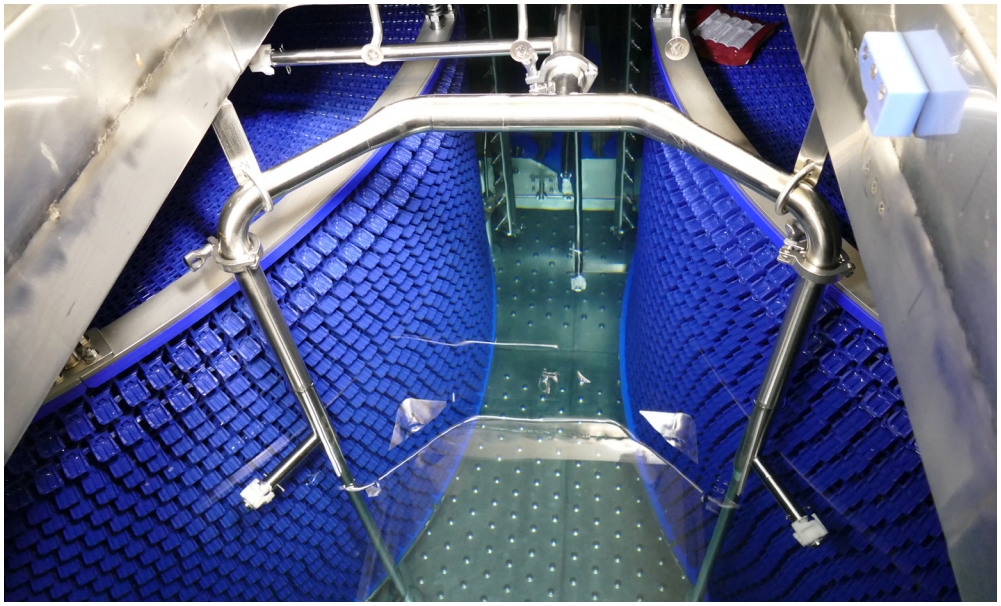
FPS FOOD PROCESS SOLUTIONS

CASE STUDY
Johnsonville LLC

INSTALLATION DATE
January 2022

Customer Name	Plant Location	Customer Product	Application	Previous Technology	FPS Solution
Johnsonville LLC	Sheboygan Wisconsin	Fully cooked prepackaged sausage	Post packaging cook/pasteurize and chill to extend product shelf life	Inline water bath auger	FPS Spiral Immersion System (SIS)™ with Intralox self-stacking belt

INNOVATION IN MOTION: SPIRAL IMMERSION SYSTEM (SIS)™



> "Johnsonville is very good at looking at new and innovative equipment. We thought that the SIS was one of those up and coming technologies that we really wanted to get ahead of and really understand how it works. With the Spiral Immersion System we have been very happy with the outcome."
>
> **Matthew Behrs,** Plant Engineer | Johnsonville

Freezing + Chilling

+ **25% Less Refrigeration Tonnage**
  For The Same Throughput
+ **70% Less Energy**
  For The Same Throughput

Cooking + Pasteurizing

+ **0% Yield Loss**
  With In-packaging Processing
+ **90% Less Labour**
  Compared to Batch Processing

The Challenges

In the auger style water bath unit the product tended to clump together reducing water circulation on the product and causing inconsistent heat transfer across the product batch. To address the product clumping, the systems we looked at used agitation of the product to maximize water circulation. The product agitation, plus the use of an auger screw to push the product through the water, caused product package damage, increased percentage of leakers, and product label damage. Product did not pass through the auger system in a reliable FIFO order and product was discharged from the auger in a jumbled, disordered fashion.

Click here to watch video

The Solutions

The SIS provided the best value when considering capital cost, delivery, FPS service, and increased efficiency through gentle handing, no leakers, organized product discharge and almost zero labor.

The lead time was reasonable, and the installation was fast. FPS and Intralox provided great cooperation and support while implementing cutting edge new technology.

The Results

+ Higher throughput than expected. Temperature stability in the SIS is better than anticipated.
+ Measurable benefits: verifiable FIFO, zero product damage, organized discharge, lower labor costs.
+ Increased capacity in place to produce up to 3,500lbs per hour.

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