



WE KNOW A THING OR TWO ABOUT BAKED GOODS

ced with new requirements and big challenges. In a highly competitive environment, you have to set yourself apart with your product range and ideas.

It used to be enough to entice customers with a variety of existing products, whereas today, new, different product concepts are needed. Gluten-free products, trending products such as energy bars, and traditional baked goods like rolls, loaves of bread and cake are expanding consumer target groups.

As a producer of baked goods, you are fa- Do you want to achieve long-term customer will offer the dependability you need to deods by offering convincing products?

> To achieve all that, you need to use production equipment that offers plenty of flexibility and almost limitless upgradeability.

> VEMAG dough portioners can produce an almost endless range of products. Easy to adjust and retool, they make your production lines true all-rounders. And if you ever need anything that is not covered by the installed equipment, VEMAG Maschinenbau GmbH's modular machine range is sure to offer you an attachment which is very easy to integrate: quick and easy to connect, it

loyalty and extend your retail listing peri- liver your promises immediately and from the very outset. All of this is about satisfying your demanding customers.

> We look forward to solving your challenges with you, since we are bakery specialists through and through. And your products are what we live for.

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ENDLESSLY DIVERSE PRODUCTS

The baked goods industry produces a vast variety of bakery products that differ in their production, composition, appearance and taste. New creations are emerging constantly.

VEMAG gives you freedom in production. Our flexible, modular range of machines allows you to extend your product portfolio whenever you want to: from white bread, to cookies and pizza doughs. The possibilities of production offer you fantastic choices.

ENDLESSLY DIVERSE PRODUCTS

Pizza dough

- Pizza
- Mini pizza
- Calzone
- Foccacia
- Etc.

Breads

- White bread
- Baguettes
- Toasting bread
- Rusks
- Rye bread

Buns, rolls & toasties

- Hamburger buns
- Hot dog buns
- Muffins/toasties
- Brioche rolls





Gluten-free products

 Bread loaves Hamburger buns

 Baguettes • Biscuits

• Pizza dough

Muffins

• Rolls

• Wholegrain bread • Multigrain bread

Rye and wholegrain bread

- Rye-mix bread

• Rye bread

Pumpernickel bread

Other examples of variety

- Cookies
- Brownies
- Marzipan & fondant
- · Fillings & toppings
- Shortbread
- Energy bars
- Pie & pie fillings
- lam
- Caramel





Your diverse possibilities in processing.

EFFICIENCY AND PRECISION

Portioning

Portioning to the very gram combined with top industrial performance. Compatible attachments can be swapped easily, offering outstanding flexibility and maximum product diversity

Shaping

Excellent shape in terms of length, height, width and weight. A smooth process guaranteed for perfect quality products

Dispensing

Dispensing to the very gram and positioning products to the very millimetre ensures your product quality remains constant



Weight monitoring

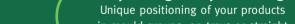
Integrated, totally reliable weight monitoring enables uninterrupted and automated production, even if raw material parameters vary

Coextrusion

Filling positioned accurately in fully closed outer shell. Perfectly synchronised dispensing processes ensure totally accurate positioning

Depositing and positioning

in mould groups, on trays or straight onto a freezer belt or oven





PORTIONING

Clean, precise portioning.

The portioning process plays an important part in the industrial production of baked goods. Technical elements such as geometry, component size and functional process- and automated line systems are perfectly ence fundamental product characteristics. You decide which properties your product should have, and we adapt our machine ful- Our powerful dough portioners process accuracy and minimum giveaway save valuable resources and the associated costs. Ef-

fective product infeed, a reliable portioning rate and gentle conveying of the dough all ensure that the downstream attachments es, from the funnel to the outlet, all influsupplied. And the product quality remains dependably constant.

ly to your requirements. Maximum weight your raw materials carefully and efficiently, which means your product is always the way you want it.

The benefits

- Excellent product quality
- Gentle processing
- Reduces giveaway and therefore saves money
- Adapts perfectly to your products
- Oil-free portioning



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SHAPING

VEMAG dough portioners portion your products without oil and shape them any way you want.

We offer a huge range of options for shaping your products perfectly:

FST883 FILLING FLOW DIVIDER

The patented FST883 filling flow divider allows you to divide and separate even the most difficult products into exact weights on multiple lanes.

