Feige FILLING

COMPETENCE IN PAIL FILLING

HIGHLY EFFICIENT PAIL FILLING

Feige FILLING GmbH is a traditional German medium-sized enterprise in Bad Oldesloe. Founded in Hamburg in 1972, the company has developed into the market and technology leader for filling technology by its innovative strength and international mindset.
Feige FILLING stands for gravimetric filling equipment for the filling of liquid and pasty products with calibrated accuracy.

Since 2003, the company is a completely integrated member of HAVER & BOECKER. With subsidiaries and agencies on all continents, we stand in a world-wide dialogue with our customers in a spirit of partnership.

We have the suitable filling technology to meet your challenge

Decades of experience with innovative technology and continuously taking into consideration the requirements of a changing market guarantee the successful implementation of your requests.

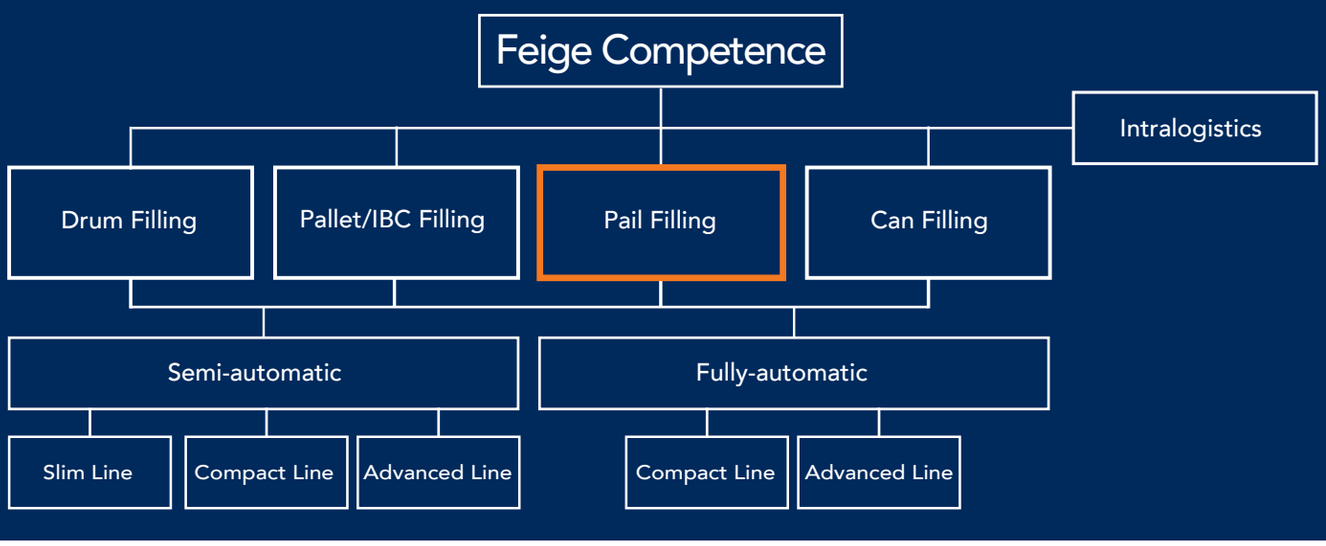
From our wide product range you can select the matching solution for your requirements as far as the gravimetric filling of containers with sizes ranging from 0.5 kg to 3000 kg is concerned. The modular assembly system of the filling equipment produced by Feige FILLING is able to meet any needs.

Ensuring no precious drop is wasted

Whenever pails need to be filled in an economic manner, using a pail filling equipment is inevitable. Decide for a turnkey filling solution – individually matched to your operating sequences:

- Pail fillers for single containers
- Pre-configured pail filling stations
- Automatic pail fillers
- Fully automatic pail filling systems
- High speed pail filling systems

At your request, we supply you with a complete solution comprising anything from robot-supported pail denesting and pail sealing to lid placers and lid pressers to automatic palletising systems.



Feige
FILLING

SAFETY - ACCURACY - FLEXIBILITY

Repeatable accuracy as well as the highest degree of safety during product filling are fundamental requirements placed on filling equipment meeting the highest quality standards.

Irrespective whether your products are uncritical, foaming, explosive or flammable commodities,
FEIGE Filling as specialist for filling equipment will make available suitable filling technologies. All automatic pail filling machines have a standardised working principle. Whether individually or several units arranged close to each other, the pails reach the automatic filling unit clean and empty and leave it filled with calibrated accuracy, clean and capped. Central components of the automatic pail filling machine are filling valve and weigh scale.

The filling operation takes place using the well-proven coarse/fine fill process or the FEIGE product flow control. In order to observe the calibration error limits, it is necessary to restrict the volume flow towards the end of the filling process.

