



ASEPTIC RAPID RECOVERY SYSTEM

Safety, Value and Sustainability on a New Level



RAISE YOUR EXPECTATIONS OF WHAT AN ASEPTIC PIGGING SYSTEM CAN BE



Increase productivity, sustainability and aseptic conditions. It's all possible with the new ARRS.



Introducing an innovation so disruptive it can change the way you think about sustainable processing.

Our Aseptic Rapid Recovery System (ARRS) is a uniquely designed technology that is cleaner, safer and more productive than anything currently on the market.

Whether your goal is to expand into ambient foods, recover more of your valuable product or maintain the safety of the food you produce, our ARRS can fit, or retrofit, to any system.

Recover More Food More Safely

The global demand for ambient food such as yogurt is on the rise. These foods are heat-treated after fermentation, providing the same health benefits as chilled, but with a longer shelf life. Production of ambient foods requires an aseptic setup for downstream processing. Before the invention of the pigging system, the valuable product left in pipes was unsalvageable. Not anymore.

Recover More Valuable Product

Our latest technology provides the highest hygienic process available for ambient, highly sensitive, high value pH neutral applications as well as high value viscous products such as creams, dessert creams, cosmetics and nutraceuticals.

SPX FLOW's Aseptic Rapid Recovery System is a perfect fit for these applications, saving more of your high-value product than ever before reducing product loss from 4% to 0.5%* through a quicker cleaning process, this translates to 50%* more up-time with less cleaning in place (CIP), chemical usage and water savings between 60-70%*.

** Figures are indicative and depend on the actual running conditions in the plant.*



TRANSFORMATIVE TECHNOLOGY

Our ARRS is a sustainable way to increase productivity, reduce waste and provide higher product yields.



How it maintains aseptic conditions throughout the process

Featuring a steam barrier, PTFE diaphragm membrane valves, and pressurization, ARRS produces the highest hygienic process possible. The system is sterilizable and capable of maintaining aseptic conditions throughout production along with full control of the sanitary state by returning the pig in aseptic conditions for multiple uses.



Recovery

Rather than using water to clean products from pipes at the end of production, a pig clears all product remnants via compressed air which saves valuable traces of product from being flushed down the drain while also reducing water usage.



Sustainability

Designed to clear product in a more sustainable way, our ARRS reduces waste volume and treatment costs while saving more high-value product through a quicker cleaning process. The result is more up-time with less cleaning in place (CIP) chemical usage, reduced waste volume, treatment costs, water usage, cleaning time, and changeover time.



Value

Our system virtually eliminates flushing valuable product down the drain. Plus, you can increase efficiencies with a sustainable process designed to reduce plant downtime while increasing yields for highly-sensitive products including ambient, neutral pH, low acidic products.



Integration

Our ARRS can fit, or retrofit, to any system or existing plants. No need to overhaul your system to benefit from these upgrades. The parts are accessible, serviceable and ergonomic, so they fit into small spaces without any major changes.

ASEPTIC RAPID RECOVERY SYSTEM

A cleaner, safer processes means:

- Highest level food safety
- Increased innovation
- Greater product yields
- Increased productivity
- Reduced waste