MMP223 PORTIONER

The MMP223 portioner delivers an enormous output, making it an efficient industrial solution. The MMP223 shapes bars, blocks and other products at maximum speed and to an exceptionally high degree of weight accuracy with minimal giveaway, making it the perfect attachment to increase productivity. An ideal product shape is guaranteed.

ASV811 CUTTER

The ASV811 pneumatic cutter is used wherever doughs have to be separated into exact weights. The ASV811 operates with a wire or a blade, depending on the product. The wire or blade performs a controlled hinging-out movement, enabling the product to be cut cleanly and deposited properly. The belt can be oiled or floured if required. The ASV811 cutter can cut, portion, shape and deposit products: it's a true all-rounder.

The benefits

- Cut accurate weights reliably
- Rapid set-up times
- Products separated perfectly
- No problems with product residues
- Allows a wide range of shapes
- Quick and easy product change
- Constant quality



ASV811







DISPENSING

Perfectly dispensing and positioning your products in consistent quality.

ROLLER FILLING HEAD863

The universal roller filling head863 is ideal for the fully automated industrial or artisanal portioning of loaves of bread and baguette: Delicious speciality breads of exact weights – portioning is made quick, easy and economical.

SHEETING HORN

The sheeting horn is used for portioning soft doughs and mixtures with great accuracy as well as placing them directly on trays or flat products.

The sheeting horn is equipped with a pneumatically operated roller closure. It is sensor-controlled and ensures that portions are positioned precisely on the tray. The roller closure can be adapted to meet specific requirements (e.g. sheet size).

FILLING HEAD981

The filling heady81 is perfect for cleanly portioning flowable foods in accurate weights. You can use the filling heady81 to fill a wide range of mixtures and consistencies, such as cakes mixtures, gluten-free doughs, jams, spreads etc. Rework is nearly eliminated since portioning is drip-free and absolutely accurate.

The benefits

- High degree of weight accuracy
- Excellent application
- Can be adjusted to existing conveyor belts
- Product distributed perfectly



Double screw



WEIGHT MONITORING

... for automated production, even by varying parameters of the raw materials.

To ensure efficient and economical production, industrial bakeries and artisan businesses must prioritise the accuracy of the weight of dough portions, while ensuring the quality of their materials and that these are processed carefully. VEMAG guarantees weight accuracy by integrating the existing Process Check VPC715 or the digital scale877 into your production line.

Minor deviations in weight can quickly add up to kilos and tonnes. Every gram over the required amount wastes valuable raw materials, while every gram under the required amount damages your good reputation. VEMAG weighing systems ensure your products do not weigh too much or too little. If you are especially concerned that your weights and quality remain constant, the Process Check VPC715 and digital scale877 will meet your needs fully.

By monitoring the weight of products, both scales can automatically adjust portion sizes at the VEMAG dough portioner if needed.

The benefits

- Reliable prevention of underweight and overweight portions
- Guaranteed to reduce giveaway
- Continuous documentation of weighing
- Improved product planning
- Easy to evaluate data
- Ideal monitoring of the production process