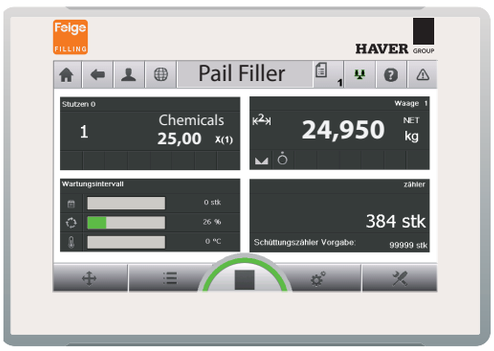
Filling - safely

With the Feige FILLING valve, you fill your liquid and viscous products with a proportional or multi-stage dosing system. The filling valve is dimensioned in accordance with your requirements on filling opening, viscosity and volume flow. Resistant materials such as stainless steel, Teflon, Hastelloy, titanium, nickel, PVDF and PTFE guarantee the reliable use of the filling valve. Depending on the area of application, you can also resort to filling valves of aseptic design, heated and with overfill protection. To enable you to change the filling valve within seconds during operation, a stainless steel quick-action filling valve mount is a standard feature.

Measuring with calibrated accuracy

The FEIGE weigh scale terminal is the heart of the equipment. Measuring the dosed filling volumes with calibrated accuracy is carried out with mass flow meters (minimum filling volume and filling tolerance) or load cells (maximum weight), which are integrated in the filling equipment as a system approved for verification. Safety mechanisms assume the control of all important parameters.

You operate the weigh scale terminal via discrete elements or a touch panel with alphanumerical input. The weigh scale records your operating data, logs the weighing results and puts statistical data at your disposal. The system communicates with your network or outputs the data on a mobile USB flash drive.



The filling valve

- **Filling valve diameter** according to
  – Filling opening
  – Viscosity
  – Flow rate
- **Aseptic**
- Minimum dead space
- **Heated** filling valves
- **Material**
  – Stainless steel
  – Teflon
  – Hastelloy
  – Titanium/Nickel
  – PVDF/ PTFE
- **Multistage dosing**
- **Proportional dosing**

Above-Surface

Below-Bunghole

Below-Surface

Safety Functions

The filling valves are equipped with important safety functions such as:

- Closing / opening with compressed air
- Closing with spring force
- Relieved of product pressure
- Leakage monitoring of the sealing space
- Fill level check
- Minimum dead space

The weigh scale

- **255 product files, expandable**
- **Protocol of weighing results and statistics**
- **Alphanumeric entry through prompting**
- **Storage of operation data**
- **Label printer**
  Protocol printer
- **Measuring device**
  Load cell
  Mass flow meter

CONCENTRATED KNOW-HOW IN INTRALOGISTICS

If you are planning a seamless overall concept of filling equipment with end packaging, palletising, conveying and marking technology, talking with the specialists of Feige FILLING will certainly be of assistance.

For more than 40 years, Feige FILLING has been building automatic packaging systems for liquid and pasty products. Due to the numerous application experiences the engineers have gathered a wide variety of projects, existing systems are continuously enhanced and always adapted to the latest state-of-the art.

Due to the affiliation with HAVER & BOECKER, the expertise at Feige FILLING was further enhanced and the range of services portfolio expanded in synergy. Today, Feige FILLING supplies you with the entire process technology seamlessly from one source.

Turnkey complete solutions

In the field of filling, Feige FILLING will project your complete turnkey equipment for the solution of complex logistic tasks. The equipment required by the most different industrial sectors for storage, mixing and filling of liquid or pasty products comprises:

