

# FILLING TECHNOLOGY FROM THE EXPERTS SAFE, CLEAN, POWERFUL

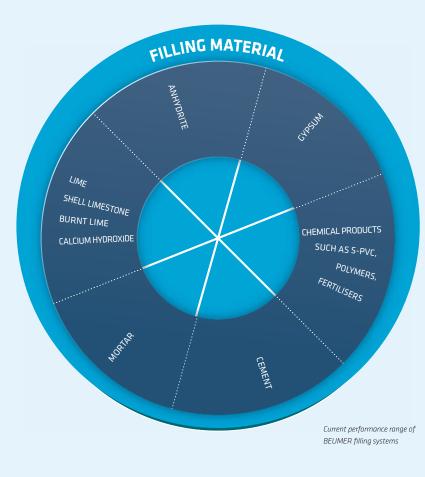
**FILLING TECHNOLOGY** 



### POWERFUL FILLING TECHNOLOGY IN A NEW DIMENSION

As an expert in filling technology, BEUMER Group is the reliable partner you need. BEUMER systems are used for reliable, gentle and sustainable bagging of building materials, cement and chemicals. Processes that work perfectly together ensure optimal performance at all times. BEUMER Group stands for accurate engineering – driven by visions, realised with precision.





#### EXTREMELY FLEXIBLE: BEUMER FILLING SYSTEMS

**BEUMER Group offers filling systems** that meet a variety of requirements: Depending on the bulk density, flow behaviour and grain distribution of the products, we supply customers worldwide with an individually tailored filling system for maximum throughput. The optimal system is offered for almost all materials in the building, cement, minerals and chemicals industries. The special requirements of the chemical and petrochemical industry are met with the innovative solution that forms, fills and seals the bags in one compact system. The efficiency of all BEUMER Group filling systems is ensured by low purchase costs, a high rate of parts availability and ease of maintenance.

#### WIDE SELECTION OF SYSTEMS FOR DIFFERENT REQUIREMENTS

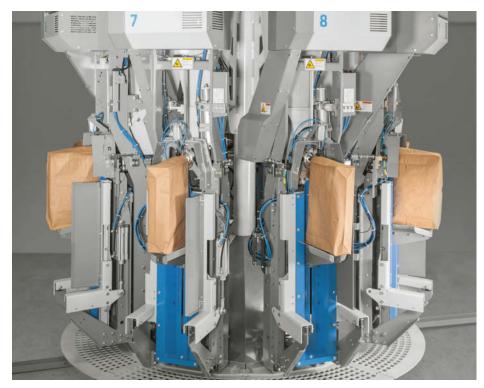
The BEUMER fillpac<sup>®</sup> series offers innovative systems for reliable and economic filling of various pourable or free-flowing, fine or coarse-grained products. These filling systems include:

- Rotary impeller filling machines BEUMER fillpac<sup>®</sup> RH/RV
- Air rotary filling machines BEUMER fillpac<sup>®</sup> RA
- Inline impeller filling machine BEUMER fillpac<sup>®</sup> IH/IV
- Air inline filling machines BEUMER fillpac<sup>®</sup> IA
- Form fill seal system BEUMER fillpac<sup>®</sup> FFS

### HIGHLIGHTS

- Primary packaging for the building materials, cement, mineral and chemical industry
- > Low initial costs
- > High parts availability
- > Easy to maintain

## SIMPLY THE RIGHT TURN BEUMER ROTARY FILLING MACHINES



Innovative filling system: BEUMER fillpac® R 8 spout turbine rotary filling machine

In case of high throughput rates, the BEUMER Group rotary filling machines can turn on their full power: they can fill up to 6,000 bags per hour, in a clean, precise and reliable way. As requirements and material characteristics change depending on the field of application, the construction series include turbine filling machines as well as air filling machines. The turbine filling machines are ideal for free-flowing, fine-grain products such as cement, lime or various types of gypsum. Air filling machines are used for pourable coarse-grained products with particle sizes up to 16 millimetres, e.g. mortar, screed or dry concrete.

