

HIGH LIGHT

GRUNWALD[®]
Dosing · Filling · Packing



GRUNWALD's customer magazine no. 52 / April 2022

GRUNWALD-ALM



**ANUGA
FOOD
TEC**
DLC

Hall 7.1 - stand B010



Editorial

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EDITORIAL



Thanks to a record amount of orders we have started 2022 busier than ever before. Our highly motivated team together with our long-standing partners have been able to provide all electronic components and raw materials just-in-time despite the worsening situation of material shortage, enabling us to supply our customers in due course.

Grunwald are well-known for their quality, reliability and for meeting the agreed delivery dates. We take extreme pride in this and will continue to provide you with the best support, whether you are launching your new products on the market or expanding your production capacities.

As a pioneer in the world of bucket and cup filling machines, with our ever evolving innovations we can confidently step into new industrial sectors. We are proud that the paint producer Meffert AG with its head-office in Bad Kreuznach has trusted us with the manufacture of the first GRUNWALD bucket filling paint machine.

Thanks to the unique and intensive cooperation with our partner and customer Meffert AG, our engineers and technicians have made a sensational start in the paint industry.

After a very short installation and start-up time the customer was able to supply the market with its new sealed paint buckets. This new revolutionary machine does not only set new standards of hygiene, but also has a 30 % higher cycle speed compared to traditional paint filling machines on the market, we were able to achieve this on the first go.

On the opposite page you can find our detailed report on this exciting topic.

Perhaps you can still remember the report in issue number 50 – "flexibility squared for the delicatessen industry". We are pleased to be

able to announce the new development for the delicatessen industry.

Within this industry the trend is to use less dressing and to avoid preservatives. In order to achieve a long-lasting shelf life despite such modified recipes a guaranteed low residual oxygen value is necessary. We have the solution for it!

As described in issue 50, pumpable and non-pumpable salads can be filled on our compact and flexible high-performance cup filling machines. We can **NOW** do even more! Additionally, the cups can be sealed in a protective atmosphere. The cups are sealed with sealing film from the reel **without a reduction in speed at a rate of up to 40 cycles per minute and a residual oxygen value of up to $\leq 0.5\%$** .

Such residual oxygen values could formerly only be reached by vacuum packing and evacuation which, in turn, reduced the cycle speed by 50 to 70 %.

For further information see page 6 and 7. Or contact your local sales representative. We would be happy to develop a suitable concept for you or provide you with detailed information about machine concepts that have already been delivered.

Visit us in our cosy Grunwald pasture at the **ANUGA FoodTech in Cologne at our stand in hall 7.1, stand B010** where we can inform you of the latest development from the Pioneer that is Grunwald.

We are looking forward to meeting you in person in the "GRUNWALD pasture".

Yours
Ralf Müller
and the **GRUNWALD** team

We love it colourful!

Foil sealing for buckets with paint and extended shelf life for the products of the paint industry

NEW BUSINESS



Since December of last year Meffert AG has been filling their paints on the **fully-automatic bucket filling and closing machine GRUNWALD-ROTARY XXL**. This new rotary-type bucket filler is part of an extensive investment project

More efficiency, a higher delivery rate and, above all, a higher quality standard were the main reasons for investing in a state-of-the-art filling machine for the department for dispersion paints at their head-office in Bad Kreuznach.

After analysing the different machine concepts thoroughly, an enquiry was made with Grunwald for the development of engineering technology for filling and packaging high-precision paints under perfect hygienic conditions. The reason for contacting Grunwald was our experience gained for decades with filling the most different products and packaging materials in the food, cosmetics and pet food sector as well as the hygienic concepts applied.

Constructive partnerships for development and detailed conversations with our customers

are very important for us in order to advance technological issues in a target-oriented way and finally implement them successfully.

For this enquiry, our development engineers have – as always – closely cooperated with the responsible people at Meffert AG in order to turn this idea into a suitable machine concept. As a result a filling machine was developed that has it all: the 1-lane bucket filler GRUNWALD-ROTARY XXL.

