

DPR of M/S SINGHANIA MILK PRODUCTS PRIVATE LIMITED

Details of the Applicant

SN	Particulars	Details
i.	Name of the Applicant	M/S SINGHANIA MILK PRODUCTS PRIVATE LIMITED
ii.	Constitution Legal Status of Applicant: (i.e. Govt. organization, NGO, Co-operative society, Company, partnership firm, proprietorship firm, Individual, FPO, Self Help Group, etc.)	Private Limited Company
iii.	Registration No. of Applicant/CIN	U15201UP2004PTC028849
iv.	GST No. of Applicant	09AAJCS5503L1Z0
v.	Date of Establishment/Incorporation	13/07/2004
vi.	Address of the registered office	HARDOI RAOD SITAPUR, SITAPUR, Uttar Pradesh, India, 261001
vii.	PAN No. of Applicant	AAJCS5503L
viii.	Address of the proposed site	Village Ram Nagar, Hardoi Road Sitapur Sitapur Uttar Pradesh India 261001
ix.	District	Sitapur
x.	State	Uttar Pradesh
xi.	Pin Code	261001
xii.	Whether lead promoter belong to SC/ ST/Woman/Minority	No

1. Contact details of the Applicant/ Promoter(s)/ Partner(s)/ Directors(s)/ Members including addresses, telephone, mobile, fax, e-mail, website, PAN etc.

S N	Name of Applicant/Promoter(s)/ Partner(s)/Director(s)/ Members	Address	Telep hone No.	Mobile No.	E-mail Id	Any other details
1.	OM PRAKASH SINGHANIA	HARDOI ROAD, SITAPUR	-	9415329168	SINGHANIA OMP@GMAIL.COM	-
2.	MAHESH PRAKASH SINGHANIA	HARDOI ROAD, SITAPUR	-	9415706958	INFO.SINGH ANIAGROUP @GMAIL.COM	-

2. Details of the Promoter(s)/Partner(s)/Directors(s)/Members

S N	Name of Promoter(s)/Partner(s)/Director(s)/Members	Aadhaar No.	PAN No.	Academic and technical Qualification	Net Worth (in Rs.)	Credit Rating	Date of Shareholding	Partner profit Sharing ratio
1.	OM PRAKASH SINGHANIA	9972 4601 0066	ACQPS2527J	B.Com	-	-	-	-
2.	MAHESH PRAKASH SINGHANIA	5457 2148 2990	ACQPS2814N	B.Com	-	-	-	-

3. Relative experience of the Applicant/Promoter(s)/Partner(s)/Directors(s)/Members

S N	Name of lead Applicant/Promoter(s)/Partner(s)/Members of Applicant Entity	Detail of Experience	Details of Turnover (year-wise)	Supporting Document attached, if any(Yes/No)
1.	OM PRAKASH SINGHANIA	30 years	Already disclosed in this later	
2.	MAHESH PRAKASH SINGHANIA	30 years	Already disclosed in this later	

4. Shareholding Pattern

1. OM PRAKASH SINGHANIA – 24.31%
2. MAHESH PRAKASH SINGHANIA- 32.37%
3. OTHER – 43.32%

Overview of the Operational Context for M/s Singhania Milk Products Private Limited:

This is to clarify that **Singhania Milk Products Private Limited (SMPL)** is engaged in the dairy business since 2004, carrying out processing of milk, skimmed milk powder (SMP), Desi ghee, butter, etc. The Company is also operating **Village Level Collection (VLC) Units** to facilitate direct procurement of fresh and good-quality milk from farmers at the village level.

At present, SMPL has an existing dairy plant at Sitapur with an installed capacity of **1,50,000 liters per day**. In addition to the dairy plant, the Company has also established and operates **486 VLC Units** spread across three districts, including **Ram Nagar (within the factory premises), Naimisharanya and Gonda**.

Accordingly, the Company confirms that it is operating both (a) a **Dairy Unit** and (b) **Village Level Collection (VLC) Units** at the same overall setup to ensure uninterrupted supply of milk and raw material for its operations.

Further, SMPL proposes to **expand its capacity by installing an additional 50,000-litre per day plant (Unit-II)** at its existing factory premises at Ram Nagar, Hardoi Road, Sitapur on a land area of 5,113 sq. meters with separate entry and exit, to diversify into new product segments such as liquid packed milk, liquid packed milk in tetra pack, curd and buttermilk.

**Rationale for the Proposed Project for construction of Building of Milk Chilling Plant and purchase of Plant & Machinery.
(Targeting 18797.5 MT per annum)**

The proposed project engaged in processing of Butter, Desi Ghee, SMP and Milk etc along with the purchase and installation of essential Plant & Machinery for its operation. This facility will serve as a key infrastructure to support milk processing, enhance quality control, and improve the overall efficiency of milk collection, storage, and distribution systems. This proposal seeks to address the growing demand for milk and dairy products while ensuring better quality standards and supply chain management.

Project Objective:

The objective of M/s **Singhania Milk Products Private Limited** is to establish a modern dairy processing plant with an additional capacity of **50,000 litres per day**. The plant will be equipped to handle the processing, packaging, and distribution of various dairy products including **packed liquid milk, tetra pack milk, curd, buttermilk, and other value-added products**. The objective is to enhance production capacity, meet the growing demand for safe and quality dairy products, and ensure longer shelf life through advanced packaging technologies. This project will also support diversification, improve operational efficiency, and strengthen the brand's presence in the competitive dairy market.

Particulars	Capacity (LPD)	Plant & Machinery (₹ in Crore)	Civil Works (₹ in Crore)	Total Cost (₹ in Crore)	Remarks
Existing Facility	1,50,000	20.71	3.24	23.95	Detailed list of Plant & Machinery attached
Proposed Expansion	50,000	9.19	3.02	12.21	Quotation and Civil Estimate enclosed
Total After Expansion	2,00,000	29.90	6.26	36.16	

5. Details of Existing Banking and Credit facilities of the Applicant/ Promoter(s)/Partner(s)/ Directors(s):

Sanction Date	Facility Name	Amount (in Crore)
10-06-2022	Term Loan	0.74
16-03-2023	Term Loan	1.50

6. Details of GST Returns submitted, if any or status of registration: Registered

7. Project Details

Objective of the proposed project: The proposed loan is to set up dairy plant of additional capacity of 50000 litre per day for production of packed milk, tetra milk, curd and buttermilk etc.

