

Advantages over traditional milk coolers (1000 & 2000 L)

Parameters	Inficold	Traditional ISO 5708 2All	Implications
Cooling output at 30 °C – 1kL BMC	60 kBTU/h	24 kBTU/h	2.5 times fast cooling High milk quality
Cooling output at 10 °C – 1kL BMC	27 kBTU/h	21 kBTU/h	
Cooling output at 4 °C – 1kL BMC	13 kBTU/h	17 kBTU/h	0.75 times slow cooling Lower freezing chances
Time to cool 50% capacity 35 to 10 °C	80 mins	145 mins	High milk quality
Time to cool 50% capacity 35 to 4 °C	120 mins	180 mins	High milk quality
Cooling cost with grid	0.15 INR/L	0.15 INR/L	No additional cooling cost for high milk quality
Cooling cost during grid failure	0.15 INR/L	1.1 INR/L	Low cooling cost
User intervention during grid failure	Automatic	Manual	High milk quality
Pollution & Noise	None	High	Environment friendly

Advantages over other ice energy storage milk coolers (1000 & 2000 L)

Parameters	Inficold	Competition	Implications
Off grid solar integration	Available	No	
Cooling backup	1250 L for 1000 L BMC 2000 L for 2000 L BMC	500 L for 1000 L BMC 1000 L for 2000 L BMC	2.5 times autonomy during grid failure
Condenser area	25% higher	-	Lower energy consumption
Liquid to suction heat exchanger	Yes	No	Lower energy consumption
Expansion valve	TXV (standard); EEV (optional)	TXV	Lower energy consumption
Material of construction of sheet metal parts	PU coated mild steel (standard); SS 304 (optional)	Plastic or powdered coating mild steel	Longer life
Design	Integrated on a single skid	Separate Ice energy storage, condensing unit & control panel with cluttered piping & wiring	Smaller footprint Ease of installation Higher reliability
Heat transfer fluid	Iso propyl alcohol (standard); salt HTF (optional)	Iso propyl alcohol	Optional high performance heat transfer fluid
Phase change material	Nano engineered spill proof	Water	Faster cooling rates
Cooling backup capacity measurement	Temperature (standard); Quantity (optional)	Temperature	Accurate measurements improve energy efficiency and operational planning

