

# World Class Powder Filling Technology



Versatile and hygienic units designed to fill by vacuum, volume and time-fill – or even a combination of these variables.

jbtc.com

# Worldwide presence





# Commitment to excellence

The ethos of JBT PLF International is simple: Absolute dedication to understanding our customers' needs. This has been at the heart of the company since it was founded in 1994 and, by utilising many years of knowledge and experience, all our powder and granular filling machines offer unparalleled quality and reliability.

With continued investment in research and development, we have designed a range of user-friendly models that provide customers with greater flexibility and technical capability. Our powder filling machines for rigid containers are capable of filling by vacuum or free flow, depending on the flow characteristics of the products. They were also the first machines to achieve ATEX certification.

Every JBT PLF product is specifically manufactured to accommodate the precise needs of each customer, resulting in a bespoke system tailored to their requirements. Such an approach has established JBT PLF as a worldwide market leader, with a customer base that includes global brands in the food, pharmaceutical and beverage sectors.

At JBT PLF International, we are committed to exceeding the expectations of our customers by combining a superior level of expertise with high quality products, all backed by first-class service.







# Powder & granular filling

JBT PLF's powder and granular filling technology can be utilised for a wide variety of products, such as baby milk formula (including probiotics), coffee, chocolate and nutraceuticals – with each machine manufactured to a customer's specific requirements. We can supply highly accurate, versatile and hygienic units designed to fill by vacuum, volume and time-fill – or even a combination of these variables.

Our machines are renowned for handling products gently, with no moving parts in contact with the powder or granules during the filling process – reducing the risk of contamination. Such a reputation has elevated JBT PLF machines as the preferred choice by leading organisations in the food, beverage, pharmaceutical, cosmetic and household industries.







## Features & benefits:

- An extensive range of models for every application, from single head in-line to 30 head rotary all operating at 10rpm for optimum performance
- Head update feature for maximum accuracy and minimum giveaway
- Designed for easy cleaning, which reduces maintenance schedules and potential downtime
- Rapid changeover of product/container, optimising productivity
- · Flexible filling heads to accommodate static or free flow products all on one machine
- Automatic loop top-up conveyor system with auto product run out option, which reduces operator intervention
- Versatile design capable of filling a range of container types, including glass, cans, PET and composite
- Low maintenance design with no onerous oil lubrication regime required
- Real time production feedback for fast fault diagnosis and optimal production efficiencies
- Remote modem access for programme updates
- Gassing systems available to maintain minimum oxygen content and extend product shelf life
- Tare and gross check weigher system option
- ATEX compliant when required









### Automatic top-up system

This system has been designed specifically for minimum weight legislation. Utilising a checkweigher feedback system, varying amounts of product can be dosed by the four independent stations, reducing product giveaway to a minimum.

## Powder & granular filling

### A customised approach

At JBT PLF, we appreciate that every customer has different requirements. Our approach considers all aspects of a filling system, from the product's flow characteristics and container type, to line speed and feedback systems – while still maintaining excellent levels of accuracy and consistency. We work with customers from the outset, designing and planning a system that will perform efficiently for its entire lifecycle. The result is an unparalleled quality of filling machinery.

### Container and product types

With our customised approach, we are able to develop machines capable of filling a wide variety of container types, including cans, glass jars, plastics and bags. Our vacuum filling machines have been developed to handle an extensive range of powders, such as milk formula, spray-dried coffee, chocolate and nutraceuticals. All filling is achieved with minimal product breakdown and dust generation.

Additionally, free flowing products that do not bridge through an aperture can be accurately filled using positive shut-off nozzles. This approach is ideal for products such as freeze dried coffee, dishwasher powder, sugar or spices.







## Testing and compliance

Before any JBT PLF filling machinery leaves our factory, it is thoroughly tested on site to ensure optimum performance. Each machine is built and prepared on our premises to reflect a real life working environment with all pneumatic pressures, electrical connections, scale calibrations and software checks rigorously completed. In addition, gassed machines are pressure and smoke tested to ensure all seals are intact before shipping.

# Ancillary equipment

Over the last two decades, JBT PLF has continued to develop a range of filling machinery to meet the growing demands and expectations of our customers.

This has included significant investment in research and development to produce a range of complementary ancillary equipment.







### Laser coding

Laser coding is essential across many industries for package and product traceability.

At JBT PLF, we have developed a highly reliable and easy to use coding system, which can be used on production lines across a wide range of manufacturing sectors.

### In-line gassing system

Our highly reliable in-line gassing system reduces residual oxygen to minimal levels, which has been proven to extend the shelf life of packaged products. The system also ensures oxygen levels are maintained between the pre-gassed state in the hopper, through to the sealed container. Furthermore, the incorporation of a specially developed recycling system significantly reduces operating costs by lowering gas usage.