Land Details:

SN	Particulars	Details
1	Land Area	9870.00 SQ.M
2	Status of Legal title & Possession	Leased
3	If leased, Period of lease	29 Year 11 month
4	Connectivity to roads i. State Highway(in Km.) ii. National Highway(in Km.)	Well Connected
5	Availability of Water	Yes
6	Availability of Power	Yes

8. Proposed capacity of manufacturing plant 18797.5 MT (50,000 Liter) per annum

Existing Capacity	1,50,000 Liter Per day
Proposed Capacity	50,000 Liter Per Day
Capacity Per Year (No. of days -365)	18250000 Liter Per Year
Capacity in Kg (Density of Milk -1.03)	1,87,97,500 Per Year
Capacity In MT	18,797.5 Per Year

Manpower recruitment/hiring plans:

M/s Singhania Milk Products Private Limited will implement a strategic manpower recruitment plan, leveraging the expertise and experience of its existing staff. The directors, including Mr. Mahesh Prakash Singhania with his 30 years of industry experience, will oversee the recruitment process to ensure the selection of highly skilled and competent personnel.

List of Machinery and Equipments:

Sr. No	Supplier	Name of Machinery	Quotation Date	Quotation Amount
1	M / s Sameco Engineers	Dairy Plant Section	29-11-2023	73160000.00
2	M / s Future Industries Private Limited	Hydraulic goods cum passenger lift	09-10-2023	2018000.00
3	M / s Hindustan power controls	Aluminium Busbar with Accessories and Cable	13-10-2023	1050200.00
4	M/S Tetra pack India Pvt Ltd, Pune	Tetra Pack Section	10-10-2023	11983000.00

- Quotation is attached below for your reference.**
- Existing Plant And Machinery List Attached Below for Your Reference**

9. Details of Statutory Clearance Required:

- (a) Pollution Control Board,
- (b) FIRE NOC

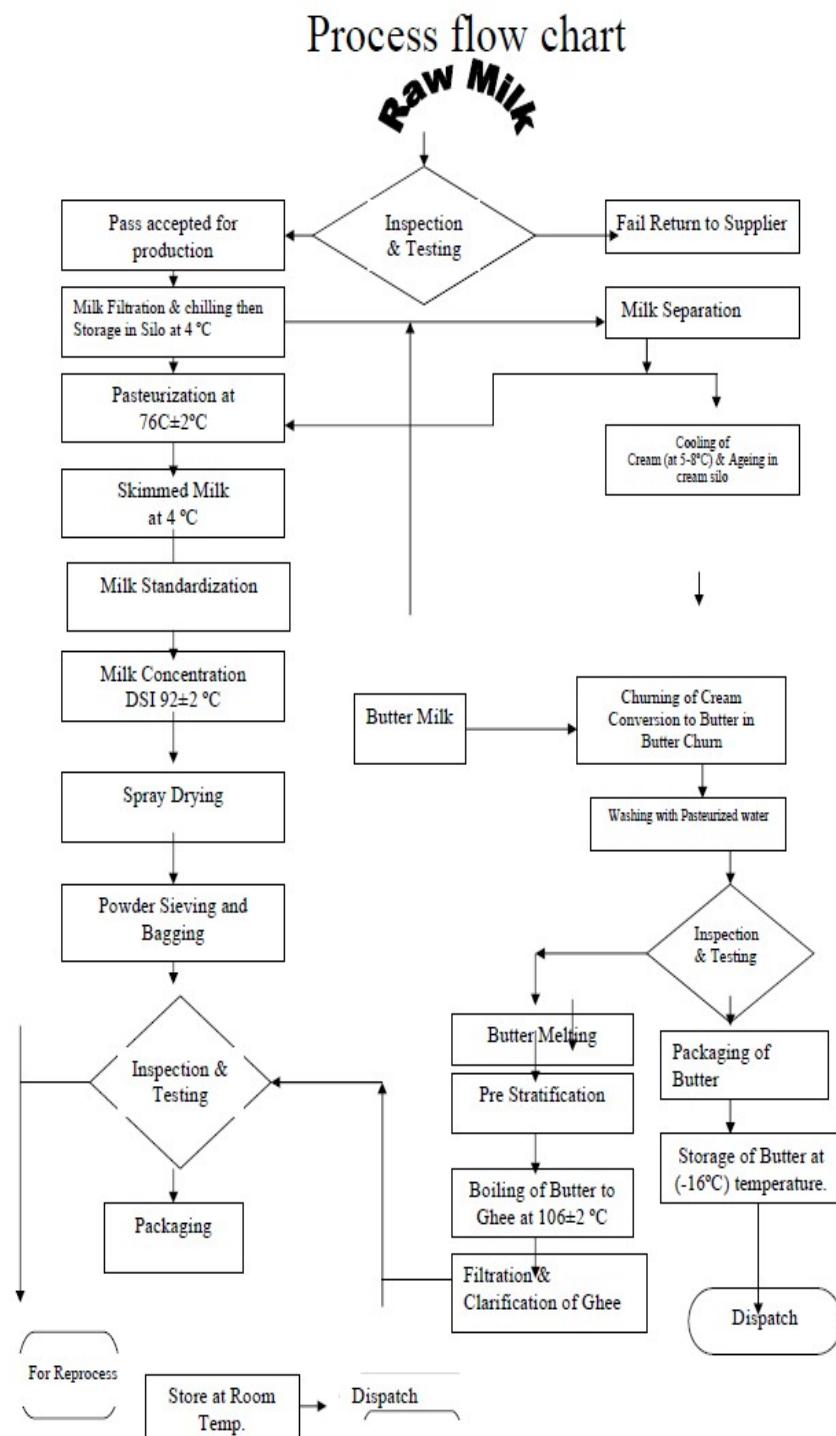
Necessary pre-requisite

(i) Details of proposed facility

SN	Features	Status
1	Availability of Milk	Available
2	Availability of land for setting up the unit.	Leased
3	Feasibility of organic product manufacturing	NA
4	Availability of utilities such as electricity connection, water supply power back-up, etc.	Applied
5	Access to expert guidance / training with regard to product selection, knowledge of manufacturing methods, quality criteria, food safety rules, packaging requirements, organic criteria (if applicable), pollution control guidelines, occupational safety guidelines and labour laws.	M/s Singhania Milk Products Private Limited benefits from the extensive experience of its directors, Mr. Mahesh Prakash Singhania with over 30 years in the milk sector. This experience provides the company with expert guidance and comprehensive training across various critical areas.
6	Access to the right machinery for product manufacturing and packaging.	The directors have experience in this sector and have contacted with several Chilling Plant and dairy development officer in UP.
.7	Robust demand generation activity to ensure easy sales of the product.	M/s Singhania Milk Products Private Limited have experience in this sector and have contacted with Chilling businesses and have tie up with them.

