



From preparation to packing – KRONEN does it all

Food processing solutions designed and built
for the fresh produce industry.



Innovations for the food processing industries

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Our mission:
The true blend of precision,
reliability and innovation!



KRONEN GmbH is one of the leading suppliers for the catering, convenience, delicatessen and food industry. Our strength is the fruit, vegetable and salad processing but we can also offer interesting solutions for meat, fish and poultry. We have obtained awards and prizes for our innovation at international trade shows. We develop and produce single and special machines as well as complete processing lines for preparing, peeling, cutting, washing, drying and packing of food. Our quality and our consulting competence are appreciated world-wide.

KRONEN was founded in 1978 as a trading company for hotel and restaurant equipment. The development and production of our own machines for the fruit, vegetable and salad industry was started in 1992. In the year 1998 KRONEN was taken over by the current Senior Managing Director, Rudolf Hans Zillgith, with the strategy of the further export orientation, which led to a considerable growth in sales and number of employees.

In 1999, with Stephan Zillgith as Technical Manager, graduate in engineering, the next generation entered the company. In 2004 he took co-responsibility as Junior Managing Director joining the management of the company.

Since 2004, KRONEN has been developing and producing its machines in a new production- and administration building with own show room and training facilities in Kehl-Goldscheuer close to the French border.

As an innovative and internationally operating enterprise KRONEN made further progress in establishing itself even more successfully on the international market, making it necessary to double the production area to 5000 m² in total. In September 2008, KRONEN celebrated the official opening of the new production hall and its 30th anniversary with a special live-concert and event for business partners and customers.

Today, KRONEN has 100 employees and is a globally operating supplier of machines and systems for the catering-, delicatessen- and food industry with representations in over 60 countries and is selling its solutions in over 100 countries world wide. Due to the close co-operation with our customers and international partners, we consider it our commitment to keep traditional values such as quality awareness but also to react creatively and actively to the challenges of the global market.



Rudolf Hans Zillgith
Senior Managing Director



Stephan Zillgith
Junior Managing Director

KRONEN

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KRONEN Show room

Our modern show room gives visitors the opportunity to try out a wide variety of processing techniques for salad, vegetables and fruit with newly developed as well as proven KRONEN machines. Come and visit us!

Comprehensive advisory expertise

One of the strong points of KRONEN lies in its ability to respond to customers' individual requirements, implementing further developments and appropriate adaptations. All components of a line of KRONEN machines are adapted perfectly in order to tap the full throughput potential of every machine and to maximize the total throughput of the line. Thus, bottlenecks in the production process as well as any overload of the machines are avoided. We will be happy to sit down with you and plan the solution that best suits your needs.

Our long experience and comprehensive know-how in planning, implementing and starting-up of complex and customer-specific lines for the food processing industry assure short project duration and trouble-free operation. Our customers benefit from the close collaboration with our cooperation partners which complement our product portfolio. Thereby emphasizing our claim of being a systems and solutions provider and partner for our customers, from the initial idea to the end of the machines & lines production life. It goes without saying that the project engineering team of KRONEN considers existing buildings, conditions and lines and also integrates machines of

other suppliers – this in close cooperation with the customer. Customer-specific requirements as e.g. Hallal cutting of meat or kosher washing of salad are fulfilled on a high quality basis and a reasonable cost-performance-ratio. We pride ourselves on our ability to work in partnership with our customers to oversee the design, construction, installation and commissioning of the equipment. In short KRONEN creates solutions that work.



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Continuous high-quality combined with technical know-how and optimal blend of precision, reliability and innovation guarantee a constructive cooperation.

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Cutting

GS10-2, GS 20

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For industrial cutting of salad, vegetable, fine herbs, fruits and many more products.



The GS 10-2 belt cutter, tried and tested a thousand times, not only appears in a new look but also impresses with its high-performance technology and substantial functions. The GS 10-2 is the ultimate all-purpose belt cutting machine for leaf salad, vegetable, fruit, herbs, meat, fish, sausage, bread, cheese, nuts and many more. It is ideal for use in large kitchens, catering and industrial applications.

The GS 10-2 presents an attractive package of innovative features and enhancements such as:

- ▶ sloping surface
- ▶ modern hygienic design
- ▶ knife box with optimized ejection (products remain undamaged during unloading process)
- ▶ completely redesigned downholder
- ▶ new safety interlock system on knife box.

Various cutting accessories for a wide range of applications are available:

- ▶ slicing delicate leaf salad products and herbs like chives, dill, parsley, etc.,
- ▶ strip cutting / dicing / segmenting vegetables, fruit, etc.,
- ▶ grating / shredding raw vegetables, cheese, bread, nuts, etc.,
- ▶ tearing and slicing of chicken breast, meat, etc.



Measures		Products & capacity	
I x w x h	1610 x 670 x 1275 mm	Lettuce	up to 1500 kg/h
Weight	235 kg	Vegetables	up to 2500 kg/h
Belt width	125 mm	Fruit	up to 2000 kg/h
Max. product height	130 mm	Herbs	up to 80 kg/h
Conveyor speed	2,2-16,4 m/min	Cabbage	up to 1200 kg/h
Knife rotation speed	105-795 r/min	Field mushroom	up to 700 kg/h
Theoretical cutting thickness	1-130 mm	Cheese	up to 300 kg/h
Power		Meat + sausages	up to 1000 kg/h
Total power	1.8 kW	Fish	up to 625 kg/h



**Belt Cutter
GS 10-2 TTS**



**Belt Cutter
GS 20**

Based on the proven technique of the world wide most sold belt slicer GS 10-2 the GS 10-2 TTS belt cutting machine has been developed to be able to control the cut size and minimize the waste on product cut in combination with the horizontal out feed belt.

By measuring the product size, the GS 10-2 TTS is able to calculate the right number of cuts, eliminating or reducing waste to a minimum. This is given by a PLC and servo motors that allow the knife to make every cut exactly where we need it to be, following customer's specification. We can achieve minimum waste on applications like melon chunks, pineapple tid bits, chicken breast slices and many others.

The GS 10-2 TTS offers as well the possibility to top and tail (cut both ends) of the product, in addition to slice it (or not) to customer's specification.

If the special TTS feature is not needed, the machine will operate as a standard GS 10-2 belt slicer.

The solid industrial machine is completely made of stainless steel AISI 304 and can easily be cleaned and maintained.

The GS 20 belt cutting machine is equipped with a conveyor belt 250mm wide and a product down-holder to apply gentle pressure for product control. This key feature holds and controls the product until point of cutting. The GS 20 feeding belt is capable of conveying whole heads of lettuce or cabbage. Individually definable programs (up to 99) can be stored and selected by the simple use of control buttons and features digital cutting size adjustment from 1 to 50 mm when using a knife with 3 blades.

This new GS 20 joins our series of established GS belt cutting machines with the following improvements: newly designed knife door to optimized product outfeed allowing for gentle product handling; the down-holder assembly has been improved to reduce the number of parts; display lights now indicate the status of all safety sensors; a new locking system combined with a new belt cover creates additional safety in the area of the knife. As with all KRONEN machines, its excellent hygiene properties are a major advantage.

Measures		Products & capacity	
I x w x h	3800 x 630 x 1300 mm	Lettuce	up to 1500 kg/h
Weight	275 kg	Vegetables	up to 2500 kg/h
Belt width	125 mm	Fruit	up to 2000 kg/h
Max. product height	130 mm	Herbs	up to 80 kg/h
Conveyor speed	1,7-15,7 m/min	Cabbage	up to 1200 kg/h
Knife rotation speed	110-800 r/min	Field mushroom	up to 700 kg/h
Theoretical cutting thickness	1-130 mm	Cheese	up to 300 kg/h
Power		Meat + sausages	up to 1000 kg/h
Total power	3 kW	Fish	up to 1500 kg/h

Measures		Products & capacity	
I x w x h	2628 x 1059 x 1485 mm	Lettuce	up to 2500 kg/h
Weight	530 kg	Vegetables	up to 4000 kg/h
Belt width	250 mm	Fruit	up to 6500 kg/h
Max. product height	210 mm	Herbs	up to 700 kg/h
Conveyor speed	2,6-19 m/min	Cabbage	up to 2250 kg/h
Knife rotation speed	130-590 r/min	Field mushroom	up to 1500 kg/h
Theoretical cutting thickness	1-50 mm	Cheese	up to 625 kg/h
Power		Meat + sausages	up to 1375 kg/h
Total power	3 kW	Fish	up to 1375 kg/h

Cutting

KUJ V, KSM 100



Cube, strip & slice
cutting machine KUJ V

The KRONEN high performance dicer KUJ V cuts slices from 2 up to 12 mm, strips from 2 up to 20 mm and cubes from 3 up to 20 mm in precise, perfect cutting quality. It can process up to 3.500 kg per hour. High quality accessories enable neat slicing without damaging the produce. Even delicate products (such as onions, peppers, mushrooms, tomatoes, zucchini or slightly frozen products) can be processed. A frequency inverter with 7 adjustable speeds allows the gentle cutting of very sensitive products like e.g. strawberries or beetroot, etc. In addition to larger cubes cut from apples, melons, ham, cooked chilled meat and a variety of vegetables, tiny cubes as small as 3 x 3 x 3 mm (Brunoise) can be cut. The KUJ V can cut strips as small as 2 x 2 mm in section for dips, soups, sauces, salads and much more.



