.

If the feeding worm runs in reverse the raw material is mixed. If it runs forwards, raw material is fed into the working worm.

The mixing unit is mounted above the feeding worm and as a result the raw material is mixed easily and evenly.

The mixing unit can be set to run forwards or backwards with each two speeds.

Large pieces of fresh meat as well as pre-cut frozen meat can be fed by the wide three-speed conical feeding worm into the two speed working worm and then be ground.



Automatic Mixing Grinder with mixing paddles

Mixing unit

Depending on the application, various types of mixing units are available. As a result of the special mixing geometry, the best and most thorough mix is achieved in very little time.

The mixing units can be equipped with ribbons or paddles according to the application.

For tough and sticky material ribbons are specially good.

Paddles are most suitable for mixing of preground material. The ingredients receive the ideal mix as a result of the order and positioning of the paddles. This also puts as little strain on the material as possible.



ME 130/3, MG 160, MU 200

Hole plate diameter

130 mm, 160 mm and 200 mm.

Hopper content

300 l.

Drives

Two-speed working worm with short-time reverse. On request frequency-controlled six-speed working worm.

Mixing unit with automatic forward and reverse.

Application

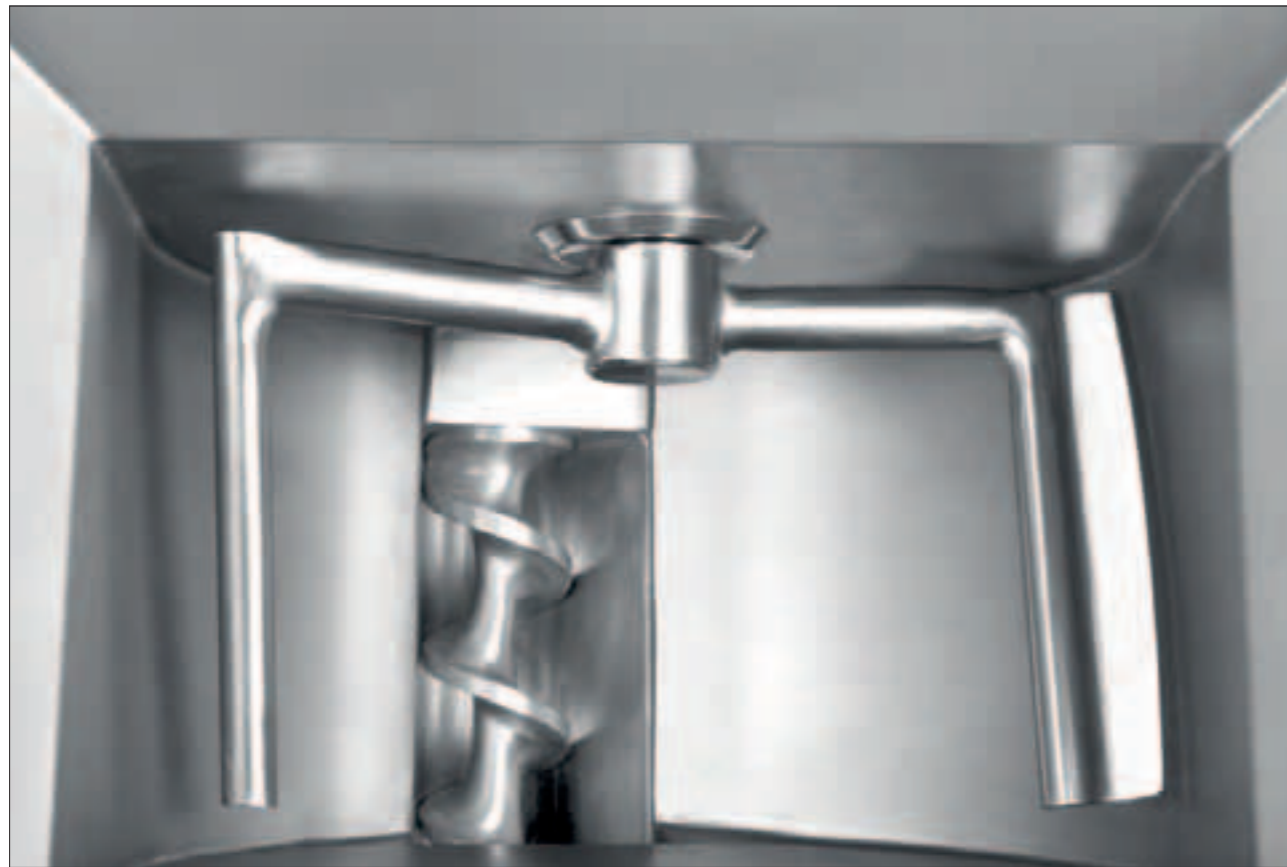
Fresh meat, cooked meat, fish, vegetables, fruit and other food products from from -4 to 85 °C.

For material that needs to be mixed and standardised before grinding. As final grinder for pre-ground material.

Output per hour

Up to 6.000 kg/h.

Mixing Grinder ME 130/3, MG 160, MU 200 with integrated, hydraulic loading device



Mixing Grinder with mixing arms

Mixing Grinders

Two speed working worm

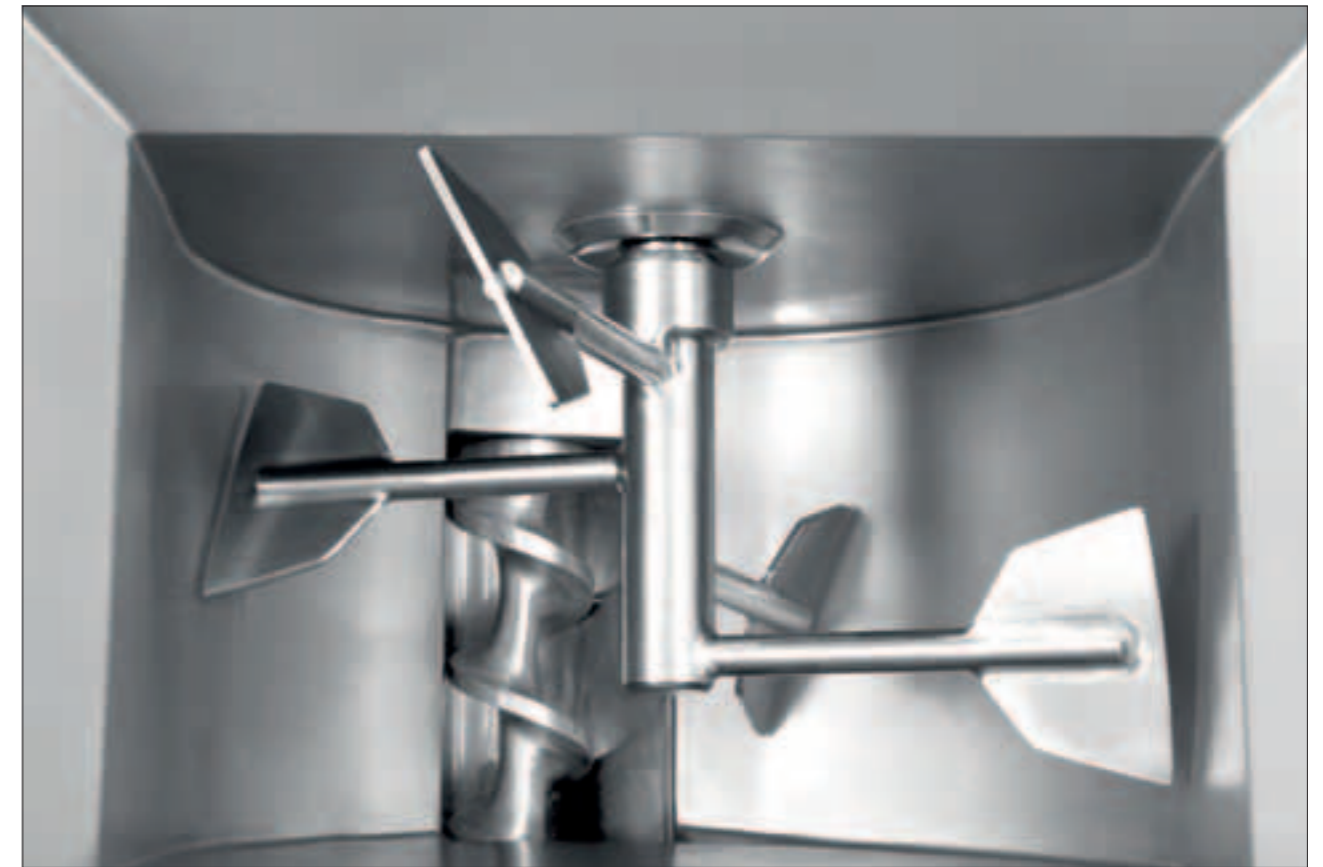
The working worm is equipped with a short time reverse gear which enables the smallest quantities of the mix to be fed through the mixing unit again and again as required.

