

K+G WETTER



200 I CUTMIX **200 I VACUUM CUTMIX**

**for the industrial manufacture
of scalded, cooked, or
raw sausage meats**



The 200 I CUTMIX and the 200 I VACUUM CUTMIX

The design

The CUTMIX series features a sturdy, torsion-resistant grey cast iron base with a cast-on bearing arm for the knife shaft. The heavy duty grey cast iron base not only guarantees an extremely long service life – 25 years and more is not uncommon, but it also absorbs vibrations caused by the bowl and cutter head rotation better than any other design.



The grey cast iron base is encased with stainless steel at our large assembly facility. In addition to visual appeal, stainless steel also meets all the requirements demanded for the processing of foods as well as all health regulations. The expertise gained from years of experience in the industry ensures that the K+G WETTER staff deliver ideal results regarding visual appeal and functionality.

A rust-proof base plate finishes off the bottom of the base. Splashed water simply cannot penetrate.

In addition to visual appeal, the point of departure for the design of the 200 I CM + VCM also included practical and sanitary issues. The smooth surfaces, without lines and corners are easily cleaned. Even the noise protection and vacuum cover with the filling opening for spices has been fitted at an angle and thus has been seamlessly integrated in the overall design. All parts that come in contact with product to be processed are made of stainless steel. The cover functions and the feeding and emptying units are hydraulically controlled. The operator panel at the centre is easy to use, featuring a membrane keypad, which is smooth and cleaned in no time. Both machines conform to the safety and health regulations pursuant to the latest EC Directive on Machinery Safety. The CUTMIX is labelled with the BG mark.

The electrical controls have been incorporated in the base. Despite of the little floor space required, all components can be easily accessed.

The vacuum pump has been integrated in the base of the 200 I Vacuum CUTMIX.





The degree of high performance and reliability of the 200 litres CUTMIX has been put to the test in daily continuous operation for years. Certainly, this is a tribute to the meticulous workmanship and superior engineering design, which allows the operator to make any type of sausage meat in one cycle in no time; plus, changing from one product to the next takes just a few flicks of the wrist. Ease of use, safety and cleanliness are distinguishing features that can simply be taken for granted.

The final products

Both machines make any type of sausage in just one cycle. One end of this spectrum includes scalded sausage meat emulsions to make pork sausage, Frankfurters, mortadella and ham sausage and, on the other end, cooked sausage meats used to make liver and blood sausage meats and, last but not least, raw sausage meats to make salami, hard sausage and very fine saveloy and more.

The range of applications for the CUTMIX machinery has been expanding to also include making fillers for sweets, or chocolates and almond paste, or to chop nuts, as well as producing cheese and fruit products.

Advantages of making sausage meat under vacuum

- Product is improved while reducing the costs
- Preserves protein to a higher degree
- Improves the binding quality of sausage meat
- Preserves colour longer
- Reduces the oxidation process thus extending the durability of the product
- Significantly reduces the noise level emitted by the machinery
- Available as an option: Cooking unit to make cooked sausage, eliminates the need for pre-cooking, no weight loss, maintains full flavour.

The cutting area

Years of studying the flow characteristics of different kinds of sausage meats went into the design of the cutting area in the cover.



A retaining plate that can be inserted reduces the cutting space to allow for improved emulsification to make scalded and cooked sausage meats.



By removing the retaining plate, the cutting area is enlarged to allow the raw sausage product to be processed to flow out freely without any pressure. The exterior lines of the twin-walled, sound-proofed cutter cover have been integrated in the overall design.

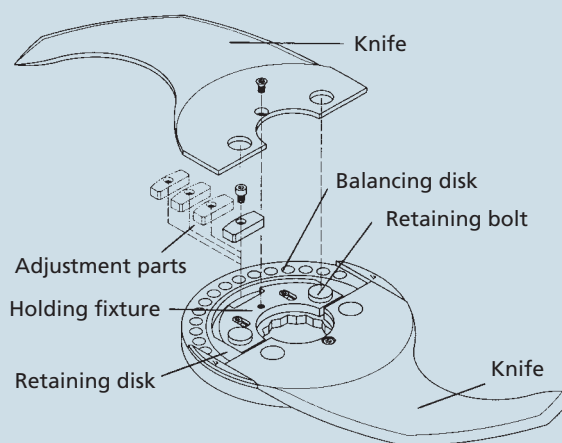
The WMK cutting system

At the core of any bowl cutter, however, is the cutting system. K+G WETTER has designed and developed the now patented WMK cutting system for heavy duty industrial machinery. This cutter head meets all the exacting requirements specific to ease of use, design, and hygiene. Regardless of what type of cutters are used, the new WMK cutting system works with 4 to 8 knives. They are radially offset on the knife shaft at an angle of 30°, 60° or 90°.

