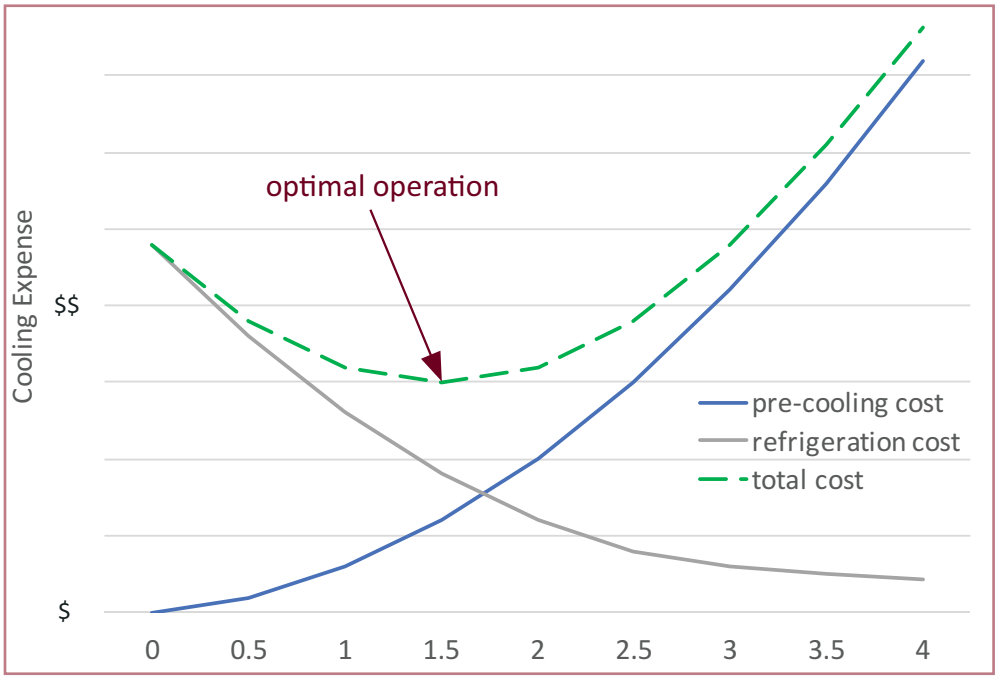
SMARTFLO PCW



Product

Is your cooling equipment operating at the most effective and efficient capacity for your farm? Do you wish you could analyze the amount of water you use, how much it costs you, and how much electricity it will take to cool your milk efficiently?

The SmartFlo PCW control system monitors milk and water flow rates and controls the water flow rate to achieve optimal cooling with the optimal amount of water, resulting in a more efficient system. Simply put, it helps you manage total-cooling costs.

SmartFlo PCW allows you to balance refrigeration cooling and water usage for your specific circumstances, costs and preferences and achieve a water/milk ratio ideal for your situation and farm.

It monitors the water in and out and the milk in and out temperatures, as well as the water and milk flow rates. Using these measurements, it displays statistics and graphs that give you the information you need to monitor and optimize your system.

At one farm where the product was installed, water use dropped by 25% which was at least 15,000 gallons per day. Before the SmartFlo PCW was installed, the milk temperature leaving the plate cooler would vary by over 10 degrees.

After installing this control, the system achieved a more consistent and lower milk temperature leaving the plate cooler, now only a few degrees warmer than the incoming water temperature.

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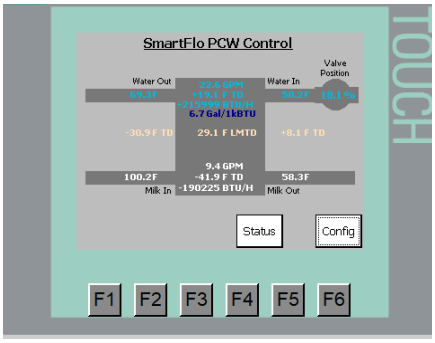