First speed

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

Second speed

For fresh meat, cooked meat, liver, vegetables and spinach.



Mixing Grinder with mixing paddles

Mixing Grinder with mixing arms

Mixing Grinders have powerful mixing arms which can mix the raw material evenly before grinding.

For example, pre-cut meat can be mixed with salt, seasoning and additives for hamburger or "Bratwurst" production.

The mixed product is fed directly into the working worm by the mixing arms and then ground with clear cut and even granulation.

Mixing Grinder with mixing paddles

The specially positioned paddles enable the product to be mixed smoothly in the best possible way. The mixing paddles are particularly suitable for mixing pre-ground material.

The strong paddles also feed the material into the working worm.

Grinders with cooling

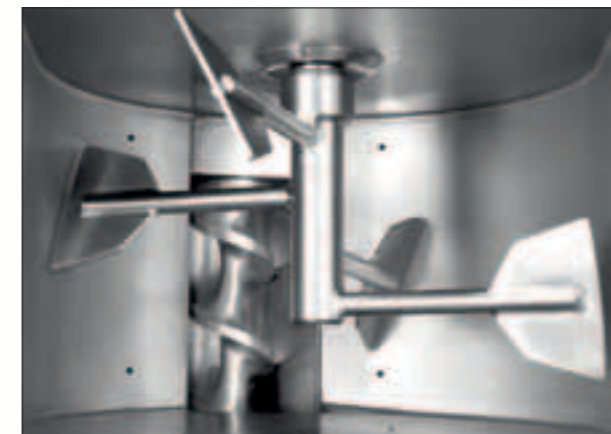
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MG 160 hydraulic lid and cooling function and integrated, hydraulic loading device



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



Hopper with mixing paddles and cooling nozzles

Precise temperature control

The optional cooling system on a Industrial Grinder ensures ideal processing temperatures.

Via nozzles at the bottom of the hopper or via snowhorns on the lid of the machine CO₂ or LN₂ (Liquid Nitrogen) are injected into the hopper.

The temperature or consistency of the product is controlled by a temperature sensor or optionally the current demand of the mixing unit.

A fixed expansion room is placed above the hopper. Gas can be exhausted over that expansion room.

The hopper lid is opened hydraulically. The Industrial Grinder with its own cooling system replaces cooling room capacity and thereby greatly increases production efficiency.



AU 200 U

Hole plate diameter

200 mm.

Hopper content

570 l.

On request 800 l or 1.000 l.

Drives

Six-speed frequency-controlled working worm, four-speed frequency-controlled feeding worm.

Application

Fresh meat, pre-broken frozen meat, frozen meat blocks, rind, cooked meat, fish, vegetables, fruit and other food products from -25 to 85 °C.

Output per hour

Up to 16.000 kg/h for fresh meat.

Up to 6.000 kg/h for frozen meat blocks.

AW 300 U

Hole plate diameter

300 mm.

Hopper content

925 l.

Drives

Six-speed frequency-controlled working worm, four-speed frequency-controlled feeding worm.

Application

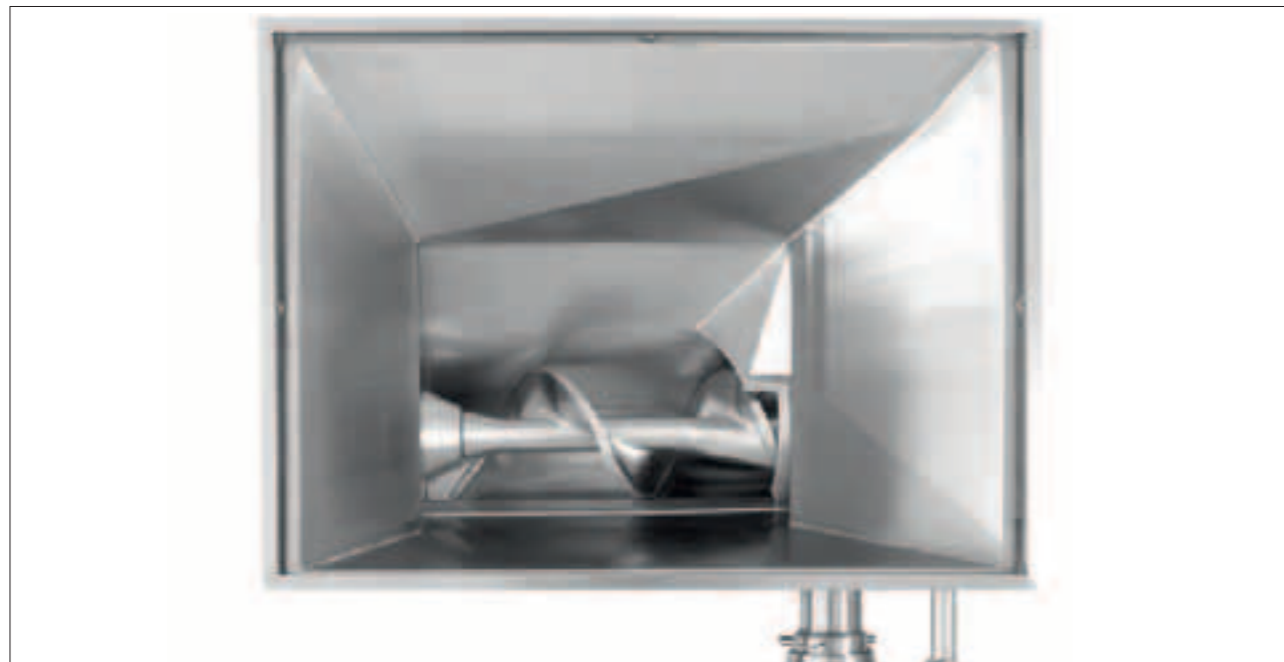
Fresh meat, pre-broken frozen meat, frozen meat blocks, rind, cooked meat, fish, vegetables, fruit and other food products from -25 to 85 °C.

Output per hour

Up to 30.000 kg/h for fresh meat.
Up to 15.000 kg/h for frozen meat blocks.



Universal Grinder AW 300 U with loading device
for 800 liter containers



Hopper AU 200 U

Universal Grinders

The Universal Grinders reduce fresh meat as well as blocks of frozen meat, rinds, blocks of fat and other food products independent of the consistency and temperature.

They are driven by a frequency controlled AC-motor with intelligent output current control. Irrespective of the composition of the raw material the machines prove themselves by the clear cut of the end product and the maximum possible throughput. This series of machines is equipped as standard with the anti-block unit, hydraulic worm ejector, Command 500 W control system, a worm cradle and cutting sets for fresh and frozen meat.

Six speed, frequency controlled working worm

The drive of the specially equipped working worm is mostly wear and maintenance free. The six speeds can be pre-set steplessly via the Command 500 W control system. Thus for example faster speeds can be chosen for fresh meat and slower speeds for deep frozen blocks of meat. This guarantees the best possible cross-section cut and a very efficient throughput.



Hopper AW 300 U

Four speed, frequency controlled feeding worm

The extremely strong drive of the feeding worm can be pre-set steplessly to four speeds via the Command 500 W control system so that the quantity of the product to be fed can be controlled as required.