Numerous common trials made in our facility in Wangen and the knowhow of our development engineers contributed to develop the suitable machine concept. >>>



1-lane fully-automatic bucket filling and closing machine GRUNWALD-ROTARY XXL for filling interior paints

COVER

GRUNWALD-exhibition stand
ANUGAFoodTec 2022 in Cologne
26 - 29 April 2022

Publisher's imprint
HIGHLIGHT is topical information for customers, potential customers and partners of GRUNWALD GMBH and is published three times a year.
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GRUNWALD GMBH at 



Filling station guaranteeing maximum dosing accuracy ($\leq 0.1\%$ standard deviation)



Leak test control of buckets sealed with peelable safety film



No paint adhesion on the lid.
"NO SIFTING – NO DECANTING – JUST PULL OFF THE FILM AND GET STARTED!" This is the slogan of Meffert AG

Photos: Meffert AG

The paint buckets of Meffert AG are hygienically sealed with film from the reel and subsequently closed with lids. The new tamper-evident film is the perfect solution for the existing problem with dried paint on the lids of the buckets.

Depending on the requirements of the filling process the filling machine can be equipped with additional options according to the customer's specification. Priority is given to the filling of the paints under maximum hygiene conditions.

The technologies which have been used for years in the food industry such as automatic cleaning systems and sterilisation of packaging materials are very well applicable for filling interior paints, too. Thus an extended shelf life can be achieved without using preservatives. This is an important argument with environment and health-conscious consumers when buying interior paints. In addition doing without preservatives is becoming more and more the focal point of legal requirements.

The pioneer for the paint industry

With the 1-lane rotary-type bucket filler GRUNWALD-ROTARY XXL Grunwald makes a major contribution to an extended shelf life and the sterility of the paints of our customer Meffert AG. The format-flexible machine design allows to handle different packaging materials within a changeover time of less than three minutes. When designing the machine, a user-friendly operation such as the optimum access and ergonomics when loading the packaging materials also played an important role. Costs and expenditure of time are reduced considerably. Compared to the traditional bucket filling machines of the paint industry the **production output can be increased by up to 30 %**. Seizing the customers' requirements, a cooperative teamwork and a close exchange of experiences

with the customers have always been the basis at Grunwald for developing customised and successful machine concepts.

We are glad that our customer Meffert AG is the first producer of paint who can now advertise their products with the slogan

„Never again small dried pieces of paint in the fresh paint!"

The adhesion of paint on the lid which has been a problem in various industrial sectors was finally solved in mutual development work and with the delivery of the fully-automatic bucket filling and closing machine GRUNWALD-ROTARY XXL.

We would like to thank all employees of Meffert AG for the trust they have always placed in us and for the constructive, successful and always pleasant cooperation.

We are happy to be part of Meffert AG's course for success in a spirit of partnership and with our packaging technology.



Convenient reloading of packaging materials in connection with long storage times

DETAILS ON THE MACHINE

GRUNWALD-ROTARY XXL

Compact bucket filling and closing machine for the paint industry

Machine performance

- approx. 20 buckets/min. for buckets with a filling volume of 5 litres
≈ 1,200 buckets/h resp. ≈ 6,000 litres/h
- approx. 15 buckets/min. for buckets with a filling volume of 12.5 litres
≈ 900 buckets/h resp. ≈ 11,250 litres/h

The most important advantages

- paint does not stick to the lid of the bucket
- extended shelf life is achieved as the buckets are sealed hermetically
- no preservatives due to filling under highest hygiene standards
- flexible, individual and future-proof machine concept
- maximum format flexibility due to quick format changeover without tools within a few minutes
- automatic format adjustment due to the use of servo motors
- the cycle speed is 30 % higher compared to traditional bucket filling machines used by the paint industry
- fully-automatic bucket storage with a storage time of up to 30 minutes
- process-monitored, fully-automatic cleaning (CIP/SIP) of the filling system
- high-quality sealing with film which can be very easily pulled off or peeled off and resists even heavy strain such as e. g. by paint vibrators
- it is possible to handle and seal buckets made of recycled plastic material with the same high and reliable quality