(ii) Details of technologies to be used/alternative technologies : NA

Flow chart of activity process:



10. Detailed timeline for construction of proposed project and proposed date for commencement of operation

Implementation Schedule-			
Details	Start Date	End Date	
Order for Machine given and foundation work started	01-09-2024	30-11-2024	
Construction of ground floor / Installation of Dairy Plant section	01-12-2024	29-02-2024	
Installation of tetra Pack Section and Aluminium Basbar with Accessories and Cab	01-03-2025	30-05-2025	
Construction of First Floor/ Installation of hydraulic Goods Cum Passenger Lift	01-06-2025	31-08-2025	
Fitting and Other Miscellaneous Work	01-09-2025	01-10-2025	
Trial Run	01-10-2025	31-11-2025	

11. Proposed Profitability Statement.

a. Estimated Project cost details

SN	Items	Amount(₹in crore)
1	Site Development	-
2	Civil Works	3.02
3	Technical Civil Works/ Erection etc.	-
4	Plant & Machinery(P&M)	9.19
5	Fixed cost on power supply connection or/and Generator set/solar system etc.	-
6	Common Utilities like Water/ETP/STP, etc.	-
7	Pre-operative Expenses	0.15
8	Interest During Construction	0.60
9	Margin money for Working Capital	1.34
10	Contingencies	0.45
11	Add other items not listed above	0.10
Total Project Cost		14.85

b. Means of finance

SN	Items	Amount (in crore)	Percentage (%)
1	Share Capital	0.20	1.35%
2	Internal Accruals	2.88	19.39%
3	Unsecured Loan	2.65	17.85%
4	Term Loan	9.12	61.41%
	Total	14.85	100.00%

c. Basic Revenue Projections(in Crores)

	Car Loan										
	Interest on CC Limit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Depreciation	1.44	2.52	2.09	1.73	1.44	1.20	1.00	0.84	0.70	0.59
6	Profit before taxation	2.4	1.57	2.76	3.65	4.43	5.08	5.63	5.75	6.33	6.51
	Tax	0.6	0.39	0.69	0.91	1.11	1.27	1.41	1.44	1.58	1.63
7	Profit after taxation	1.8	1.18	2.07	2.74	3.32	3.81	4.22	4.31	4.75	4.88
	Viability Analysis:										
	PAT+ Int on term loan	2.24	2.15	2.91	3.45	3.91	4.28	4.58	4.57	4.91	4.94
	Cash Profit (PAT+Dep)	3.24	3.7	4.16	4.47	4.76	5.01	5.22	5.15	5.45	5.47
	PAT+ Dep+ Int on Term Loan	3.68	4.67	5	5.18	5.35	5.48	5.58	5.41	5.61	5.53

d. Financial Parameters

SN	Particulars	Details (Ratio/%)	Ref Page No. in DPR*
1	Internal Rate of Return (IRR) [(a) With and (b)without grant/subsidy]	25%	As per DPR Attached
2	Avg. Debt Service Coverage Ratio(DSCR)	10.23	As per DPR Attached
3	Break Even Point(BEP)	173.16	As per DPR Attached
4	Debt-Equity Ratio(TTL/TNW)	3.82	As per DPR Attached
5	Fixed Assets Coverage Ratio	2.89	As per DPR Attached

e. Credit Facilities proposed

(I) Fund Based

a) Term Loan: 9.12 Lakhs

(II) Non Fund Based: N.A

a. Repayment Schedule (Including moratorium period)

Period	Opening Balance	Disbursement	Repayment	Closing Balance	(Rs. In Lacs) Interest @9.15%
2024-25					
Quarter I	0.00	0.00	0.00	0.00	0.00
Quarter II	0.00	912.00	0.00	912.00	6.95
Quarter III	912.00	0.00	0.00	912.00	20.86
Quarter IV	912.00	0.00	0.00	912.00	20.86
Total			0.00		48.68
2025-26					
Quarter I	912.00	0.00	0.00	912.00	20.86
Quarter II	912.00	0.00	0.00	912.00	20.86
Quarter III	912.00	0.00	26.31	885.69	20.56
Quarter IV	885.69	0.00	26.31	859.38	19.96
Total			52.62		82.24
2026-27					
Quarter I	859.38	0.00	26.31	833.08	19.36
Quarter II	833.08	0.00	26.31	806.77	18.76
Quarter III	806.77	0.00	26.31	780.46	18.15
Quarter IV	780.46	0.00	26.31	754.15	17.55
Total			105.23		73.82
2027-28					
Quarter I	754.15	0.00	26.31	727.85	16.95
Quarter II	727.85	0.00	26.31	701.54	16.35
Quarter III	701.54	0.00	26.31	675.23	15.75
Quarter IV	675.23	0.00	26.31	648.92	15.15
Total			105.23		64.19
2028-29					
Quarter I	648.92	0.00	26.31	622.62	14.54
Quarter II	622.62	0.00	26.31	596.31	13.94
Quarter III	596.31	0.00	26.31	570.00	13.34
Quarter IV	570.00	0.00	26.31	543.69	12.74
Total			105.23		54.56
2029-30					
Quarter I	543.69	0.00	26.31	517.38	12.14
Quarter II	517.38	0.00	26.31	491.08	11.53
Quarter III	491.08	0.00	26.31	464.77	10.93
Quarter IV	464.77	0.00	26.31	438.46	10.33
Total			105.23		44.93
2030-31					
Quarter I	438.46	0.00	26.31	412.15	9.73
Quarter II	412.15	0.00	26.31	385.85	9.13
Quarter III	385.85	0.00	26.31	359.54	8.53
Quarter IV	359.54	0.00	26.31	333.23	7.92
Total			105.23		35.30
2031-32					
Quarter I	333.23	0.00	26.31	306.92	7.32
Quarter II	306.92	0.00	26.31	280.62	6.72
Quarter III	280.62	0.00	26.31	254.31	6.12
Quarter IV	254.31	0.00	26.31	228.00	5.52
Total			105.23		25.68
2032-33					
Quarter I	228.00	0.00	26.31	201.69	4.91
Quarter II	201.69	0.00	26.31	175.38	4.31
Quarter III	175.38	0.00	26.31	149.08	3.71
Quarter IV	149.08	0.00	26.31	122.77	3.11
Total			105.23		9.23
2032-33					
Quarter I	122.77	0.00	26.31	96.46	2.51
Quarter II	96.46	0.00	26.31	70.15	1.91
Quarter III	70.15	0.00	26.31	43.85	1.30
Quarter IV	43.85	0.00	26.31	17.54	0.70
Total			105.23		4.41
2032-33					
Quarter I	17.54	0.00	17.54	0.00	0.20
Quarter II	0.00	0.00	0.00	0.00	0.00
Quarter III	0.00	0.00	0.00	0.00	0.00
Quarter IV	0.00	0.00	0.00	0.00	0.00
Total			17.54		0.20