According to its temperature, consistency, size or type the product can be fed continuously with the ideal speed.

The feeding worm is made with special cutting edges and breaking contour for frozen blocks of meat.

Wide windings guarantee that large pieces of fresh meat as well as whole blocks of frozen meat are grabbed by the worm.

Frozen Meat Grinders

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GW 300

Hole plate diameter

300 mm.

Hopper content

450 l/110 l with inlet steel plate.

Drives

Two-speed working worm. On request six-speed frequency-controlled working worm.

Hydraulic pressing device

For especially high and/or irregular frozen meat blocks.

Application

Frozen meat blocks and other frozen food products like fish, vegetables, fruit etc.

Output per hour

Up to 10.000 kg/h for frozen meat blocks.

Frozen Meat Grinder GW 300 with angled conveyor belt.



GX 400

Hole plate diameter

400 mm.

Hopper content

460 l.

Drives

Two-speed working worm. On request six-speed frequency-controlled working worm.

Application

Frozen meat blocks and other frozen food products like fish, vegetables, fruit etc.

Output per hour

Up to 12.000 kg/h for frozen meat blocks.



Hopper GW 300 with hydraulic pressing device and inlet steel plate



Hopper GX 400

Frozen Meat Grinders

The even reduction of whole deep-frozen blocks of meat guarantees efficient processing further on through mixers, grinders and cutters.

Through the grinding of frozen meat to a size ideal for the cutter, the cutter and its knives have less strain and wear.

Size reduction

The first stage of the size reduction process takes place in the worm of the Frozen Meat Grinder. With its extended profile and relief grinding windings the worm cuts off approximately 8 cm of the frozen meat block with every rotation, and carries the meat to the cutting set for grinding.

Two speed drive

The GW 300 and GX 400 are equipped with a two-speed drive as standard.

The first speed is for deep-frozen blocks of meat or when using hole plates with small holes.

The second speed is suitable for reduction with hole plates with bigger holes.

Motor variant types

Six speed, frequency controlled working worm

The working worm of all Industrial Grinders can be optionally equipped with a frequency controlled AC-drive and gear box.

Most suitable speed for the most varied types of raw material

The AC-6 drive makes it possible to pre-set steplessly six speeds via the digital display of the Command 500 W.

In this way the most suitable speed can be pre-set for the most varied types of raw material e.g. frozen meat and fresh meat, cooked meat, fish, vegetables, fruits and other food products. Thus the hourly throughput is maximised with the best possible cut-image and an extremely uniform granulation to satisfy even the highest demands.

Energy savings

In comparison to other three phase drives the AC-6 Industrial Grinders do not cause peak loads when switching on or changing speeds. Only the necessary power is consumed for the particular power requirement. This enables energy savings of up to 25%.

Four speed, frequency controlled feeding worm

The feeding worm of Automatic Grinders and Automatic Mixing Grinders can also be equipped with a frequency controlled AC drive.

The four speeds can be pre-set steplessly via the digital display of the Command 500 W.

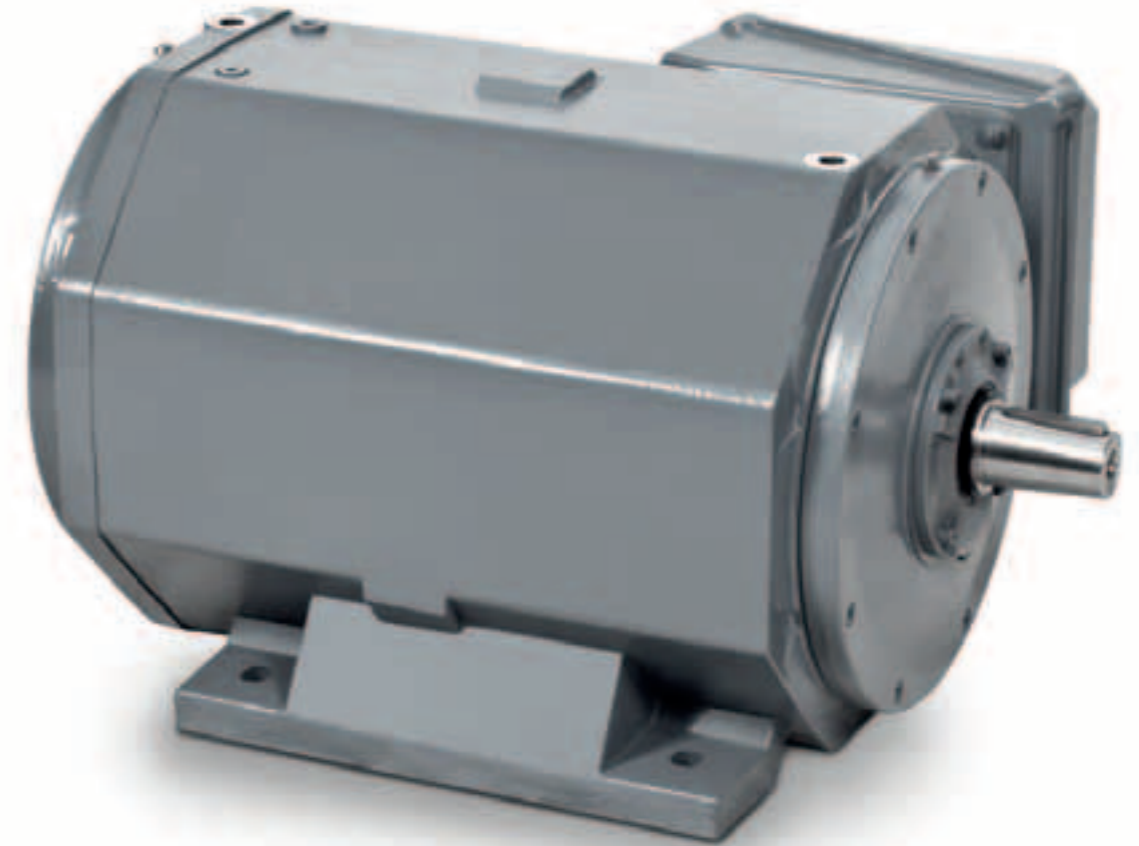
Precise fine setting

With the stepless drive of the feeding worm the amount of product being fed can be controlled accurately.

According to its temperature, consistency, size or type the product can be fed continuously with the ideal speed.

Universal Grinders

The AU 200 U and AU 300 U Universal Grinders are equipped as standard with a six speed frequency controlled drive for the working worm and four speed frequency controlled drive for the feeding worm.



Water-cooled motor

The water-cooled AC-6 motor is always working within the optimal temperature range. The waste heat of the motor can be fed well-directed to a heat recovery system, a water heating or a central heating.

This prevents the production room being heated up and relieves the burden on air-conditioning systems – a double saving.
On request for all Industrial Grinders.

Details/Additional equipments

Outlet protection device

The outlet protection device is required by law for Industrial 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 of all Industrial Grinders.



Hopper safety frame

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

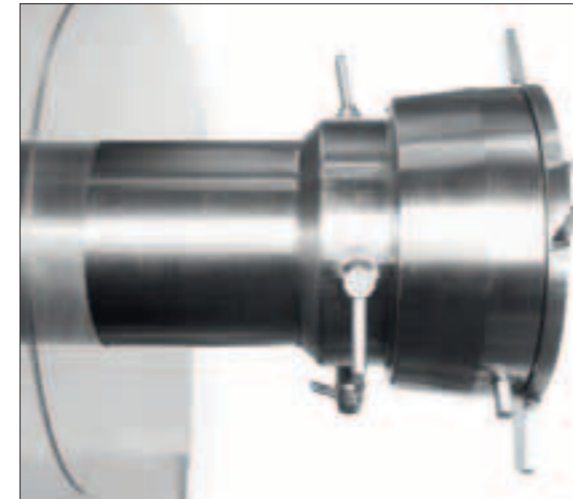
Standard equipment of all Industrial Grinders.



