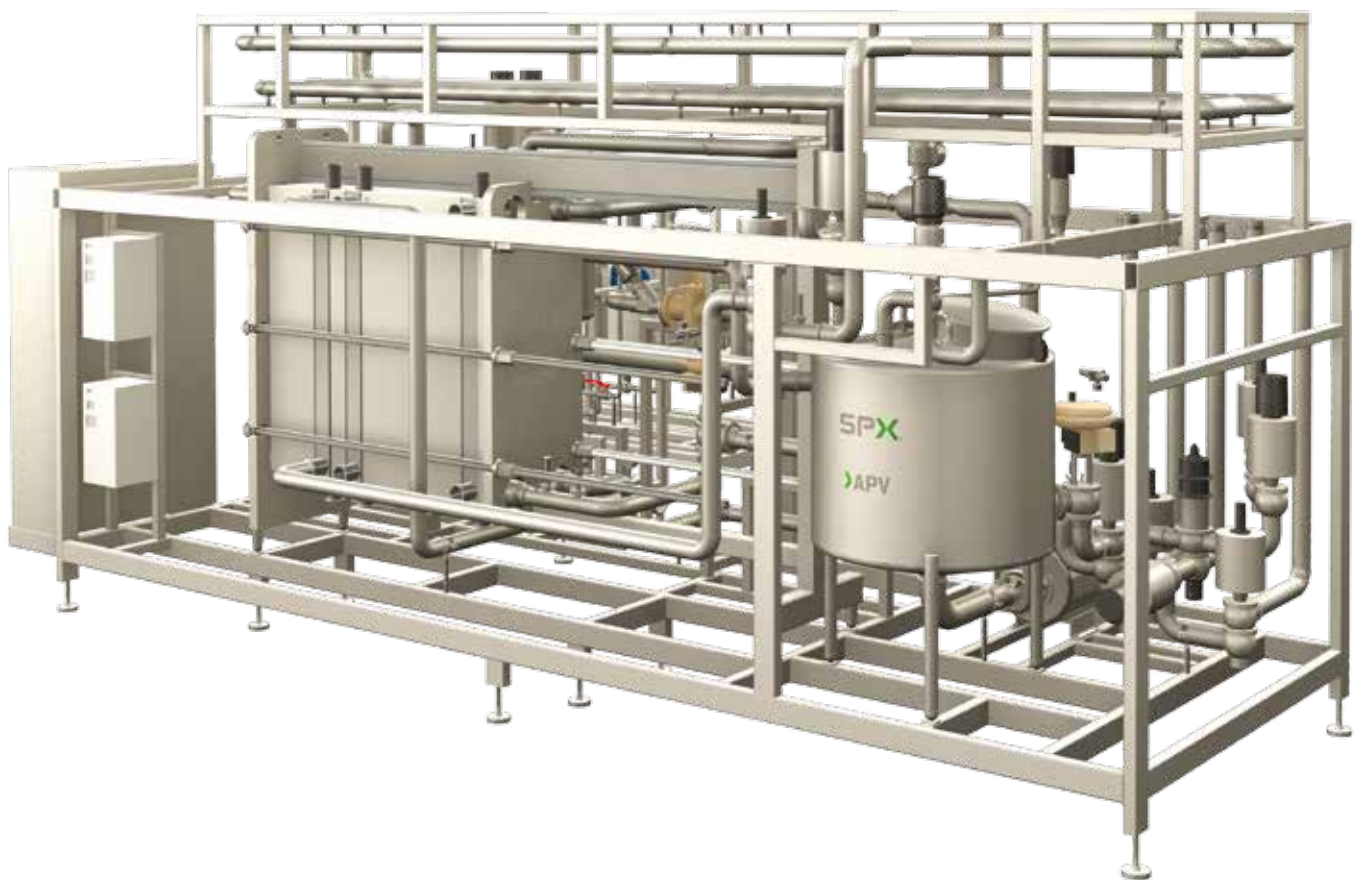


Factory Xpress Systems

BENEFITS FOR SMALL, MEDIUM, AND LARGE SCALE PRODUCTION
PASTEURIZERS • MEMBRANE FILTRATION • CIP • UHT • FLEX-MIX • MILK RECEPTION



SPX FLOW is highly committed to delivering sustainable solutions, which exceed customer expectations in value and return through a focus on.

- Waste prevention and loss reduction
- Reuse of resources
- Improved value of raw materials
- Water and energy reduction
- Product safety and security
- Social responsibility

It's hard to find a more comprehensive portfolio of processing equipment like SPX FLOW can offer. Many of our designs incorporate patented features and our research and development efforts continue to produce ground breaking technologies. When you specify our equipment you get more than a product – you get a partner.

SPX FLOW, Inc. (NYSE:FLOW) is a leading manufacturer of innovative flow technologies, many of which help define the industry standard in the market segments they serve. From its headquarters in Charlotte, North Carolina, it operates a sales and support network, centers of manufacturing excellence, and advanced engineering facilities, throughout the world. Its cutting-edge flow components and process equipment portfolio includes a wide range of pumps, valves, heat exchangers, mixers, homogenizers, separators, filters, UHT, and drying technology that meet many application needs. Its expert engineering capability also makes it a premium supplier of customized solutions and complete, turn-key packages to meet the most exacting of installation demands.

