

Tetra Pak® Plant Components

Always available. Always approved.



One supplier, 40,000 advantages

Get access to plant components from multiple leading brands, without having to contact multiple companies.

When buying plant components from us, you can enjoy all the convenience and cost savings of dealing with a single, reliable, and familiar partner.

Thanks to our many longstanding partnerships, we've built a comprehensive portfolio of over 40,000 plant components. All of them are suitable for food and beverage production, and especially for our core categories: dairy, beverage, prepared foods, ice cream, cheese, and powder production. The range includes many innovative components that help you drive savings in energy, water, and waste.

Thanks to our comprehensive product range of plant components, you're sure to find exactly what you need – from single items to complete, plant-wide solutions.



Small things that make a big difference

Quality plant components keep your production line working at its best while optimising your energy and water consumption, and reducing your total cost of ownership (TCO). They provide the many vital links that make packaging equipment, processing modules, lines, and even whole plants work together smoothly.

Our portfolio includes both sanitary and non-sanitary components, spanning valves, pumps, tank equipment, measuring instruments, integration components, automation and electrical components.

Each item has a clearly defined function and is correctly dimensioned to deliver the efficiency, product quality, and safety you need.

Pumps

Sanitary

Centrifugal pumps Self-priming pumps Rotary lobe pumps Circumferential piston pumps Eccentric screw pumps Peristaltic pumps Diaphragm air-driven pumps Twin screw pumps

Non-sanitary

Diaphragm air-driven pumps Dosing pumps

Tank equipment

Agitators and mixers

Agitators Magnetic mixers Rotary jet mixers

Cleaning devices

Static spray ball Rotary spray head Rotary jet head

Tank covers

Circular Oval Rectangular

Integration components

Installation material

Hoses Pipes Fittings

Pneumatics

Valves Air control Fittings and hoses

Various integration components

Sight glass Inline housings Strainers/filters Steam separators Steam traps Vacuum breakers Brazed heat exchangers

Measuring instruments

Sanitary flow meters

Magnetic low meters Mass flow meters

Utility flow meters

Vortex steam flow meters Thermal flow meters Ultrasonic flow meters Magnetic flow meters Variable flow meters

Pressure

Pressure transmitters Differential pressure transmitters Pressure gauges Hydrostatic pressure transmitters

Level

Conductive level meter Capacity level meter Radar level meter Level switch

Temperature

Indicator Transmitter

Analysis

Conductivity pН 0, **Turbidity meter** Refractometers

Weighing

Pancake load cells Hygienic compression load cells

Automation and electrical

Control systems I/O modules Processors **IO-Link master**

Operator panels Graphical operator panels

Low voltage

Motor protection Circuit breakers Contactors Buttons and lamps

Communication

Switches Routers Field bus Interfaces

Auxiliary equipment

General power supply Uninterrupted power supply (UPS) **Buffer units** Light towers

Motor drive systems

Frequency converters Soft starters

Valves

Sanitary

Seat valves Constant pressure valves Mixproof valves Non-return valves **Regulating valves** Sampling valves Butterfly valves **Ball valves** Safety valves Diaphragm valves Accessories Control/indication

Non-sanitary

Seat valves Constant flow valves Non-return valves Reducing valves **Regulating valves** Safety valves Solenoid valves Ball valves Accessories Control/indication



Smart sourcing from global leaders

All the plant components you buy from us have been pre-selected from globally proven, world-class suppliers and validated for their quality, sustainability, and product safety.



Alfa Laval

Endress+Hauser

People for Process Automation

Alfa Laval is one of the market leaders in hygienic fluid handling products, plate heat exchangers, high speed separators, and decanters.

Endress+Hauser

Endress+Hauser is a global leader in measurement and automation technology for process and laboratory applications.

SAMSON

SMC



SPIRAX SARCO

Spirax Sarco is the world leader in steam technology, offering the industry's most extensive range of products, services, and solutions for steam users to improve productivity, save energy, and reduce waste.



IFM

Measuring, controlling, and evaluating -

When it comes to pioneering automation and digitalisation technology, IFM is the ideal partner. Ensuring process reliability and plant uptime.



SAMSON's modular valve design reduces costs for spare parts, installation, and maintenance, leading to significant savings in total cost of ownership.



SMC provides high quality services throughout the world, with its products, technologies, and experienced staff.



Bürkert

Bürkert specialises in valve technology and sets the international benchmark for industrial solenoid valves.

