

## APV FX Tubular UHT Plant



Engineering excellence, allied to stringent quality control, ensures that SPX FLOW's unrivalled range of APV products complies with the highest international standards for hygiene. In the light of growing pressure worldwide to deliver safe, high quality food, all SPX FLOW products are designed for easy cleanability, while minimizing the use of valuable resources, such as energy.

The APV product portfolio includes a wide range of pumps, valves, heat exchangers, mixers and homogenizers designed for use in the food, dairy and brewing industries, as well as in chemical, healthcare, pharmaceutical processing and heavy industries.

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.

# Boost availability, flexibility and energy efficiency

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 anywhere else. 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.

#### IMPROVE EFFICIENCY, QUALITY AND OUTPUT

Are you looking for continuous, energy-efficient heat treatment of whole milk?

The APV FX system uses high-velocity tubular aseptic and non-aseptic heat treatment to ensure smooth and efficient, continuous production of high-quality milk products.

#### PRODUCT BENEFITS AND FEATURES

The APV FX system is a flexible solution that can be delivered, installed and commissioned within a very short time, offering a unique combination of advantages:

- Extended run time between Clean-In-Place (CIP)
- Minimum fouling and effective cleaning
- Less plant dead volume
- Less product loss during start/stop
- Extended energy recovery
- Modular system for complete flexibility
- Lower daily running costs
- Capacities 1,585 g/h (6,000 l/h), 3,170 g/h (12,000 l/h) and 5,283 g/h
   (20,000 l/h)
- Small footprint for installation in spaces too small for other equipment
- Pre-assembled and factory-tested for easy and fast installation based on standardized design
- Short pay-back time and high ROI over a long service life
- Global availability with SPX FLOW global service and support

#### **OPTIMUM OUTPUT**

- Higher turbulence decreases fouling and shortens cleaning times
- High product flow velocity minimizes fouling and extends run time
- Lower dead volume due to corrugated tubes in preheater and coolers means longer run time
- Easy inspection and access means shorter maintenance times

#### **REDUCED COSTS**

- Longer production time between CIP cuts expensive down time
- High heat transfer efficiency cuts energy costs
- Extended heat recovery saves energy costs
- Product loss savings during start/stop due to sharp interface between product and water as well as between water and CIP liquids

#### **FASTER CIP**

High flow velocity and turbulence shortens CIP times

#### **FOOD SAFETY AND SUSTAINABILITY**

- High kill rate
- Sharp separation of product and process water
- Efficient cleaning
- Lower energy consumption

#### SHORT TIME TO PRODUCTION

 Each module contains a full set of installation instructions for fast assembly and connection

#### **PROVEN RELIABILITY**

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

#### STANDARDIZED TURNKEY PACKAGE

- Skid-mounted system
- CIP system and PLC system
- Fast delivery
- Commissioning
- All in the box all in the price

#### **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 Center
- Customer specific equipment/instrumentation

### Typical product applications

**Dairy** Whole Milk



#### UNIQUE UHT EXPERTISE

SPX FLOW is a world leader in UHT processing with a comprehensive portfolio of tried and tested UHT plant solutions comprising plate, tubular, injection and infusion UHT plant technologies.

The SPX FLOW Innovation Center based in Silkeborg, Denmark, operates a UHT pilot plant capable of running all the main UHT systems. This pilot plant is available for customers wishing to test new processes and optimize existing process parameters with the assurance of production scalability. Plant is also available for rent, enabling customers to conduct trials on their own premises.

#### **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.

FX Tubular UHT Plant



Based in Charlotte, North Carolina, SPX FLOW, Inc. (NYSE: FLOW) is a multi-industry manufacturing leader. For more information, please visit www.spxflow.com

#### SPX FLOW

611 Sugar Creek Road
Delavan, WI 53115
P: (262) 728-1900 or (800) 252-5200
E: answers.us@spxflow.com

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.

The green ">" and "x" are trademarks of SPX FLOW, Inc.

ISSUED 03/2017 6757-01-08-2011-US

COPYRIGHT © 2017 SPX FLOW, Inc.