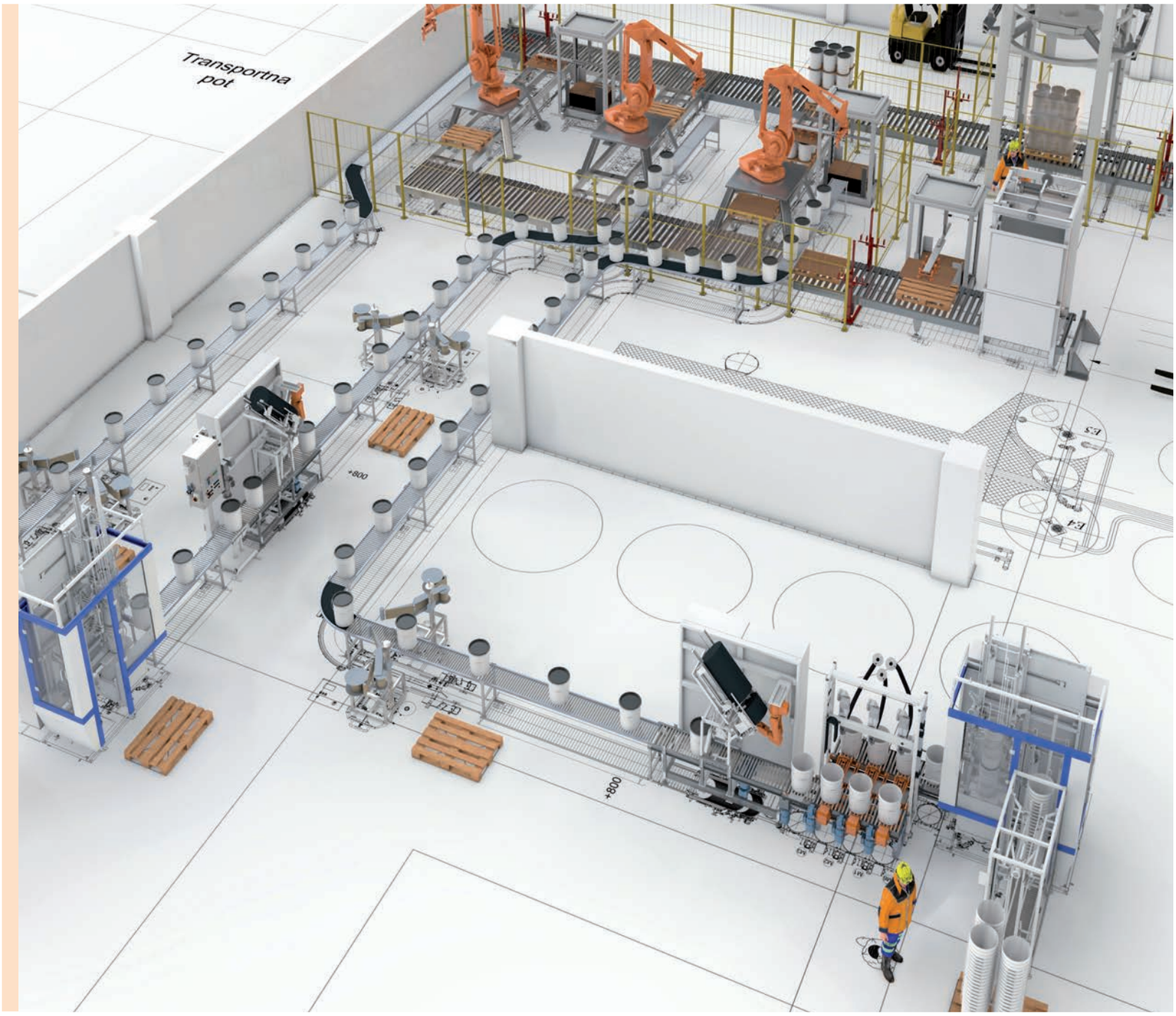
- Computer-controlled process control
- Conveyor systems for container transport
- Conveyor systems for pallet feed
- Palletising systems
- Product feed
- Storage facilities for pallets and containers
- Loading facilities
- Cleaning systems
- Marking systems
- Load securing

Innovative factory and system design (FEIGE FACTORY DESIGN)

You would like to look at your new equipment long before it is implemented in your production hall? FEIGE FACTORY DESIGN shows you how. With an accurate, photo-realistic visualisation, you can marvel at your future equipment already before it is assembled. To make this possible, the planned equipment is adapted to the intended environment. Particularities inside the hall, e.g. an old system comprising subsequent extensions and conversions, are recorded by means of a 3D laser scan and taken into consideration.

This new procedure saves you time and costs. Planning is clearly simplified and accelerated. Disruptive ambient conditions are already given consideration during the tendering stage. Tedious drawing work or on-site actions have become superfluous. The accurate and realistic previsualisation offers you the perfect basis for a decision.

FROM THE FIRST IDEA TO COMPLETION



FLEXIBLE SOLUTIONS FOR YOUR REQUIREMENTS

You decide on the degree of automation. Compile your semi-automatic pail filling system from the FEIGE modular assembly system according to your individual requirements for the calibrated filling of pails.

Select the equipment for your type of filling - single units consisting of round, angular or oval pails or combined with our conveying and palletising technology. Our solutions will support you during the entire filling process.

Accelerate your filling processes

The three product lines of Feige FILLING for semi-automatic pail filling offer you all the functions of a gravimetric filler, ranging from the reasonably priced pail filler “Slim Line“ and the pre-configured filling station “Compact Line“ to the automatic pail filling machine “Advanced Line“ with extensive peripherals.

The systems convince by their ease of operation and installation. Depending on the application, they are also available in mobile designs conforming to ATEX requirements. All main functions of a gravimetric filler are executed in time-tested FEIGE quality.

You can supplement filling systems produced by Feige FILLING at any time with additional modules, which integrate further working steps such as removing and marking the containers.

Filling

The individual containers are positioned below the filling valve, automatically filled with calibrated accuracy and manually closed. Optionally, the filled pails can afterwards be palletised with FEIGE palletising systems. Driven roller conveyors for the in-feed and out-feed area support the workflow during the feeding of empty containers and removal of filled containers.

After actuating the start button, the container is automatically tared and filled with calibrated accuracy using the coarse / fine fill process or the FEIGE product flow control. The necessary auxiliary tools such as lid placer and lid closer are available to you for a precise closing of the pails.