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 recognises material independently of the composition of surface of the material. It is supplied in a closed housing, which is engineered in protection class IP 69K.

On request for all Industrial Grinders.



Holding device

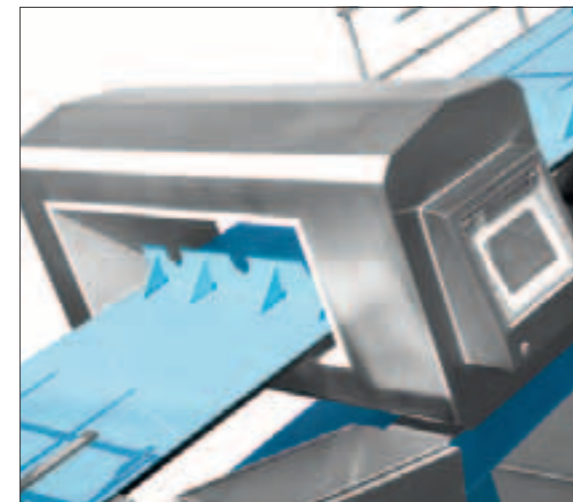
The holding device for the precutting plate guarantees a low friction and careful cut. The grinding set is not pressed together under the high pressure of the meat flow. The wear of hole plates and knives is reduced considerably.

Standard equipment of AU 200 U. Not available for AW 300 U, GW 300 and GX 400.

Conveyor belt with integrated metal detector

The loading of the Industrial Grinders can be achieved by moveable conveyor belts. Apart from a high control unit all angled conveyor belts with cross flights are equipped with a form-closed drive, a loading table, lateral guide rails and a back fall protection. On request the conveyor belts can be equipped with a metal detector. Metal particles in the raw material can therefore be identified and sorted out. Thus machine damages as well as metal particles in the end product can be avoided.

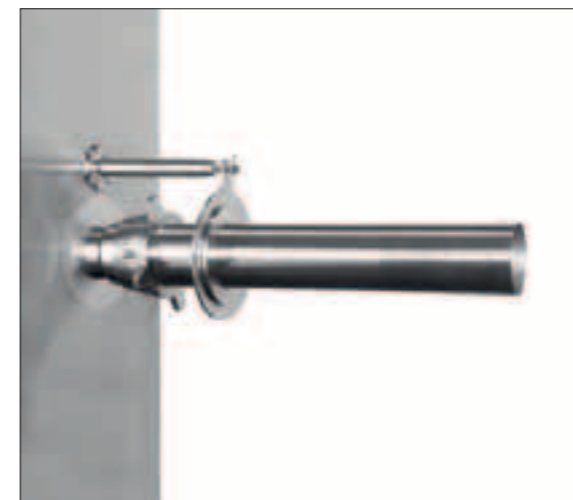
On request for all Industrial Grinders.



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 Industrial Grinders.



Bayonet locking

The solid stainless bayonet locking ensures a fast and easy change of the hole plates and knives.

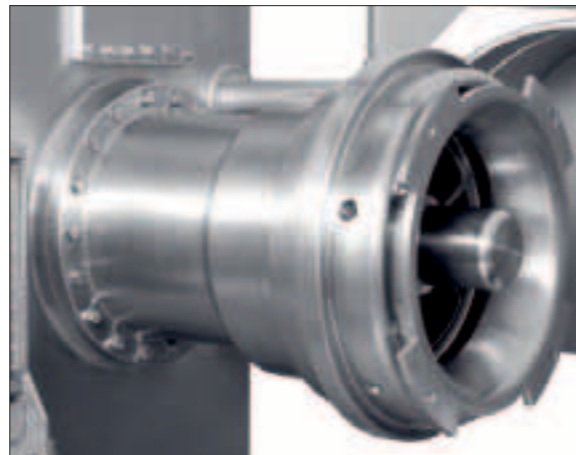
As the outer ring remains on the housing, the front part of the bayonet is considerably lighter than the whole screw nut.

The bayonet locking also protects the thread of the worm housing.

Standard equipment of all Industrial Grinders except for Cheese Grinders.



Bayonet locking for Automatic-, - Automatic Mixing-, Mixing- and Universal Grinders



Bayonet locking for Frozen Meat Grinders

Crane

The GX 400 is equipped with a stainless slewing crane as standard. The crane facilitates the assembly and removal of the worm.

Standard equipment of GX 400.



Frozen Meat Grinder



Automatic Grinder

Hydraulic pressing device for Frozen Meat Grinders

Irregular or outside blocks are fed into the worm of the GW 300 by the hydraulic pressing device. This enables a constant throughput. The GX 400 has an even wider worm than the GW 300. As an option it can also be equipped with a pressing device.

Standard equipment for GW 300, on request for GX 400.

Hydraulic pressing device for Automatic Grinders

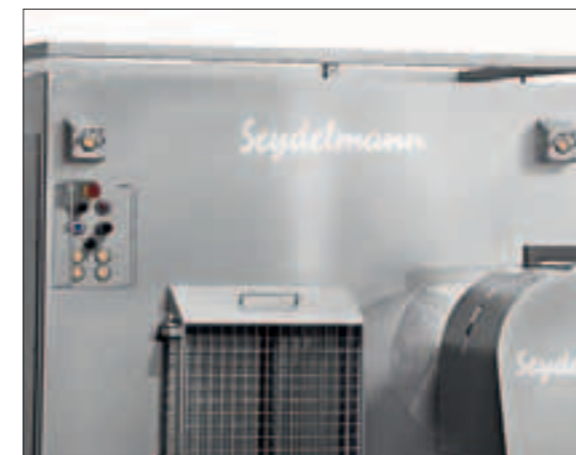
The hydraulic pressing device for Automatic Grinders can be shaped according to the material being processed. As a result, even the most difficult product can be fed into the worm. The pressing device runs at set intervals or can be controlled manually.

On request for all Automatic Grinders.

Two-hand operation

Industrial Grinders can also be equipped with two-hand operation for short-term running of the feeding worm or the mixing arms when the step is in the down position. The two-hand operation makes cleaning the machine easier.

On request for all Industrial Grinders except for Frozen Meat Grinders.



Raised hopper

All Automatic Grinders from hole plate size G/160 as well as the AU 200 U Universal Grinder can be equipped with 800 or 1.000 litre hoppers. With Automatic Mixing Grinders from hole plate size G/160 the volume of the hopper can be increased to 750 litres.

On request for several Industrial Grinders, see technical data.

Raised outlet height

As an option all Industrial Grinders can be equipped with extended feet so that the outlet height is suitable for standard 300 L trolleys and large containers. With the raised outlet the safety step has to be modified or a separate platform supplied. The worm trolley is also modified for the raised outlet height.

On request for several Industrial Grinders, see technical data.

Working platform

As an alternative to the interlocked safety step, a working platform is also available. The working platform makes cleaning easier and enables the reduction process in the hopper to be observed.

Standard with the AW 300 U as well as Industrial Grinder with raised outlet or bigger hoppers. Depending on the machine height movable guard cover may also be necessary.

Thermal Overload Control

The thermal overload control will switch off the complete machine if for any reason it is overloaded. Industrial Grinders with a feeding drive automatically switch to the slowest speed when they are overloaded. If the drive remains overloaded, the thermal overload control switches off the machine completely.

Standard equipment for all Industrial 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.

Standard equipment for AU 200 U, AW 300 U and GW 300 and GX 400, on request for all Industrial Grinders.



Worm cradle

The strongly built stainless steel mobile worm cradle serves as a means of storage or cleaning of the grinder worm and cutting sets.

Standard equipment for AW 300 U, GW 300 and GX 400, on request for all Industrial Grinders from hole plate size G/160. Higher version for raised outlet height available.

Grip cradle for worm

The grip cradle locks onto the worm inside the worm housing and by adjusting the height of the trolley enables the worm to be removed without coming into contact with the housing.

On request for AW 300 U, GW 300 and GX 400.

Separate panel box

A separate panel box in 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 in the protection class IP 66 standard.