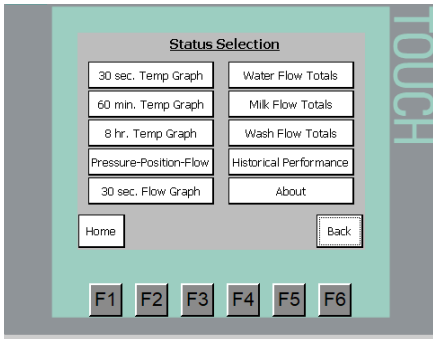

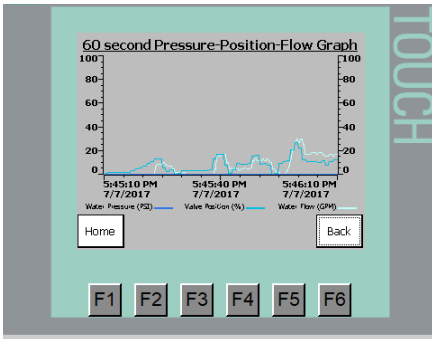

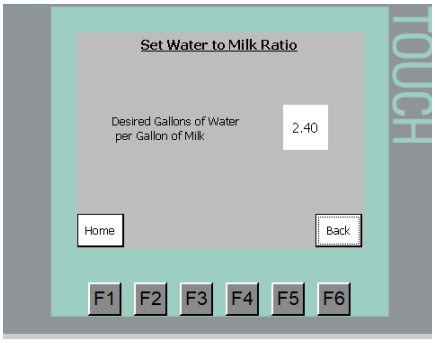

Benefits

Milk cooling improvements and water savings will vary from farm to farm. The existing water control method, the supply water temperature, the milk flow control method, the cost of electricity, the cost of buying and disposing of excess water, and the plate cooler size all factor into the overall performance of the system.

While you may or may not know how much water you use for precooling now, with a SmartFlo PCW you can know how much water you will use.

If the desired water to milk ratio is set to 2.0 and you ship 6000 gallons of milk per day, you will use 12,000 gallons of water to precool that milk. If you set the desired water to milk ratio to 2.5, you would use 18,000 gallons of water to precool.

In addition, the statistics provided on the SmartFlo PCW touch screen will soon help each farmer decide what ratio produces the best balance between water economy and cooling effectiveness for them.

Enhancements/Variations

Once milk and water meters and temperature sensors are in place for the SmartFlo PCW, you may want to consider several optional add-on capabilities Lyntech offers which can enhance the value of your investment.

- Milk totalizing and alarms for full bulk tanks and tankers.
- Optimizing milk flow from a milk vat
- Managing chiller capacity
- Collecting proportional milk samples.

After 35 years in dairy equipment, Kevin Bouwman kept getting frustrated by solutions he needed but couldn't find in the current market. So he started designing his own products and software to meet those needs. In 2015, Kevin launched Lyntech so he could provide these solutions to farmers and dealers everywhere.

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SMARTFLO PCW

Order Guide Worksheet

Relevant Specs

Effectively and accurately measuring the milk and water flow rates requires properly sized and located meters. Pipes are often sized for minimal pressure drop and ease of cleaning. Meters though, should be sized for the expected minimum and maximum flow rates they will measure. Installing a meter and a water control valve smaller than the pipe most often produces the best result.

When the milk flow rate is controlled by a variable speed drive, the system will operate at low speeds much of the time. A smaller meter will measure this flow far more accurately while providing only very minimal restriction to high flow rates. Contact us with the details of your milking center, and we will help you select the best meters for your application.

Complete the questions below to help us create a quote for your SmartFlo PCW.

How many pounds of milk do you ship per day? _____

What kind of parlor do you have? _____How many milking stalls? _____

What make and model plate cooler do you have? _____

How many milk pumps do you have? _____ What size are they? _____

Are your milk pumps controlled by variable speed drives? ☐ yes ☐ no

What is the lowest milk flow rate through the plate cooler (if you know)? _____

What is the peak milk flow rate through the plate cooler (if you know)? _____

What is the diameter of the milk line near the plate cooler? _____

What is the pipe size and material of the water line entering the plate cooler? _____

What is the maximum and minimum water pressure at the plate cooler? _____

What is the supply water temperature? _____

How much does this change seasonally? _____

Do you have a compressed air system? ☐ yes ☐ no

If so, does it include an air dryer? ☐ yes ☐ no

What filters are in the air line? _____

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