#### **BEUMER FILLPAC® RH/RV**

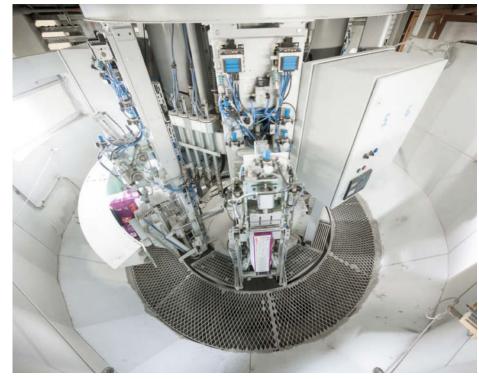
With up to 16 filling modules, the BEUMER fillpac® RH/RV can fill up to 240 tons of fine-grain materials per hour into diverse bag types. The innovative BEUMER bag placer® that reliably prepares HDPE bags prior to the filling process makes BEUMER Group one of the leading manufacturers of fully-automated filling technology. Technologically, the system features a compact rotor design that still allows for fast filling of the bags and maximum material throughput. The bag weight adjustment, which automatically adjusts the weight of the next bag, ensures precise results. The vertically mounted three-position cylinder opens and closes outside of the dirty area, so it remains protected from dust minimising wear and tear and increasing service life. Maintenance costs are also reduced because the bag discharge cylinder is positioned in the dust-free area.



#### HIGHLIGHTS OF OUR ROTARY FILLING MACHINES

- Number of modules: up to 16
- Capacity: up to 240 tons/hour
- > Bag variants:
  - $\cdot$  HDPE, PP or paper bags
  - flat valve bags or valve bottom bags





#### MAXIMUM USABILITY

Not only the operation via the ergonomic HMI, but also maintenance and servicing of the BEUMER fillpac<sup>®</sup> are tailor-made and as comfortable as possible for the customer, supported by easy accessibility and the open availability of almost all components on the market. In addition to smaller initial costs, subsequent costs are also considerably lower compared to other systems of this type.

BEUMER fillpac® 6 spout air rotary filling machine with ultrasonic sealing

#### **BEUMER FILLPAC® RA**

The BEUMER Group's air rotary filling machines are manufactured with four to ten filling modules arranged in a circle – in this way, depending on the number of filling spouts, they can reach maximum capacities of 3,000 bags per hour for 25-kilo bags. The electronic filling control ensures highly accurate weighing results in accordance with German calibration law and international standards.

For increased performance and to ensure that the machines operate consistently at full capacity there is the option to add the fully automated bag placer that independently adjusts to the bag format.

#### HIGHLIGHTS OF THE AIR ROTARY FILLING MACHINES

- Number of modules: 4 to 10
- Capacity: up to 3,000 bags/hour (10 modules)

### GET IN LINE BEUMER INLINE FILLING MACHINES







BEUMER fillpac® I with dust-proof enclosure

Compact, space-saving design with belt conveyor

BEUMER Group inline filling machines are particularly efficient in production environments with a low product throughput. The filling spouts can fill up to 1,200 bags per hour; they are mounted next to each other and therefore easy to maintain. The components for placing, filling and closing the bag, the control, the control terminal and the discharging belt conveyor can be optionally enclosed in a dust-proof structure which reduces the machines' footprint considerably.

#### BEUMER FILLPAC® IH/IV AND IA

The BEUMER fillpac® IH/IV turbine filling machines and the BEUMER fillpac® IA air inline filling machines are equipped with up to four filling modules. These modules are placed next to each other for ready access, which makes them easy to maintain. Up to 1,200 bags per hour can be filled, depending on the number of filling spouts. The filling process works either automatically in combination with a bag placer or at the push of a button. After the filling process, the bag is automatically vertically discharged onto a belt conveyor.

The turbine filling machines use motordriven impellers. They are horizontally or vertically mounted and ensure a controlled material flow and optimum material compaction. The air filling machines fluidise the material with a blower, which is then conveyed gently and accurately into bags.

#### HIGHLIGHTS OF THE INLINE IMPELLER FILLING MACHINES AND AIR INLINE FILLING MACHINES

- Number of modules: 1 to 4
- Capacity: up to 1,200 bags/hour (4 modules)

### AUTOMATICALLY MAKING MORE BEUMER BAG PLACER®



Enclosed BEUMER bag placer® with feeding ream magazine

Whether for HDPE, PP or paper bags, for flat valve bags or valve bottom bags: with the option to add the automatic BEUMER Group bag placer you can further increase the capacity and utilisation of the BEUMER filling machines.

#### HIGH CAPACITY THROUGH COMPLETE AUTOMATION

In addition to the rotary and inline filling machines, BEUMER Group also offers the option to add bag placers to optimise the automated feed of different bag types. The innovative BEUMER bag placer® has been optimised to ensure highest process stability with low maintenance and operating costs. Due to their sturdy, well thought through mechanics and modern control electronics, the machines can place the bags accurately on the filling spout.

Grippers with double bearings ensure smooth running of the machine with only minimal vibrations. Some of the many other quality features are the joint bag placer and turntable and the ream magazine with stabilising compartments.

