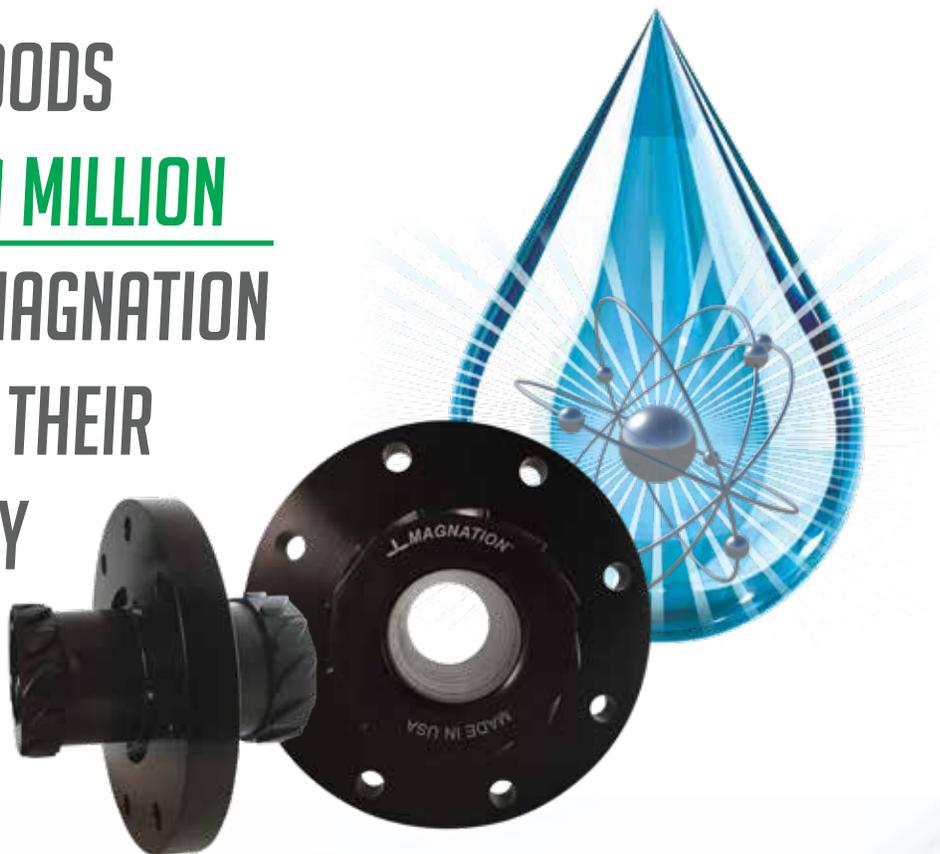


CASE STUDY

HOW TYSON FOODS SAVES OVER \$1 MILLION A YEAR WITH MAGNATION BY IMPROVING THEIR WATER QUALITY



OVERVIEW

Tyson Foods is a leading American multinational corporation based in Springdale, Arkansas. The company is noted as the world's second largest processor and marketer of chicken, beef, and pork. Also, in conjunction with its subsidiaries, Tyson operates major food brands Jimmy Dean, Sara Lee, Hillshire Farm, State Fair, Aidells, and Wright Brand.



PROBLEM

Tyson Foods is tasked with numerous challenges as it works to deliver cost-effective food to the world. This includes maintaining a clean water supply to crops and animals and assuring manufacturing equipment is running efficiently.

When water conditions are less than ideal and scaling is prevalent, the following occurs:

- (1) Water isn't readily absorbed by the plants and soil.
- (2) Animal health is negatively impacted.
- (3) Machinery becomes clogged with scale and slows down production.

In an effort to reduce costs, improve the quality of the soil and plant life, and better nurture their animals, Tyson needed to make some bold moves.



SOLUTION

Beginning with its machinery challenges, Tyson installed a double Turbulator on its mainline. Each and every day, the company uses 5 million gallons of water. It travels through ten miles of spaghetti line pipe. As water is quickly passed through the pipe and heated at the final stage from 140 degrees to 180 degrees minimum, about one-half inch scale forms on the pick heater. This requires the product crew clean the pick heater each day with boring and acid wash.

This resulted in downtime, which costs the company an estimated \$5,000 per minute. By installing the Magnation Turbulator, the company hoped it would significantly reduce down time.



RESULTS

Tyson quickly discovered that the Magnation Turbulator significantly reduced scale formation on the pick heater. Instead of stopping production for cleaning once per day, the team has been able to push cleanings out to once every three days.

Additionally, the team has reported cleanings are much easier than before the Turbulator was installed. The scale formation is now in a soft, powdery form whereas before it was rock-hard crystal. As result, Magnation is currently saving Tyson over \$1 million dollars per year.



CONCLUSION

The Magnation Turbulator is already revealing multiple benefits for Tyson. The technology is both saving time and money, while offering further opportunities within the Tyson Foods organization.

The greater implications are for manufacturers and farmers who battle harsh water conditions, excessive water costs, and water scale issues. Utilizing Magnation to break down the components in water that wreak havoc gives organizations the power to be proactive rather than reactive. This sets them up for millions of dollars in expenditure savings, year after year.



Before: Dec. 21st, 2018

After: Jan. 17th, 2019