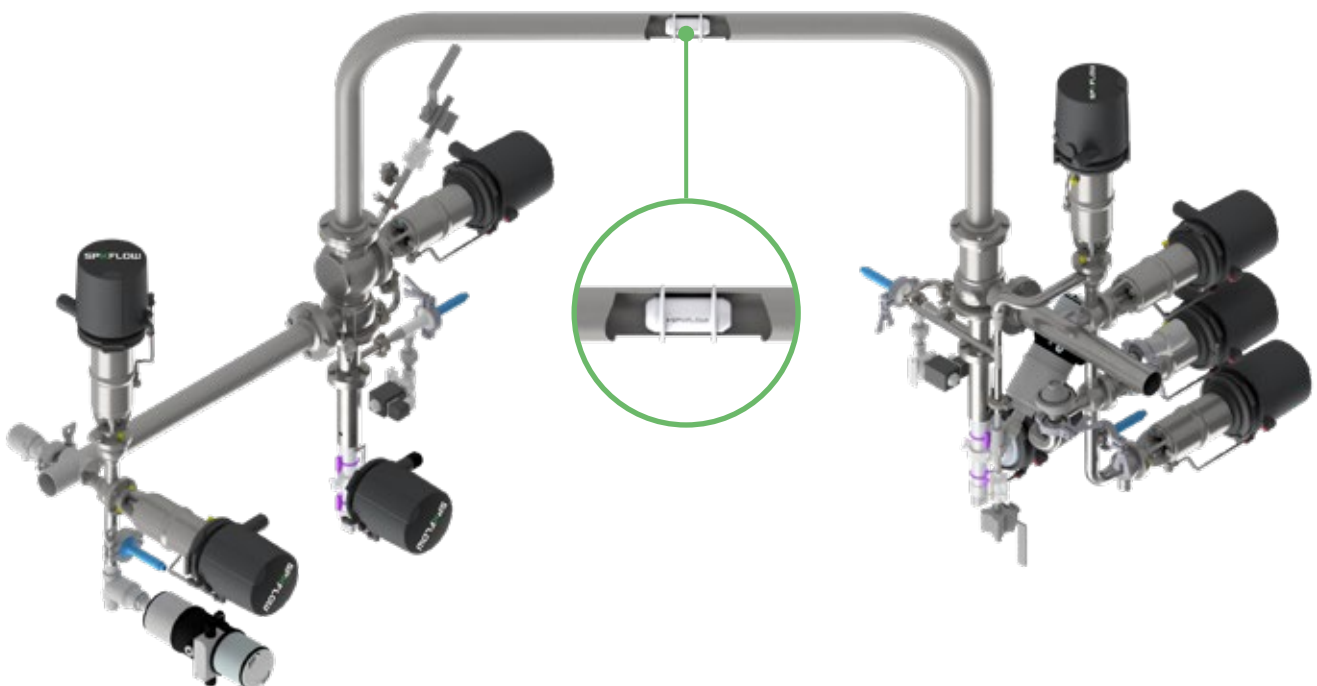
Our ARRS is a pigging technology which enables product recovery from process pipes. It works similar to our Hygienic Rapid Recovery System but has been significantly upgraded with features so that it can be installed for ambient, neutral pH and long shelf-life products.

How It Works

The system launches a projectile pig, made up of silicon or EPDM rubber, that pushes the product through the pipe. Instead of using water to clean products from pipes at the end of production, a pig clears all product remnants, saving valuable product from being flushed down the drain while also reducing water usage.

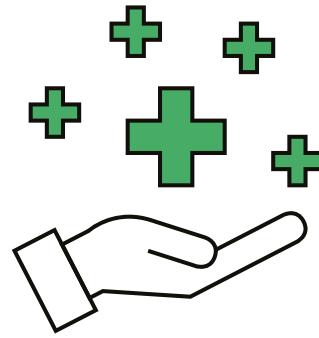
The pig then sits in a receiving station while CIP is performed. And because there's less product in the pipes, CIP is much quicker and minimizes chemical usage and losses. After CIP, the pig is sent back to the launching station using compressed air instead of water. The result is a clean, empty pipe ready for the next production run, reducing losses even further.

- Saves more valuable product.
- Aseptic pigging is performed with steam barriers at required interventions in launching and receiving stations.
- Produces the highest hygienic process possible while providing control of the sanitary state by returning the pig in aseptic conditions for multiple uses.



KEY BENEFITS

Every product we manufacture is engineered to deliver the highest level of efficiency possible. And our ARRS is no exception. With the ability to reduce water usage by 60–70%* and recover up to 97–99%* of your valuable product. You'll wonder how you ever managed without it.