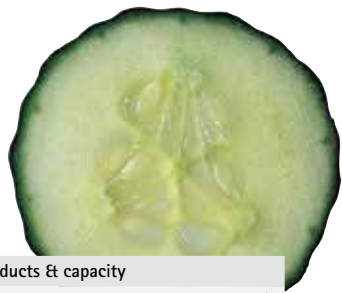
Measures		Products & capacity	
I x w x h	1105 x 978 x 1492 mm	Vegetables	up to 3500 kg/h
Weight	260 kg	Fruit	up to 3500 kg/h
Infeed / feeding height	1492 mm	Meat + sausages	up to 1500 kg/h
Discharge / outfeed height	472 mm	Fish	up to 1200 kg/h
Power			
Total power	1.1 kW		



Vegetable cutter type
KSM 100

The KSM 100 cutting machine is perfectly suited for cutting vegetables, salads as well as fruit. It is easy to handle with its big cutting door with two infeed openings for every requirement:

- Big opening for products like cabbage, leafy vegetable and broad leaf endive
- Small opening for long products such as cucumbers, courgettes, carrots, radishes, etc.



Measures		Products & capacity	
I x w x h	1003 x 856 x 1235 mm	Lettuce	up to 200 kg/h
Weight	80 kg	Vegetables	up to 375 kg/h
Infeed / feeding height	1185 mm	Fruit	up to 187 kg/h
Discharge / outfeed height	519 mm	Cabbage	up to 325 kg/h
Power		Cheese shredding	up to 150 kg/h
Total power	0.9 kW		

Cutting, dividing, coring

TT 450, Multicorer



**Top & Tail-Machine
TT 450**



Multicorer

The newly developed top & tail machine TT 450 is perfectly suited for removing the core of lettuce with flat stem (e.g. Frisee, Endive / Escarole, Romaine / Cos) and cutting leaf tips. It allows – with an at the same time improved yield of up to 6 % – a considerable increase in productivity by up to 110 % per person (Frisee and Endive/Escarole).

The TT 450 is equipped with an automatic waste separation section which can be perfected by appropriate waste and out-feed belts. The solid industrial machine is completely made of stainless steel AISI 304 and can easily be cleaned and maintained due to hinged doors and removable covers.

The Multicorer cores salads and cabbage in a fast and neatly way and divides products into 2 or 4 segments, if required.

Highest throughput and minimal waste. Compared with conventional processes, the Multicorer allows an increase of productivity of up to 300% and reduces the waste rate considerably at the same time.

Decoring height can be adjusted according to product height in order to optimize the cycle times for the product to be processed, e.g. iceberg lettuce, endive, Salanova®, lollo, cabbage, radicchio etc.



Measures		Products & capacity	
I x w x h	4000 x 1800 x 1800 mm	Lettuce	up to 4000 kg/h
Weight	900 kg		
Power			
Total power	1.8 kW		

Measures		Products & capacity	
I x w x h	3568 x 2024 x 2447 mm	Cabbage	up to 2800 pcs/h
Weight	1877 kg	Iceberg	up to 4800 pcs/h
Max. height of raw product	240 mm		
Max. diameter of raw product	240 mm		
Power			
Total power	5.2 kW		

Coring, cutting

KSB, CAP 68



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Cabbage Corer
KSB

Easy to operate, robust and hygienic. Cores up to 600 cabbage heads per hour. Due to the adjustable coring depth the machine is suitable for a wide range of cabbage sizes. A clean way of operation is guaranteed by a directed waste removal.



Cabbage Shredder
CAP 68

The CAP 68 cabbage shredder handles whole head cabbage without any need of pre-cutting. Highlights of this equipment are hygienic, stainless steel construction and easy to remove blade and funnel. CAP 68 can also be supplied with shred shorteners on the knives to control the length of the cabbage strips.



Measures		Products & capacity	
I x w x h	905 x 1045 x 1400 mm	White cabbage	up to 1800 kg/h
Weight	230 kg	Red cabbage	up to 1600 kg/h
Infeed / feeding height	960 mm		
Discharge / outfeed height	960 mm		
Power			
Total power	0.9 kW		

Measures		Products & capacity	
I x w x h	1385 x 1010 x 1690 mm	White cabbage	up to 2500 kg/h
Weight	450 kg	Red cabbage	up to 2500 kg/h
Infeed / feeding height	1120 mm		
Discharge / outfeed height	545 mm		
Power			
Total power	1.5 kW		

Cutting

S 021, SPIRELLO 150

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**Vegetable cutting machine
S021**

The vegetable cutting machine S021 is perfectly suited for cutting decorative spirals of vegetables (e.g. carrots, potatoes, pumpkins, radishes, celeriac, beetroots, zucchinis, etc.) very quickly and simply.

By means of variable tools a multitude of spiral thicknesses (e.g. 2 x 2 mm, 2 x 8 mm, 2 x 10 mm – other versions on request) can be produced with a max. product length of 250 mm.

The original result is enabling vegetable-processing companies to add a new touch to conventional product presentation in the market with very attractive, fine, springy strands similar to cooked spaghetti.



Measures		Products & capacity	
I x w x h	1050 x 270 x 500 mm	Carrot	up to 20 kg/h
Pneumatic		Potato	up to 20 kg/h
Operating pressure	6 bar	Radish	up to 20 kg/h



**Vegetable spiral cutting machine
SPIRELLO 150**

With the SPIRELLO 150 you are able to cut large quantities of vegetables in decorative spirals in a quick and clean way.

With up to 680 revolutions per minute, the SPIRELLO 150 cuts vegetables within seconds into meter-long spirals, which optionally can be shortened with a length limit knife by interval switchings (7 levels).

The machine is equipped with removable magazines, one of which can be fitted with the raw product while the vegetable in the second magazine is processed. This means that the SPIRELLO 150 can be operated without interruption!

An optimal cutting result is achieved with a variable speed control in 7 steps depending on the nature of the product. The machine is featured with an automatic separation system between product and waste product. The SPIRELLO 150 scores with a very minimal amount of waste since the vegetable product is cut completely in spirals – except a small piece from the top.

Measures		Products & capacity	
I x w x h	600 x 845 x 1700 mm	Carrot	up to 160 kg/h
Weight	180 kg	Courgette	up to 80 kg/h
max. height of raw product	300 mm	Cabbage turnip	up to 120 kg/h
Pneumatic		Radish	up to 180 kg/h
Operating pressure	9 bar	Beetroot	up to 50 kg/h
Power		Sweet potato	up to 210 kg/h
Total power	0.9 kW	Butternut	up to 340 kg/h

Cutting

S 195, S 198, HGW, PGW

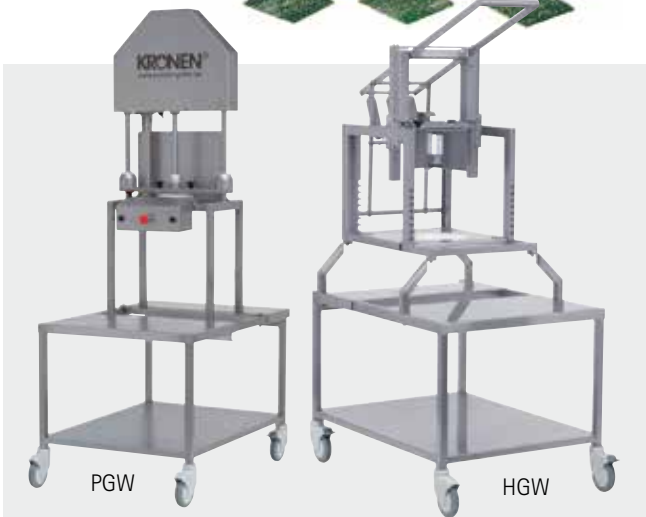


Table top grid cutter S 195
Sticks cutter S 198

You can use the manual S 195 to cut wedges, slices and figures out of vegetables and fruit. The sticks cutter S 198 makes it easy to cut vegetables into sticks. Another practical aspect is that the sticks can be removed by the bundle. The standard size is 8 x 8 mm, but many more sizes are available.



Grid cutter S195		Products & capacity	
Measures		Vegetables	up to 120 kg/h
I x w x h	360 x 210 x 940 mm		
Weight	8.5 kg		
Max. height of raw product	105 mm		
Sticks cutter S198		Products & capacity	
Measures		Vegetables	up to 235 kg/h
I x w x h	652 x 205 x 250 mm	Fruit	up to 370 kg/h
Weight	25 kg		
Max. height of raw product	105 mm		



Pneumatical grid cutter PGW
Manual grid cutter HGW

The grid cutters HGW and PGW offer special cuts in a great variety of cutting forms of fruit, salad, vegetable and cheese, also pineapple peeling and/or dividing, cutting tomatoes into slices, cabbage coring & quartering (can only by applied to HGW & PGW „cabbage versions“) and much more. Whereas the HGW is a manually operated device the PGW operates pneumatically (up to 600 strokes/h). The PGW is also available as XL-model with larger lifting height (up to 400 mm) suitable for big products up to Ø 300 mm.