Incorporating many leading brands, SPX FLOW has a long history of serving the food and beverage, power and energy, and industrial market sectors. Its designs and engineered solutions help customers drive efficiency and productivity, increase quality and reliability, and meet the latest regulatory demands. In-depth understanding of applications and processes, state-of-the-art Innovation Centers, and advanced pilot/testing technology further assist in optimizing processes and reducing timescales to reliably meet production targets.

To learn more about SPX FLOW capabilities, its latest technology innovations and complete service offerings, please visit www.spxflow.com.

APV FX Systems™ deliver benefits for small, medium, and large scale production

APV FX SYSTEMS™

APV Factory Express (FX) Systems are high-quality, skid-mounted, Plug & Produce application solutions marketed by SPX FLOW under its APV brand. They are designed for dairy, beverage, and food manufacturers all over the world who require reduced lead time for delivery of high-quality, low-risk solutions for plant upgrades or extensions. Based on standardized modules designed, built and backed by SPX FLOW, APV FX Systems™ leverage proven APV/SPX FLOW engineering and automation, and comply with global industry standards.

QUICKER AND MORE ECONOMICAL INSTALLATION

APV FX Systems™ can be customized to a certain extent by choosing between various modules and options, depending on the application type. The standardized module design and short delivery times result in reduced time-to-market for a new product and relieve larger plants from time consuming changeovers.

Each module includes a full set of operator manuals and can be assembled quickly, thus cutting installation costs to a minimum and significantly shortening time-to-production.

SIMPLY PLUG AND PRODUCE

APV FX Systems™ mean that dairy, food and beverage processors of all sizes can now benefit from fast delivery and installation of skid-mounted systems with the same quality and reliability, the same low maintenance requirements and the same access to global service and spare parts delivery as those offered by larger SPX FLOW systems, and what's more, when the equipment is installed, all the customer has to do is "plug and produce".

BENEFITS

- Pre-assembled and factory-tested with water before delivery for easy and fast installation based on standardized design
- Small footprint for flexibility in limited space
- Reduced lead time
- Reduced pay-back time and high ROI over a long service life
- Global availability with SPX FLOW global service and support

REDUCED INVESTMENT

Enables realization of full production capacity to optimize efficiency and ROI with lower investment costs.

SHORT TIME TO PRODUCTION

- Each module includes a full set of operating manuals for fast assembly and connection

PROVEN RELIABILITY

- Testing of each unit by SPX FLOW specialists prior to shipping
- Rapid installation and commissioning
- Proven functionality and performance

STANDARDIZED TURNKEY PACKAGE

- Skid-mounted system with small footprint
- Fast delivery

SERVICE AND SUPPORT

- Customized service and maintenance agreements
- Global delivery of genuine SPX FLOW spare parts
- Application consulting
- Application testing at the SPX FLOW innovation centers

WORLD-LEADING EXPERTISE AND SUPPORT

The SPX FLOW innovation centers offer pilot plant and application development expertise for customers wishing to test new processes and optimize existing process parameters, with the assurance of production scalability. The plant is also available for rent, enabling customers to conduct trials on their own premises.

The SPX FLOW portfolio of aseptic and non-aseptic heat treatment systems is adapted to specific national legislations and regulations.

Typical product applications

Food



Dairy



Brewery



Water



Beverage



Syrup



Sugars





APV BRAND FX MILK RECEPTION SYSTEMS

The milk reception line includes intake of milk and other liquid milk products for further processing in a milk processing plant. The primary function is to eliminate air, measure the quantity, pumping and cooling before storage and/or further processing.



APV BRAND FX TUBULAR UHT PLANT

The tubular UHT system is a solution that can be delivered, installed and commissioned within a very short time, offering multiple advantages. The APV brand FX Tubular UHT system uses high-velocity tubular aseptic heat treatment to ensure smooth and efficient, continuous production of high-quality milk products.



APV BRAND FX SEPSTREAM SYSTEM

APV brand FX SepStream systems are pre-engineered and cost effective membrane systems for multi dairy applications. APV brand FX SepStream systems separate and concentrate whey or milk raw material to create new value-added main stream products or ingredients with no waste as the process also produces a high-quality water main stream.



APV BRAND DELTA MANIFOLDS

DELTA valve manifolds and skidded systems by APV save processors time and money and reduce lead times. The manifolds and systems are completely engineered and built by APV, and are factory-tested before shipment. Solenoid panels can be included in pre-wired manifolds.



APV BRAND FX CIP SYSTEMS (CLEANING IN PLACE)

CIP units for efficient cleaning of pipeline systems, tanks and processing plants with a choice of tank sizes depending on requirements. The CIP MIDI is intended for small to medium CIP applications with a choice of different capacities and sizes, up to a maximum of two CIP circuits per CIP set.