#### HIGHLIGHTS OF THE BEUMER BAG PLACER®

- Capacity: up to 6,000 bags/hour
- Optimal alignment of the bag reams
- Easier adjustment to other bag formats
- Anti-collision device towards the filling machine
- Suction technology to optimise wear
- Oil-free, low-maintenance vacuum technology
- > Very easy maintenance access

### EFFICIENT MULTITASKING IN SMALL SPACES BEUMER FORM FILL SEAL SYSTEM



BEUMER fillpac® FFS - compact, space-saving and symmetrical design

High product temperatures, special flow characteristics and low dimensional stability – these are some of the challenges when bagging and packaging chemical and petrochemical products. As a partner of chemical companies, BEUMER has developed an innovative, compact high-precision form fill seal system (FFS system) to address these challenges: BEUMER fillpac<sup>®</sup> FFS.

#### **BEUMER FILLPAC® FFS**

The BEUMER fillpac® FFS fulfils three functions with one compact and spacesaving system: It forms bags from a prefabricated tubular PE film, fills them with the corresponding product, and seals them at a capacity of 2,600 bags per hour.

The filling process is carried out reliably, gently and sustainably. Moreover, an integrated weighing unit ensures exact filling results.

#### FLEXIBILITY IN ALL RESPECTS

The symmetrical structure of the BEUMER fillpac<sup>®</sup> FFS is unique and enables operation from any side of the system. Thanks to various options like print mark control, automatic exchange of film rolls, detached film releasing unit, free or rail-based manoeuvrability and the possibility of processing pre-stretched film, the system can be adapted individually to any kind of customer requirements.



Reliable, gentle and sustainable filling of chemical products

#### AVAILABILITY THAT SAVES COSTS

Where systems operate around the clock, the BEUMER fillpac<sup>®</sup> FFS with its outstanding availability is the perfect partner. Its robust design extends maintenance intervals. The wear and tear of the system, for example, is minimal: It guides the bags in a straight movement to the individual working posts, preventing the bags from oscillating and thus avoiding vibrations.

A further advantage is its modular structure which ensures simple operation and easy cleaning as well as short retrofitting and maintenance times.

#### EASY TO OPERATE

An ergonomic control terminal enables an easy, quick and safe control and operation of the BEUMER fillpac<sup>®</sup> FFS. The optimised user interface and navigation with an easily understandable and intuitive interaction concept helps to increase the efficiency of working sequences.

#### HIGHLIGHTS OF THE FORM FILL SEAL SYSTEM

- Bag forming, filling and sealing in one system
- Capacity of up to 2,600 bags per hour
- > Compact, space-saving design
- > Robust low-vibration technology
- Intuitive operation with an ergonomic HMI

### SIMPLY WORLD-CLASS CUSTOMER SUPPORT



We also act as the main contractor on behalf of our customers and provide comprehensive, highly customised concepts.

Competent engineering, fast and reliable on-site service as well as optimal spare parts supply round out our offering and ensure high reliability of the systems.

Our support solutions will keep

24 hours a day, 365 days a year.

your systems operating -



**CUSTOMER CARE** Our customer care programme entitles you to multiple service options, such as maintenance and repair on site through our field service engineers or regular safety checks according to statutory rights. If hardware replacements are needed, our comprehensive warranty service ensures you are always covered.







At BEUMER Group, the focus is always on neonle. We build strong partnerships through personal relationships and individual attention

TRAINING AND QUALIFICATION We offer standard and tailored customer training programmes to make sure your teams are fully qualified to operate your systems. With hands-on guidance, conducted either on-site or at BEUMER Group locations, your teams can maintain optimal operational performance.





#### HOTLINE SUPPORT

Our hotline support is manned 24/7 by highly trained, multiskilled engineers who all have at least four years of direct field experience. Most cases are solved remotely, however, should the problem require more specialised attention, a BEUMER Group engineer will be quickly sent out.

**MODERNISATION** 

We are constantly developing new ways to upgrade our software and hardware to extend a system's lifetime, lower energy costs and increase efficiency. We will keep you informed of all relevant upgrade opportunities, based on an understanding of your business and system needs.

SPARE PARTS LOGISTICS We guarantee spare part replacements around the world through our local companies. As a BEUMER Group customer, you will have your own individual contact to assist you with technical inquiries, warranty issues or repair orders and to secure that your order is delivered on time.

**RESIDENTIAL SERVICE** With our residential service, we are on-site every day to take complete responsibility for your system uptime, performance and operational efficiency. We can take care of all maintenance and management, including system improvements, contingency plans, specialist advice and repairs.





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Products and technologies carrying BEUMER's "made different" seal are characterised by their sustainability based on their economic, environmental and social performance as measured by the BEUMER Sustainability Index (BSI).