

Conventional Milk Chillers (CMC)

Chill milk **without** a need of a Diesel Generator

Promethean's CMC can chill up to 2000 liters of milk per day even if there is no power during the milk collection by using only 4-5 hours of intermittent grid power between each milking shift.

By eliminating DG set, Promethean Milk Chiller provides the most cost effective way of collecting top quality chilled milk from village milk collection centers where grid power is erratic.



OUR TSS

The TSS is the energy storage technology which provides cold energy for all of Promethean's refrigeration products:

- Backup cooling power - for areas with unreliable grid power
- Instant cooling power - for rapid cooling of fruits, vegetables, milk and other perishable food products
- Load shifting - from day-time to night-time to reduce energy bills

| Features | Benefits |
|---------------------------------------|--|
| Milk cooling at the source of milking | <ul style="list-style-type: none"> • Premium quality enables longer shelf life of processed milk and higher margins on value-added products. • Capture more farmers in the catchment area. • Eliminates spoilage of raw milk. |
| Cold Storage Backup | <ul style="list-style-type: none"> • Eliminates diesel generator. • Low maintenance & operating costs. • Unlike electrical batteries, thermal battery does not need to be replaced every 3 years. |
| Simple Design | <ul style="list-style-type: none"> • Single phase connection at village collection centers • Easy manual cleaning |



| Milk cooling Tank | | |
|------------------------|-------------------------|------------------------|
| Capacity | 1000 LPD | 2000 LPD |
| No of TSS | 1 | 2 |
| Insulation PUF | 50 mm | 50 mm |
| Dimensions (L x B x H) | 1.96 x1.08 x1.35 Meters | 2.38 x1.48 x1.4 Meters |

| | |
|----------------|---------------|
| Thermo Plate | Dimple Jacket |
| Material Used | AISI 304 SS |
| S. Thick Inner | 2 MM |
| S. Thick Outer | 1.5 MM |
| Agitator RPM | 30 rotations |
| ISO Standard | 5708 – 2A II |



| Thermal Storage System | |
|---|-----------------|
| Back-Up Capacity of TSS (1 full charging) | 500 Litres |
| Time to Recharge | 4 - 5 Hours |
| Dimensions | 1.2 x1.2 Metres |



| Chiller Unit (for charging TSS) | | |
|---------------------------------|-----------------------|----------|
| Compressor Type | Copeland Scroll | |
| Type of Refrigerant | R-404 a | |
| AC power supply options | (1 ph) 220/50 Volt/Hz | |
| | (3 ph) 440/50 Volt/Hz | |
| Capacity | 1000 LPD | 2000 LPD |
| Power input | 3.5 kW | 7.0 kW |
| Avg Cooling Capacity | 5 kW | 10 kW |