+	SUITABLE FOR THE MAJORITY OF HIGHLY-SENSITIVE PRODUCTS INCLUDING AMBIENT AND NEUTRAL PH / LOW ACIDIC PRODUCTS
+	IMPROVED PRODUCTIVITY, ENHANCED SUSTAINABILITY AND INCREASED PROFITS
+	HIGHEST LEVEL OF PRODUCT SAFETY
+	REDUCED WASTE VOLUME AND TREATMENT COSTS ON CHEMICAL DETERGENT USAGE
+	INCREASED UPTIME WITH REDUCED CIP, CLEANING AND CHANGEOVER TIME – SAVING TIME AND MONEY
+	HIGHER PRODUCT YIELDS WITH REDUCED PRODUCT LOSS
+	EASILY IMPLEMENTED / RETROFITTED INTO EXISTING LINES
+	INTEGRITY AND CONSISTENCY WITH A BRAND YOU CAN TRUST
+	FAST PAYBACK

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PROCESS

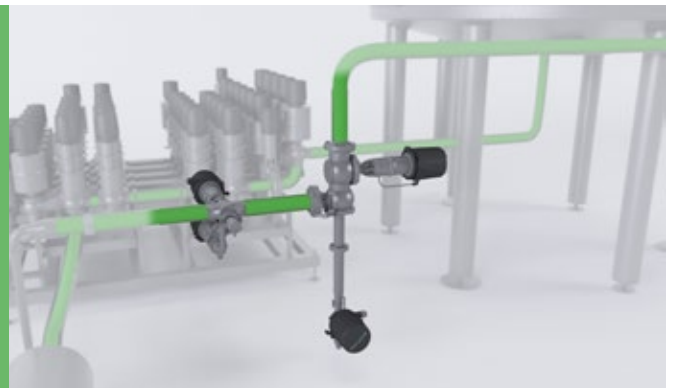
Before production begins, the process line is empty, clean and dry.

Product is initially primed from the valve manifold through the launching station to the receiving station and then to the filler.



When the production cycle is complete, water is first flushed through the pipeline.

When water reaches the launching station, the pig module is released, clearing the pipeline of all products.



Most of the product is recovered, product losses are minimized.

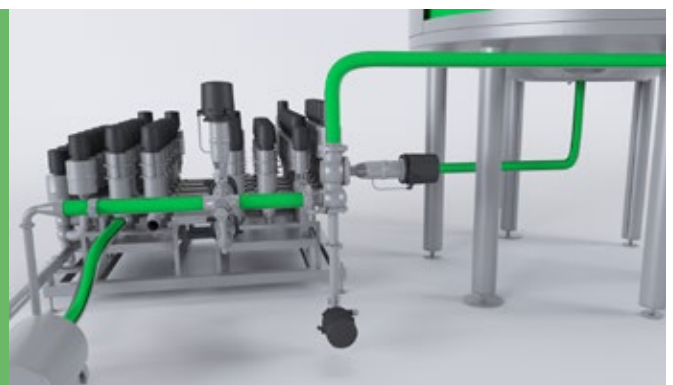
Water continues to push the pig module to the receiving station.

CIP takes place.



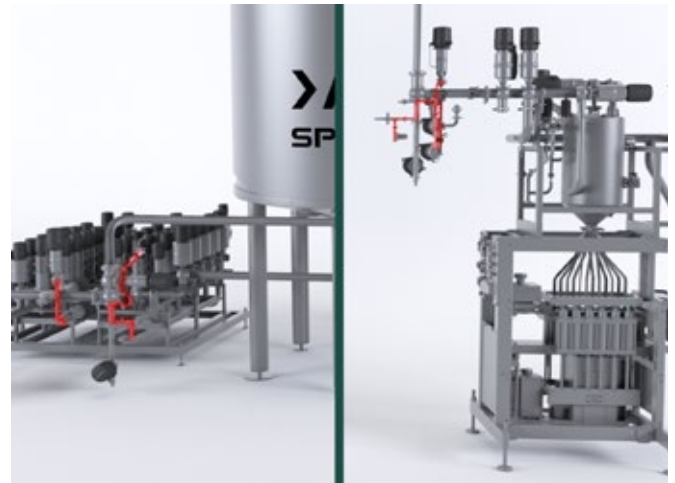
The pig module is then returned to the launching station using compressed air.