Dosing accuracy

- dosing range 2 - 15 litres
- guaranteed dosing accuracy $\leq 0.1\%$ standard deviation
- optimised filling due to adaptor nozzles especially developed for paint products

Process reliability and product safety

- guaranteed high availability of the machine of > 98 %
- fully-automatic monitoring systems with innovative technologies such as e. g.
 - bucket breakage control
 - leak test control
 - and other sensor controls
- the patented transport system
 - prevents buckets from overturning
 - reduces the spilling of paint
- avoids unwanted contamination of the machine and thus time-consuming cleaning work
- High degree of automation due to e. g.
 - Industry 4.0
 - Production data acquisition system
 - monitoring systems etc.

High degree of user-friendliness

- ergonomic, convenient reloading of packaging materials in connection with long storage times
- safe operation through authorised release levels

CONTACT

If you are interested in receiving further information or if you are looking for a solution for your filling application please do not hesitate to contact us. For further information please contact:

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Meffert AG Farbwerke

The paint shop, which was opened in Bad Kreuznach in the year 1947, has dynamically developed into one of the leading producers of high-precision paints and varnishes, glazes, plastering, sealing masses, products for renovation and building protection in Europe and has strengthened its position as a full line provider.

The product range of the Meffert AG includes more than 30,000 articles today. Their high-quality products are known in more than 60 countries. They employ more than 1,500 people at national and international production and distribution sites.

Extensive experience and an efficient research and development department ensure that all products correspond to the latest technology. The use of the best raw materials, tightened quality management and technically sophisticated production guarantee a uniform product quality

www.meffert.com

Premises of Meffert AG in Bad Kreuznach



NEW DEVELOPMENT

It needn't always be vacuum-packed! GRUNWALD sets another milestone for the delicatessen industry

Residual oxygen values of < 0.5 % at 40 cycles/min.

The "light" salads from the delicatessen industry are well-received by the final consumers. Products such as

- couscous salad
- bulgur salad
- flaked tuna salad
- carrot salad
- pasta salads
- or regional products, such as e. g.
- ox-muzzle salad

promise exciting new ultimate taste experiences and are an attractive alternative

to mayonnaise-based salads. The trend for naturality and the consumer's wish for healthy food involves many an obstacle for the delicatessen industry in daily production of these mayonnaise-based resp. non-pumpable salads.

For many years there has been a trend towards resealable and ecologically sound packaging. The extended shelf life with consistent freshness and quality of the product has to be guaranteed and unwanted discolouration of the product has to be avoided. Therefore it

will always be necessary to seal the filled cups with the lowest possible remaining oxygen value. This will be especially mandatory with products with a reduced percentage of preservatives resp. with products without any preservatives. With the technology used for evacuation / gas injection so far (MAP procedure) remaining oxygen values of < 1 % could be achieved but at the same time the machine speed was considerably reduced.

Another new development for the delicatessen industry

The GRUNWALD development engineers now found a solution how to remove the negative effect that the production speed is reduced when achieving the lowest possible remaining oxygen value of < 1 %. Due to the newly developed gas injection system from GRUNWALD it is possible **to run production at full cycle speed, i. e. at up to 40 cycles/min. and achieve remaining oxygen values of < 0.5 % in the headspace of the cup at the same time.**

This new gas injection system offers clear advantages compared to the system used for evacuation / gas injection (MAP procedure) so far:

- new recipes with less or without preservatives are feasible as the remaining percentage of oxygen in the headspace of the cup is very low
- less energy consumption;
- no vacuum pump required
- less gas consumption
- higher machine efficiency
- increase in production

Thus Grunwald, as the pioneer und market leader for filling machines in the delicatessen industry, could develop further their unique concept for dosing machines and optimise it again in a user-oriented way. Due to extremely short changeover times and sometimes small batches for filling **pumpable and non-pumpable products** we cannot only achieve extremely short changeover times (machines are allergen-free within 3 – 5 minutes) but also **remaining oxygen values of less than 0.5 % at full cycle speed (at 40 cycles/min.).**

Once again, Grunwald set an important milestone for an optimised and economic production. To be able to guarantee an extended shelf life and at the same time consistent freshness and quality of the products and to prevent unwanted discolourations of the products, is ultimately a challenge which already starts with mechanical engineering.