Pneumatical grid cutter PGW		Products & capacity	
Measures		Lettuce	up to 150 kg/h
I x w x h	440 x 530 x 1100 mm	Vegetables	up to 1600 kg/h
Weight	55 kg	Fruit	up to 2340 kg/h
Max. height of raw product	250 mm	Cabbage	up to 1000 kg/h*
Pneumatic			
Operating pressure	6 bar		
Air consumption	17 NI per cycle		
			* special PGW
Manual grid cutter HGW		Products & capacity	
Measures		Vegetables	up to 550 kg/h
I x w x h	483 x 950 x 900 mm	Cabbage	up to 700 kg/h
Weight	36 kg		

Cutting

Tona grid cutting machines



**Tona rapid,
Tona rapid 3D, Tona rapid XL**

The Tona rapid provides a practical way to cut fruit and vegetables into segments, slices, sticks and other special shapes. As a special feature the Tona rapid 3D has the possibility to cut produce into slices before they are cut into segments, slices or sticks. This results in a three dimensional cut like small chunks from apples and many more possibilities. A continuous variable speed feed system ensures high capacity and high quality results. Tona rapid XL is best suited for cutting big fruit & vegetable (e.g. pineapples, eggplants, onions etc) in segments or slices. Pine-apples can even be peeled, cored and segmented. The product is inserted manually, kept in place by the product holders and pushed through the cutting tools. The cut product falls directly into a container or on a conveyor belt.

	Tona rapid	Tona rapid 3D	Tona rapid XL
Measures			
I x w x h (mm)	2000 x 945 x 1700	2000 x 950 x 1700	2000 x 945 x 1700
Weight	460 kg	290 kg	820 kg
Power			
Total power	0.55 kW	0.55 kW	0.55 kW
Pneumatic			
Operating pressure	6 bar	6 bar	6 bar
Air consumption	34 NI per cycle	34 NI per cycle	36 NI per cycle
Processing data			
Strokes per hour	1800 strokes/h	1800 strokes/h	1200 strokes/h
Max. height of raw product	100 mm	90 mm	220 mm
Max. diameter of raw product	85 mm	75 mm	130 mm
Products & capacity			
Vegetable & fruit	up to 3600 pcs/h	up to 3600 pcs/h	up to 2400 pcs/h



Tona S180K

For precise cutting of fruit and vegetables like apples, tomatoes, carrots, onions, potatoes, kiwi fruits, pears, mushrooms, citrus fruit etc. in segments, slices, sticks and figurines. The Tona S180K is a smart combination of the proven machines Tona E (wegder) & Tona S (slicer). The Tona S180K is equipped with blue centring fingers (on 16 standard product holders), fruit and vegetables are gently fixed in the centre of the holder. Various cutting inserts assure to achieve the required cutting results. Optimal feed – With the Tona S180K it is possible to process product to a maximum diameter of 85 mm at a capacity of 20 pieces per minute (1200pcs/h). All cutting inserts used on the Tona Rapid can now be used as well on the Tona S180K. Simple operation – The clearly arranged push buttons on the machine switchboard are fast and simple to use. The cutting / wedging attachments are quick and easy to remove.

Measures		Products & capacity	
I x w x h	800 x 1000 x 1400 mm	Vegetable	up to 1200 pcs/h
Infeed / feeding height	800 mm	Fruit	up to 1200 pcs/h
Pneumatic			
Operating pressure	6 bar		
Air consumption	17 NI per cycle		
Processing data			
Strokes per hour	1200 strokes/h		



Germ reduction

Vortex-line, UVC-Lock

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VORTEX-line for germ reduction + prolongation of shelf life of fresh-cut products

The new Vortex-line from KRONEN has been developed for final treatment stage for vegetables (like e.g. various leaf salads, root products, etc.) but also fruit like apples and grapes achieving germ reduction and prolongation of shelf life and, consequently, increase of quality of products.

The product enters gently into a pipe system without passing through a pump. Chemicals and sanitizing products can be added at different stages of the product transportation through the machine. At the discharge, the product is rinsed with fresh water through special nozzles placed on top of the exit conveyor belt.

Flexible contact and dwell time of the produce is adjustable from 1 to 3 minutes. The modular and space-saving tubular system can easily be integrated into existing salad processing lines, various installation layouts for customer specific conditions are possible. For mechanical cleaning the pipelines can be disassembled easily and quickly by means of screw connections.

Measures		Products & capacity	
I x w x h	variable x variable x 2100 mm	Iceberg	up to 1500 kg/h
Total volume	1250 l	Spinach / rocket	up to 800 kg/h
Power			
Voltage	3~400 V/N/PE/ 50 Hz		
Total power	5.9 kW		



**UVC-Lock
Disinfection lock**

The UVC-Lock has been developed for surface disinfection of packaging, boxes, stainless steel and plastic containers, buckets, as well as sausage and ham skins, vegetables*, fruit*, salads*, semi-manufactured products*, etc. in close cooperation with the Swiss company sterilAir® (CH-Weinfelden).

The UVC-Lock is equipped with the latest UVC technology (hybrid tubes of sterilAir®) and thus combines the high demand for sturdiness, flexibility and easy maintenance. An adequate microbiological sterility of packaging materials and storage containers is one of the most important prerequisites for the durability and hygiene of foodstuffs especially in the salad, vegetable and fruit processing industry.

The UVC treatment with sterilAir® components disinfects safely and reliably: without heat, undesirable additives, residues and within a very short time.

*Use with food depends on the legislation in the country of the user.

Measures		Products & capacity	
I x w x h	3044 x 886 x 1286 mm	Product size (lxwxh):	600x400x145 mm
Infeed / feeding height	750 mm	Throughput capacity / hour:	approx. 500 pcs/h
Discharge / outfeed height	750 mm		
Power			
Total power	1.8 kW		

Product treatment

Washing

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Dipping bath KDB 120

The new KDB 120 dipping bath has been developed for final treatment of peeled or cut fruits or vegetables. By application of e.g. Nature Seal®, other liquids or water soluble powders a prolongation of shelf life and, increase of product quality will be achieved.

Working principle:

- ▶ The product will be transported through the filled tank and, additionally, sprayed from the top. The open and easy access construction guarantees a very gentle product treatment.
- ▶ The contact time of the product is adjustable from 30 to 120 seconds.
- ▶ The water level in the dipping bath is infinitely variable according to product quantity and size.
- ▶ With a minimum water filling of 24 l, corresponding to a water level of 10 mm, the function of the machine is fully guaranteed (up to max. 130 l content). The KDB dipping bath is the device with the smallest fill quantity on the market!
- ▶ At the end of the process, the product can be dried by an air knife (optional) and then will be discharged directly into a container or on a conveyor belt (optional) for further processing.

Measures		Products & capacity	
I x w x h	2600 x 1500 x 1600 mm	Fruit	up to 650 kg/h
Power			
Total power	2.2 kW		
Water			
Total water volume	24 - 130 l		

Efficient and gentle washing of lettuces, vegetables and fruit by means of adjustable water rotation.

GEWA ECO and GEWA PLUS range

Thoroughly washing salads and vegetables, herbs but also sliced products until they are completely clean – that's the job of the KRONEN GEWA ECO and GEWA PLUS range of continuous flume washing systems. All of the washers work continuously using a combination of water agitation for cleaning, and vibrator for dewatering and transportation. Other options include mesh belt outfeed for delicate products, instead of the vibrator system, and air agitation to work with, or in place of, the standard water agitation system. Valve control over the water flow, direction and pressure enables you to adjust the machine to the specific requirements of your product. For example delicate salad and babyleaf products require a more gentle wash than harder root vegetables. Water is recirculated through the system to keep operating costs low.

A series of filtration systems, including a dedicated system for the removal of floating debris such as flies and insects, ensure water quality in the washer is kept as clean as possible. The goal is always to achieve thoroughly washed products without damage – the GEWA ECO and GEWA PLUS range meet that goal. One of the major advantages offered by the KRONEN washing machines is its hygienic design. The ability to clean machines quickly and meticulously not only maintains the quality of the product but reduces costly production down-time. With the GEWA range pipework, nozzles, vibrator decks and filter plates can be removed for thorough cleaning. Seamless welding and the use of stainless steel throughout further enhance traditionally high KRONEN standards. The outfeed vibrator elements (springs are not used) are all stainless steel, they ensure reliable performance and prolong machine life.

All GEWA washing machines are available in PLUS or ECO versions, different sizes, with belt outfeed or vibration outfeed and a lot of useful accessories and options.

