

CASE STORY



THE CUSTOMER

Körper, a Brazilian company specialized in industrial water-cooling systems; and EngMilk, a company with 25 years of expertise in the milk market.

THE CHALLENGE

Guarantee milk quality and bacterial control with quick-cooling to 4°C (39°F), while also saving energy and costs.

THE SOLUTION

Replace the existing solution, which required 12 compressors, with a chiller solution that requires only 4 units.

THE HEAT EXCHANGERS

SWEP P250AS single-circuit evaporator, specially developed for air- and water-cooled reversible chiller applications.

THE RESULTS

An optimized milk-cooling process, with improved speed and energy efficiency, resulting in improved product quality.

Immediate cooling guarantees milk quality and bacterial control

SWEP
A DOVER COMPANY

Milk is a key staple in the diets of most Brazilian families. The vast South American nation is both a significant consumer and a major producer of this important foodstuff. In fact, Brazil is the fifth-largest milk producer in the world, responsible for generating more than 36 billion liters of milk a year. Fazenda Santa Luzia, a farm in Passos/MG, which is owned by Grupo Cabo Verde, is a core contributor to the Brazilian dairy industry, with approximately 2,000 lactating cows, who produce nearly 45,000 liters of milk daily. The farm is focused on sustainable production. Cows are grazed on irrigated pasture-land, which is regularly rotated; their waste is used for fertilization, and biodigesters are used to produce electricity. Grupo Cabo Verde is one of the ten largest milk producers in Brazil and is also engaged in other agricultural activities, including raising beef cattle, swine, coffee, corn, and soy.



The role of SWEP BPHEs

SWEP brazed plate heat exchangers were the ideal choice for this application, which called for energy efficient, economical heat transfer. In this case, a single-circuit SWEP P250AS was used as an evaporator. The P250AS is specially developed for air- and water-cooled reversible chiller applications. Its large ports and asymmetric plate design deliver an effective operating range of 80-250 kW. SWEP's AsyMatrix® plate pattern improves heat transfer while reducing water pressure drop and refrigerant charge.

Why choose SWEP?

SWEP has been a longstanding supplier of brazed plate heat exchangers to Körper, who have trusted SWEP technology to boost the efficiency of their systems. In collaboration with Körper and Engmilk, SWEP developed a solution for optimizing the milk cooling process to ensure speed, energy efficiency, and product quality. The new chiller solution required only 4 compressors to cool the milk, instead of the 12 required by the old design. SWEP is proud of this partnership and its successes and looks forward to additional opportunities to further our commitment to 'Challenge Efficiency' in everything we do.

More About Körper

Körper is a Brazilian company that stands out in the industrial water-cooling systems market, supplying Chillers, Dry Coolers, Open and Closed-Circuit Cooling Towers, as well as integrated solutions to the process. With the mission of manufacturing equipment with a focus on industrial technology, but also environmentally friendly with low consumption of water and electricity, Körper has relied on SWEP for years to supply brazed plate heat exchangers, thus adding even more efficiency in many of their systems.

More About EngMilk

EngMilk, founded by Marcos Moretti and Maycoln Gervazio, is a company with 25 years of expertise in the milk market specializing in instant milk cooling systems that deliver efficiency, profitability with innovation, and technology to the producer.



SWEP P250AS.