ENGINEERING TOMORROW



Danfoss

Danfoss is a global leader in energyefficient solutions that reduce both costs and carbon emissions. Danfoss' products and services are used in diverse industries and applications, such as electric motor controls, refrigeration, air conditioning, and renewable power.

These are just a few of our main suppliers - this list is by no means exhaustive.

Get solutions, not just components

When you buy plant components from us, you get so much more than the physical product. You get an easy buying process, rapid deliveries, performance guarantees, and the best possible TCO – all accompanied by sound advice based on over seven decades of food and beverage industry experience.

Reliability



24/7 express delivery

 \star

170 supported countries



8 distribution centres worldwide

Convenience

389 supplier agreements

e-Business platform deal with. **Easy to buy** Streamline your purchasing r

Save time and effort by reducing the number of suppliers you

One supplier

Streamline your purchasing process by using our e-Business portal.

24/7 order system Any size of order Order whatever you need – no more, no less – from a single replacement item to a complete package of plant components.

Guidance



2,500 field service engineers

500 account manag and specialists



40,000 + components for everyone

Fast deliveries You get rapid delivery since we hold stock at our Regional Distribution Centres.

After sales

We support you throughout the equipment's lifecycle and manage improvements as well as obsolescence – in partnership with our suppliers.

Global coverage

No matter where you're based, Tetra Pak can supply you with the components you need.

	Technical service With locally-based experts aroun the world, we can provide world- class technical support wherever you are.
ers	Advice on tap If you're not sure what you need, don't hesitate to ask for our advice.

Brand neutral You don't have to run a Tetra Pak line to buy plant components from us. Our offer applies to any brand of food processing and packaging equipment.

Meet some of our star performers

All the plant components we sell are chosen with criteria like running times, utilities consumption, and waste reduction in mind.

Choosing the right components not only helps lower your energy, water, and chemical usage, but also improves your bottom line.

On the following pages, we highlight some of our star performers to give you a taste of our portfolio. To see the full range, please go to our e-Business platform or ask your local Tetra Pak representative for more information.





Pumps

Reduce energy consumption with the right pump.

The efficiency and versatility of the LKH prime **pump** makes it one of our star performers. Thanks to a combination of advanced airscrew technology, optimised impeller, and casing geometry, this self-priming pump gives you quiet, efficient operation and very low energy consumption - while at the same time meeting the most stringent hygiene standards in the food, dairy, and beverage industries. It can be used to pump product as well as for CIP duties.

Since pumps account for a massive 10% of global electricity consumption – and as much as 50% of total electricity consumption in some applications - this is a good place to look for savings.¹ Let our experts help you find the best size and type of pump to optimise efficiency in your specific applications.

Using a variable frequency drive to control pump speed, you can reduce energy consumption by up to 20%, and simultaneously lower maintenance costs.² This is achieved by reducing the pump's operating speed to keep it in the 'zone' of highest efficiency at all times.

Transform pump data insights into action.

Asset Health Monitoring with Condition Monitoring by Alfa Laval helps improve your operations by providing continuous monitoring of pump performance. By collecting and analysing real-time pump data, Asset Health Monitoring allows you to identify potential breakdowns early, optimise production processes, and enable faster, more effective troubleshooting. More accessible and reliable data can also improve resource efficiency.

Pump selection and best efficiency point.

Take advantage of our advisory service to ensure that you not only get the most efficient pumps, but also the best technology and model sizes for your application. We help you select pumps at an early stage in your system design and ensure they run consistently at their best efficiency point.

Pumps available

Sanitary

Centrifugal pumps Self-priming pumps Rotary lobe pumps Circumferential piston pumps Eccentric screw pumps Peristaltic pumps Diaphragm air-driven pumps Twin screw pumps

Non-sanitary Diaphragm air-driven pumps Dosing pumps





Sanitary valves

Reduce water consumption by up to 90%.

We chose the unique mixproof valve with ThinkTop V70 and burst cleaning function as our star performer in this category because it has been proven to save up to 90% of CIP liquid, significantly lowering your operating costs compared to the traditional (PLC) timer-controlled seat lift.3

Two products or fluids can safely flow through the same valve which means one unique mixproof valve can often be used to replace two or more of other types. Thanks to a state-of-the-art double-seat design, you get longlasting, spillage-free operation, with minimal risk of product contamination. Safe, hygienic operation is further assured by the use of double lip seals, and the top-loaded design makes maintenance quick and easy.