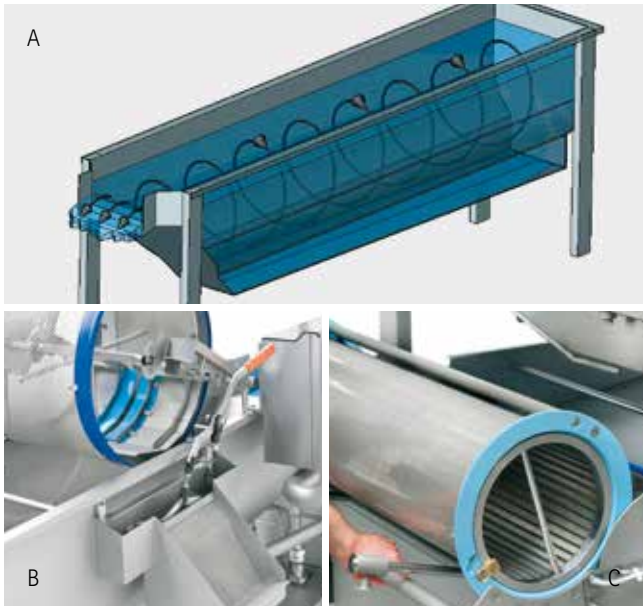
All models GEWA ECO and GEWA PLUS can be used separately or in combination dependant upon the product type and capacity processed – high quality salad and vegetable washing systems with a proven track record!



Washing GEWA 3800B PLUS

Highlights

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A – Helical wash system

Based on the KRONEN helical wash system the foot print of the washers is only 2/3 than comparable flotation washers. The possibility to combine the KRONEN helical wash system and the air system of a normal flotation washer makes the KRONEN GEWA systems also much more flexible and allows to handle floating and non-floating products. Due to the spiral water movement the produce travels a path of 15 - 30 meters in the tanks of 2,4 - 3,6 m lengths depending on machine size.

B – Insect removal system

All floating debris rises through the submersion device to the surface of the tank. The insect removal system is available for most washers of the GEWA range in two versions.

C – Lateral fines removal drum

The lateral rotary wedge wire drum filter allows a continuous, non-stop filtration of the wash water. The KRONEN system allows to completely remove the wedge wire drum for cleaning and better access to the filter tank. This filtration system is optional and also easily retrofitable on all GEWA PLUS washers.

Options & accessories

Various other options are available such as WMS (water management system) WRS (water recycling system), air system, sand trap funnel, dipping belt for cascade utilisation, and many more.



Washing machine GEWA 3800 B PLUS

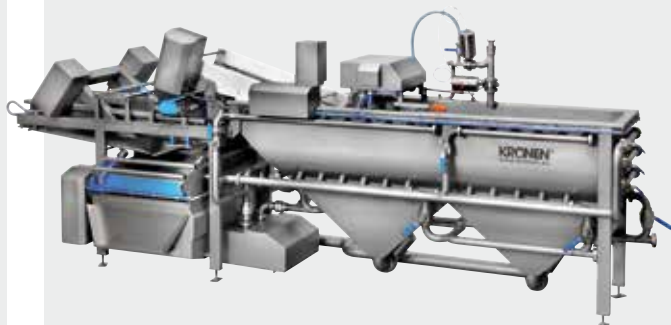
Washing machine GEWA 3800B PLUS with belt outfeed for medium capacities, for example approx. 200-1000 kg per hour, depending on product. Efficient and gentle washing of lettuces, vegetables and fruit by means of adjustable water rotation.

The removable belt can be offered with straight or inclined options and dipping belt, to allow connection between different washing machines at the same height. Furthermore, the conveyor belt is provided with a standard air scraper to allow smooth product discharge. As special options, the discharge belt can be provided with de-watering devices, just as knocking belt or air blowing/suction devices. Kronen Belt conveyor discharge are easy to clean and especially suited to run very delicate products, such as baby leaf and Salanova®.

Measures		Products & capacity	
I x w x h	4209 x 1388 x 1675 mm	Lettuce	up to 700 kg/h
Weight	590 kg	Vegetables	up to 900 kg/h
Infeed / feeding height	1232 mm	Fruit	up to 900 kg/h
Discharge / outfeed height	759 mm	Aromatic herbs	up to 300 kg/h
Power		Cabbage	up to 900 kg/h
Total power	7.7 kW	Field mushroom	up to 400 kg/h
Water			
Total water volume	814 l		

Washing

GEWA 3800V PLUS, GEWA 5000V ECO



**Washing & sorting machine
GEWA 3800V PLUS
for bell peppers**

This innovative GEWA 3800V PLUS has been specially designed for washing and sorting sliced bell pepper (completely cut with core and kernels). Due to the automatic special separation method different kinds of bell pepper (diced or sliced) can be processed.

By means of a sophisticated water streaming system the waste and good product are separated thus saving extensive costs. The machine can easily be adjusted, e.g. for various kinds of bell pepper. Furthermore, it can be used as a standard washing machine by easily lifting up the link conveyor.

A capacity of >800 kg (good product) can be achieved. The standard design of the GEWA 3800 V PLUS washing & sorting machine includes WMS and sand trap funnels and many more features.

We offer processing systems for washing & sorting up to 7 tons of raw goods.



**Washing machine
GEWA 5000V ECO**

Washing machine GEWA 5000V ECO with vibration outfeed (product outfeed over vibration screen) for bigger capacities, for example approx. 600-2500 kg per hour, depending on product.

Efficient and gentle washing of lettuces, vegetables and fruit by means of adjustable water rotation.



Measures		Products & capacity	
I x w x h	3815 x 1389 x 1675 mm	Lettuce	up to 700 kg/h
Weight	560 kg	Vegetables	up to 900 kg/h
Infeed / feeding height	1232 mm	Fruit	up to 900 kg/h
Discharge / outfeed height	933 mm	Aromatic herbs	up to 300 kg/h
Power		Cabbage	up to 900 kg/h
Total power	6.4 kW	Field mushroom	up to 400 kg/h
Water			
Total water volume	912 l		

Measures		Products & capacity	
I x w x h	5145 x 1590 x 1600 mm	Lettuce	up to 1750 kg/h
Infeed / feeding height	1073 mm	Vegetables	up to 2250 kg/h
Discharge / outfeed height	825 mm	Fruit	up to 2250 kg/h
Power		Aromatic herbs	up to 500 kg/h
Total power	10.7 kW	Cabbage	up to 2250 kg/h
Water		Field mushroom	up to 800 kg/h
Total water volume	1400 l		

Washing GEWA XL

De-Watering BDS 3000/800



**Washing machine
GEWA XL**



**Belt de-watering system
BDS 3000/800**

The new GEWA XL washing machine offers optimal washing results for large quantities of salads and vegetables.

- ▶ Powerful and gentle washing using the continuous flow process
- ▶ Compact design for processing large quantities, e.g., iceberg 5 t / h or babyleaf 1.5 t / h.
- ▶ Dwell time of 45 seconds
- ▶ Optimal water flow in the piping and washing tub, thus increasing energy efficiency and avoiding/reducing biofilm forming
- ▶ Reduced water consumption during spraying and washing
- ▶ No organic residue on the product due to optimized spraying
- ▶ Extension of the product shelf life
- ▶ Low carryover of water due to belt suction
- ▶ Standard equipment with Sand trap, Insect removal system with increased surface contact, Filter screen, WMS (Water Management System), centrally controlled filling and draining.
- ▶ Individual discharge area
- ▶ Wide range of additional functions and useful accessories

Measures

I x w x h	6738 x 2417 x 1920 mm
Volume wash tank	2 m ³
Volume filter tank	max. 1 m ³
Power	
Total power	14 kW

The BDS 3000/800 is used for de-watering fruit, hard and soft vegetables as well as salad and baby leaf. It removes excessive free moisture from the products before the drying process. The residual moisture can be reduced to 3 % depending on product and capacities. Products are transported by a wire mesh belt of 2000mu.

KNOCKING SECTION: The products drop on the infeed belt, move to the knocking section and will there evenly be distributed.

DE-WATERING SECTION: The products are running inbetween two belts (top/down). In a first step the suction device takes the first moisture from the product. Directly afterwards the products (only leaf and light products) are blown to the top belt where a further suction operation is performed. In this way 6 similar dewatering operations take place. Hard and more heavy product will stay on the bottom belt. The de-watering belt system is designed with an open stainless steel frame. Round materials are used wherever possible and all materials are FDA approved. The BDS 3000/800 is characterized as a hygienic and "easy to clean" construction.

The outfeed bottom is equipped with an air knife to remove remaining product from the belt. A noise reduction box captures moisture and reduces the noise.

Measures

I x w x h	3350 x 1650 x 1700 mm
Infeed	1000 mm +/- 50 mm
Outfeed	1100 mm +/- 50 mm
Power	
Total power	15 kW

Spin-drying

K 50 series, Basket-Carousel



Spin-dryers K 50 ECO and K 50

K 50 ECO and K 50 are ideal for salad, vegetable and various other applications. KRONEN ECO spin-dryers are available with one speed (600 or 900 rpm) or with 7 speeds (K 50-7 ECO) and a transparent cover. The infeed height is 850 mm.