(g) Details of Statutory/other approvals/registrations (status): NA

Availability of Raw Materials in the Catchment Area-provide details such as Adequate Volume, Wider Mix of Raw Materials, and Days of Operation in a year along with supporting data. Based on this information feasibility/viability of the project should be justified:

The area where plant is situated is a rich agriculture belt, Farmers have adequate buffalo and cows, and have farm level milk collecting units to supply quality milk.

Details of the catchment area of the project

S.N	Location of the Catchment (Primary/Secondary)	Name Village/Dist /APMC	Commodities to be sourced	Quantities to be sourced[MT] (per annum)
1.	Village Ram Nagar, Hardoi Road Sitapur Sitapur Uttar Pradesh India 261001	Sitapur	Milk	18797.5

12. SWOT Analysis.

Strengths

- The Unit is running successfully since 2005 and possesses strong market reputation.
- Diversified range of products with accepted marketability.

Weaknesses

- In the month of May and June of Calendar year, procurement of milk becomes difficult due to low milk delivery by the cows and buffaloes.

Opportunities

- Untapped Areas in other nearby districts provides huge business opportunities

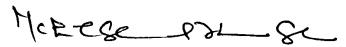
Threats

- We do not foresee any major threat as the product is of wide acceptance with proven quality since 2005.

Employment Generation projections

- a. Direct Employment:(Skilled and Semi-skilled) : 100
- b. Indirect Employment : (Skilled and Semi-skilled): 200

I Mahesh Prakash Singhania Certify that the information/contents as above furnished by me/us are true to the best of my / our knowledge and belief and nothing material have been concealed. In case, any information furnished in the application is found false, my / our application may be rejected out at any stage by the Bank and not eligible under Agriculture Infrastructure Fund scheme.



Date: 03-11-2025

Place: Agra

Signature of the Applicant

LIST OF ALL TYPES OF MACHINERY & EQUIPMENTS INTSALLED IN THE PLANT (CAPACITY 150000Ltr/Day).

S.No.	EQUIPMENT	CAPACITY	QTY.	Make
1	MILK RECEPTION SECTION			
1.1	Can Tipping Bar	Standard	1 No.	BAAF
1.2	Milk Weighing Machine	0-500 kgs	1 No.	BAAF
1.3	Milk Weighing Bowl	500 kgs	1 No.	BAAF
1.4	Dump Tank	1000 ltrs	1 No.	BAAF
1.5	In Line Filter	standard	1 No.	BAAF
1.6	Milk Pump	10000 LPH	1 No.	ZEUTECH
1.7	Milk Chiller	10000 LPH	1 No.	TETRA
1.8	Tanker Unloading Pump with Hose Pipe	10000 LPH	1 No.	ZEUTECH
1.9	Can Scrubber	425 Ltrs	1 No.	BAAF
1.1	Milk Silo	20000 Ltrs	2 Nos.	BAAF
2	MILK PROCESSING SECTION			
2.1	Milk Transfer Pump	5000 LPH	2 Nos.	ZEUTECH



Existing Plant & Machinery

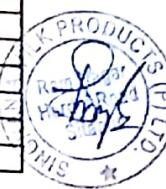
2.2	Milk storage tank	20000 Ltrs	2 Nos.	BAAF
2.3	Milk Pasteurizing Plant & Accessories	5000 LPH	1 Set	TETRA
2.4	Cream Separator	5000 Ltrs	2 No.	TETRA
2.5	C.I.P. (Manual)	Standard	1 Set	BAAF
3	FAT HANDLING SECTION			
3.1	Cream Balance Tank	500 Ltrs	1 No.	BAAF
3.2	Cream Transfer Pump	2000 LPH	2 Nos.	ZEUTECH
3.3	Cream Pasteuriser	1000 LPH	1 No.	TETRA
3.4	Cream Storage Tank	5000 Ltrs	2 Nos.	BAAF
3.5	Butter Churn	2000 Ltrs	1 No.	BAAF
3.6	Butter Trolley	600 Kgs	3 Nos.	BAAF
3.7	Butter Melting Vat	1500 Ltrs	1 No.	BAAF
3.8	Butter Oil Transfer Pump	5000 LPH	1 No.	ZEUTECH
3.9	Pre- Stratification Tank	1500 Ltrs	1 No.	BAAF
3.10	Ghee Boiler	1500 Ltrs	1 No.	BAAF
3.11	Ghee Balance Tank	100 Ltrs	1 No.	BAAF



