SPX has added an innovative new modular process technology to its family of mixing and dispersing equipment. The new APV Cavitator offers breakthrough benefits for heating liquids without scale build-up as well as provides solutions for many of the most difficult mixing and dispersing challenges for food and beverage processing.

The cavitator is one of the first products commercialized under SPX’s ‘innovation initiative,’ and is an example of how the company is focusing on innovation to better address the needs of its customers. In particular, it is an example of the willingness to combine exciting technologies with its internal expertise to provide breakthrough products and services.

Exclusively licensed from Hydro Dynamics, Inc. for sanitary applications, SPX has extensively tested and enhanced the design for maximum performance at its Innovation Center in Silkeborg, Denmark. The APV Cavitator is named for the powerful effects of shockwaves produced from the collapse of ‘controlled cavitation’ bubbles and works by taking a fluid into the machine housing, where it is passed through a controlled cavitation field created by the reactor’s spinning rotor.

The unique design uses the intense force of cavitation in a controlled manner, rather than typical impellers or blades to process materials, increasing the mass transfer rate and producing results superior to those of many current mixing and heating technologies. Additionally, the cavitation effects are achieved without damage to metal surfaces. The APV Cavitator can be considered a next generation offering and a paradigm shift in the mixing industry where process intensification, acceleration and the replacement of batch processing with continuous processing are necessary to compete in a global economy.

This advanced technology can be used for a multitude of sanitary applications ranging from pasteurization to low-pressure homogenization.

Benefits include:
- Improved process efficiencies (time, operating costs, and/or capital costs)
- Enhanced product quality, yield and/or raw material savings
- Extended process run times related to scale-free heating
- Elimination or reduction of process downtime from maintenance requirements
- Smaller footprint than traditional technology
- Designed for easy disassembly, fully CIPable and manufactured to meet 3-A standards

SPX can leverage its extensive industry experience and process expertise to support customers in applying the new APV Cavitator, along with many other innovative sanitary technologies for the food, beverage and personal care industries.

Photos: SPX
SPX has added an innovative new modular process technology to its family of mixing and dispersing equipment. The new APV Cavitator offers breakthrough benefits for heating liquids without scale build-up as well as provides solutions for many of the most difficult mixing and dispersing challenges for food and beverage processing. The APV Cavitator is another example of how SPX continues to focus on innovation to better address the needs of its customers. SPX can leverage its extensive industry experience and process expertise to support customers in applying the new APV Cavitator to their process. To learn more, visit us at www.apv.com