All gassing systems are sealed and supplied with leakage monitors for improved safety.





### Additional systems available:

- Barcode reading system
- Particulate & damaged container rim
  inspection system
- UV sterilisation systems
- Rejection system

See our 'Ancillary Equipment' brochure for more details.



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### Scoop inserter

The versatile scoop inserter from JBT PLF is designed for quick and simple loading of scoops. An elevated conveyor feeds scoops into a stainless steel bowl, before they are accurately discharged into a container through a chute.

Our inserter system can manage a wide variety of scoop sizes and bowl depths, and is also capable of a quick changeover between differing scoop types and shapes – maximising productivity.



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# Project management

Whether our customers are investing in a standalone filling machine, or a fully integrated processing line, JBT PLF offers a comprehensive management service. From initial concept and budget management, to installation and compliance with all relevant legislation, our aim is to identify and fulfil a customer's requirements throughout a project.

### **Dedicated contact**

Depending on the scale of a customer's order, we can assign a JBT PLF Project Manager (PM) to oversee the successful delivery and installation of our filling machinery.

The dedicated PM will supervise the entire process, continually measuring the project timescales against pre-agreed targets, while ensuring the design criteria is successfully transferred to a fully commissioned finished product.



### The services we offer include:

- Site survey advice on equipment placement to optimise productivity
- Line/equipment simulation to optimise line performance
- 3D scanning to gather vast amounts of data for review and analysis
- Budget planning and review managing expectations for all stakeholders
- Installation targets keeping a project on track
- Design and specification generating equipment concepts that fulfil requirements
- Procurement and purchasing sourcingthe best quality materials within budget
- Installation and commissioning check, inspect and test operational components before operational phase
- Method statement and project schedules ensuring ongoing safe operation of filling equipment
- Operator and engineer training maintaining high quality operation of equipment
- Turnkey line integration



# Training

At the early stages of a machine build, we offer our customers the opportunity to view the equipment at the assembly stage. This allows our client's engineers and operators to gain an insight into the manufacturing process and improve their knowledge of the machinery's functionality and design features.

Once the installation is complete, a client training programme is implemented to ensure a thorough understanding of the machinery's operation. This is coupled with a detailed briefing on the maintenance schedules required to ensure optimum performance and efficiency. Additional training can be providedon request.



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## Spares

In the unlikely event of a breakdown, diagnosing the fault and identifying the specific replacements is key. To focus on our customers' needs, we have a dedicated UK-based customer support team who can arrange quick delivery of parts to assist the speedy repair of equipment and ensure minimum disruption. We stock parts for all JBT PLF supplied products and a variety of thirdparty equipment.













## Service information

After investing in state-of-the-art equipment, it's important to maintain optimum performance. We offer a comprehensive service contract facility for all JBT PLF supplied equipment, as well as other manufacturers' vacuum powder filling machinery.

Our fully trained workforce has extensive knowledge and expertise in the industry. This is utilised to great effect by our worldwide client base to maintain, service and, in many cases, improve the performance of their equipment.

### Year-round peace of mind

With pressures on production line equipment to perform continuously, it's vital that year-round accuracy, safety and efficiency is maintained. Regular checks and servicing of equipment are essential in reducing the chance of breakdowns, as well as maintaining an efficient and accurate production line.

### Maintain performance

Routine servicing and maintenance ensures all equipment operates at optimum efficiency – keeping output high and downtime low.

### We have the expertise

As a specialist manufacturer, we have a network of fully qualified engineers to service all JBT PLF equipment and other branded filling machinery. Equipped with the necessary skills and expertise, our engineers can keep systems running at optimum performance, or quickly get them operational again in the event of a breakdown.

## Spread the cost

Planning your maintenance and managing your budget is easy with JBT PLF. We have a range of flexible monthly payment options, which let you spread the cost over the year.





### COUNT ON JBT TO HELP PROTECT YOUR INVESTMENT

JBT's greatest value in PRoCARE® services comes from preventing unexpected costs through smart, purposeful, and timely maintenance based on unmatched knowledge and expertise. PRoCARE service packages are offered as a maintenance agreement in various service levels, depending on your production and cost management requirements.



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#### JBT LIQUID FOODS

FRESH PRODUCE TECHNOLOGIES | FRESH-CUT, ROBOTICS, STEAMING | FRUIT AND VEGETABLE PROCESSING | SECONDARY PROCESSING | ASEPTIC SYSTEMS | FILLING AND CLOSING | IN-CONTAINER STERILIZING | TRAY SEALING | HIGH-PRESSURE PROCESSING | POWDER PROCESSING | TUNA PROCESSING

OUR BRANDS



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## We're with you, right down the line."

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