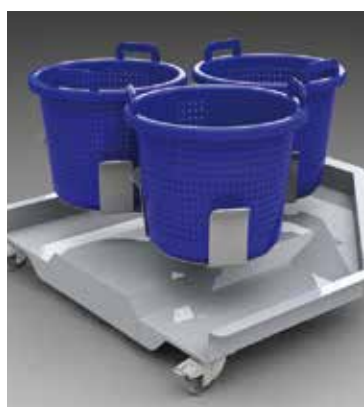
The KRONEN top model K 50 with inclined cover (590 mm) for lower, more convenient loading is available as K 50-7S with 7 speeds and K 50-100S with adjustable speed from 250-850 rpm as well as a 100 program memory to achieve the perfect combination of spin speed and time for each individual product. The lid lock is included as a standard on the K 50 models.

The hygienic design completely made from stainless steel guarantees a quick and thorough cleaning.



Basket-Carousel

This attachment works as an efficient link between washer and spin-dryer by ensuring continuous operation. It simplifies the change of the baskets and collects the overflowing product in the stainless steel base. Also available as an automatic version with weight control.



Spin-dryer Turbo K50 ECO 600/900 rpm		Products & capacity	
I x w x h	869 x 580 x 923 mm	Lettuce	up to 270 / 360 kg/h
Weight	140 kg	Vegetables	up to 480 / 600 kg/h
Total power	0.75 kW	Fruit	up to 390 / 520 kg/h
Basket volume	44 l	Cabbage	up to 420 / 560 kg/h
Speed	600 / 900 r/min	Aromatic herbs	up to 140 / 210 kg/h
Spin time	fixed	Spices	up to 200 / 300 kg/h
Spin-dryer Turbo K50-7 ECO		Products & capacity	
I x w x h	869 x 580 x 928 mm	Lettuce	up to 360 kg/h
Weight	140 kg	Vegetables	up to 600 kg/h
Total power	0.75 kW	Fruit	up to 520 kg/h
Basket volume	44 l	Cabbage	up to 560 kg/h
Speed	250 - 850 r/min	Aromatic herbs	up to 210 kg/h
Spin time	free adjustable	Spices	up to 300 kg/h
Spin-dryer Turbo K50-100S, K50-7S		Products & capacity	
I x w x h	928 x 588 x 938 mm	Lettuce	up to 350 kg/h
Weight	170 kg	Vegetables	up to 560 kg/h
Total power	0.75 kW	Fruit	up to 500 kg/h
Basket volume	44 l	Cabbage	up to 540 kg/h
Speed	250 - 850 r/min	Aromatic herbs	up to 195 kg/h
Spin time	free adjustable	Spices	up to 290 kg/h

Peeling

PL 25K, PL 25S, PL 40K



PL 25K



PL 25S



PL 40K

Peelers

PL 25K, PL 25S, PL 40K

Peeler PL Series

The PL Series has two peeling systems and a washing system to choose from.

The abrasive system peels quick and price effective for further processing. The knife system peels the potatoes, carrots, beetroot, turnips and other hard vegetables like hand peeled and therefore is the ideal solution for whole peeled product with longer shelf life. The rubber knob system can be used for washing potatoes, carrots, etc. The rounded, easy-to-clean peeling chamber guarantees residue-free waste management that helps ensure a hygienic environment. The automatic top-down water sprinkler washes the product so it's ready to process. The pneumatic door opening (optional for PL 40K) allows trouble-free integration of the machine into automatic production process. Emptying via pneumatic door opening – followed by automatic closing of the door for next peeling.



PL 25K		Products & capacity	
Measures		Carrot	up to 250 kg/h
I x w x h	815 x 705 x 1285 mm	Cabbage turnip	up to 300 kg/h
Power		Potato	up to 400 kg/h
Total power	1.12 kW	Beetroot	up to 250 kg/h
Processing data			
Processing volume per hour	400 kg/h		
Kg per batch	25 kg		
PL 25S		Products & capacity	
Measures		Cabbage turnip	up to 300 kg/h
I x w x h	735 x 750 x 1195 mm	Potato	up to 400 kg/h
Power		Beetroot	up to 250 kg/h
Total power	1.5 kW		
Processing data			
Processing volume per hour	400 kg/h		
Kg per batch	25 kg		
PL 40K		Products & capacity	
Measures		Carrot	up to 500 kg/h
I x w x h	930 x 910 x 1395 mm	Cabbage turnip	up to 400 kg/h
Power		Potato	up to 600 kg/h
Total power	1.52 kW	Beetroot	up to 600 kg/h
Processing data			
Processing volume per hour	600 kg/h		
Kg per batch	40 kg		



Complete & continuous peeling line

Root processing line for washing, peeling, cutting / dicing up to 1.200 kg per hour. The loading and peeling process is central controlled.

Peeling

AS 2, AS 4, AS 16



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AS 2 + 4

Apple peelers AS 2, AS 4, AS 16



AS 16

Apple Peeler AS 2+4

The Apple Peeler AS 2 peels, cuts and cores up to 600 apples per hour. A spring-loaded knife adjusts automatically to provide a consistent result on uneven surfaces. The peeling thickness can be adjusted. The multifunctional AS 4 is a logical upgrade that provides the additional option to slice apples in rings or apple wedges in small pieces for apple pie for example.

Apple Peeler AS 16

The AS 16 apple peeling & slicing machine is perfectly suited for processing a wide size range of apples (60 – 120 mm Ø) up to 2000 pcs per hour. Switching from one apple size to another can be easily done within 2 minutes during the peeling process (no tools required!).

The slicing, segmenting and coring tools can be changed simply and very quickly. In the first process stage the apples are positioned into the four holders. The fruit holders are moving forward by means of a step motor. The fruit holders are pushed upwards pneumatically to transfer the apple centred onto the pins. The pins with the fruit rotate 90° reaching the peel position. Through rotation with adjustable speed and a special formed knife the apples are peeled with a very smooth surface without grooves.

In the next process-stage the peeled apples can be sliced. In the third stage the apples are either cored (23, 25 or 27mm) or cored & wedged (2 to 16 pieces). The end products (either peeled, cored or cut apples) are discharged from the machine

by an integrated conveyor. The machine includes a PLC which controls the step motor (for the feeding and the rotation systems) and the pneumatic valves.

Apple Peeler AS 2		Products & capacity	
I x w x h	600 x 300 x 400 mm	Apple	up to 90 kg/h
Weight	30 kg		
Total power	0.15 kW		
Processing date			
Processing volume per hour	600 pc/h		
Apple Peeler AS 4		Products & capacity	
I x w x h	660 x 300 x 400 mm	Apple	up to 90 kg/h
Weight	35 kg		
Total power	0.15 kW		
Processing date			
Processing volume per hour	600 pc/h		
Apple Peeler AS 16		Products & capacity	
I x w x h	2334 x 2579 x 1889 mm	Apple	up to 400 kg/h
Weight	955 kg		
Total power	3 kW		
Processing date			
Processing volume per hour	2000 pc/h		

Peeling

FP 20, ORKI



Mango peeler
FP 20

The automatic mango peeling machine FP 20 is perfectly suited for peeling mangos within seconds. The intelligent peeling system is based on the economy peeler principle. Therefore, the peeling losses are reduced to a minimum and very good peeling results also with flat mangos can be achieved. The peeling loss amounts to approx. 21 % depending on the fruit size. Product feeding into the machine is automatic, only the mango has to be placed in a product holder. So, it is possible that one person may fill a number of machines thus increasing the capacity per person up to 12-16 mango per minute. Destoning the mango as well as top + tail will be done manually as further steps.



Measures		Products & capacity	
I x w x h	1420 x 800 x 1845 mm	Mango	up to 100 kg/h
Weight	325 kg		
Power			
Total power	1 kW		
Processing data			
Processing volume per hour	240 pc/h		



Orange, grapefruit, kiwi peeler
ORKI

To produce beautiful pieces of orange, grapefruit or kiwi, you need the ideal basic ingredient: the clean, soft, fleshy part of a fruit...

This can be effortlessly achieved with the new ORKI peeler, without compromising on quality.

The fully automated ORKI peeler which consists of a top & bottom cutter, is capable of cleaning oranges, grapefruits and kiwi. The ORKI peeler can operate as stand alone unit or can be interlinked with a second machine to increase the capacity.

Each ORKI peeler is working with two peeling stations to achieve the maximum capacity of 18 oranges per minute. It is also possible to supply this machine with only one peeling station and therefore a capacity of max. 9 fruit per minute.

Main features of the ORKI peeler:

- ▶ Fruit handled with the utmost care
- ▶ Maximum shelf life guaranteed
- ▶ Maximum yield from the fruit
- ▶ Simple to operate and easy to clean
- ▶ Convenient processing – Convenience Fruit!