Standard equipment for AU 200 U and for frequency controlled AC-drive.

Feeding worm forward and reverse

As an option, the feeding worm of the Automatic Grinders can be switched to run backwards so that circa 25% of the contents of the hopper can be mixed.

On request for all Automatic Grinders, Standard equipment for Automatic Mixing Grinders and Automatic Grinder K.

Hydraulic worm ejector

When pressing the push button, the whole grinding set and the worm are pushed out of the worm housing. Due to that the grinding set and the worm is very easy to change.

Standard equipment for all Frozen Meat Grinders and Universal Grinders. On request for all Automatic Grinders, Automatic Mixing Grinders and Mixing Grinders from hole plate size G/160.

Controls and control panels

Comand 500 W

The speed of the main drive and/or the feeding drive can be pre-programmed steplessly via the Command 500 W control system. The actual speeds are shown on the display. The water-tight stainless steel box is engineered in protection class IP 66 which is rated for easy cleaning.

The extra large display can be mounted with clear visual access for the operator either on the machine or on the wall. All relevant data are easily visible from a distance.



Standard on all Universal Grinders and Industrial Grinders with frequency controlled AC-8 main drive.

TD 200

The TD 200 control system enables time values to be programmed and the total mixing time can also be pre-programmed.

The water-tight stainless steel box is engineered in protection class IP 66 which is rated for easy cleaning.



Standard on all Automatic Mixing Grinders, on request for Mixing Grinders.

TP 177

In addition to the functions of the TD 200, the TP 177 also shows values for temperature. The water-tight stainless steel box is engineered in protection class IP 66 which is rated for easy cleaning.



Standard on all Grinders with cooling function.



Control panel with buttons and switches.



With frequency control motors the control panel also has cross switches.



Control panels

The controls are laid out on the control panel of the machine in such a way as to provide the operator with the best possible ergonomic means of operation. The symbols for the machine functions are self-explanatory and prevent operating errors. All Industrial Grinders depending on machine type are operated via buttons, knobs or cross-switches. The operating panel can be easily cleaned using a high pressure hose and other standard cleaning liquids.

Standard on all Industrial 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 Industrial Grinders.



NIR (Near Infra-Red) Analysis

Scanning the surface of the meat makes it possible to get continuous real-time measurements of the fat content of the ground meat.

The high resolution technology guarantees by the high concentration of data points exact and reliable measurements which correspond to conventional laboratory analyses. The results are achieved from reflection or transmission technology depending on the application.

The in-line analysis systems is directly integrated into the production flow. For example it can be installed on a conveyor after the grinder. As a result, sample taking which takes time and costs money is not necessary.

The results of the fat measurements can be integrated into the recipe control of an automatic production line.

Based on the measurement results of the fat analysis the feeding of the material to the particular machines ahead of the fat analysis can be controlled precisely true to the recipes.

The Near Infra-Red Analysis enables a noticeable increase in product quality and in batch standardisation.



X-ray Analysis

Raw material and processed material after the grinder can be controlled by the analysing system. Fat content can be kept to exactly 1 % and the weight of the material is measured at the same time. The integrated conveyor is positioned under the grinder outlet and conveys all the material into the analysis area.

Here it is measured completely and continually by x-rays. The results of the measurement process guarantee precise control of individual recipes and enables best usage of the processed material.

The cost-effectiveness of the system is demonstrated by perfect standardisation. Up to 22000 kg of product can be analysed per hour. The costs of sample taking and laboratory analysis are made obsolete by the complete continuous measurement process. The recipe control system of automatic production lines makes it possible to control the material feed to the individual machines before the fat analysis based upon the measurement results. This makes it possible to equalise the difference between the ideal values of the recipe and the actual analysed values by controlling the various conveyor systems.

Loading devices



Integrated hydraulic loading device

The hydraulic loading device is available for 200-litre, on request also for 300-litre trolleys (BW 200 or BW 300), according to DIN 9797.

The hydraulic system of the loading device and the loading device itself are almost maintenance free.

The hydraulic aggregate, the lifting cylinder, valves etc. are completely built into the machine. Therefore, the loading device is very quick and easy to clean.

When the grinder is not used, the loading device can be “parked” in its highest position - which is a gain of space.

In case the product is unloaded into 300-litre trolleys the enlarged feet made of stainless steel are available.

The loading device is principally on the left hand side. On request it can be mounted on the right hand side.

On request for all Automatic Grinders, Automatic Mixing Grinders, Mixing Grinders and the Universal Grinder AU 200 U. Not available for raised hoppers and raised outlet respectively.



Vertical loading device

Industrial Grinders can also 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-in and contained within the frame so that cleaning is easy. The vertical loading device is strong and conforms to the highest hygiene standards.

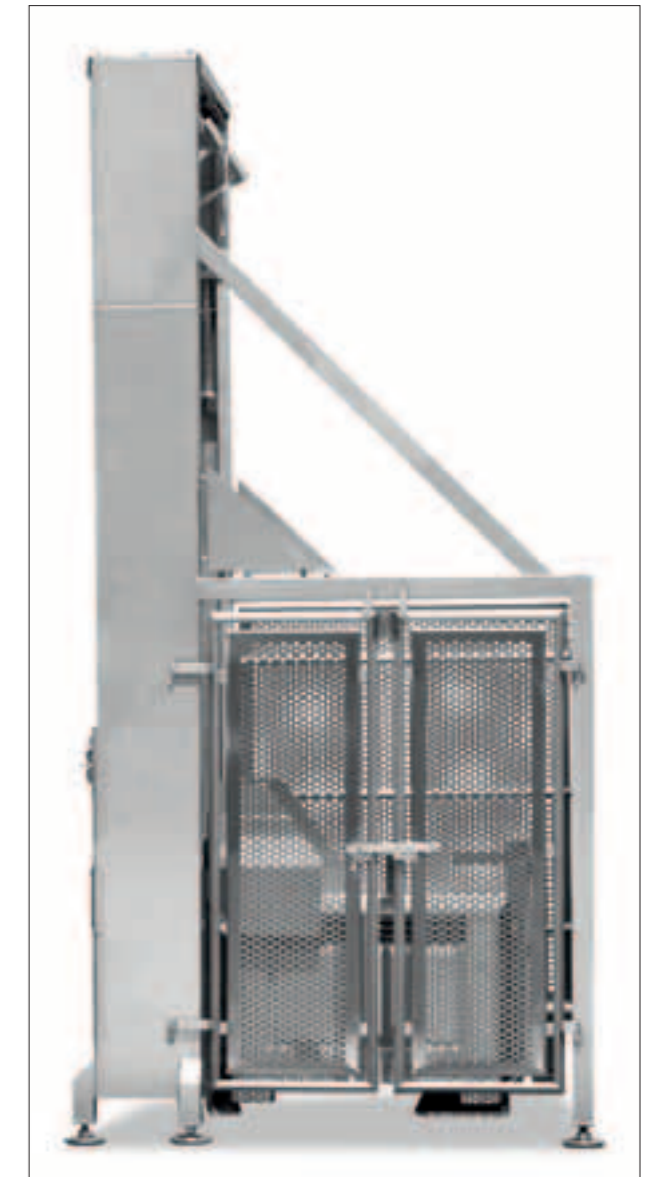
On request for all Industrial Grinders.



Loading device for large containers

The loading device for large containers enables quick and efficient loading and can be customised to suit to different container sizes.

On request for AW 300 U and for all Automatic Grinders with enlarged hopper content and the AU 200 U with enlarged hopper content.



Separating set



Separating set

The separating set serves the improvement of the meat quality. Gain of 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 1 to 2 quality levels (GEHA). Ideal for collagen reduction. Removed sinews are deepfrozen and bowl chopped to a fine emulsion which can be added to certain products.