SEMI AUTOMATIC FILLING

SEMI-AUTOMATIC PAIL FILLERS

SLIM LINE

JUST FILL
- Cost-effective filler
- Designed in well-proven FEIGE quality and accuracy
- Simple installation – easy use

PAIL FILLER **TYPE 4**
With perforated disc

COMPACT LINE

PLUG & FILL
- Pre-configured / pre-assembled compact filling station
- Stainless steel load cells / 255 product parameter sets
- Conveyors with up to three motors

PAIL FILLING STATION **TYPE 14**

ADVANCED LINE

COMPLEX CONFIGURATION
- Large conveying systems for empty and filled containers
- Filling products or environment require special features

PAIL FILLING EQUIPMENT **TYPE 24**
With driven conveyor system and several accessories
for more safety and efficiency

DESIGNING AND OPTIMISING WITH SYSTEM EXTENSIONS

If you want to design and optimise processes, you need the corresponding tools. Flexibly adapt your structures to new basic conditions within the scope of continuous process optimisation. Expand your Feige FILLING systems in accordance with your performance and production features.

Our system extensions provide you with the opportunity to design clean and efficient production flows. Use the advantages offered by the versatile additional modules.

Increased Productivity

- Valve heating
- Perforated disc
- Roller conveyor on scale
- Roller conveyor in the in-feed and out-feed area

Simplified Handling

- Drip scoop
- Drip extraction
- Valve rack
- Fine fill via product file
- Product hose suspension

SEMI-AUTOMATIC PAIL FILLING TECHNOLOGY

High Flexibility

- Level controlled ascent
- Filling valve principle and geometry
- Base height adjustment
- Cleaning station
- Product hose
- Valve encoding

Utmost Process Reliability

- Reduced fill start
- Inerting
- Earthing
- Gas hood
- Collecting basin
- Overflow protection
- Pressure surges reduction

HIGH-PERFORMANCE FILLING

You want to start the automatic filling of your pails immediately subsequent to installation? The fully automatic pail fillers of the "Compact Line" and "Advanced Line" will satisfy this wish.

You can start up the equipment immediately following installation. A plain text display on the control panel of the pail filler displaying all operating modes and possible error messages of the equipment provides you with all the information you need for a simple and safe operation of the station. Your pails are transported to the filling valve via transport equipment and are automatically positioned with millimetric accuracy and filled gravimetrically. Push-bar chain conveyors push your pails from station to station in cycled operation. The frequency-controlled drive makes it possible to accelerate and stop the containers in an ideal manner. In case of a pail change, the saved data records are simply retrieved.

Simply neatly filled

The fully automatic pail fillers are available to you as highly integrated, powerful automatic machines. For an ergonomic operation by one operator who feeds pail and lid from one position, the conveyor system arranged in a U-shape has proven its worth.

With the most simple design of the Compact Line you can already fill approx. 180 pails (25l) per hour. You can increase the performance potential of this easily and upgrade the equipment at any time. By expanding the machine components, such as for example the machine type with product flow control, you can increase the performance of this type of equipment of up to 300 pails (25l) per hour.

It goes without saying that all subsidiary work steps such as pail denesting, pail sealing, lid feeding, lid placing, inerting and steam application can be integrated into the automatic operating sequence.

