

DATA SHEET FOR BULK COOLING UNITS		
CAP: 5000L (Scroll)		
Sr. No.	Description	5000L (Three Phase) Closed Type
A. BULK MILK COOLER TANK		
1	Capacity - Rated /Gross	5000/5500
2	Make and model (SS 304/316)	Serap Industries/ First SC
3	Material used for construction	AISI 304 (EN 1.4301)
4	Shape/Orientation	Horizontal-Cylindrical
5	Overall dimensions	(LxØxH: 2950x1772x2285)
	Weight without cooling unit	800
6	Thickness of Inner shell	2.0 mm
	Thickness of outer shell	1.5 mm
7	No. and RPM of agitators	ONE/25 RPM
8	CIP facility (Manual / Auto)	Manual with a provision for cleaning through balanced tank and pump ; Auto (Available as option at extra price)
9	Insulation:	
	Type	By injection in situ, of high density (min 40 kg /m3) , CFC Free Polyurethane Foam without any imperfection and hygroscopicity
	Thickness	Minimum 50 mm
	Efficiency	0,028 W/m.K -The rise of the milk temperature, initially at 4°C, does not exceed 1°C in 12 hours, in an ambient temperature of 38°C when rated volume is allowed to standstill as per requirement of ISO 5708 (2AII)
10	Facility to measure milk volume	Dipstick with value table
B REFRIGERATION UNIT		
1	Type: DX type	
2	Compressor:	Hermetically sealed
	-- Make	Emerson
	--- Type	Scroll
	---- Model	ZB 48KQ-TFD
	---- Nos.	TWO
3	Condensing Unit :	
	----Make	PRIJAY OR SPIROTECH
	-- Model	SA 1 RS178 P 150
	Size	
4	(a)No. of compressors	2 nos.
	(b) Capacity of the compressors(Kcal/hr)	2 x 13103
5	(a)No. of condensers fans	2
	(b)Capacity of the condensers	2 x 18909
6	Overall weight & dimensions of the unit	1x (1455x900x880)+ 1x (1255x900x880);300 KG
7	Type of refrigerant	Freon – 22 (R-22)

C	DESIGN PARAMETERS	
1	Ambient temp. considered for design	38 °C
2	Maximum cooling time for	
	All Milking	3 hrs from 35 °C - 4 °C
	Second Milking	1.5 hrs from 10 °C - 4 °C
3	Temperature range considered for	
	All Milking	35 °C - 4 °C
	Second Milking	10 °C - 4 °C
D	ELECTRICALS	
	Supply	
1	Connected load in Watts & Amperes for	
	Compressors	$(5750/8.3) \times 2$
	Condenser Fans	$(375/1.75) \times 2 = 750 \text{ watt} / 3.5 \text{ A}$
	BMC Agitator(s)	70 watt / 0.35A
	BMC Milk Pump	750 Watts
	Max surge current drawn by the compressors	Max: 17A/LRA: 101A