Measures		Products & capacity	
I x w x h	2000 x 1800 x 1840 mm	Orange	up to 110 kg/h
Weight	625 kg	Kiwi fruit	up to 80 kg/h
Power		Grapefruit	up to 150 kg/h
Total power	2 kW		
Processing data			
Processing volume per hour	1080 pc/h		

Peeling, de-stemming

AMS 220, GDM 35

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Pineapple & melon peeler AMS 220



The AMS 220 pineapple & melon peeling machine is ideally suited to peel fruit in a great variety of different shapes and sizes:

- Many kind of fruit such as e.g. pineapples, melons of all kind, pumpkins with a smooth surface (e.g. butternut) can be peeled regardless of the products contours. The AMS 220 scores with this significant flexibility benefit!
- Pineapples can not only be peeled but also cored simultaneously (on/off switching function)
- The peeling depth is adjustable from 1,5 to 10 mm by changing the specially developed contour control system – without any tooling within seconds. An extremely smooth and almost score-free surface is achieved by this control unit following the shape of each (individual) fruit.

The clearly arranged push buttons on the machine switchboard are easy to use and emphasize the high user friendliness. The compact design of the AMS 220 and the combination as standard with a mobile frame ensures ease of use – anytime and anyplace.



Measures	
I x w x h	843 x 737 x 1390 mm
Power	
Total power	0.7 kW

Products & capacity	
Capacity depending on product:	up to 4 fruit / min.

Grape de-stemmer GDM 35



De-stemming grapes no longer needs to be done by hand. The newly developed GDM 35 GRAPE DE-STEMMER is perfectly suited for automatic de-stemming of grapes. The machine ensures that the grapes are neatly loosened („unscrewed“) without damaging the grapes.

An integrated air knife prevents condensation. Furthermore, the machine is equipped with a gap width adjustment (for optimal adaption to grapes sizes). The de-stemmed grapes will then be gently put on a conveyor belt for further processing or end control.

Capacity: up to 240 kg per hour (depending on grapes sizes and varieties)



Measures		Products & capacity	
I x w x h	1635 x 1117 x 1805 mm	Grape	up to 240 kg/h
Weight	500 kg		
Power			
Total power	2.5 kW		
Processing date			
Processing volume per hour	240 kg/h		

Packaging

MP, CP, UP, Flow



**Minipack Machine
MP 125**

The MP 125 is ideal for packaging processes with a need for medium to high capacity for relatively small bag sizes or those processes where a very compact machine is an absolute must! For example: hand sorted and/or composed products, sample packaging etc. The bag length is determined by means of an encoder wheel on the film which guarantees a high accuracy! The MP 125 has a standard bag length of 175 mm in one seal step (multiple seal steps possible). Other methods to determine the bag length are optional, for example a photocell on bag marker (when pre-printed film is used). Together with the standard equipped full color touchscreen it is easy to create and store programs (up to 99 preset programs can be stored in the machines memory). The user friendly interface which is divided into an operator level and an administrator level will guarantee you that the machine cannot be disrupted in any way. Various accessories such as photocell on bag marker, gas flushing unit, vibration unit, synchronisation unit with weighing/dosing system, etc. are available.

Technical specifications MP 125:

Bag width pillow (min./max.):	40 – 125 mm
Max bag length:	unlimited (175 mm per sealstep)
Film thickness:	20 – 120 micron
Maximum production speed heat-seal / impulse:	60 / 35 p/min
Maximum film width:	280 mm
Core diameter film roll:	76 mm (3")
Max. outer diameter film roll:	320 mm
Voltage:	230 Volt / 50 Hz
Machine dimensions (l x w x h):	688 x 450 x 1.030 mm



**Packaging machine
CP 350 PLUS**

The CP 350 PLUS is very compact and suitable for packing various products. Being one of the smallest form, fill and seal machines in the world, it can transform film into a bag by using a specially developed former set.

Finally the machine fills and seals the bags representatively. The small, space-saving and completely self supportive packaging machine ensures an efficient, clean and hygienic operation. The CP 350 PLUS is suitable for all types of free-flow food (like vegetable, fruit, lettuce, pastries, raw vegetables, sweets) and non-food products. Besides standard pillow bags the CP350 is able to produce square bottom bags or gusset bags.

The CP 350 PLUS is being characterized by its flexibility and userfriendliness and it covers a high standard equipment. Various accessories are available, i.e. photocell for printed film, gasflushing, vibration unit, perforation systems, end of film detection and many more. Options and components can be retrofitted quickly.

Technical specifications CP 350 PLUS:

Bag width (pillow):	75 – 350 mm
Max. bag length:	unlimited mm
Max. bag length per sealing step:	230 mm
Max. production speed:	40 bags/min
Film thickness:	25 – 120 µ
Core diameter:	76 mm (3")
Max. film width:	750 mm
Max. outer diameter film roll:	320 mm
Voltage:	230 V, 50/60Hz
Machine dimensions (l x w x h):	1.495 x 962 x 1.647 mm

Vertical form-, fill- and sealing machines form a flat film into a tubular shape by means of a specially former set. The funnel can be filled with any type of free flowing product by hand or automatically via a weighing or dosing system. Finally the machine seals and cuts the bag with its contents and a perfectly formed bag is made. The packaging machines are suited for packing all free flowing products, food or non-food.



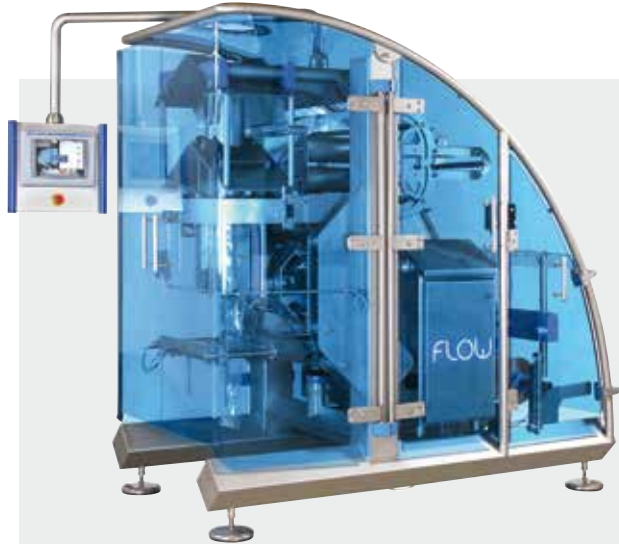
**Packaging machine
UP 350**

The GKS-Unipack UP 350 has a hygienic design and is constructed out of stainless steel. Through its open and accessible construction, the machine is easy to clean and to maintain. Therefore the machine is very suitable for free-flow food applications in the food industry. With its large range in packaging sizes (75 up to 350 mm bag width and endless bag length) this flexible machine can be used in a wide variety of packaging situations. The machine capacity is up to 50 bags per minute. In the standard configuration it produces pillow bags. Optionally the machine can produce self-standing square bottom bags.

The machine covers a high standard equipment and is built in a modular way, so each individual function group (e.g. sealing mechanism or electrical cabinet) can be exchanged within minutes. This creates a reduction in downtime and costs during maintenance work. Various accessories are available – options and components can be retrofitted quickly.

Technical specifications UP 350:

Bag width (pillow):	75 - 350 mm
Max. bag length:	unlimited mm
Max. bag length per sealing step:	480 mm
Max. production speed:	50 bags/min
Film thickness:	25 - 120 µ
Core diameter:	76 mm (3")
Max. film width:	750 mm
Max. outer diameter film roll:	320 mm
Voltage:	230 V, 50/60Hz
Machine dimensions (l x w x h):	1.495 x 962 x 1.999 mm



**Packaging machine
Flow**

FLOW is the next generation vertical, form, fill and sealing machine. It is suitable for packing all kinds of bulk goods, both food as well as non-food products. FLOW distinguishes itself from other packaging machines by its hygienic design, full stainless steel construction (no aluminum parts), high packaging speeds and very user friendly interface. The machine is fully servo driven, both on the film transport as well as on the sealing system. FLOW is specially designed for packaging processes with a medium to high capacity, with a wide variety on products and film types. Especially processes in which hygiene and cleaning are highest priority FLOW is the machine to beat. The machine is available with various continuous heated sealing systems to process a wide variety of packaging materials, PP, PE, laminated and coextruded films. The bag length is determined by an encoder on the film which guarantees a high accuracy. For processing printed films an eye mark reader is installed. The intuitive touch screen provides the possibilities to create and store programs (up to 200). The user friendly interface which is divided into an operator and administrator level guarantees a trouble free operation in every situation. A lot of options are available.

Technical specifications Flow:

Bag width range:	200 - 500 mm
Max. bag length:	610 mm (longer in multiple steps)
Max. production speed:	90 packs/min
Maximum film width:	1.040 mm
Film thickness:	25 - 130 micron
Core diameter:	76 mm (3")
Outer diameter film roll:	500 mm
Voltage:	230 Volt / 50 Hz / 16 Amp
Machine dimensions (l x w x h):	2.140 x 1.430 x 2.340 mm

Trimming & sorting, transporting

Ergonomic trimming tables, conveying belts

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Ergonomic trimming tables

We offer convenient and ergonomic trimming & sorting tables, automatic waste separation systems and automatic conveying equipment fully integrated in complete processing lines.