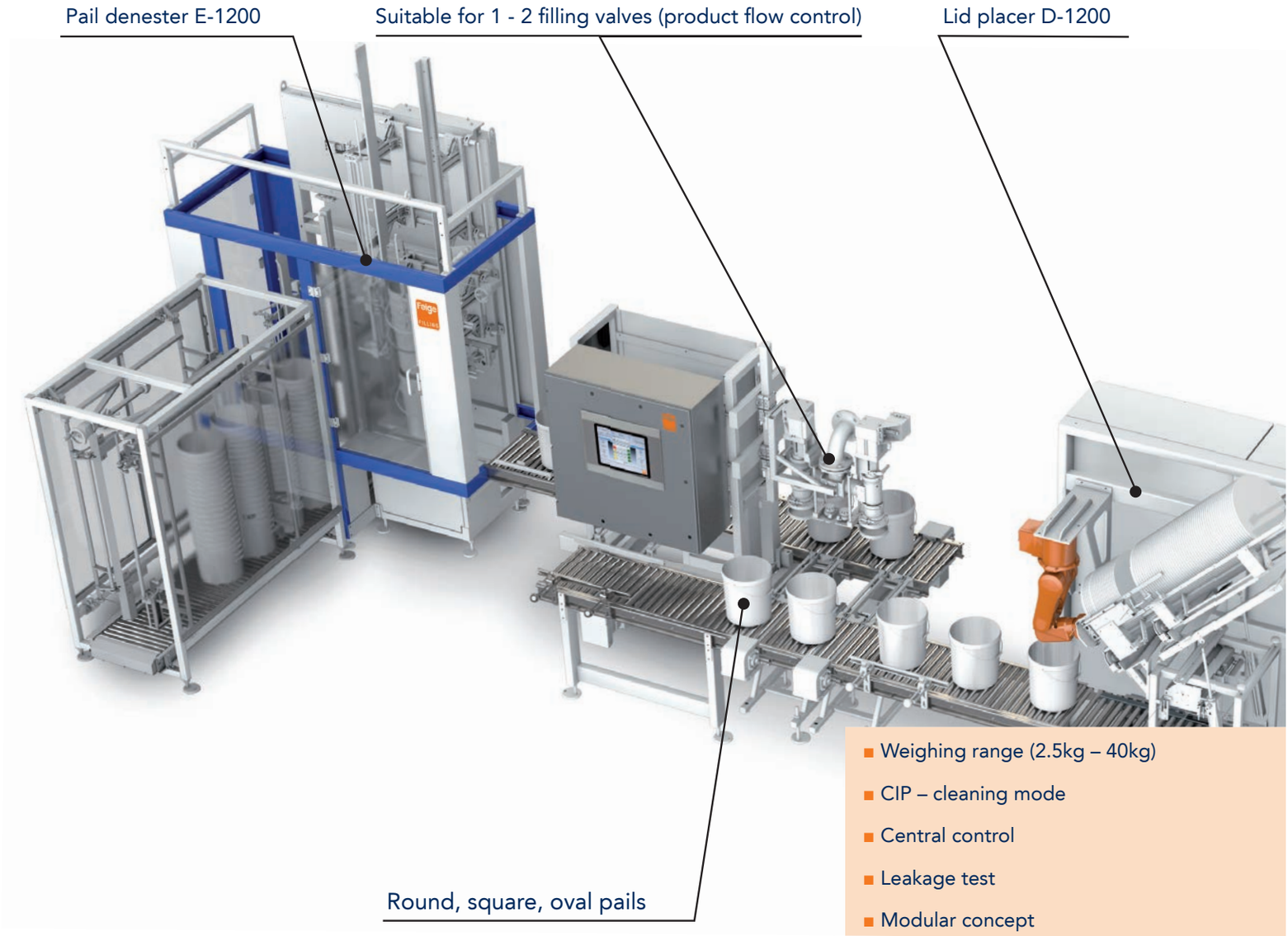
Controlled high speed

The Advanced Line is characterised by a multitude of functions which leave nothing to be desired. You can operate all the stations via the central FEIGE touch panel. Expand your equipment into a fully automatic packaging line by combining it with mixers, pumps and pail denesters or lid placers and lid closers as well as palletising equipment. By filling two pails in parallel, you can further increase the productivity and minimise the fill time. Activate several filling stations with high performance and constant product flow simultaneously, thus combining parallel and continuous filling.

The result: Up to 1200 filled pails per hour with pasty, pumpable liquids.

Turnkey - filling logistics

FULLY AUTOMATIC PAIL FILLING SYSTEMS



- Weighing range (2.5kg – 40kg)
- CIP – cleaning mode
- Central control
- Leakage test
- Modular concept
- Short changeover times
- High degree of automation

FULLY AUTOMATIC FILLING

COMPACT LINE

PLUG & FILL
- Pre-configured / pre-assembled compact filling machines
- Operated via touch screen

AUTOMATIC PAIL FILLING MACHINE **TYPE 44**
Automatic lid placing and pressing

ADVANCED LINE

COMPLEX CONFIGURATION
- Large conveying systems for empty and filled containers
- Operated via touch screen
- Filling products or environment require special features

RAPID FILLER **TYPE R2/R3/R4**
High-performance fully automatic filling machine
also with constant product flow

AUTOMATIC PAIL FILLER **TYPE 400**
With de-stacking, filling and lid placing, membrane sealing

PROCESS OPTIMISATION AND QUALITY

Short set-up times, easy handling

To ensure the long-term success of your company, you are of course always keen on optimising your processes. Individual filling equipment accurately tailored to your production requirements is indispensable for ensuring continuous efficiency and competitiveness and cost effective logistics. We will provide you with support across the entire process chain.

At the beginning of the filling process, you are for instance supported by the highly flexible pail denester for continuous denesting and uninterruptible pail feed with integrated safety system. Denesting and running-in any make of pail is achieved within a very short time. Retooling to other pail sizes or heights is just as smoothly managed as changing the stacking distance or the range. Various pail shapes and sizes are separated and placed onto the conveyors entirely without any mouldings.

Seal of trust

Demanding requirements in case of food or reactive products require a proper closing of the containers. To meet the corresponding requirements, sealing with suitable films is also possible. Sealing is particularly desirable if high demands on freshness have to be met simultaneously to ensuring an original quality sealing.

The FEIGE pail sealer processes round, oval and angular pail shapes. You decide whether sealing from the roller is to be done fully automatically in one working step or rather semi-automatically with manual two-hand actuation at the tabletop unit. The sealing is applied either firmly or peelable with pull tab, if desired also with film pattern, just as you wish.