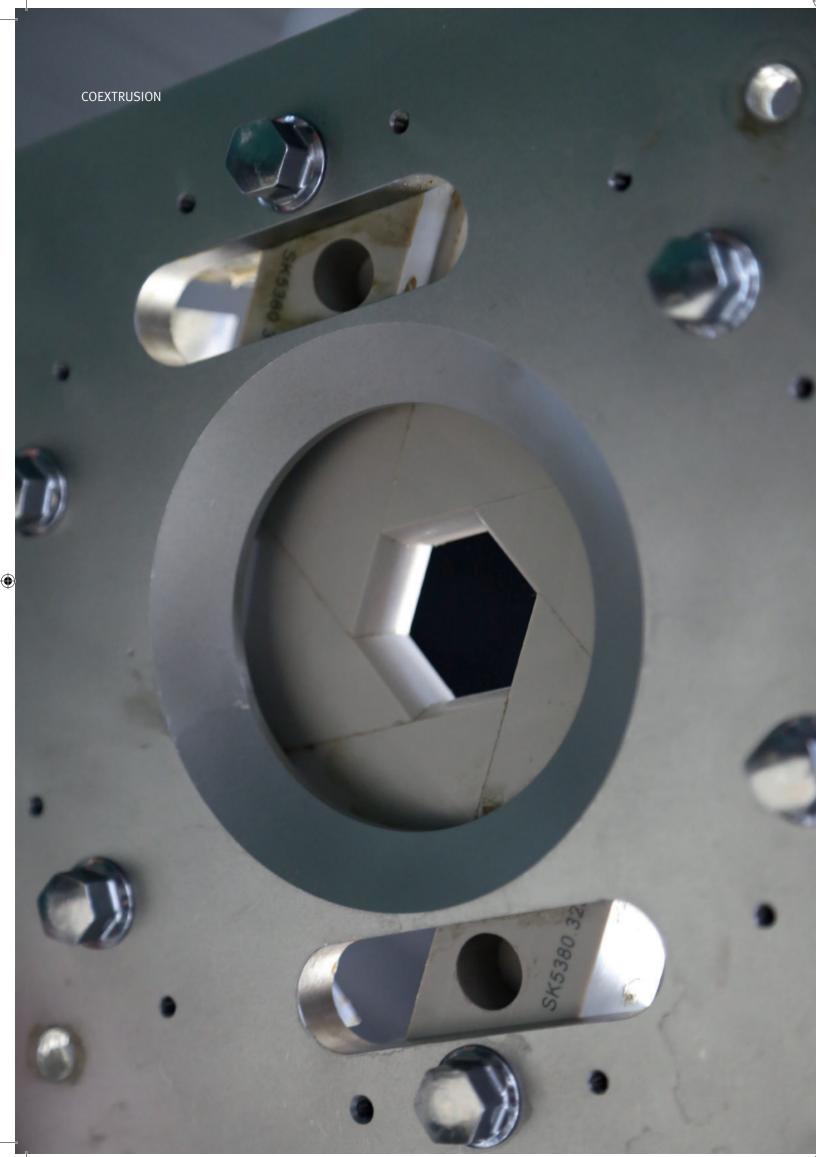
VEMAG portioning technology for products the way you imagine them



Digital scale877



Process Check VPC715



COEXTRUSION

Flexible manufacturing for exceptional product diversity.

Pastry pockets or cookies: with some products, it is the inside that matters most. Filled products with highly paste-like, coarse and very soft fillings can all be made easily using the VEMAG coextrusion system. And they can be made in multiple rows.

Combining different foods into one product opens up completely new possibilities

and flavour experiences. It is a particularly effective way of setting yourself apart from your competition and winning over customers with ground-breaking products.

Our machines position fillings precisely and close the ends securely. Products with open ends are also possible. The shape is retained even after preparation.

The benefits

- High output
- Attractive product pattern and accurately distributed mixture thanks to proven VEMAG conveying technology
- Filling positioned accurately in outer shell
- High production output and constantly accurate weights – even in multi-row applications thanks to patented filling flow divider technology
- Identically shaped products that can be reproduced daily guarantee high customer satisfaction
- Downstream automation and packaging systems can be supplied and controlled easily using centralised operation



DEPOSITING AND POSITIONING

... in mould groups, on trays or straight into the freezer or oven.

We have the perfect solution for your complex production lines which allows you to divide your products up on multiple lanes. It allows you to make efficient use of your freezer, fridge or oven, because products are portioned in a single lane and sent to the next process in multiple lanes. Our shuttle conveyors help you bake or deposit your products in mould groups.

VEMAG shuttle conveyors are available in different lengths, can be integrated perfectly into our production lines and are suitable for a wide range of products. Working at high speed, they place down your products according to the transport direction of the packaging machine.



The benefits

- High transfer rates
- Exact positioning of the products
- Products are deposited precisely for the follow-up process
- Fully automated
- Optimum hygiene





HPE - MMP223 - SC261 - Conveyor belt

THE VEMAG MODULAR **PRINCIPLE FOR MAXIMUM FLEXIBILITY**

VEMAG's large portfolio of machines, attachments and accessories is like a box of building blocks from which you can select the modules to assemble your customised

For you as a user, it means that once you VEMAG attachments and accessories are have purchased the core system, a VEMAG system components where technology and dough portioner, you can design your pro- operation are tailored exactly to our maduction the way you want using a combi- chines. That means you always have the ble accessories.