All the sanitary valves in our portfolio have been chosen for their smart yet simple design, corrosion-free materials, and ease of cleaning. So, if you're looking for valves that enable smooth, flexible operation, high hygiene, and a long reliable lifetime, talk to us.



Sanitary valves

Seat valves Constant pressure valves Mixproof valves with ThinkTop V70 Non-return valves Regulating valves Sampling valves Butterfly valves Ball valves Safety valves Diaphragm valves Accessories Control/indication

Non-sanitary valves

Precise control and 35% higher flows.

We awarded the product family of Bürkert non-sanitary control valves star status because they are tough yet flexible, have an unparalleled cycle life, and come with a broad choice of communications platforms. They're also wash-down safe and the parabolic trim allows for an approximately 35% higher flow than conventional control valves.

Choose from a combination of different valve types (angle, globe, diaphragm) and different control heads, from basic to full PID. Communication platforms include analogue 4-20mA, AS-I, IO-Link as well as advanced PROFIBUS DP-V1, DeviceNet, EtherNet/IP, PROFINET, Modbus TCP, büS - Bürkert System Bus (based on CANopen). Integrated controlair routing with spring chamber aeration saves energy, and you can look forward to long life cycles thanks to the double-packed stem and oscillating self-centering seat.

Non-sanitary

valves

Seat valves Constant flow valves Non-return valves Reducing valves Regulating valves Safety valves Solenoid valves Ball valves Accessories Control/indication





Tank equipment

Save energy and other utilities.

We offer several types of equipment to optimise your tank, including cuttingedge options for agitating and mixing, covers, and cleaning solutions.

Since tank cleaning is one of the most important operations for food production, we have chosen to highlight the **rotary jet head**; an outstanding cleaning device that Improves the efficiency of your tank cleaning process.

Thanks to high-impact cleaning in a 360° repeatable indexed pattern, rotary jet heads (in place of static spray balls) can reduce cleaning time by 40% to 60%, and save up to 70% of cleaning costs - all while meeting the strictest hygiene demands.5



Reduce energy consumption by up to 80%.

Specially designed for use in tanks, high-efficiency agitators are made with EnSaFoil propellers, which are wider in the middle and narrower at the tips. This means they produce an even pumping force, while consuming less energy and creating less heat. They are capable of delivering annual CO, reductions of 67 tonnes and annual energy savings of 175,000 kWh.6

Tank equipment

Agitators and mixers Agitators Magnetic mixers Rotary jet mixers

⁵ By replacing Gamajet with Alfa Laval TJ40G rotary jet head, possible to achieve a reduction of CO₂: 0.65 tonnes, water and CIP media savings of 40 m³, and energy savings of 1,900 kWh annually.





Cleaning devices Static spray ball Rotary spray head Rotary jet head

Tank covers Circular Oval Rectangular

Measuring instruments

Enhance food safety.

The Proline Promag H 100 electromagnetic flow meter is specifically designed for hygienic applications, making it our star performer in this category.

Featuring an ultra-compact, space-saving transmitter with robust housing, this flow meter gives you full functionality on a minimal footprint. It delivers energysaving flow measurement, as well as multivariable temperature and conductivity measurements. It's adapted for a range of hygienic process connections, with Heartbeat Technology to ensure compliance and process safety at all times.

We invite you to discuss your process monitoring needs with our experts and be sure to get the best instruments for your installation. Why not take advantage of our complete solution for on-site calibration of critical instruments at the same time?



Measuring instruments

Sanitary flow meters Magnetic low meters Mass flow meters

Utility flow meters Vortex steam flow meters

Thermal flow meters Ultrasonic flow meters Magnetic flow meters Variable flow meters

Pressure

Pressure transmitters Differential pressure transmitters Pressure gauges Hydrostatic pressure transmitters

Level

Conductive level meter Capacity level meter Radar level meter Level switch

Temperature Indicator Transmitter

Analysis Conductivity pН 0, Turbidity meter

Refractometers

Weighing Pancake load cells Hygienic compression load cells

Automation and electrical components

Accelerate your digitalisation.

Providing the gateway for connection of up to 8 IO-Link devices, such as sensors, valves, or binary input/output modules, the **IO-Link master with PROFINET** or EtherNet/IP interface helps accelerate your progress towards Industry 4.0.

It offers excellent electromagnetic stability, a wide temperature range, a high protection rating, and a robust housing - qualifying it for use in the food industry and making it a star performer among automation and electrical components.