Safe and well closed

The filling process is completed by closing the pails. With the automatic destacking of lids and the integrated lid placer, the FEIGE lid presser contributes to a further acceleration of the operating sequence. When using the design with double magazine, the automatic filling unit will automatically move to the second stack of lids as soon as the first stack is empty. Replenishing or retooling the magazines can be done without interruption during current operation.
Lid placer and lid crimper are further tools which safely and firmly close the lid. Both lid presser and lid crimper are integrated in the overall process according to your individual requirements.

Clean
- Level controlled ascent
- Drip scoop
- Drip extraction
- Drain funnel
- Cleaning station

Tight
- Leakage test
- Pail sealing

Flexible
- Valve heating
- Filling valve principle
- Base height adjustm
- Product hose suspen
- Product hose
- Valve rack
- Valve encoding

FULLY AUTOMATIC PAIL FILLING TECHNOLOGY

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ustment
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Safe

- Reduced fill start
- Inerting
- Earthing
- Pressure surges reduction
- Gas hood
- Collecting basin
- Overflow protection

Efficient

- Perforated disc
- Touch panel
- Fine fill via product file
- Roller conveyor on scale
- Roller conveyor in the in-feed and out-feed area

PRODUCTIVITY WITH A SYSTEM

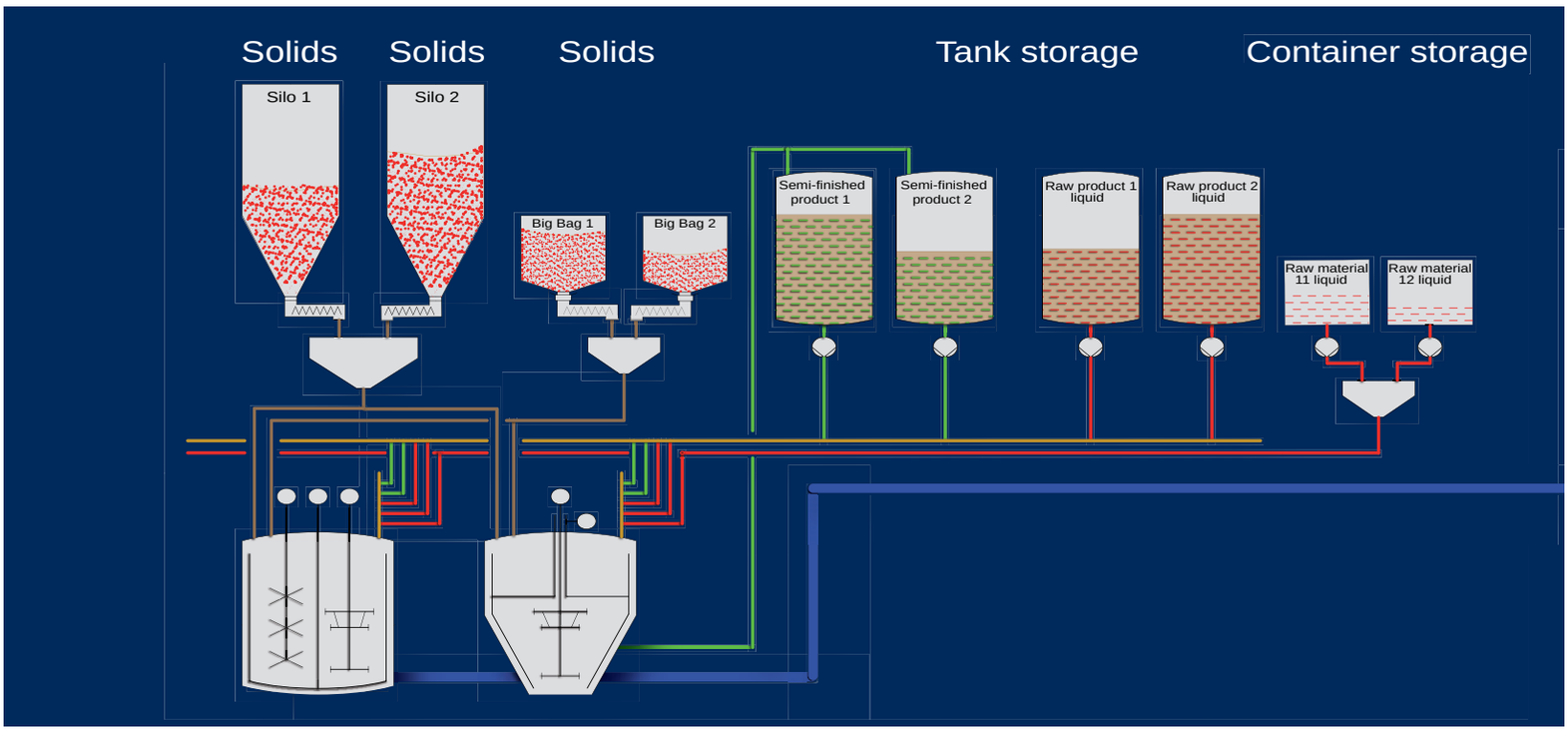
Design your production sequences according to your ideas with the automatic pail filling machines from Feige FILLING. Based on our many years of experience with innovative technology and our knowledge of market requirements, we can offer filling equipment in any performance class, offering the highest degree of flexibility you can use to achieve the highest possible degree of productivity for your company. Use the individual extensions to optimise your production flow, reduce processing times, improve job planning and job controlling.