Please also read our report "Innovations in mechanical engineering" in our customer magazine no. 50 / August 2021 on pages 8 – 11 (see download section on our website).

MACHINE DETAILS

GRUNWALD-ROTARY 12.000

Dimensions: 3,000 x 2,200 mm

1 - 4 lanes

Up to 10,000 cups/h,
depending on product,
packaging materials and fill weight



*Mobile GRUNWALD dosing systems are ideally suited for filling both pumpable and non-pumpable products
The photo shows two mobile fillers used as decorating stations on a 4-lane rotary-type cup filling machine GRUNWALD-ROTARY 12.000*

CONTACT

If you are interested in receiving further information or if you are looking for a solution for your filling application please do not hesitate to contact us.

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*2-lane rotary-type cup filling machine GRUNWALD-ROTARY 12.000
with the newly developed gas injection system. Thus production at full cycle speed (up to 40 cycles/min.)
is possible and at the same time remaining residual oxygen values of < 0.5 % can be achieved in the
headspace of the cup.*



Johma
Oet Twente

The company history of Johma began in the year 1968 when the founders Johan and Martin started their salad production in a garage in Glanerbrug (a town near Enschede Twente). They quickly decided on the company's name by combining their first names.

From the very beginning they have been using superior ingredients. The production of their salads has always been aimed at being the most tasty ones!

Their first customers were butchers and small supermarkets in the east of the Netherlands. In the middle of the 70's Johma had experienced such a considerable growth that a bigger building was required. The new building was found a few kilometres away in Losser. Today the community of Losser comprises slightly more than 22,000 residents and is located in the east of the region Twente. With "Twente" – which means "sympathetic, hardworking and honest" – many innovations were launched in a very customer-friendly way. Under the name of "Johma oet Twente" this company proudly presents its roots.

www.johma.nl

An exciting success story

About a successful business relationship and three decades of sheer trust

Perhaps you have already enjoyed one or more of the products produced by the Dutch group Signature Foods BV: Delicatessen products, potato salads, tapas but also products of South American cuisine – or one of the wide assortment of antipasti, olives, dips and spreads, produced under their own brand 1BITE. One part of this strong group of companies is Johma, the best-known and largest salad producer in the Netherlands.

History writes success stories

Twente is a region in the Netherlands. Yes, you could say that it is as beautiful there as it is here in the Allgäu. Perhaps this is one of the reasons why we have got along that well with each other and for such a long time. Already in 1990, a very friendly and trusting cooperation between GRUNWALD and Johma began for decades, which has been very much appreciated by both companies from the beginning and to date.

When Johma placed an order with us for a 4-lane GRUNWALD-ROTARY 10.000, no one could even expect that this order would be the starting point for 30 years of intensive cooperation.

Today, Johma produce delicatessen salads in all possible variations. The product portfolio ranges from potato salad and poultry salad to coleslaw and non-pumpable pasta salads.

Johma is one of Grunwald's most important customers in the delicatessen industry – not without reason. Grunwald has delivered 26 cup filling machines in total to their site in Losser since 1990. Most of these are 4-lane rotary-type cup fillers. For many years Johma have also successfully been using complex 4-lane inline cup filling machines with sophisticated technology to suit various products in Losser.

Business keeps going...

The 26 machines supplied in total comprise six 4-lane rotary-type machines delivered in the past five years. Recently, Signature Foods BV has taken over the production of the Homann brand and production. As a result they had to considerably extend their capacities at the Losser site and placed the order for two more rotary-type Grunwald filling machines.

