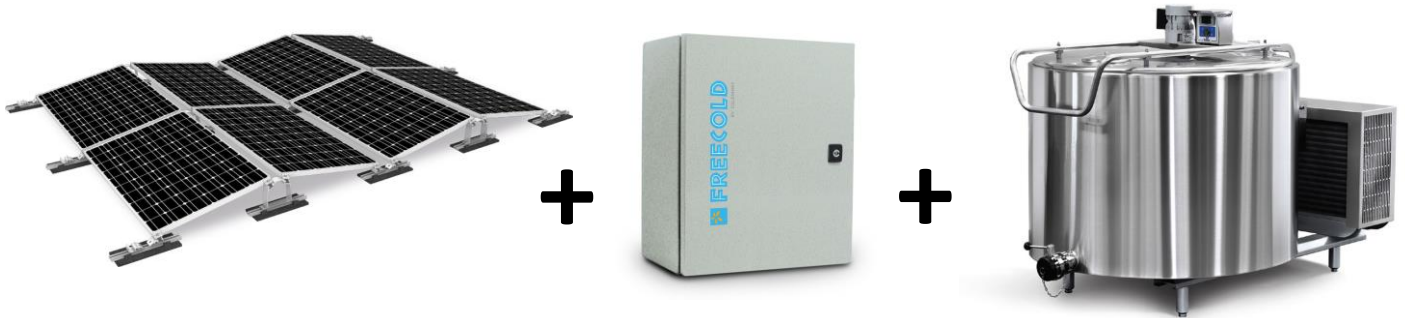


Solar milk tank : 500 liters / 2 milkings

Including solar plant, battery storage and energy management



Milk tank

The FREECOLD TAL 500 milk tank cools a 250 liters milking in 2 hours down to a temperature of 4 °C with an ambient temperature of 35 °C.

All in stainless steel, the tank, with a capacity of 520 liters, has a smooth inner wall, rounded corners and polished welds for optimum conditions of hygiene and food safety. Its walls are insulated with injected polyurethane foam to limit heat losses.

Placed under the tank, the refrigeration unit develops a power of more than 3700W. The stainless-steel structure includes four adjustable feet to put level the tank in case of uneven ground. Openwork panels allow the evacuation of heat from the refrigeration group and prevent the intrusion of small animals and rodents in the refrigeration unit.

A milk stirrer - to mix and homogenize without foaming, the temperature and the fats in the tank -, a gauge to measure the volume of milk, a temperature controller and a stainless-steel draining valve - allowing a complete emptying of the tank - complete the equipment.

Smart management of energy

Coupled to photovoltaic modules, the FREECOLD cabinet guarantees a high-quality power supply and prioritizes renewable energy before enabling a second potential source, grid or generator.

Solar batteries, with a capacity of 20 kWh, make it possible to smooth out irregularity as well as intermittent energy from the photovoltaic power source.

The installation is secured by DC disconnect and lightning arrester devices, and AC differential switch. The whole installation, including the photovoltaic field is grounded.

Solar plant

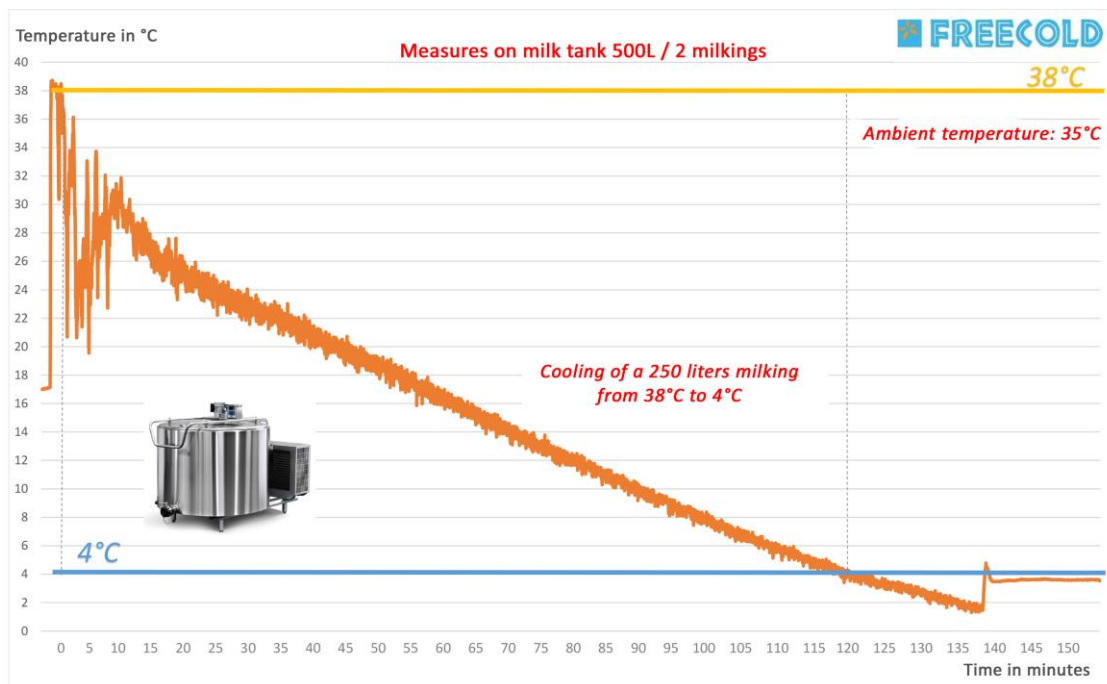
Fourteen photovoltaic modules of European origin are delivered with their kit mounting brackets and pre-installed electrical wiring for quick and easy commissioning.

The solar plant of 4,5 kWp, powers directly the tank and simultaneously recharges the battery to ensure the autonomy of the installation.

Solar milk tank 500 liters / 2 milkings

Including solar plant, battery storage and energy management

- ✓ "All stainless steel" milk cooling tank complying with EN 13732 et ISO 5708 standards
- ✓ Outside dimensions : 165 x 110 x H 120cm closed / 172cm open
- ✓ Sealed refrigeration unit - Cooling power : 3.750W - Maximum power demand: 2.300W
- ✓ Dixell XR80CX digital controller for precise control of the milk temperature
- ✓ 4,5 kWp solar plant including 14 photovoltaic modules (330 Wp, 72 polycristallin 6" cells, 25-years performance warranty, origin EU)
- ✓ Supports of photovoltaic modules delivered in kit
- ✓ Electrical security box including DC/AC surge protectors; DC disconnecter and AC 30mA differential switch
- ✓ Energy storage by sealed AGM solar batteries (maintenance-free) : 20 kWh (420Ah-48V) ; Service life of 1350 cycles @ 30% DOD (origin Germany)
- ✓ Energy management and power sources coupling optimized in relation with available power in entry (PV, batteries, AC input) and loads (refrigeration, recharge of batteries)
- ✓ Battery recharge possible by 2nd power source (grid or generator)
- ✓ Unit packing :
 - 1 pallet 170x115xH180 cm – 190 kg
 - 1 pallet 200x100xH120 cm – 550 kg
 - 1 pallet 120 x 80 x H80 cm – 620 kg



Note: In the case of 2 daily (morning and evening) milkings, the milking of the morning will be introduced in the tank, 1 hour minimum after the Sunrise so that the solar plant has started to charge the batteries.