3.12	Ghee Transfer Pump	5000 LPH	2 Nos.	ZEUTECH
3.13	Ghee Settling Tank	1500 Ltrs	1 No.	BAAF
3.14	Ghee Clarifier	1000 LPH	1 No.	TETRA
3.15	Ghee Storage Tank	5000 Ltrs	1 No.	BAAF
3.16	Ghee Pouch Filling Machine (Pneumatic)	600 PPH	1 No.	SAMARPAN
3.17	Jar & Tin Semi Automatic Filling Machine		2 No.	
4	MILK POWDER SECTION			
4.1	Five Effect Evaporator	10.5 M.T. per Day	1 Set	FOOD & BIO TECH./BAAF
4.2	Spray Drier	10.5 M.T. per Day	1 Set	FOOD & BIO TECH./BAAF
4.3	Milk Silo	40000 Ltrs	1 No.	BAAF
4.4	Spare Automlzer	10.5 M.T per Day	1 No.	FOOD & BIO TECH.
5	UTILITY SECTION			
5.1	Refrigeration Plant with Butter Cold Store	30 TRPH	1 Set	BAAF
5.2	Air Compressor	TC-1500	1 Set	ELGI
5.3	Spray Pond Equipments	Suitable	1 Set	BAAF



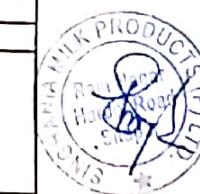
5.4	Stainless Steel Pipe Line Fittings	Suitable	1 Lot	BAAF
5.5	Water Pipeline and Fittings	Suitable	1 Lot	BAAF
5.6	Air Pipe Line and Fitting	Suitable	1 Lot	BAAF
5.7	Steam Pipe Line and Fittings	Suitable	1 Lot	BAAF
5.8	Chilled Water Pipe Line and Fittings	Suitable	1 Lot	BAAF
5.9	Condensate Recovery Arrangement	Suitable	1 Lot	BAAF
5.10	Service Bridge, Ghee Section Platform, Supports	Suitable	1 Lot	BAAF
5.11	Erection & Commissioning	Suitable	1 Lot	BAAF
6	MILK CHILLING & RECEPTION CENTER			
6.1	Can Tipping Bar	Standard	1 No.	BAAF
6.2	Milk Weighing Machine	0-500 kgs	1 No.	BAAF
6.3	Milk Weighing Bowl	500 kgs	1 No.	BAAF
6.5	Dump Tank	1000 ltrs	1 No.	BAAF
6.6	In Line Filter	standard	1 No.	BAAF
6.7	Milk Pump	10000 LPH	1 No.	ZEUTECH
6.8	Milk Chiller	10000 LPH	1 No.	TETRA



6.9	Tanker Unloading Pump with Hose Pipe	10000 LPH	1 No.	ZEUTECH
6.1	Can Scrubber	425 Ltrs	1 No.	BAAF
6.11	Milk Silo On Load Cel (Imported) Inside th plant connected with Chilling Center	40000 Ltrs	1 Nos.	BAAF
7	ADDITIONAL KIRLOSKER KC-3 COMPRESSOR			
7.1	Ammonia Compressor KC-3 in Refrigeration Plant	30 TRH	1 No.	
7.2	Electric Motor	75 HP	1 No.	CROMPTON
7.3	Oil Seprator with Matching Capacity		1 No.	
7.4	Ammonia Pipes & Fittings to connect the Compressor with Existing Refrigeration Plant		1 No.	
8	LIQUID MILK PLANT			
8.1	Milk Storage Silo	6000 Ltrs	2 No.	BAAF
8.2	Pouch Filling Machine	1000 PPH	1 No.	
8.3	Packing Table		1 No.	
8.4	Inline Filter		1 No.	
8.5	CIP Return Pump	10000 LPD	1 No.	
8.6	SS Pipes & Fittings		1 Lot	



9.8	Effluent Treatment Plant to discharge Full Clean Water free of Pollution as per Pollution Control Board	For 150000 Ltrs of Milk per day	1 No.	PLSR
10	LABORATORY-Fully Equiped With All Types of Testing Devices and Equipments Along with All Required Chemicals.		1 No.	
11	SPARE PARTS Including Accessories, Bearings, Pipe Fittings, Milk Pumps, Vacuum Pumps, Electronic Parts, etc.			
12	INFRASTRUCTURE-Full RCC Building with Stylish Look & Cemented Road Inside the Campus			
12.1	Product Godown	12000 Bag	1 No.	
12.2	Store House		1 No.	
12.3	Powder Packing Room		1 No.	
12.4	Office		1 No.	
12.5	Plant Machinery Room		1 No.	
12.6	Drainage System			
12.7	Land	104500 Sq. Feet	1 No.	
12.8	Provision for Expansion of Powder Plant Is Provided.			
13	AGMARK & ISI VALIDITY CERTIFIED, NOC OF POLLUTION CONTROL BOARDED CERTIFIED & VALID, EXPLESSIVE LICENSE VALID, MMPO CERTIFIED & VALID, FACTORY LICENSE VALID & CERTIFIED, SALES TAX & OTHER REQUIRED LICENSE ARE VALID AND CERTIFIED.			



QUOTATION

M/S. Singhania Milk Products Private Limited Sitapur Uttar Pradesh India Ph.No. : 9415706960 Email : milksinghania@gmail.com	Quotation No. : Q11119 Quotation Date : 10/10/2023 Revision No. : 02 Revision Date : 24/11/2023 Ref. Date : 09/10/2023
Your Ref. : website Kind Attn. : Pulkit Singhania Contact No. : 9415706960 Email Id : milksinghania@gmail.com	

Dear Sir,

This refers to your enquiry regarding your requirement ,we are pleased to submit our quotation as per your requirement.

1 Hydraulic Goods Cum Passenger Lift

- BRAND	: FIPL
- Model Number	: FIPL-171-B
- Capacity (kg)	: 1.5 Ton
- Type	: Dual Cylinder Type
- Cylinder	: As per Requirement
- Platform Size	: 2500 x 2500 mm
- Travel	: G+2
- Well size	: As per Drawing
- Travel height	: 25 ft
- Pit Depth	: 1500mm
- Over Head Space	: 4500 mm
- Stops &Openings	: 3 Stop 4 Opening / 2stop 3 opening / 1stop 2 opening
- Power Supply	: 230 Volts, Single Phase, 50 Cycles
- Control	: Collective Micro process
- Operation	: Attendant Mode
- Cabin (If Required Cost Extra)	: M.S. POWDER COATED CABIN
- Entrance Door	: M.S. MANUAL COLLAPSIBLE DOOR
- Guide	: For Car T Sections Machined. (89 X 62 X 13)
- Details	: Indirect Acting Cylinder Single Acting Up stroking Cylinder M.S Cold Drawn hollow round seamless pipe and its material code is - ST-52 with hard chrome plating at 25 microns ,100 bar of pressure rating capacity. Cylinder is built with imported P.U (poly urethane) - "U" Cup oil sealing design for special hydraulic elevator piston and cylinder.