The master transmits machine data, process parameters, and diagnostic data to the controller. It features a separate IoT Ethernet socket separating IT and automation network, allowing important sensor information to be sent safely to the IT and ERP system. Meanwhile, intuitive software finds all IO-Link masters in the network and creates an overview of the whole plant, with sensors and parameters visible from a central point.

Talk to our experts about customised automation solutions that give you better control of your processing, packaging, and plant logistics.





Automation and electrical components

Control systems I/O modules Processors IO-Link master

Operator panels Graphical operator panels

Low voltage Motor protection Circuit breakers Contactors Buttons and lamps

Communication Switches Routers Field bus Interfaces

Auxiliary equipment General power supply Uninterrupted power supply (UPS) Buffer units Light towers

Motor drive systems Frequency converters Soft starters

Integration components

Total peace of mind.

Since this category covers all the small components needed to successfully integrate your production line, it was hard for us to choose a single star performer. So, we picked our whole sanitary fittings range. What's special about these components is that they give you total peace of mind.

Each fitting meets the highest standards of safety, reliability, and efficiency required for use in the food, dairy, and beverage industry. Each one complies with food contact requirements to ensure consistent quality in your production, and each offers full traceability to enable swift troubleshooting, if required.

The range covers various different global dimensions standards including EN 10357-A ("DIN" sizes), ISO 2037 ("SMS" sizes) and ASME ("US inch" sizes).





Integration components

Installation material Hoses Pipes Fittings

Pneumatics Valves Air control Fitting and hoses Various integration components Sight glass Inline housings Strainers/filters Steam separators Steam traps Vacuum breakers Brazed heat exchangers



Customer cases

Lowering energy consumption with pumps equipped with Variable Frequency Drive (VFD).

When a dairy producer in North Europe discovered that some of its whey filtration pumps were running at a mere 50% energy efficiency, we worked with them to find a solution. An internal audit revealed that half the energy being consumed by these filtration pumps was going to waste, as well as causing damaging vibrations along the processing line.

Our solution was to replace two traditional standard pumps with LKH pumps fitted with variable frequency drives (VFDs). Available in multiple models and sizes, LKH pumps feature advanced air-screw technology and an optimised impeller and casing geometry which combine to enable reductions of up to 40% in electricity consumption compared to standard pumps. Meanwhile, the VFDs lower the pumps' speed, keeping them consistently within the 'high-efficiency zone'.

The overall result was a reduction in energy consumption from 186 kW/hr to 142 kW/hr - which led to annual costs savings of €37,000 and a CO₂ reduction of 212 tonnes. In addition, the dairy gained 192 hours of production uptime.

Improving productivity and energy efficiency in Central Europe.

A leading European cheese producer wanted to increase productivity and save energy when installing a new 360,000-litre milk tank. We supported them in a two-step process which allowed them to achieve both these goals.

The first step was to opitmise their valve cleaning process. By installing an ALS agitator using only 4 kW of installed power (compared to 18 kW for a conventional tank agitator) we helped them improve productivity - logging results over a three-month period. This also reduced their annual energy consumption by 30,000 kWh.

The second step - at the dairy's request - was to retrofit 11 conventional 11-15 kW agitators with 2.2 kW ALS agitators fitted with EnSaFoil propellers. Featuring a wider centre and narrower tips, these propellers are specially engineered to produce an even pumping force while consuming less energy than standard designs.

Reducing energy and water consumption in the production of specialty cheeses.

One of our major European dairy customers is a producer of fine cheeses. When planning to upgrade their cleaning system for 66 valves, their main goal was to reduce their resource consumption. However, it was also important for them to maintain the highest standards of mechanical and biological cleaning efficiency.

We supported them by introducing a burst clean ThinkTop V70 system which controls hygienic valves with a single sensor-target control board, handling all valve functions and communication. It also features the fastest ever burst seat cleaning, which reduces water consumption by up to 90%.

With the addition of this new component, the dairy reduced its annual liquid heating needs by



70,000 kW/hr, saved 16 tonnes of CO₂ per year, and reduced water /CIP liquid by 1,400m³/yr. And all while maintaining the desired levels of biological cleaning efficiency.

Our knowledge, your peace of mind

When you source your plant components from us, you can trust that everything is under control.

With a wealth of process and application knowledge to draw on, our experts will always provide you with the best plant components for the job. By implementing the right components, you can expand or modify your operations, and accelerate progress towards your sustainability targets, while also reducing your operational costs.

To learn more about which plant components would improve your production, <u>get in touch</u> today.



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