The secure hold and allowing for making quick adjustments were features of utmost importance. Every knife is fixed to a holding fixture via two heavy duty bolts. The holding fixture in turn is securely connected to the retaining disk. The retaining disk absorbs the strong centrifugal and cutting forces, which effect the individual knives. On the inside, the retaining disk is seamlessly connected to the hexagon socket of the knife shaft and embedded in the balancing disk, which securely holds the knife base and absorbs the lateral vibrations of the knives' blades.

With just a few flicks of the wrist the cutter head disk is disassembled to change the knives.

This system significantly helps to improve hygiene.



Keeping the distance from the tip of the knives to the bowl's wall to a minimum positively affects the end product, regardless whether you are making raw, scalded or cooked sausage meats. The gap is minimised by adjustment parts affixed to the retaining disk. The adjustment parts are available in different lengths; their standard version features 1 mm increments. This means that the knives can be offset by 1 mm. Smaller increments are possible.



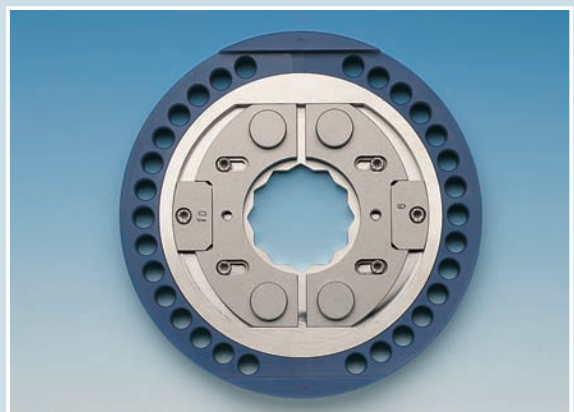
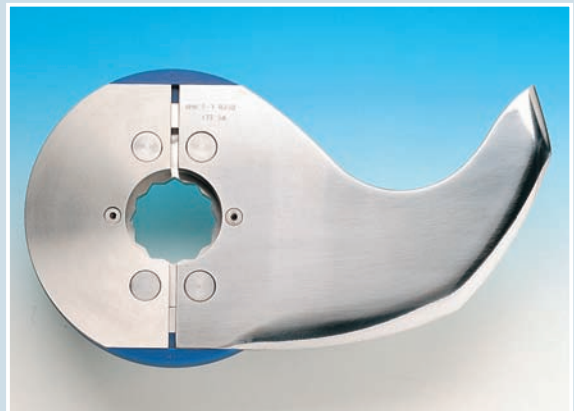
Loosening and tightening the cutter shaft nut with a power tool

The first two knives, the so-called catching knives, are individually mounted to the cutter head disk and turn on different planes. All consecutive knives are mounted in pairs. This type of arrangement ensures that the WMK cutting system features excellent feeding/catching properties, which is of crucial importance when making raw sausage. The deep-frozen cuts of meat are easily caught by the knives and cut.

Every set of cutters has been precision balanced. The loads are always balanced. The WMK cutter head runs quietly and virtually vibration-free even at high speeds.

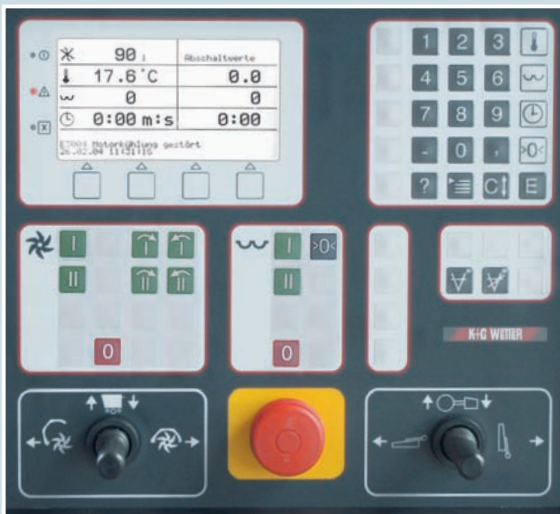
The superior cutting performance, extremely fine cuts and excellent emulsification make the WMK the cutter head perfectly suited to make scalded or cooked sausage meats. For the production of raw sausage meats, the WMK features a clear and clean cut as well as good distribution and mixing properties of meat and fat particles.