For example, our trimming & sorting stations – for 1 up to 16 and even more persons – are perfectly suited for adaption directly to the infeed belts of our cutting machines. These tables are equipped with stepless belt speed adjustment, product guides, removable cutting boards, waste chute, etc.

Various options and accessories are available such as hopper extensions, waste belts, crate supports, etc. – allowing improved yield and considerable increase in productivity!



Conveying belt systems

We offer various conveying belt systems for the efficient and smooth transport of your food products. Our product portfolio includes solutions for any given conveying demands from simple standard belt conveyors to complete conveying systems with electronic control.

Due to the compact and modular construction the belts and other parts are quickly removable without any tools for cleaning.

All parts that are in contact with food are made of stainless steel AISI 304 or FDA approved plastic.

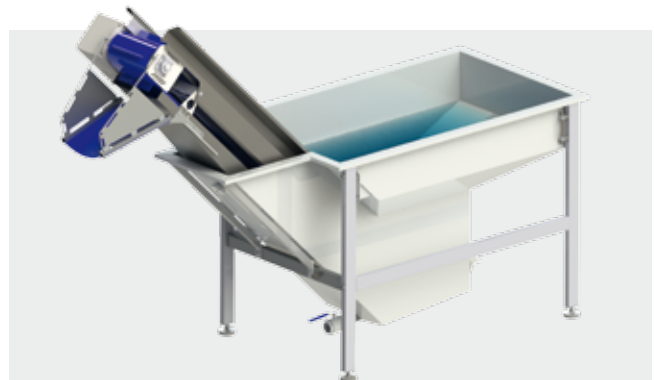


Roller inspection tables

These tables can be placed before or after the peeling and/or cutting machines and are made for visual product control.

Poor quality products can easily be sorted out.

Different models and designs can be supplied.



Water tank for pre-cleaning

Products (e.g. potatoes) are filled into the robust water tank for temporary storage & pre-cleaning and are lifted with an effective conveyor to the next production line element.

The water tank fits together with the PL peelers and further production line elements.

Weighing & mixing, central controlling

Weighing systems, central control



Automatic weighing system

- To determine product weight
- Continuous dosing of various products allows thorough blending for e.g. salad mixtures

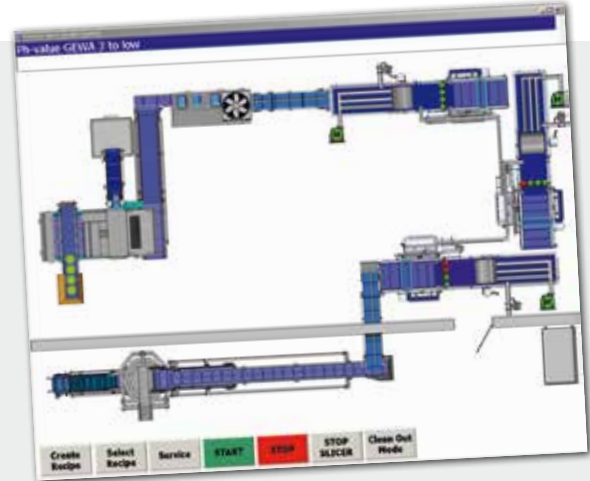
The innovative KRONEN washing and processing technique in combination with the proven automatic weighing belt system allows a precise, continuous and automatic dosing and mixing of different products, e.g. salad and cabbage. A thorough blending of the products takes place in a KRONEN GEWA washing machine, for example (other customized weighing systems are available).

Example:

Iceberg, Frisee, radicchio and other leaf lettuce with capacities of 1300 - 1400 kg per hour are processed adding a mixture of 5 - 45 % (depending on produce). Dosing sliced cabbage but also other products such as carrot sticks (julienne), shall be provided automatically always in the same mixture ratio.

The advantages are obvious:

Automatic operation and, thereby savings in personnel; continuous weighing process without belt stop on main product; storage of production data (statistics); control on raw material input; high accuracy of the finished mix achieving cost savings on expensive products, etc.



Process automation and visualisation for complete lines

For use in processing lines KRONEN has developed a standardized central control system offering an optimal cost-to-benefit ratio. The complete line can be controlled by means of an operator via touchscreen or PC. The control can be adapted individually to the production processes. This facilitates the adaption of the performance of the line in respect to varying capacities, products or product mixes.

Complex lines need an intelligent interaction which is assured by means of KRONEN process control components.

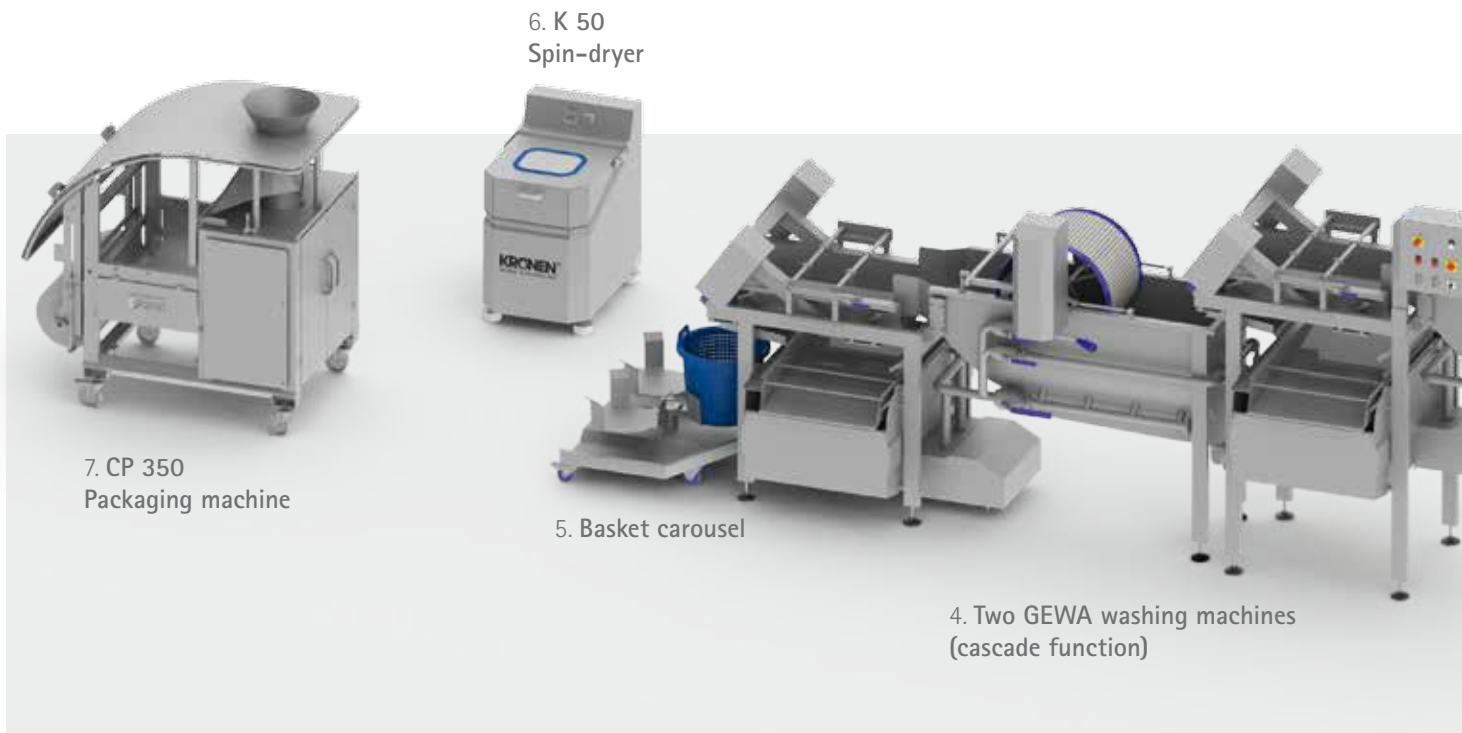
These process visualisation components, combined with the optional bus-system, allow to locate system messages, as e.g. maintenance messages or error messages and react without delay. For instance, in case of a machine stop in the production line, the system stops automatically upstream machines and avoids the waste of valuable raw material.

Advantages in detail:

- Quality
- Traceability
- Detailed process information
- Standardized process
- Easy handling on product changes
- Process control on the work floor
- Less downtime
- Remote Service access possible
- Maintenance / error messages can be promptly located
- Avoids waste of raw material

Concepts for complete production lines and processes.

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Planning

In addition to the standard range, KRONEN is always interested in discussing specific customer requirements. Thanks to the extensive range of machine accessories and our knowledge of the food processing industry, all machines can be enhanced to meet the customers individual needs. We will be happy to sit down with you and plan the solution that best suits your needs. Thanks to the skill and knowledge of our staff we are ideally qualified to advise you about all areas of salad, vegetable and fruit processing, from individual machines to complete purpose designed factory layouts. We pride ourselves on our ability to work in partnership with our customers to oversee the design, construction, installation and commissioning of the equipment. In short KRONEN create solutions that work.