The delivery of new rotary-type cup filling machines does not mean that production on older machines is stopped. The first line we delivered to Johma in 1990 is still running at full capacity in three-shift operation six days a week.

We like to do our best!

Our specialists have been working very closely with the responsible persons from Johma from the very beginning. For both our rotary-type and inline filling machines customer-oriented solutions were developed. A good example of this close and successful cooperation is the quick format changeover. It is of great advantage because sometimes the same salads have to be filled into different packages. Due to the quick format changeover the product change including time-consuming cleaning work is no longer necessary.

The well-known high flexibility of our rotary-type machines and other technical solutions such as a quick format changeover selected by the push of a button or two heat sealing sta-



Cleaning of the rotary table of GRUNWALD-ROTARY 20.000



In order to achieve high flexibility and quick format changeover: two heat sealing stations mounted on the opposite side. They are easily selected by the push of a button.

tions mounted on the opposite side convinced the persons responsible at Johma again and again. We have also successfully implemented the customer's latest request for a rotary-table cleaning system.

The high quality, long life of Grunwald filling machines, reliable supply of spare parts and reliable customer service are important criteria for Johma to make a decision for an investment in Grunwald cup filling machines. Finally, this offers the necessary dependability and planning reliability to be sure that the machines do not have to be replaced after only a few years.

The adherence to delivery dates is always an important criterion for the project manager Daniel van der Woude even though the delivery times demanded by Johma are often challenging. And if there is a problem, if there is actually a machine downtime, the responsible persons at Johma know that they can rely on quick response times and the 360° full service from Grunwald.

For more than 5 decades, Johma in Losser have experienced a very successful history of production. We have accompanied them for three decades and are proud to be part of this exciting success story. The filling machines supplied and the technical developments during all these years have contributed to this success. This is an optimum result for daily production and the greatest possible customer satisfaction – this is what we do our best.



DETAILS ON THE MACHINE

GRUNWALD-ROTARY 20.000

Dimensions: 2,300 x 2,300 mm

4- to 6-lane version

Approximately 12,000 – 18,000 cups/h depending on product and packaging material

2 x 3-lane up to 2 x 4-lane versions

Approximately 15,000 – 20,000 cups/h depending on product and packaging material

Dosing range: 10 – 1,000 ml



CONTACT

If you are interested in these cup filling machines and in receiving further information or if you are looking for a solution for your filling application please do not hesitate to contact us. For further information, please contact:

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After the successful acceptance test of the GRUNWALD-ROTARY 20.000 the Johma team joined for a photo.

From left to right:
Christoph Trunzer and Martin Rädler (both from Grunwald), Michael Verstrenge (Johma), René Theunissen (Grunwald), Sema Deniz, Derk Beldman, Daniel van der Woude and Elroy Maat (all from Johma).

NEW BUSINESS



Products are served

Filling of milk substitutes with the swirl technique

for vegetable-based milk and milk substitutes is growing continuously. Experts speak of an "enormous growth in the market for alternatives to milk".

As a mechanical engineering company, the number of enquiries for cup filling machines for filling vegetable-based milk substitutes is growing rapidly as this new trend soars.

We can fit your filling needs

Regardless of whether your products are made from coconut, almond, oats or soy, GRUNWALD can supply suitable filling machines for milk substitutes and all kinds of spread without animal additives.

As with dairy products, the portfolio for milk substitutes is based on the customer's requirements and ranges from small starter models to high-end filling lines.

Delivery of flexible cup filling machines to the market leader for milk substitutes

For many years, one can almost say long before the "founding days of the vegan food movement", the consumption of "vegetable-based products" has been a product daily used in the kitchen by the Greek population. This trend has also resulted in a strongly growing demand for vegan and vegetarian products.

We are very proud in having supported one of the European market leaders in this sector with our rotary-type machines for several years. In order to meet the enormous increase in demand, the second rotary-type machine GRUNWALD-ROTARY 20.000E has just been delivered and commissioned at the beginning of 2022. This highly flexible, 4-lane cup filling machine is especially impressive with its wide range of possibilities for product presentation.