Different shapes of knives are available for the various application areas.



Knife receiving disk with adjustment parts

Drive and use

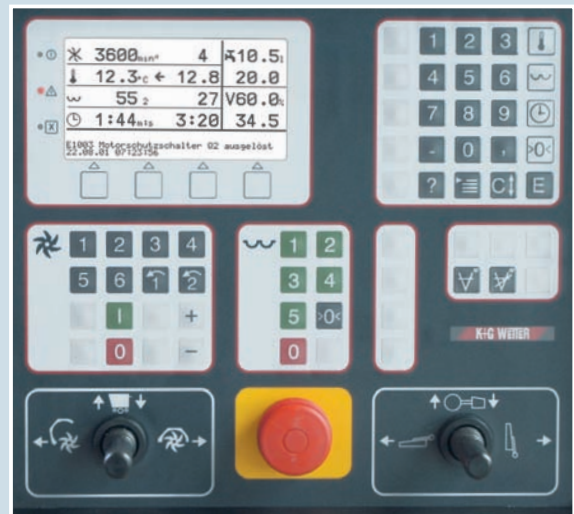


The 200 I CUTMIX + 200 I VCM are available with two types of knife shaft drives. The bowl can be driven at 2-speeds or infinitely variable.

The 2-speed drive, the T2M-R, features two cutting speeds of the knife shaft, two forwards and reverse mix cycles and two bowl speeds. The purpose of the first and slower cutting speed is to pre-cut scalded and cooked sausage meats and to cut, distribute and mix meat and fat substances of raw sausage meats. The second and faster speed serves to finely chop and emulsify scalded and cooked sausage meats. Both mix cycles will quickly and thoroughly mix filler products even if the bowl has been filled to the rim.

The LED indicates the knife and bowl speeds. A temperature limit switch finishes the cycles once the set temperature has been reached. The machinery is fed and emptied and the noise protection (vacuum) and cutter cover is hydraulically opened or closed via the two control switches.

Time and bowl rotation limit switches are also available.



The STL drive – infinitely variable – is the second type of driving the knives and the cutter bowl. The operator can select the perfect working speed for every step in production. Starting with the slow speed of pre-cutting the basic products to varying cutting speeds required for good emulsification up to the top speed of more than 130 m/sec at the tips of the knife necessary to finely chop the product. Knives running in reverse mix coarse fillers in the basic sausage meat.

STL drives also save energy and avoid high start-up peaks.

The 200 I CM/VCM STL features a microprocessor controlled 4-Q drive. Hence, the braking device works trouble and maintenance free and the braking energy is re-supplied.

The microprocessor control activates a variety of change-over and shut off functions and finishes the work processes after the desired values have been reached. This applies to the temperature of the product, cutter time and the number of bowl rotations. Additionally, the CUTMIX can be equipped with an automatic control unit to dose drinking water.

The LCD indicates the speeds, actual temperature and the number of bowl rotations. Six forwards and two reverse speeds can be individually stored and are available at the push of a key. If required, additional information can be displayed such as the desired temperature, the desired number of bowl rotations, the amount of water to be dosed, overloads, operating hours and error messages.

The microprocessor control unit also features a self-diagnosis function; in other words, the control unit continuously checks itself for errors. System malfunctions are displayed and stored and can be called up at the next servicing.

Options

Program controls. Straightforward production processes, always uniform batches. The programmer inputs the entire production flow, step by step, and can save it in up to 99 memory cells.

CUTVISION. The "CUTVISION" software completely captures all process data. The entire production sequence is directly sent to the computer that is networked with the cutter. The batch production can be traced back even over longer periods of time.

Cooking unit. Gentle simmering, no loss of stock, no pre-cooking. Full flavour as early as chopping. Proteins, minerals as well as all other ingredients are fully preserved. The K+G Wetter cooking unit works via a system of steam spray, which heats the bowl from the bottom. Likewise, the same principle is applied to cool the bowl with cold water. The heating and cooling media, steam and water, do not come in contact with the product.

Cooling unit. Both machines can be fitted for an N2 or CO2 cooling connection.

Ventilation. We would recommend an additional fan to cool the driving motors, if they are located in a climate controlled facility or operated in a dusty or humid environment. We will gladly provide further advice. Just give us a call.