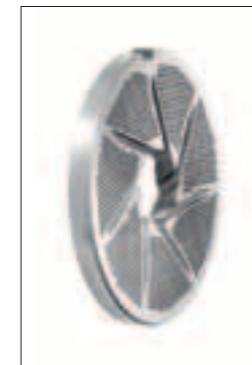
Pneumatic separating device

The pneumatic separating device, used with the separating set, ensures even more exact and precise control of separation and sorting out sinew and meat. The pneumatic separating 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.

Cutting sets



Separating set



Backside of separating hole plate



Outlet device through supporting hub



Standard cutting set 5-pieces



Standard cutting set 3-pieces



Cutting set for frozen material 5-pieces



Cutting set for cheese 2-pieces



Cutting set for frozen material 3-pieces



Cutting set for dry sausage



Cutting set for cooked material 4-pieces



Cutting set for soft or pre-reduced material 2-pieces



Outside knife

The outside knife is running on the last hole plate. Meat coming out of the grinding set in the form of threads is cut once again getting a uniform size and blend. Ideal for coarse meat pieces, dry sausage, "Bratwurst" etc.

Available on request for all Industrial Grinders except for GX 400.

Applications

Seydelmann



Minced meat



Various mince products



Cheese products



Pasta fillings



Spreadable dry sausages



Sliceable dry sausages



Convenience and fast food products



Doner Kebab



Fish based products



Coarse liver sausage



Confectionary and nut based products



Vegetable and fruit products

Production lines

Individual complete solutions

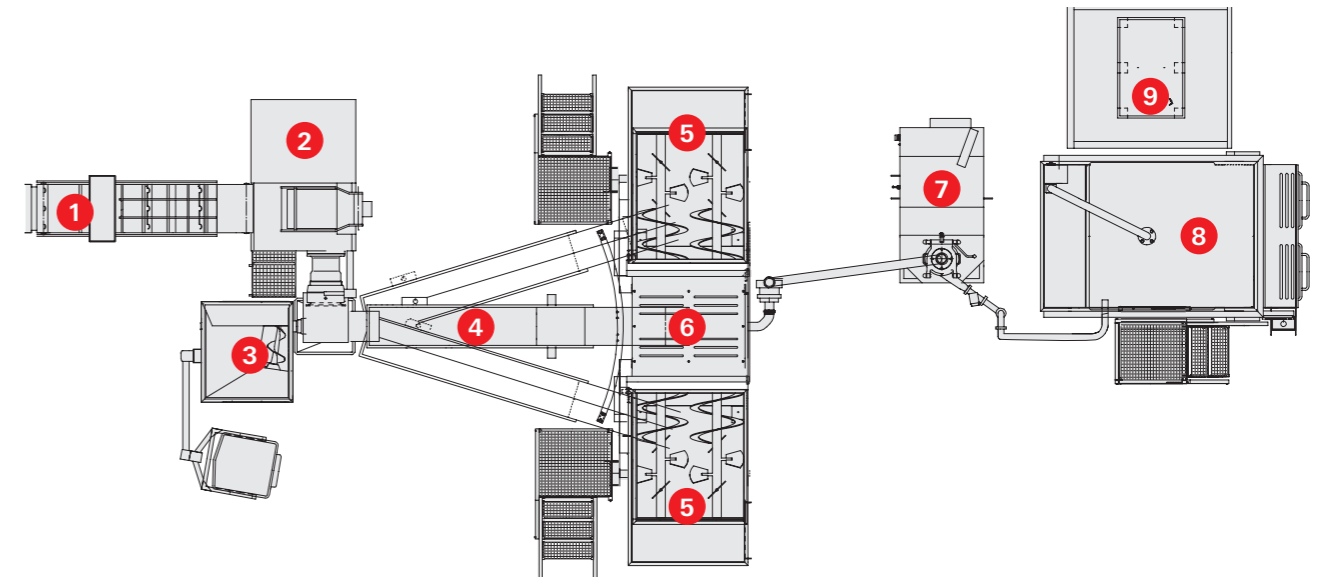
Automated production lines are planned, designed and manufactured as complete solutions for the most varied types of products in the food industry. The project planning is individually tailored to the demands and expectations of the customer. The individual machines are controlled in an automatic series and are completely tuned to one another. The degree of atomisation and the interfaces can be individually decided.

The complete production can be fully automated and controlled by one single person from a central operating terminal.

All the steps in the process like pre-cutting, cutting, fine cutting, emulsifying and mixing under vacuum, like standardising, heating of the material, gas-flushing and cooling with CO₂/LN₂ and the analysis of the material by near infra-red or x-ray measurement - all these steps can be carried out for the highest quality and efficiency in the automated production.

All the necessary means of conveying the product like belt conveyors, screw conveyors and pumps are tailored exactly to the individual machines and the steps in the production process. The means of conveying the product replace the labour and time consuming transport of the material via trolleys between the individual steps in the production process. Storage containers built into the production line offer a space-saving and efficient alternative to temporary storage of the material in trolleys.

Fully automated production provides a significantly higher throughput and a constant quality of the end product while reducing labour costs.



- 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



Safety

All Industrial Grinders conform to current accident prevention regulations and are self evidently CE marked. They are constructed in accordance with the safety standard EN12331.

Advanced Quality

Think innovatively, work efficiently, produce quality. Seydelmann has implemented a quality management system covering the whole production and organisation. 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 Maschinefabrik 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 end-build take place in Aalen.

Tradition und Know-How

Since the founding of the company in 1843 Maschinefabrik 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 five generations. The large number of long-serving and highly qualified employees ensure the company's wide ranging knowhow.

In the hands of the best

In the hands of the best is the principle behind Maschinefabrik 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.

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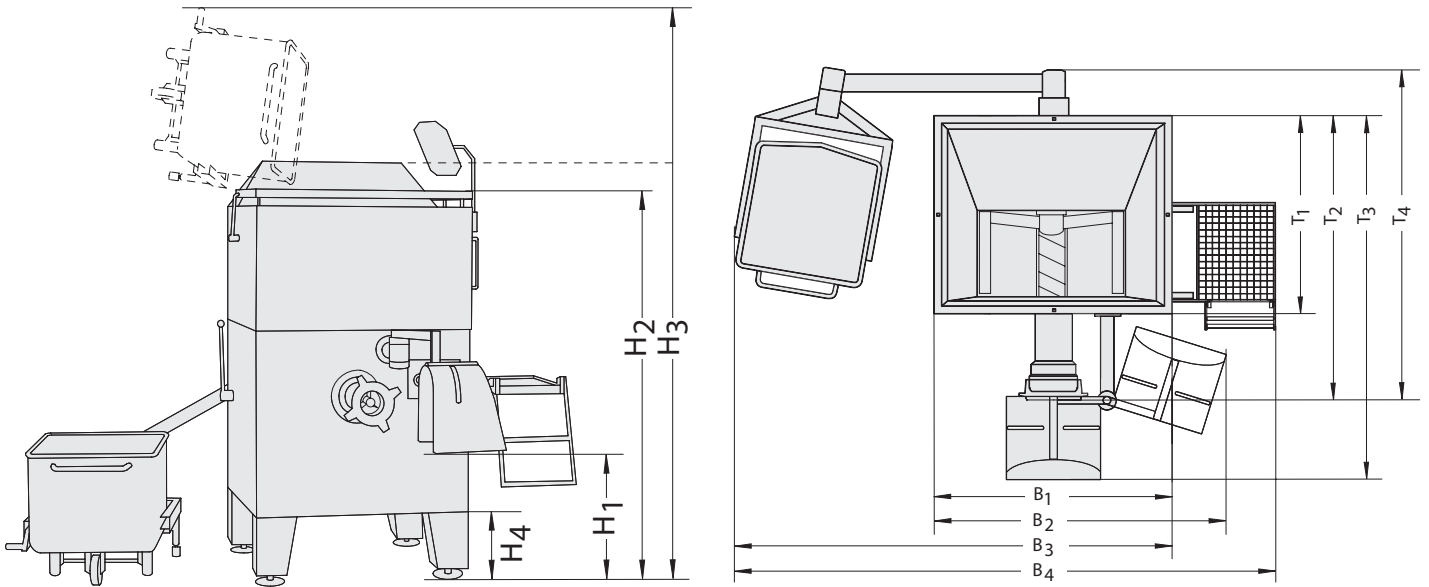
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englisch 03/2012