We will support you. Together with you we will both develop and implement high-performance filling concepts.

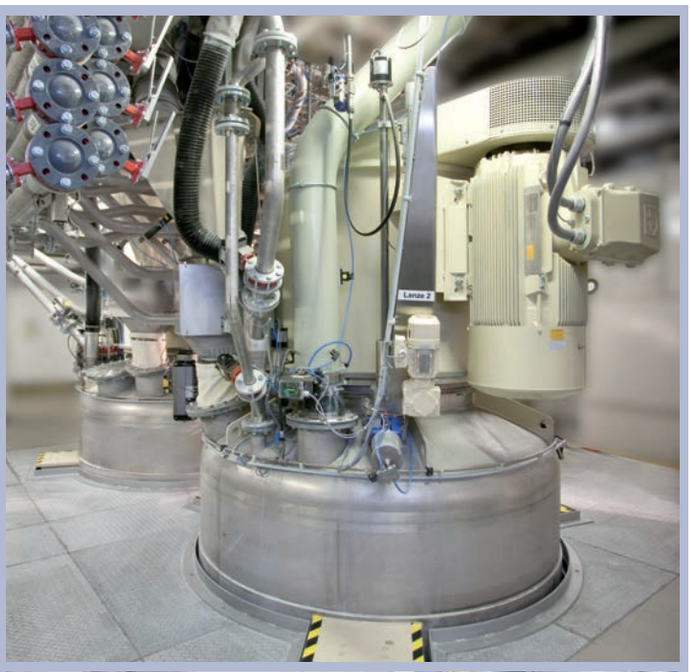
Sommer GmbH & Co. KG

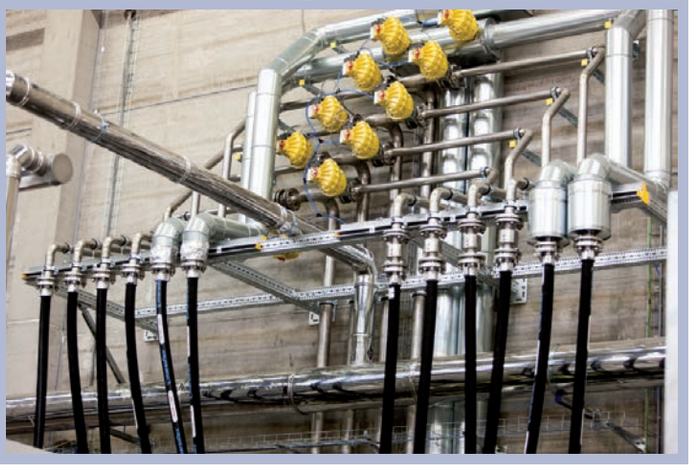
Caused by the integration of Messrs. Sommer into the HAVER & BOECKER group of companies in 2009, the product portfolio FEIGE could be completed with the field "Mixing and setting of plasters and paints". Both partners offer to their customers all from one source - up to final packaging. Sommer GmbH & Co. KG has been manufacturer of individual and customized solutions for more than 100 years.