Feeding and emptying

The patented feeder for the 200 l meat cart is compact and requires little space. Its defined features involve the precision guidance during the entire lifting process. The meat cart will remain fixed in its horizontal position up to the tilt point. The cart will tilt only right above the bowl to empty its content into the bowl. This is a significant advantage, in particular when feeding products of low viscosity.

The ejector discharges the finished product quickly and without leaving any remains in the meat cart. The particular shape of the rotary shield and a stock guide sheet ensure the best discharge properties of products of very low viscosity.

Noise protection and safety devices

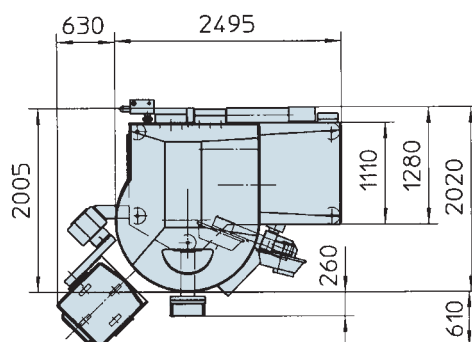
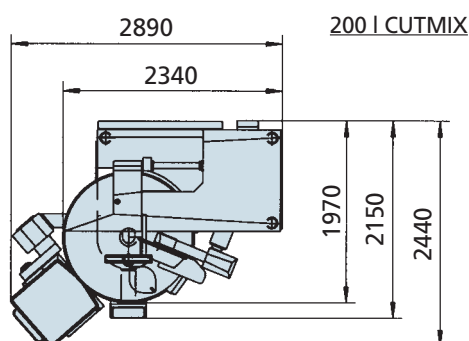
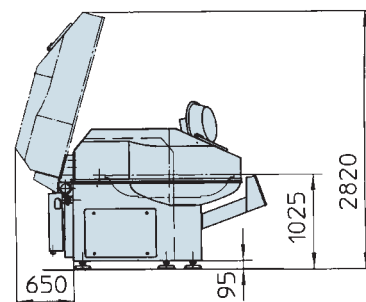
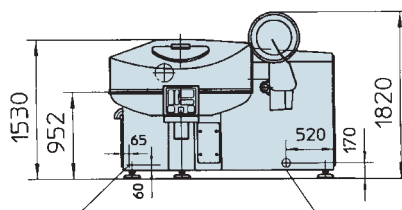
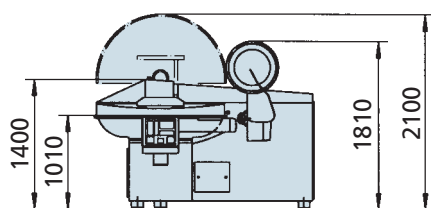
The level of noise emitted is significantly reduced as a result of the quiet, virtually vibration free operation of the WMK cutting system along with the high filling level of the bowl, the torsion-resistant cast iron base, the rubber-bonded metal legs, and the noise protection or vacuum cover respectively. If the noise protection or vacuum cover is lifted, the cutting speed will be automatically reduced. Engaging the "Emergency Stop" will activate the rapid brake system.



Technical data

		CUTMIX + Vacuum CUTMIX 200I T2M-R	CUTMIX + Vacuum CUTMIX 200I STL
Bowl capacity	approx. l	200	200
Knife shaft motor	kW	48/66	90
Bowl motor	kW	2-speed 2.6/3.2 kW	infinitely variable 3.2 kW
Mix cycle motor	kW	3.7/4.4	–
Knife shaft speed forwards	rpm	1500/3000	50 – 4400
Mix cycle speed forwards and reverse	rpm	90/180	50 – 500
Bowl speed	rpm	2-speed 9/18	infinitely variable 5 – 18
Vacuum pump unit	kW	4 kW 160 cbm/h	4 kW 160 cbm/h
Electrical connection		400 V, 50 Hz 3 phase + PE	400 V, 50 Hz 3 phase + PE
Electrical fuse protection	A gL	3 x 160	3 x 200
Net weight 200 l CUTMIX	approx. kg	3850	3850
Net weight 200 l VCM	approx. kg	5000	5000

Sketches



K+G WETTER services

For details on the 200 l CUTMIX, the 200 l Vacuum CUTMIX, or any other K+G WETTER machinery, please contact us or one of our Sales Partners.

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K+G WETTER



Optional accessories:
Transport and cleaning cart