So you do not have to buy a new machine for new products: all you need is the right accessory or an attachment.





OUR MACHINES AND EVERYTHING THAT GOES WITH THEM

Our bakery lines provide you with powerful, flexible systems that can be combined with our attachments and accessories to enable a wide range of products, efficiently supporting even the most complex production processes.





HPE - Roller filling head863

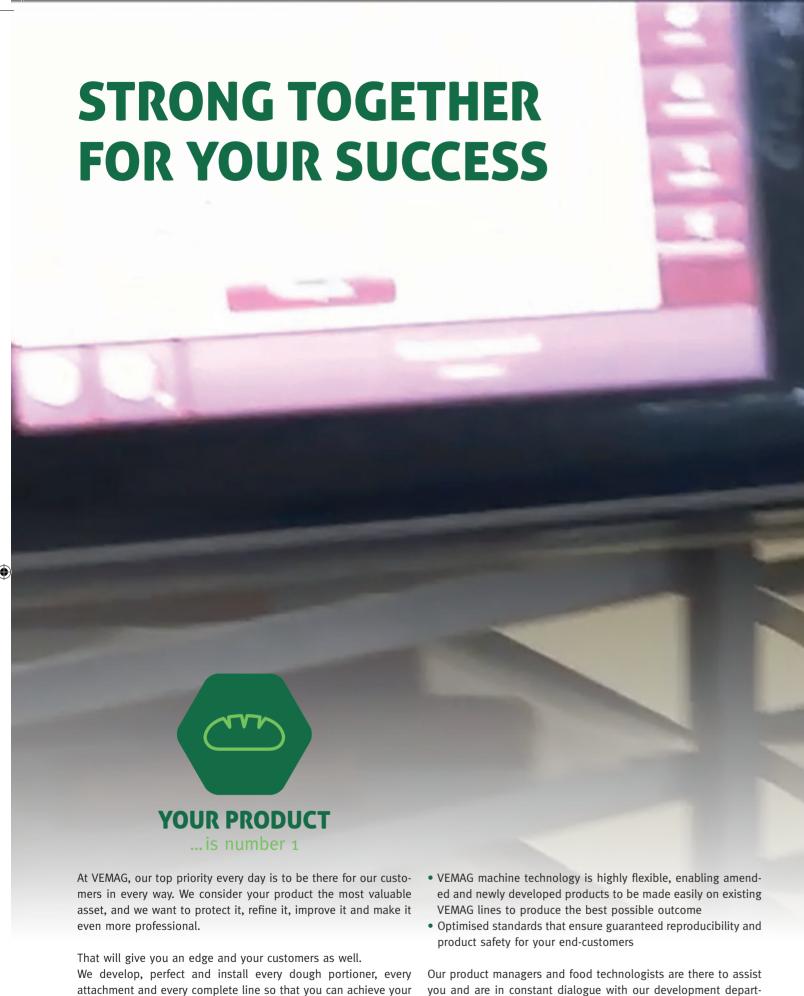






Robot500 - ASV811





objectives with a wide range of functions:

• Excellent products, designed and produced exactly the way you want them

ment in order to make your products even better using improved machine technology.



LESS RAW MATERIALS

... for more sales

Only once your product is as perfect as you want it can we think about improving yields. We understand that good food has to be competitive, which is why our own teams of experts are always using and developing their knowledge to allow you to get more of your high-grade raw ingredients into sellable products. That means more profit, and also less waste.

- Optimised weight accuracy and less giveaway allow you to deliver only what you are going to be paid for.
- Higher yield reduces your costs. For example, have you ever calculated what 1% less raw ingredients could do for your profits, thanks to VEMAG's intelligent portioning technology?
- · Perfect product sizes and geometries reduce packaging problems and improve your packaging costs. They also eliminate

Together we can work out how your process combined with our technology can generate added value for you, precisely by using less raw material.