QUOTATION

M/S. Singhania Milk Products Private Limited	Quotation No.	Rev : 02
- Power Pack & Accessory (Regular)		: AC Power Pack with three phase induction motor, Gear Pump, Cartridge solenoid valve, Pressure relief valve, Flow control valve, Check valve, Suction filter with hydraulic hose pipe and fittings
- Power Pack (Optional / More Safety)		: "Blain Make EV 100- 1.1/2" Connection
- Safety		: Hose Rupture Valve, Blain Valve, Speed Adjustment, Mechanically and Electrically Safest Hydraulic Goods Lift.
- Note		: There may be any specification/dimensional change. If these specifications are critical, the proposed application should be discussed.
- Technical		: Door: 1 Nos in cabin, 3 Nos on Landing

2 Installation and Erection charges

<u>Price Details</u>					
No. Item Details	UOM	Quantity	Rate	Amount (INR)	
1 Hydraulic Goods Cum Passenger Lift FIPL-171-B Goods Cum Passenger Lift C: 1500kg, P: 2500x2500 Level: G+M+1 H: 25 Feet ,Pit size: 3300mm x 2800mm	Nos	1.00	1600000.00	1600000.00	
2 Installation and Erection charges HSN/SAC : 998732 GST : 18.00%	Nos	1.00	110000.00	110000.00	
			Basic Amount	1710000.00	
			Sub Total	1710000.00	
			IGST(18.00%)	307800.00	
			Grand Total	2017800.00	

Amount in Words : INR Twenty Lakhs Seventeen Thousand Eight Hundred Only

Terms & Conditions :-

Prices	: The above prices quoted are ex-works our factory(Kuha Ahmedabad)
Taxes	: GST 18% applicable (HSN code 84279000)
Transportation	: Transportation charges will be in your scope. No our responsibility for transportation damages..
Packing & Forwarding	: 2%
Payments	: 50% advance along with P. O., 50% prior to dispatch against Proforma Invoice.
Delivery	: Generally Within 3-4 Weeks. On date of order will confirm delivery schedule.
Quotation Validity	: Our offer is valid for your acceptance for a period of 30 Days from the date. Thereafter, it will

Page 2 of 3

QUOTATION

M/S. Singhania Milk Products Private Limited	Quotation No. : Q11119	Rev : 02
	be subject to confirmation by us.	
Installation	: Not applicable for ready to use equipment Or Supervising installation & commissioning and Testing of Equipment shall be Extra. Man Power (if Required) ,Civil work, Welding and Drilling machine, Hydra/Forklift, required for installation is on Buyer/Client Scope.	
Load Testing	: We have the facility for load test up to 5 Ton in-house, if you need the load test at your site than you will have to arrange the load under the said crane along with respective Sling.	
Overdue Charges	: Overdue Interest & Warehousing charges If your ordered goods are not lifted after one week of delivery date mentioned in the P.O./Our order confirmation, 2% (of order value) per week will be charged being Overdue Interest & Warehousing charges	
Warranty	: (a)Warranty shall be valid for the period of 12 months (1 Year) from the date of Invoice. We hereby Warranty to replace free of cost Ex-works Our Factory (Kuha Ahmedabad) any component found defective due to bad workmanship or any Manufacturing defects only. (b) Warranty of bought out products will remain same as per main company terms. (c) No Warranty /Guarantee provided for electrical Components. (If any electrical failure occurs and due to this if any Mechanical component fails than the same shall not cover any Warranty /guarantee and the same will be supplied only on chargeable basis.)	
Cancellation	: An order once placed by the buyer cannot be cancelled without the prior consent in writing from us. In the event of our accepting the cancellation, all costs incurred by until our acceptance of cancellation will be borne by the buyer	
LD	: Liquidated Damages & Force Measure Clause We have given our delivery schedule in good faith & will try schedule. In case of delay in delivery of the Equipment concerned, we are no agreeable for payment of liquidated damages or any penalty. We are also not agreeable for any risk purchase by you. For such delays, we shall not be liable to any claim or for any compensation	
Hydraulic Oil	: Hydraulic Oil #46 or Hydraulic Oil #68 on buyer scope	

Thanks & Regards

FUTURE INDUSTRIES PVT.LTD.

DIPTI PATEL
+91 9099928360

GST No. : 24AACCF4095R1Z3
PAN No. : AACCF4095R
DOC No : QR/MKT/06

For, FUTURE INDUSTRIES PVT. LTD.

Prepared By
(Dipti Patel)

Approved By
(Dipti Patel)

HPC GSTIN – 07GCNPS6557M1ZH



Hindustan Power Controls

(A House of 11KV to 33KV Sub-station Equipments & Spares)

Quotation

Ref No HPC/104/2023-24

Dtd 13/10/2023

M/S Singhania Milk Products Pvt Ltd

Ramnagar, Hardoi Road Distt Sitapur-261001

GSTIN : 09AAJCS5503L1Z0

Dear Sir,

We are Pleased to Submit our offer.