A food filling design to capture the eye

Due to the combination of two servo-controlled piston fillers, there are almost no limits to the product presentation of the customer's various milk substitutes.



In addition to the fruit topping option resp. the option for fruit layers in the cups the integrated inline mixer can also mix two products and fill the mixed product in the cups. The highlight of this cup filling machine is the multi-layer filling. The simultaneous dosing of two products into the cup creates a stripe pattern. The cup is additionally rotated during filling, creating the visually appealing swirl effect. The same as when filling of yoghurt, quark or cream cheese, it is possible to dose a fruit topping on vegetable-based products by using an integrated inline mixer. In addition, fruit layers on the cup bottom are also possible to achieve.

In order to give these products the perfect finish the machine concept offers a free space for the provision of a mobile vibratory doser for the garnishing of dry products, such as spices and herbs.

Keeping to our high Grunwald standards and delivering a machine that is expected from Grunwald quality this rotary machine can be changed over to other formats very quickly using quick-change devices and is equipped with product-specific hygiene components.

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Meet and greet at GRUNWALD, the world of a true pioneer

Face-to-face meetings with customers, potential customers and business partners, having technical and informative discussions and, at the same time, focusing on the inspiring technology of the exhibition machines will be the main aim for the Grunwald-Alm in **Hall 7.1, Stand B-010** at ANUGAFoodTec 2022 in Cologne.

Our this year's participation in the exhibition is primarily under the motto of "**Meet and Greet**" – conversations which provide the basis to generate ideas and develop solutions for dosing, filling, and packing products.

Since meetings had to be held via video conferences and travelling was limited for a long time, there remains great interest in meeting and exchanging ideas "face-to-face".

In order to allow for conversations and physical meetings in compliance with the current corona-related hygiene regulations and to guarantee safety for everyone, the design of the Grunwald-Alm will include large open areas and plenty of space for visitors and social distanced conversations at the table.

Nevertheless, there will still be enough space for exhibition machines. They will show what is continuously in demand: in-house technical developments and state-of-the-art solutions for format flexible filling machines as well as special dosing systems and technical solutions for user-friendly handling.

We wish you a safe journey in advance now and look forward to seeing you at our stand in **hall 7.1, stand B010**.

The new GRUNWALD website

Since beginning of 2022 we present an incredibly special highlight: our new website in a modern, user-friendly design!

You can now easily switch between detailed product information, technical innovations or news, in the info centre. Thanks to clear and intuitive navigation, you will quickly discover an overview of what Grunwald has to offer.

New: Integrated access to our online spare parts catalogue.

Just one click away, you will find online access to your digital spare parts catalogue in the 360° service.

The documents (e.g. operating instructions, spare parts catalogue) for all GRUNWALD cup and bucket filling machines delivered since

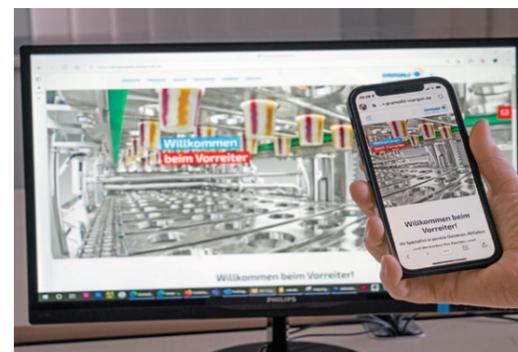
April 2016, are available in a digital version. We update them continuously and they are completely free of charge.

Our new website now offers GRUNWALD customers another option for online order placement for consumables and spare parts; 24 hours a day, 7 days a week.

Just have a look at it now and get inspired!

www.grunwald-wangen.de

Should you have any questions about our catalogue management our colleague Silvia Weber will be happy to provide advice at any time and looks forward to your phone call or email.



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GRUNWALD-HIGHLIGHT

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