

Robotic Milking

The Cooling Solution for You

When moving to robotic milking, specialized cooling techniques and equipment are needed to provide optimal milk quality.

Cooling the World's Milk



The System

For farms with fewer than 240 cows, a single milk cooler and buffer tank system is typically used. Cold milk is pumped into the non-cooled buffer tank during milk pickup and cleaning. Specialized controls coordinate the robots and the cooling system until the milk can be moved into the empty milk cooler.



How it Cools So Quickly

During the 60+ minute pickup and wash period, milk quality is maintained by instantly cooling the warm milk to 36°F. Cooling is accomplished with a multi-duty Mueller Accu-Therm® plate cooler that utilizes both well water and chilled glycol water. This technique is both fast and energy efficient, utilizing the total cooling capacity of your chiller.



Making the Transfer

When the bulk tank becomes available, the pre-cooled raw milk moves to the buffer tank. The Mueller Robotic Interface Control keeps this process consistent and automated. The milk cooler maintains the cooled milk at optimal temperatures as new milk is gathered.



E-Star HiPerForm EVC Digital Condensing Unit: The E-Star HiPerForm EVC Digital is designed to handle robotic milking dairies' constant cooling needs by providing a consistent, efficient cooling environment.



Model D Fre-Heater: The most sustainable heat recovery system in the dairy industry, our Fre-Heater captures the milk cooling system's excess heat energy, reduces waste, and provides additional hot water storage.



Model OH Milk Cooler: As the backbone of your robotic milking farm, a Mueller milk cooling system safely stores the highest quality raw milk in sizes ranging from 500 to 8,000 gallons.



HiPerForm III Cooling and Wash Control: With a user interface that has set the industry standard, the HiPerForm III allows flexible wash and cooling system programming.



Robotic Interface Control (RIC): For seamless communication between the HiPerForm III and the robotic milking control. The RIC provides a consistent experience for technicians, dairy producers, and milk haulers.



HiPerCool A5: Instantly cool your milk before the milk cooler or buffer tank. This chiller is designed around the E-Star platform utilizing HiPerForm EVC Digital technology, creating a familiar process for your Certified Mueller Service Tech.



Accu-Therm® Plate Cooler: Our plate coolers ensure 36° milk entering the milk cooler or buffer tank. Precool within a few degrees of your well water temperature and finish the job with the HiPerCool A5.