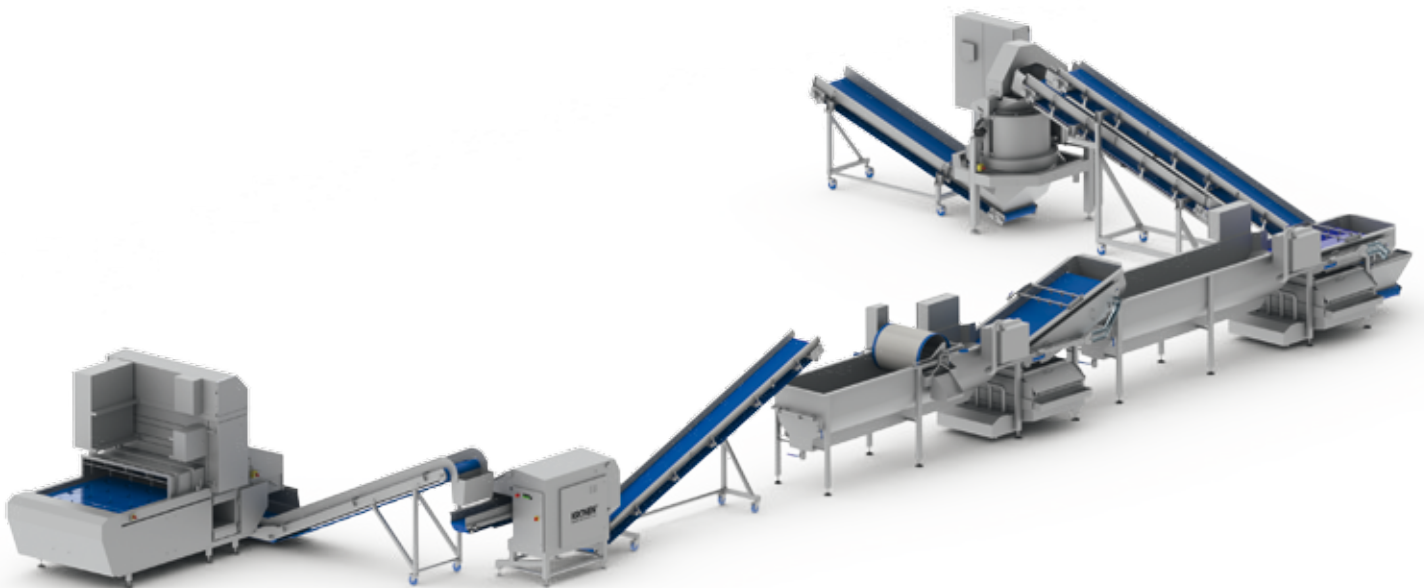
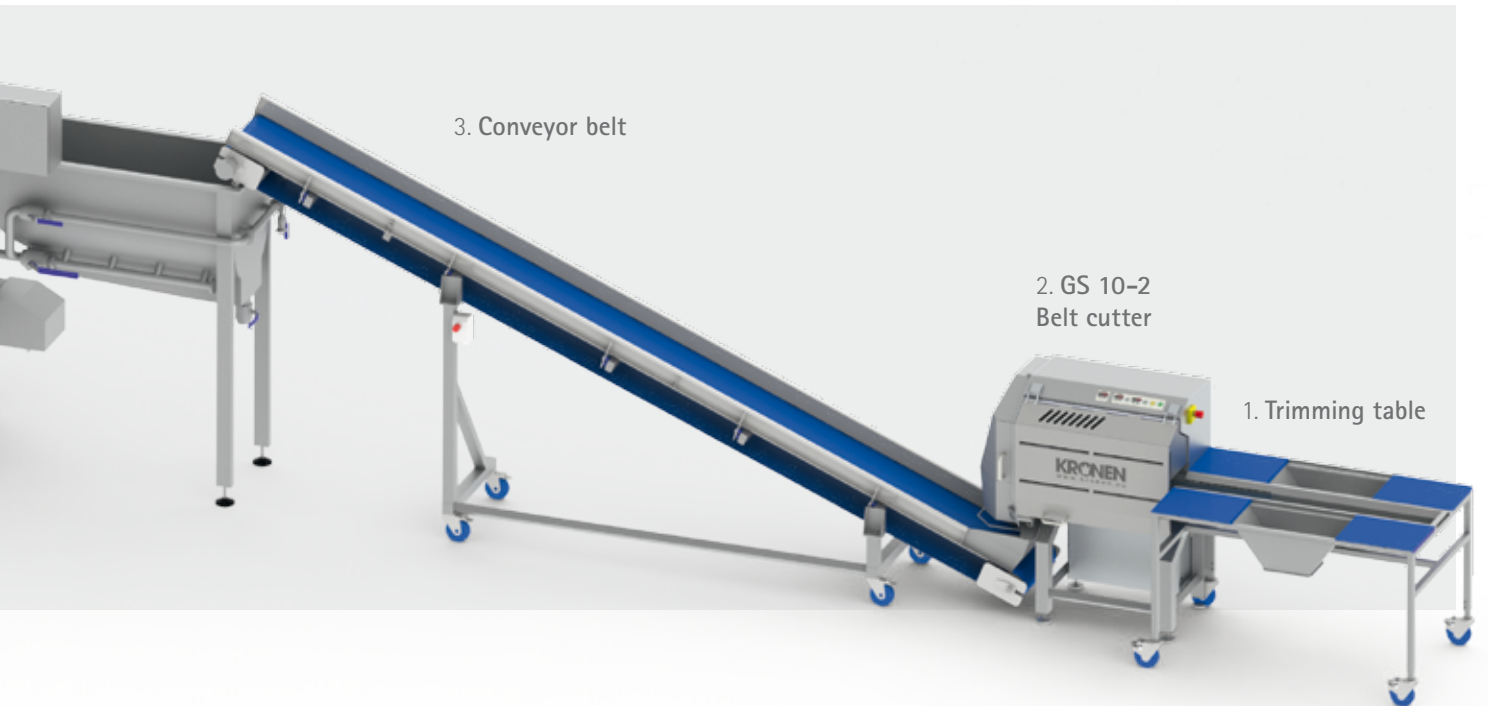
Manufacturing

The fact that KRONEN machines can be individually customised represents an important step towards building processing lines that provide real benefits to the user. Even existing customer machines can be modified to become part of a new line concept. Recently, for example, KRONEN modified a machine from its GS range to meet the unusual request of one of its customers. In doing this we took a machine that normally operates in a factory environment and modified it so that it was mounted onto a chive harvesting machine, slicing chives in the field. This development protected the delicate nature of the chives, by eliminating additional handling of the product prior to slicing, and delivered a superior finished product.

Proof that KRONEN really do create solutions that work. The layouts shown are just two examples of the ideas available from KRONEN, why not contact us to discuss how we can be of assistance to your business?

The integration of special-purpose machines.

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Large processing line for various salads –
from preparation to spin-drying

Some of our many reference projects



Portugal: Processing line for washing & sorting bell peppers – capacity up to 7 tons/h.



Italy: Processing line for destoning, peeling, washing potatoes and other vegetables – capacity up to 800 kg/h.



Belgium: Processing line for Baby leaf and mixed salads – capacity 300 up to 800 kg/h.



Austria: Processing line for trimming, slicing, washing, treating, spin-drying and mixing leaf salad – capacity up to 500 kg/h.



Norway: Salad processing line with weighing technology for cutting, washing, de-watering and mixing leaf salad – capacity up to 800 kg/h Iceberg lettuce and up to 400 kg/h Baby leaf.



United Kingdom: Large salad processing line – capacity up to 1.500 kg/h Iceberg lettuce and up to 800 kg/ Baby leaf.



Turkey: Large salad processing line – capacity up to 1.500 kg/h



Germany: Harvest & slice cut at chives field with 4 big KRONEN GS 20 belt cutting machines – capacity up to 1,8 tons/h



International Cruise liner: Economic cutting and washing technology – capacity up to 500 kg/h

Product Range:



- **Belt cutting machines** GS 10-2, GS 20
- **Slice and wedge cutter**
Tona S, Tona E, Tona S 180K
- **Special cutting and grid cutting machines**
Tona Rapid, Tona Rapid 3D, Tona Rapid XL, Multicorer, TT 450
- **Cube and strip cutting machine** KUJ V
- **Spiral cutting machines** SPIRELLO 150, S 021
- **Multi purpose cutting machine** KSM 100
- **Cabbage cutting machine** CAP 68
- **Cabbage corer** KSB
- **Dicing, wedging and shaping machine**
PGW, HGW
- **Vegetable and salad washing equipment**
- **Peeling machines**
for citrus fruit, melons, apples, pineapples, potatoes, carrots, turnips, beetroot, etc.
- **Spin-dryers and de-watering systems**
- **Packaging machines**
- **Special machines**
- **Complete production lines**

We develop and manufacture stand alone and special machines as well as complete processing lines for the food processing industry. We successfully implement production processes for you by effectively combining stand alone machines.

KRONEN - smart solutions and convincing technology for the food processing industry!



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