OUTSTANDING AVAILABILITY

... another aspect of VEMAG Service

What happens if your product is not ready to sell on time? No product often means no sales, which not only reduces turnover. it can annoy your customers a lot and even drive them into the arms of your competition. VEMAG Service includes lots of ways of avoiding that:

- VEMAG machine concepts include 'Function First'. From the drawing board onwards, we try to make functions as durable as possible. A good example is our dough portioners' box-in-box system, which doubly encapsulates electronic parts.
- Quick set-up times mean more time for production. VEMAG lines can often start producing a completely new product simply by replacing a small attachment or module, which is quick and easy.
- VEMAG trains agency and branch office technicians at its VEMAG Academy. This means our international service standards are always improving for your VEMAG solutions, and it means you receive, from installation onwards, the service that will secure your investment over the long term and make your product available to meet your customers' demands flexibly.



... more customer!

VEMAG portioners and VEMAG lines offer endless features, making them low-risk production systems that give you more time to concentrate on what is important. Every time we develop anything, we think about your safety and the hygiene standards you build your business on. We were leading the world in some areas while other companies hadn't even started there.

- VEMAG supplies the world's first dough portioner with 3-A Sanitary Standards.
- VEMAG dough portioners allow you to remove stoppers and feed units hygienically, quickly and easily in the portioning direction so you can clean them. This means you can clean seals properly

because it is quick and easy to do, and practical for operators.

- The vacuum channel between the conveying system and vacuum pump is much shorter and easy to clean. VEMAG is at the top of the industry when it comes to hygiene standards.
- VEMAG conveying technology makes product distances shorter and with fewer corners in the product flow. Hygiene is outstanding, and the products are better.
- Fewer parts in the conveying system mean better hygiene. There are also fewer parts to lose.

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MACHINE ANALYSIS AND PRODUCTION PLANNING WITH SMART LINK 4.0

Evaluate machine data effectively and quickly - and remotely: so you can know what is happening on which line, and when. All this is possible with the latest VEMAG Smart Link 4.o.

VEMAG Smart Link 4.0 is an operating and product data collection system which allows you to evaluate your portioning data at any given time and date. VEMAG Smart Link records internal machine parameters.

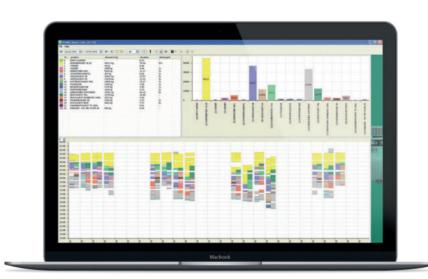
It means you can see exactly what is happening at a glance. Power consumption. be viewed, compared and evaluated. This allows you to identify any weak points that may exist, as well as things you can improve and continue. It allows you to see

what is actually happening right now. Portioning data is outputted and stored in the dough portioner as well if you want.

This means that machine data such as product filling weights, quantities achieved, machine running times and much more can be viewed centrally, such pressure levels and other information can as at your central office. This improves planning quality.

The benefits

- Be ready for IoT: Networking your machines improves your produc-
- Receive a constantly updated insight into your primary production figures. One of the things this enables is accurate product costing
- Optimise costs by reducing giveaway and using resources more
- Achieve production security and constant quality by optimising your machine settings
- Achieve transparency and traceability by automatically documenting your production data





VEMAG: YOUR RELIABLE AND **COMPETENT PARTNER**

Service and maintenance: we are there for you worldwide

At VEMAG we consider service part of our comprehensive training, and whenever re-DNA: you, the customer, are always at the centre of our activities.

VEMAG service technicians, subsidiaries, agencies throughout the world: we will always provide you with outstanding service wherever you are, and we define manufacturer standards to keep it that way, including at our VEMAG Academy. VEMAG Ser- Practice-based technician and user trainvice in Germany and our offices and agencies abroad will support you from the installation of your machine, throughout

pairs are needed.

- Global support
- Service technicians trained worldwide by the VEMAG Academy
- Sound technological training



The VEMAG Customer Centre: Space for innovation.

Make your vision a reality with us and discover how you can improve your production. We can show you individual components and complete production lines at our VEMAG Customer Centre. We will show you, under realistic conditions, how you can make a wide range of foods.

Experience VEMAG up close and in action our competent advisers are there for you.







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