Once the CIP cycle is complete, the line is clean, dry and ready for the next product cycle to begin.



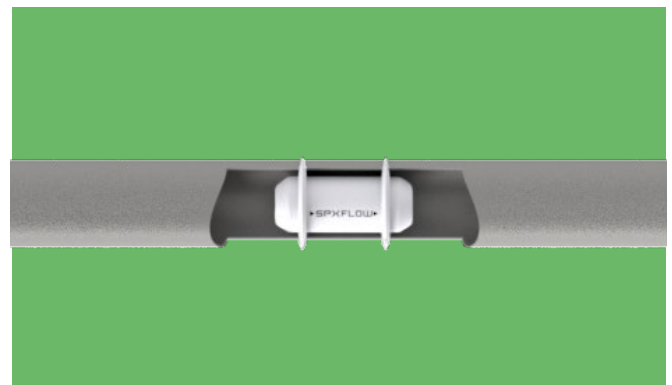
ASEPTIC VERSION

- Suitable for the majority of sensitive products including neutral pH / low acidic products.
- The seal chambers of the two stations and drain valves are equipped with steam barriers.
- The whole product line is sterilized.
- Temperature of steam barriers and air pressure of the product line are maintained to guarantee aseptic conditions.
- Additional configurations for APV Rapid Recovery Systems, Hygienic / Aseptic, are available upon request.



ASEPTIC RAPID RECOVERY PIG

- SPX FLOW design
- Maximum product recovery, up to 97–99%* of the line volume
- Made of 1935/2004/EC food contact compliant Silicone or EPDM
- FDA compliant
- Material part and batch numbers engraved on the pig, allows for full material traceability



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WHY SPX FLOW?

Customers using the our ARRS will have peace of mind knowing they have the highest quality product and customer service by choosing SPX FLOW. Pig is traceable and the system is optimized for aftermarket parts, including valves, actuators and gaskets that are already in inventory.

- Proven technology
- 25+ years of making hygienic pigging systems which has led to this latest innovation.
- 500+ installations worldwide
- Solution Makers that know your business
- Innovation that makes food safer is innovation that matters
- Because safety must be your top priority
- Your product is too valuable to waste



TECHNICAL SPECIFICATIONS

PIPE STANDARD	ISO (SMS) 1.5" to 4" DIN 40 to DIN 100
OTHER SPECIFICATRIION	Material in contact with product SS316L Electro-polishing of internal launching and receiving station External glass blasted Compatible with existing SPX FLOW pig Suitable for new lines or existing lines Maximum pressure is 10 bar (below PED directive) Maximum production temperature 90 °C CIP temperature: maximum 90 °C SIP temperature: maximum 135 °C (steam or water)
COMPLIANCE	CE marking for machine (MD 2004/62/EC) Food Contact Material 1935/2004/EU & FDA 21 CFR 177.2600 compliant/US

OPTIONS

TYPE	DIAMETER	CONTROL UNIT	SEALS	PIG	PUSH CONFIGURATION
SSAS-	038	ASI (A)	EPDM (E)	SILICONE (S)	Drain only (A)
	051	Direct Connect (D)	HNBR (H)	EPDM (E)	Push by air (B)
	063		FPM (F)		
	076				
	101				
	040				
	050				
	065				
	080				
	100				

Order code is created according to selection options e.g. SSAS-038AESA



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For more information, visit www.spxflow.com.