In Upstate New York, the George Family Farm runs an efficient dairy business with more than 700 cows producing dairy products for stores across the country. The family-owned company has consistently set the bar for the dairy industry, and the owners, John George II and his son John III, are continually looking for ways to make their systems more efficient, thereby creating opportunities to increase revenue and profit.

One of those opportunities came when Rinnai engineers visited the farm. After evaluating the George’s traditional tank-style water heater, the engineers suggested a water-heating upgrade that could help the farm produce top-grade milk. If switching from a tank to tankless water heating could take their milk quality to new levels, the Georges knew that would positively impact their bottom line.

With that in mind, the farm purchased two SE+ Series RUC98 tankless water heaters as a hot-water upgrade. Now, thanks to these Rinnai tankless models, the farm’s yearly revenue is projected to increase by more than $20,000.

**HIGH-PERFORMANCE KEEPS HIGH TEMPERATURE**

One of the most energy-intensive functions on a dairy farm is heating water, but this capability is directly linked to a dairy farm’s profitability. Since fluid milk is susceptible to bacterial contamination, more stringent health and sanitation standards apply to the production of milk used for fluid consumption (Grade A) than for milk used for butter, cheese, and other manufactured products (Grade B). For processing milk products, water must be 160-180°F to effectively clean the lines and remove all bacteria and milk fat buildup. The farm’s old traditional tank water heating system only delivered 140°F for the first cycle and 120°F after the second, so the resulting milk fat buildup meant the farm’s milk never made Grade A.
“When I visited the farm to monitor each RUC's water cycle and performance, the owners couldn’t believe the units reached the required temperature and maintained it into the second cycle. They were truly blown away.”

— BILL WESTLAKE, OWNER OF WESTLAKE HEATING, AIR CONDITIONING AND ELECTRICAL

By replacing the tank with Rinnai's SE+ Series RUC98 tankless water heaters, the George Family Farm now experiences high-performance water-heating for producing high-quality milk and dairy products. Each unit’s condensing design with two heat exchangers creates an enhanced heating value that keeps high temperature for long periods at 96% energy efficiency. After their installation, the RUC water heaters proved to be exactly the solution the dairy farm was looking for.

“When I visited the farm to monitor each RUC’s water cycle and performance, the owners couldn’t believe the units reached the required temperature and maintained it into the second cycle,” said Bill Westlake, Owner of Westlake Heating, Air Conditioning and Electrical. “They were truly blown away.”

THE VALUE-ADDING RESULTS

By replacing the dairy farm’s low-performing traditional tank with Rinnai’s high-performing tankless units, the Georges saw impressive results. Because they can maintain hot water at the desired temperature 24 hours a day, the farm’s milk can now be sold as top grade, earning them tens of thousands of additional dollars per year.

“The most important thing I learned working on this job was that the George Family Farm has the potential to reap thousands in additional revenue because of its new Rinnai system,” said Chris Stamberger, principle at Stamberger-Sender Associates. “The owners are confident this Rinnai system will increase their milk grade to a point where they will get an additional $.25 per hundredweight of milk, equaling up to $21,000 per year.”