# HIGH LIGHT





GRUNWALD's customer magazine • special edition



## **GRUNWALD-ROTARY XXL**

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

#### 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
   ≤ 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

#### Bucket setter



Dosing station



Sealing of the buckets



Snap-on lid station



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-theart 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-

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

ROTARY XXL.

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.



Filling station guaranteeing maximum dosing accuracy (≤ 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



### **GRUNWALD-ROTARY XXL**



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.

# Meffert AG

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 Meffet 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 quarantee a uniform product quality.

www.meffert.com

#### 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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Premises of Meffert AG in Bad Kreuznach

English is our international business language.

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

Editorial Dept. and Layout: Marlies Hodrius

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