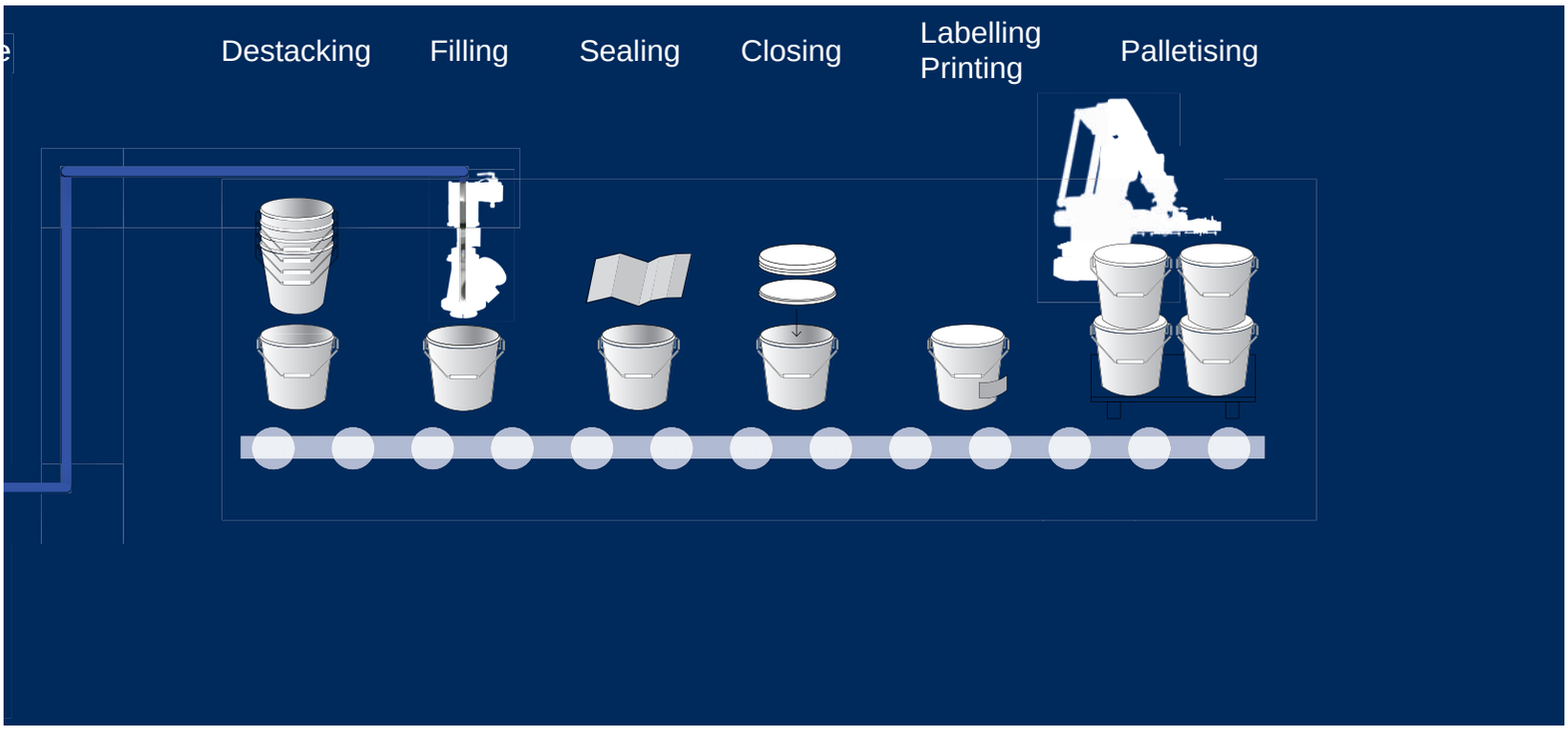
- Mechanical Engineering
  Agitators, mixers, horizontal mixers, dissolvers, planetary mixers with outputs of up to 500 kW.
- Apparatus Engineering
  Agitated vessels, storage tanks and pressure vessels up to 4000 mm in diameter and 50,000 litres volume.
- System Engineering
  Complete production systems as well as mixing systems and tank plants with all systems.



FULLY AUTOMATIC PAIL FILLING TECHNOLOGY







SAFETY AND COST EFFECTIVENESS FOR YOUR EQUIPMENT

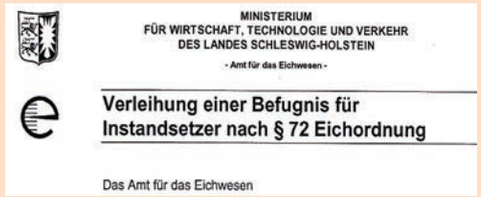
Resort to a competent and friendly service team to ensure that the reliability and precision of your Feige FILLING system are retained at all times.

Your partner for all circum-stances

You are at the centre of all our considerations! We will support you as a partner at any time. An individual service package covers your requirements from straight-forward service intervals to a complete “no care“ package.
Make use of our know-how, our consulting skills and our experience to keep your equipment’s availability at the highest level.

Whether hotline, teleservice, training, calibration, equipment inspection and maintenance, troubleshooting, spare part service or equipment extension and optimisation, committed and imaginative employees will offer you efficient and individual solutions combined with the know-how of experienced specialists.
We will take good care of your equipment!

24-hour hotline
Phone: +49 (0) 4531 - 8909-222
E-mail: hotline@FEIGE.com


MINISTERIUM
FÜR WIRTSCHAFT, TECHNOLOGIE UND VERKEHR
DES LANDES SCHLESWIG-HOLSTEIN
- Amt für das Eichwesen -

Verleihung einer Befugnis für
Instandsetzer nach § 72 Eichordnung

Das Amt für das Eichwesen

Teleservice
Dial-up access to your equipment control system via modem or Internet connection for trouble-shooting and diagnosis.

Equipment inspection
Detailed status report for your equipment with function test.

Equipment maintenance
Any measures to retain the required condition of your equipment with logging.

Spare part service
Prompt and optimum supply of your equipment with any wear and spare parts required.

FEIGE FILLING SERVICE CENTER

Training
Certified training courses on your own equipment or at our plant.

Equipment optimisation
Adaptation and/or extension of your equipment to new requirements in your company.

Equipment testing
Support with recurring tests in spect of equipment safety and with calibration.

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