Technical data

Mixing Grinders



Mixing Grinders

dimensions in mm

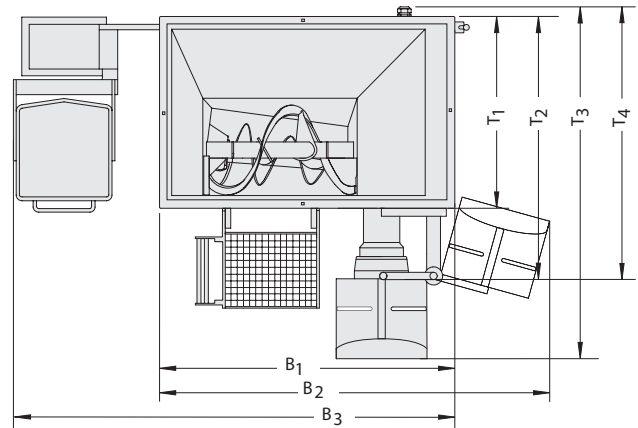
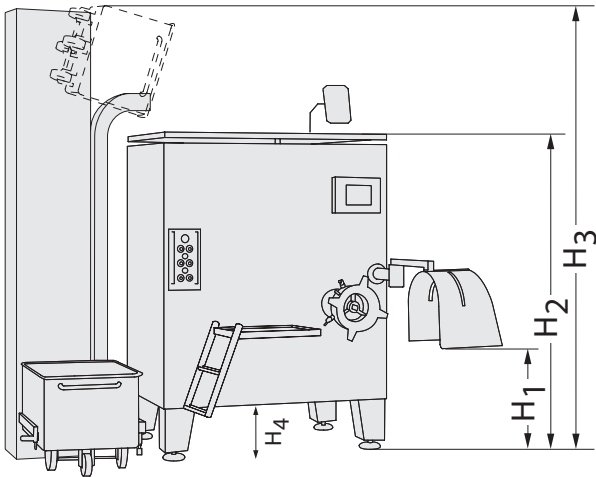
TYPE	power of motors in kW		power of motors frequency controlled motors	weight in kg	hopper content in litre	min. width of door without disassembling machine parts	width of machine body		outlet hand guard open	width of machine without step with loading device	width of machine with step	depth of machine body	depth of machine body with worm housing	depth of machine body with outlet hand guard	depth of machine body without outlet hand guard	trolley	outlet height	upper edge safety frame	height of machine	height of elongated feet	remarks
							B1	B2													
ME 130/3	14	18	30	950	300	1300	1120	1273		1685	1056	1419	1750		200 l	750	1978	2150	350		
															300 l	1000	2228	2400	600		
ME 130/3 with loading device	14	18	30	1100	300	1850	1120	1273	2186	2765	1056	1419	1750	1628	200 l	750	1978	3225	350	*1	
															300 l	1000	2228	3475	600	*1	
MG 160	18	29	45	1000	300	1300	1120	1386		1685	1056	1501	1902		200 l	750	1978	2150	350		
															300 l	1000	2228	2400	600		
MG 160 with loading device	18	29	45	1200	300	1970	1120	1386	2186	2765	1056	1501	1902	1710	200 l	750	1978	3225	350	*1	
															300 l	1000	2228	3475	600	*1	
MU 200	25	37	55	1000	300	1300	1120	1395		1685	1056	1523	1942		200 l	750	1978	2150	350		
															300 l	1000	2228	2400	600		
MU 200 with loading device	25	37	55	1200	300	2020	1120	1395	2186	2765	1056	1523	1942	1746	200 l	750	1978	3225	350	*1	
															300 l	1000	2228	3475	600	*1	
with vertical loading device										2536					200 l			3100			
															300 l			3350			

*1 vertical loading device on request

Outlet heights
trolley 200 l: 750 mm
trolley 300 l: 1000 mm

Dimensions/data not binding.
Alterations reserved.

Automatic Mixing Grinders



Automatic Mixing Grinders

dimensions in mm

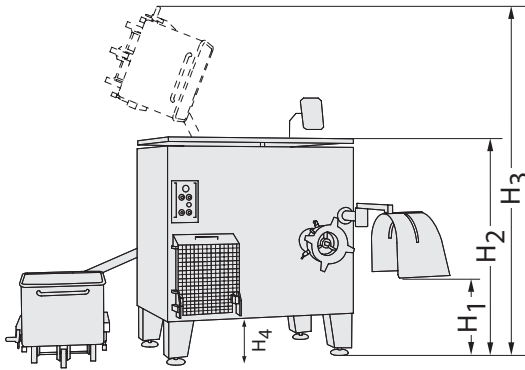
TYPE	power of motors in kW			weight in kg	hopper content in litre	min. width of door without disassembling machine parts	width of machine body			depth of machine body	depth of machine body without outlet protection device & loading device	depth of machine body with outlet protection device	depth of machine body without loading device	depth of machine body with-out outlet protection device	trolley	outlet height		upper edge safety frame	height of machine	height of elongated feet	remarks
	1	2	3				B1	B2	B3							H1	H2				
AE 130/3 M	14	18	45	1200	350	1350	1204	1705		1091	1311	1623			200 l	750	2013		350		
															300 l	1000	2263		600	*2	
AE 130/3 M with loading device	14	18	45	1400	350	1600	1204	1705	2417	1091	1311	1623	1355	1500	200 l	750	2013	3050	350	*4	
															300 l	1000	2263	3300	600	*2, *4	
AG 160 M	25	37	55	1880	620	1550	1626	2219		1056	1368	1794			200 l	750	2268		350	*2	
															300 l	1000	2518		600	*2	
AG 160 M with loading device	25	37	55	2180	620	1790	1626	2219	2849 2620	1056	1368	1794	1462	1607	200 l	750	2268	3271	350	*2, *4	
															300 l	1000	2518	3490	600	*1, *2, *3	
AU 200 M	34	52	75	1930	620	1650	1626	2219		1056	1460	1885			200 l	750	2268		350	*2	
															300 l	1000	2518		600	*2	
AU 200 M with loading device	34	52	75	2230	620	1950	1626	2219	2849 2620	1056	1460	1885	1553	1699	200 l	750	2268	3271	350	*2, *4	
															300 l	1000	2518	3490	600	*1, *2, *3	
AV 250 M	45	75	100	2080	620	1650	1626	2392		1156	1494	1948			200 l	750	2268		350	*2	
															300 l	1000	2518		600	*2	
AV 250 M with loading device	45	75	100	2380	620	1990	1626	2392	2849 2620	1156	1494	1948	1588	1733	200 l	750	2268	3271	350	*2, *4	
															300 l	1000	2518	3490	600	*1, *2, *3	
AG 160 M - AV 250 M with:	750 L-hopper				750										200 l	750	2358	3300	350	*2, *4	
															300 l	1000	2608	3490	600	*1, *2, *3	

*1 no integrated loading device possible/vertical loading device is required instead
 *2 working platform and swivel protection required
 *3 ring fence of the vertical loading device required
 *4 vertical loading device on request

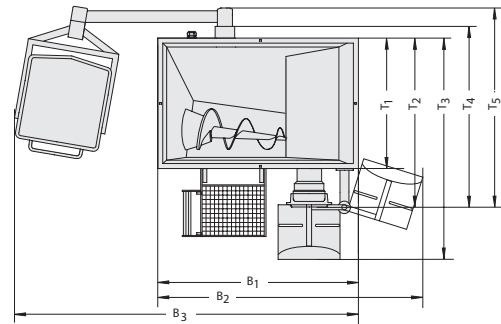
Outlet heights
 trolley 200 l: 750 mm
 trolley 300 l: 1000 mm

Dimensions/data not binding.
 Alterations reserved.