S.NO	DESCRIPTION	QTY (Mtr)	NETT PRICE	AMOUNT
1	Polycab /Havells Make 11KV (E) HT XLPE Cable Size – 3C*95 Sqmm	210	523.25	109882.5
2	ECKO Make 1.1KV Aluminium Armoured Cable Size - 3C*240 Sqmm	650	606.96	394524
3	ECKO Make 1.1KV Aluminium Armoured Cable Size - 3.5C*185 Sqmm	510	541.2	276012
4	ECKO Make 1.1KV Copper Armoured Cable Size - 4C*16 Sqmm	308	467.28	143922.2
5	ECKO Make 1.1KV Copper Armoured Cable Size - 4C*10 Sqmm	360	318.96	114825.6
6	3M Make 11KV(E) Heat Shrinkable Outdoor Type Jointing Kits For Cable Size – 3C*95 Sqmm	2	3220	6440
7	3M Make 11KV(E) Heat Shrinkable Indoor Type Jointing Kits For Cable Size – 3C*95 Sqmm	2	2322	4644
	TOTAL			1050250

Terms & Conditions

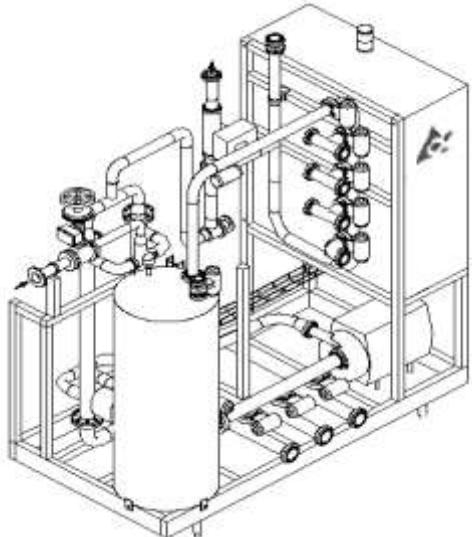
- 1) GST 18% Extra
- 2) Price is Ex-Works
- 3) Packing & Forwarding Charge Extra
- 4) Ready Stock Subject to Prior Sale
- 5) Validity of Offer Immediate
- 6) Payment 100% Before Dispatch Against Proforma Invoice

(For Hindustan Power Controls)



Singhania Milk Products Pvt. Ltd.

Quotation for: Key Components and Module



Quotation No. : 09102023/Rev 02



**Singhania Milk Products Pvt. Ltd.
Village - Ram Nagar, Hardoi Road
Sitapur - 261001 (U.P.) India**

Kind Attn.: Mr. Pulkit Singhania.

Subject : Quotation 09102023/Rev 02 dated 27.10.2023 for Key components and Modules.

Dear Sir,

This is with reference to undersign visit and had discussion with you on 15.10.2023, we are pleased to submit our revised final quotation for the duty you have specified.

Some of the Features and Values of the quoted unit which we believe will be most interest to you are:-

- Maximum Reliability
- Focus on Product Safety & Product Quality
- Quick Installation and Commissioning
- High Serviceability
- World Class Manufacturing
- Standard Components
- One single supplier
- Repeatable/Accurate production
- Lower product loss.
- Optimised utility consumption.
- Efficient CIP.
- Operator friendly.

We are pleased to bring it to your kind notice that by investing in our unit, you are assured of "Tetra Pak's Commitment to Product Life Cycle Support". We would also bring to you our knowledge and expertise in food processing systems.

This quotation consists of:

Tetra Pak Commitment to Product Life Cycle

Basis of Design

Specifications and Scope of supply

Performance Criteria

Price and Commercial Terms

General conditions of sale

We hope our offer is in line with your requirements and you will recognize the benefits of choosing Tetra Pak as your business partner when you make your decision.

We trust this offer and attached technical information is clear. Should you require any further information, please do not hesitate to contact us. We now look forward to hearing from you for further actions for Tetra Pak India Pvt. Ltd.

Arun Tandon

Manager-Sales KC & Module (North)

Tetra Pak India Pvt. Ltd. , Registered office: Plot No 53, MIDC, Chkan-Phase -II , Village Vasuli, Taluka Khed, Pune – 410501, India Telephone: +912135678101 ; Corporate Office- 15th Floor, One Horizon Centre, Golf Course Road ,DLF Phase 5, Sector-43I, Gurgaon-122002, Haryana Tel +911244124600, Fax+911244064308 Email: arun.tandon@tetrapak.com www.tetrapak.com

TETRA PAK'S COMMITMENT TO PRODUCT LIFE CYCLE SUPPORT

You are about to invest in new processing equipment and will no doubt be comparing details of product performance, availability and price. We would ask that you also take some time to consider the aspect of total life cycle support for the equipment you are about to purchase.

The need for continuous, uninterrupted production in today's food processing industry, as interruptions will often mean the cost of plant downtime will exceed the cost of capital equipment. As we see it, this need will be of increasing importance in future.

At Tetra Pak we have, over the years, built up a unique After Sales Operation which offers outstanding service.

Should you choose to purchase your equipment from Tetra Pak we will be able to offer you the following.

- Availability of spare parts 7 days a week.
- Access to 9 field based dedicated trained and well-equipped service engineers.
- Preventive maintenance agreements with services scheduled to suit your operating conditions.
- On-site diagnostic checks for all Separators, Homogenisers, Plate Heat Exchangers and complete liquid food processing plants.
- Information regarding equipment or plant optimization.
- Expertise on complete food processing systems.

Strong customer support is a philosophy within Tetra Pak and one of the cornerstones of our organization. We believe our After Sales Support and commitment to the product throughout its life cycle, will give you a competitive edge.

We hope you will recognize the benefits when you make your decision.

UTILITIES SPECIFICATION

Utilities specification: following are the guidelines for utility specifications which are to be supplied and connected by the purchaser.

Instrument air (IA)

General requirements

For consumption and pressure data, see 'Technical data'.

- Oil, invariably introduced into compressed air from oil-lubricated compressors must be removed as completely as possible. Oil is a serious pollutant, which is hard to remove from instruments.
- Water will condense within the pneumatic system in quantities varying with the humidity of the input air, the temperature before and after the compressor, or after a temperature drop in a section of the air line routed through a cold zone.
- To avoid condensation, the air must be dried to an extent determined by the lowest temperature after the drier. Air expands and cools down in orifices and nozzles inside instruments with condensation as a result.
- For this reason, the dew point of the air at the instrument inlet must be at least 10°C below the lowest ambient temperature surrounding the equipment.
- Dirt in the form of solid particles down to a size of 10 microns (0.01 mm) must be removed, for instance by means of filters or filter-equipped reducing valves.
- Position the filters so they can be seen and easily checked. The filters must be checked daily and their cartridges or inserts renewed whenever necessary.
- The air supply line must include a master shut-off valve.
- The volume of the storage (tank) for compressed air should approximately 6 times the required capacity/h.

