

SPX®



> APV®

APV FX SafeWater

Brochure

Food and beverage processing has never been more challenging. Margins are being squeezed, food safety is paramount and consumer demands for new products make formulation changes a regular occurrence.

To meet these challenges head on, you need a partner with a deep understanding of process engineering and a broad portfolio of equipment.

Look to SPX and its industry leading brands to provide unparalleled technical support, equipment versatility and food processing expertise. Explore the endless solutions that SPX has to offer. You're sure to find answers that will improve plant performance, increase profitability and enhance the value of your brand.

Engineering excellence, allied to stringent quality control, ensures that SPX'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 products are designed for easy cleanability, while minimising the use of valuable resources, such as energy. The APV product portfolio includes a wide range of pumps, valves, heat exchangers, mixers and homogenisers designed for use in the food, dairy and brewing industries, as well as in chemical, healthcare, pharmaceutical processing and heavy industries.

Skid-mounted, sustainable, production of sanitiser and cleaning agent

Save costs and boost output

On-site production of sanitiser and cleaning agent

Electrolysis of common salt with a dividing membrane between the electrodes results in two separate solutions suitable for sanitation and CIP – hypochlorous acid (HOCl) and sodium hydroxide (NaOH).

Hypochlorous acid, a weak acid that also occurs naturally in the body to combat infection, is a powerful sanitiser and cleaning agent that is substantially more effective than hypochlorite. It sanitises rapidly and effectively without the need for heating.

This new technology revolutionises CIP procedures. It helps reduce carbon footprint, shortens changeover time and saves energy as well as the costs of expensive, formulated chemicals.

Benefits

- Replace thermal and chemical sanitation
- Destroy all forms of pathogens
- Shorten CIP time
- Reduce effluent management requirement and protect the environment
- Enhance workplace safety with non-toxic, truly clean technology
- Sanitise reclaimed water streams before recycling
- Reduce or even eliminate water intake by re-using "white water"
- Reduce carbon footprint
- Generate on-site, on-demand sanitiser and cleaning agent
- Short payback time
- Choice of plate design ("ready to use") or coaxial (concentrate)
- Small footprint for installation in spaces too small for other equipment
- Pre-assembled and factory-tested for easy and fast installation based on standardised design
- SPX global service and support
- Choice of an **EAU Empowered Water™** plate electrolytic cell (APV FX Systems™ SafeWater SWP) to provide "ready to use/concentrated" anolyte/catholyte or a **Trustwater™ FEM-3** coaxial electrolytic cell (APV FX Systems™ Safewater SWC) to provide concentrated anolyte/catholyte only. In the case of the **EAU Empowered Water™** we offer the patent pending **EAU Independent Fluid Production (IFP)** system designed to optimise anolyte/catholyte production to your plants usage all while providing maximum efficacy through highly superior ORP (oxidative reduction potential) control techniques.

Effective sanitiser

- Removes biofilms completely
- Biofilm pathogens are becoming tolerant to chlorine-based chemicals

- Improved food safety: Hypochlorous acid is highly effective in removing all forms of microbes including Anthrax, Bacillus, Cryptosporidium, E. Coli, HIV, Legionella, Listeria, MRSA, Norovirus, Samonella, Tuberculosis, Yeast

Eliminate water intake

- A one million litre/day milk powder plant generates about 650,000 litres of “white water”. Recycling and treatment with SafeWater can eliminate/reduce the need for water intake.
- A one million litre per day cheese plant generates about 600,000 litres of “white water” via Reverse Osmosis. Recycling and SafeWater treatment can eliminate/reduce the need for water intake

Save capital investment costs

- Standardised design for lower CAPEX

Sustainability

- Recycling of water streams
- Reduced load on effluent plant
- Lower water intake
- Smaller carbon footprint

Short time to production

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

Save operating costs

- Shorter CIP cycles increases production time
- Caustic cost savings – NaOH
- Reduction in CIP cycle time
- Change over time savings
- CIP water savings
- CIP energy savings
- Short payback time

Proven reliability

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

Standardised turnkey package

- Skid-mounted pasteurisation system
- Fast delivery
- Pumps, valves and pipes
- Instruments and automation integration
- Integration with existing CIP
- Commissioning

Service and support

- Customised service and maintenance agreements
- Global delivery of genuine SPX spare parts
- Application consulting
- Application testing at the SPX Innovation Centre
- Customer specific equipment/ instrumentation

Typical Product Applications

Food



Beverage



Dairy



Pharma



Water



APV FX Systems

APV Factory Express (FX) Systems are high-quality, skid-mounted, Plug & Produce application solutions marketed by SPX 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 standardised modules designed, built and backed by SPX, APV FX Systems leverage proven APV/SPX engineering and automation, and comply with global industry standards.

Trademarks

EAU Empowered Water™ is a trademark of EAU Technologies

Trustwater™ FEM is a trademark of Trustwater™ USA

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