Available in two standard ranges: APV CIP MINI and APV CIP MIDI



APV BRAND FX ASEPTIC TANK

The APV brand FX Aseptic Tank is a solution that can be delivered, installed and commissioned within a very short time, offering multiple advantages.



APV BRAND FX FLEX-MIX™ CONTINUOUS SUGAR DISSOLVER

The APV brand FX Flex-Mix™ Continuous Sugar Dissolver is a fully automatic sugar syrup blending system that can be readily integrated with existing or new beverage processing solutions and that offers flexibility, Brix accuracy down to $\pm 0.1^\circ$ and significantly reduced labor costs.



APV BRAND FX FLEX-MIX INSTANT

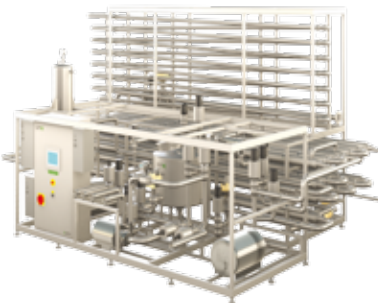
Designed for batch mixing and mixing over one or more hydration tanks in closed systems with vacuum powder transport.

The Flex-Mix instant mixer is a highly efficient vacuum processing unit, suitable for use in a wide range of applications.



APV BRAND FX FLEX-MIX PROCESSOR

Sanitary batch process with processing and cooling in a time frame similar to that of a continuous process. Special mixing agitator design for gentle processing and protection of product integrity. Optional high shear mixing unit for emulsification. Individual process step combinations.



APV BRAND FX TUBULAR JUICE PASTEURIZER

The Tubular Juice Pasteurizer is a solution that can be delivered, installed and commissioned within a very short time, offering multiple advantages.

The Tubular Juice Pasteurizer can be used for low viscosity juices with some pulp or fibers, soft drinks, tea and coffee drinks, and water.



APV BRAND FX GOLDSTREAM SYSTEM

The APV brand GoldStream process integrates high-quality sanitary components that are designed to work together to deliver a predictable return on investment. The plant employs tried-and-tested reverse osmosis (RO) technology to separate and concentrate milk residues back to their original composition or higher.



APV FX MILK PASTEURIZER

The APV brand FX Milk Pasteurizer is a solution that can be delivered, installed and commissioned within a very short time, offering multiple advantages.

The APV brand FX Milk Pasteurizer can be used for pasteurization of fresh milk. Options for separation, standardization and homogenization.



APV BRAND FX DARMIX+ IN-LINE MIXER

In-line mixer for mixing butter and butter blends:

- Compact and highly efficient in-line mixer
- Mixing intensity (rpm) is controlled by a frequency converter
- Compact design
- Cleaning simultaneously with the pipeline



APV BRAND FX FLEX-MIX LIQUIVERTER

Manual unit designed for batch mixing and mixing over one or more hydration tanks with optional integration in fully automated production. Available as a standard unit or with a high-shear mixing option.



APV FX PLATE JUICE PASTEURIZER

The APV brand FX Plate Juice Pasteurizer is a solution that can be delivered, installed and commissioned within a very short time, offering multiple advantages. The APV brand FX Plate Juice Pasteurizer can be used for low viscosity juices without pulp or fibers, soft drinks, tea and coffee drinks, and water.



APV BRAND FX TPM BATCH MIXER

Batch mixer based on circulation via a buffer tank. Powder is added to the mixer via a butterfly valve. The valve controls the flow of powder and prevents air entering the mixer.

SPX FLOW Innovation Centers

The SPX FLOW Innovation Centers leverage the extensive industry experience and expertise of a permanent staff of food technologists, process engineers and production engineers together with knowledge gained over many years to contribute actively to all types of development, testing and application of SPX FLOW equipment, systems and processing lines. All facilities and services are designed to provide added value by minimizing waste and energy requirements, or by converting commodity ingredients into new, competitive products.

Important keywords for the Centers are innovation, optimum plant dimensioning, high-quality products, and up-to-date knowledge of market requirements. The trials are custom-tailored and can be performed in the Innovation Centers or on your site. All work performed together with you is subject to the strictest confidentiality and the highest standards of customer service.

WE OFFER THE FOLLOWING APPLICATION AND PRODUCT TESTING SERVICES:

- Comparison of different processes, e.g. direct versus indirect heating systems
- Test of high-risk projects prior to order
- Troubleshooting of applications and products
- Product quality and yield optimization
- Reduction of energy costs
- Development and test of new recipes
- Assistance with product analyses in a laboratory
- Test and development of new equipment configurations
- Environmental compliance
- Practical and theoretical training courses and seminars for process employees
- Pilot and full production plant rentals for trials on your own premises
- Product and process development in close cooperation with the customer
- Product development in reasonable scale (representative product sample)
- Scale-up of results for commercial plants
- Proof of concept, testing, non-clinical

SPX FLOW test facilities:

- Silkeborg, Denmark
- Copenhagen, Denmark
- Shanghai, China





Global locations

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SPX FLOW, Inc. reserves the right to incorporate our latest design and material changes without notice or obligation.

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact your local sales representative for product availability in your region. For more information visit www.spxflow.com.

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