Automatic Grinders/Universal Grinders



Automatic Grinders



dimensions in mm

TYPE	power of motors in kW		power of motors frequency controlled motors	weight in kg	hopper content in litre	min. width of door without disassembling machine parts	width of machine body	outlet protection device open	total width incl. loading device	depth of machine body	depth of machine body without outlet protection device & loading device	depth of machine body with outlet protection device	depth of machine body without loading device	depth of machine body without outlet protection device	trolley	outlet height	upper edge safety frame	height of machine	height of elongated feet	remarks
	B1	B2	B3	T1	T2	T3	T4	T5	H1	H2	H3	H4	H5							
AE130/3	14	18	45	900	300	1350	1204	1705		1091	1311	1623			200 l	750	1773		350	
															300 l	1000	2023		600	
AE 130/3 with loading device	14	18	45	1100	300	1600	1204	1705	2417	1091	1311	1623	1355	1500	200 l	750	1773	3050	350	*5
															300 l	1000	2023	3311	600	*5
AG 160	25	37	55	1550	400	1550	1626	2219		1056	1368	1794			200 l	750	1773		350	
															300 l	1000	2023		600	
AG 160 with loading device	25	37	55	1850	400	1790	1626	2219	2849	1056	1368	1794	1462	1607	200 l	750	1773	2975	350	*5
															300 l	1000	2023	3225	600	*5
AU 200	34	52	75	1600	400	1700	1626	2219		1056	1460	1885			200 l	750	1773		350	
															300 l	1000	2023		600	
AU 200 with loading device	34	52	75	1900	400	1950	1626	2219	2849	1056	1460	1885	1553	1699	200 l	750	1773	2975	350	*5
															300 l	1000	2023	3225	600	*5
AV 250	45	75	100	1750	400	1760	1626	2392		1156	1494	1948			200 l	750	1773		350	
															300 l	1000	2023		600	
AV 250 with loading device	45	75	100	2050	400	1990	1626	2392	2849	1156	1494	1948	1588	1733	200 l	750	1773	2975	350	*5
															300 l	1000	2023	3225	600	*5
with vertical loading device									2620						200 l			3100		
															300 l			3350		
AG 160 - AV 250 with:	800 L-hopper				800										200 l	750	2114		350	*3, *5
															300 l	1000	2364		600	*2, *1
	1000 L-hopper				1000										200 l	750	2263		350	*2, *5
															300 l	1000	2513		600	*1, *2, *4

Universal Grinders

AU 200 U			100	2700	570	1990	2007	2592		1483	1885	2312			200 l	750	2013		250	
															300 l	1000	2263		500	*2
AU 200 U with loading device			100	3000	570	2250	2007	2592	3436	1483	1885	2312	1982	2131	200 l	750	2013	3258	250	*5
															300 l	1000	2263	3508	500	*2, *5
AW 300 U			200	7000	925	2690	2272	2867		1823	2517	2929			200 l	750	2443	3582	140	*1, *2, *4
															300 l	1000	2693	3833	390	*1, *2, *4

*1 no integrated loading device possible/vertical loading device is required instead

*2 working platform and swivel protection required

*3 working platform and swivel protection required/on demand special hinged safety step

*4 ring fence of the vertical loading device required

*5 vertical loading device on request

Outlet heights

trolley 200 l: 750 mm

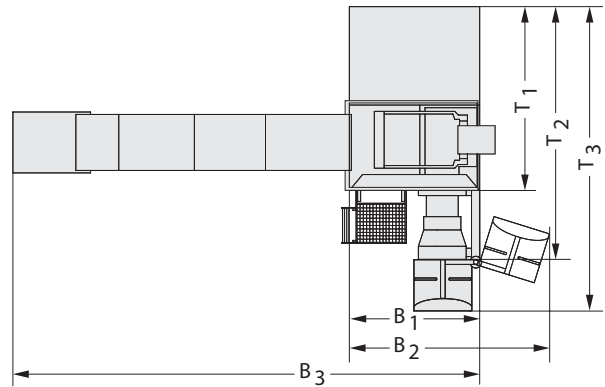
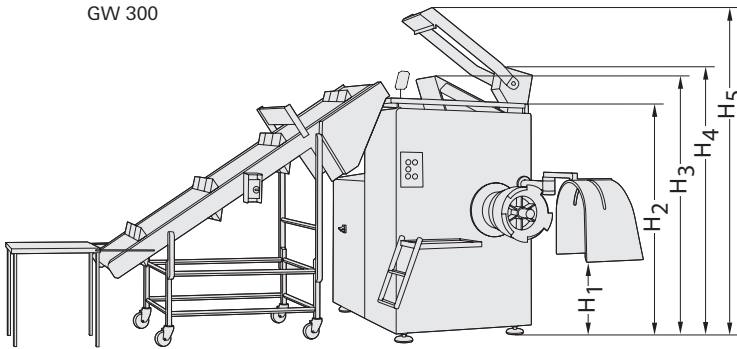
trolley 300 l: 1000 mm

Dimensions/data not binding.

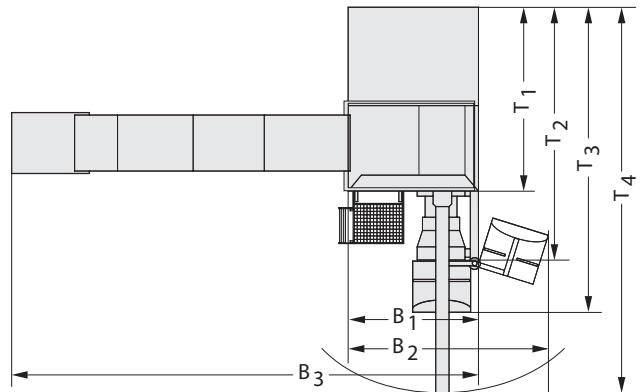
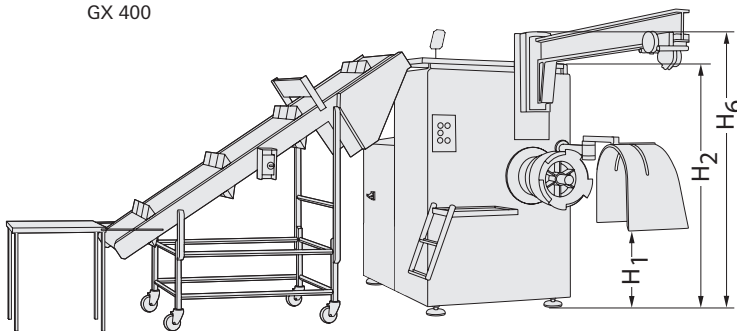
Alterations reserved.

Frozen Meat Grinders

GW 300



GX 400



Frozen Meat Grinders

dimensions in mm

TYPE	power of motors in kW		power of motors frequency controlled motors weight in kg		hopper content in litre		min. width of door without disassembling machine parts		width of machine body		outlet protection device open		width of machine		depth of machine body		depth without outlet protection device		depth with outlet protection device		depth of machine incl. Crane		trolley	outlet height		upper edge safety frame		upper edge inlet steel plate		pressing device run in		pressing device moved out		upper edge of crane		remarks
									B1	B2	B3	T1	T2	T3	T4	H1	H2	H3	H4	H5	H6															
GW 300 with conveyor belt	78	105	140	3300	450	1500	1260	1975	ca. 4800		1810	2463	2802										200 l	750	2108	2213	2466	3068							*1	
									300 l	1000													2358	2365	2621	3223							*1			
GX 400 with conveyor belt	85	140	140	3520	460	1330	1260	2085	ca. 5000		1810	2508	2910	4020									200 l	750	2095	2422	2459	3064	2337							*2
									300 l	1000													2343	2672	2709	3314	2587							*2		

*1 110 liter effectively usable due to inlet steel plate
 *2 inlet steel plate and pressing device available on request

Outlet heights
 trolley 200 l: 750 mm
 trolley 300 l: 1000 mm

Dimensions/data not binding.
 Alterations reserved.

Industrial Grinders



Maschinenfabrik Seydelmann KG

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