Caution! Noncompliance with these requirements may endanger the equipment.

Characteristics:

- Oil content	max. 10 mg/l
- Water content	none
- Dew point	min. 10°C below ambient temperature
- Solid particles	max. 0.01 mm

Steam

General requirements

For consumption and pressure data, see 'Technical data'.

The steam must be of good quality and free from condensate and air.

Supply line:

- The steam supply line must be equipped with a pressure controller in order to maintain a constant feed pressure.
- Condensate traps must be provided close to the process line in order to produce dry steam.
- A master shut-off valve must be installed in the steam supply line.
- Steam pipes must be insulated as protection against personal injury.

- Before connecting the steam supply to the process line, the steam pipes must be blown clear with repeated blasts of steam, lasting 5 - 10 minutes.

Caution! Noncompliance with these requirements may endanger the equipment.

Characteristics:

- Quality	dry saturated steam
- Humidity	max. 5% condensate
- pH	8.5 - 9.2
- Carbon dioxide	max. 2ppm
- Chloride	max. 8 ppm
- Solid particles	max. 0.5 mm
- Turbidity	max. 3 ppm KMnO ₄

Water

General requirements:

- The water supply pipe must be equipped with a master shut-off valve.
- The supply pressure must be constant.
- For consumption and pressure data, see 'Technical data'.
- Water used in the plant must be soft (by water softening if necessary) and clean in order to avoid deposits. Deposits due to water of inferior quality circulating in the plant can cause malfunction of vital parts.
- Water hardness
- If the water is hard (high concentration of Calcium carbonate, CaCO₃), deposits will accumulate in devices such as valves. This process is accelerated at high temperatures. Cleaning results and detergent consumption will also be affected due to hard water. These effects become more severe the harder the water.

Corrosion

In order to minimize corrosion the water should:

- have low concentrations of chlorine (Cl₂) and/or chloride ions (Cl⁻),
- be slightly alkaline. (The pH value is easily determined by means of litmus paper or a pH meter).
- Water used for cooling, product flushing, rinsing and cleaning should meet the WHO guidelines (stated below) or the European drinking water directive.

Caution! Noncompliance with these requirements may endanger the equipment.

Characteristics:

- Taste	none
- Smell	none
- Turbidity	max. 3 NTU
- Colour	max. 20 mg/l Pt
- Oxygen demand	max. 20 mg/l KMnO ₄
- Tot. dissolved solids	max. 500 mg/l
- pH	7 - 8.5
- Hardness	<10° dH max. 180 mg/l CaCO ₃
- Ammonium	trace amounts
- Ammonia	max. 0.5 mg/l NH ₄
- Iron	none
- Manganese	none
- Nitrate	max. 30 mg/l NO ₃

- Sulphate	max. 100 mg/l SO ₄
- Chlorine (M, S)	max. 0.2 mg/l Cl ₂
- Chloride (M, S)	max. 30 mg/l Cl --
- Aggressive carbon acid	max. 0 mg/l CO ₂
- Total amount of bacteria	max. 100/ml
- Total amount of 35°C coliform bacteria	max. 1/100 ml
- Total amount of 44°C coliform bacteria	max. 0/100 ml
- Copper	max. 0.05 mg/l Cu
- Zinc	max. 1.0 mg/l Zn

Feed water to steam boiler

- as stated above	
- Hardness	max. 0.1° dH
- Aluminum	max. 0.2 mg/l Al
- pH	8.5 - 9.0
Silicon acid	max. 30 mg/l

SPECIFICATIONS & SCOPE OF SUPPLY

BASIS OF DESIGN

Unit Description : TETRA PAK MILK PASTEURISATION MODULE MP5000A

Basis Of Design:

Product	: Whole Milk, 16.5%
Capacity	: 5000 LPH
Temp Program	: 4-50-72-80-4 deg C
Regen. Efficiency	: 90 %
Holding time	: 15 sec

Process Operation:

Pasteurization temperature control (by PID controller) and flow rate(by mechanical flow controller in case of milk pasteuriser) will be automatic. Flow will be diverted automatically with alarm if temp is below the past temp. Sequencing of production, sanitisation and CIP will be manual. Detergent addition in the balance tank and concentration monitoring will be manual. CIP flowrate will be approximately 1.2 times of the product flow rate.

Utilities Required (Approx):

Steam at 3 bar	: 70 kg/hr
Chilled water	: 12000 LPH (1.5 – 4 C)
Approx. Total power	: 5 kW, (3.7 kW Prod. Pump, 1.1 kW HW Pump) 415V, 3 PH, 50 Hz
Process water	: 6000 LPH during CIP
CIP flow	: 6000 LPH
Instrument Air, 6bar	: 625 NL/Hr.

Utilities specification: following are the guidelines for utility specifications which are to be supplied and connected by the purchaser.

Instrument air (IA)

General requirements

For consumption and pressure data, see 'Technical data'.

- Oil, invariably introduced into compressed air from oil-lubricated compressors must be removed as completely as possible. Oil is a serious pollutant, which is hard to remove from instruments.
- Water will condense within the pneumatic system in quantities varying with the humidity of the input air, the temperature before and after the compressor, or after a temperature drop in a section of the air line routed through a cold zone.
- To avoid condensation, the air must be dried to an extent determined by the lowest temperature after the drier. Air expands and cools down in orifices and nozzles inside instruments with condensation as a result.

- For this reason, the dew point of the air at the instrument inlet must be at least 10°C below the lowest ambient temperature surrounding the equipment.
- Dirt in the form of solid particles down to a size of 10 microns (0.01 mm) must be removed, for instance by means of filters or filter-equipped reducing valves.
- Position the filters so they can be seen and easily checked. The filters must be checked daily and their cartridges or inserts renewed whenever necessary.
- The air supply line must include a master shut-off valve.
- The volume of the storage (tank) for compressed air should approximately 6 times the required capacity/h.

Caution! Noncompliance with these requirements may endanger the equipment.

Characteristics:

- Oil content	max. 10 mg/l
- Water content	none
- Dew point	min. 10°C below ambient temperature
- Solid particles	max. 0.01 mm

Steam

General requirements

For consumption and pressure data, see 'Technical data'.

The steam must be of good quality and free from condensate and air.

Supply line:

- The steam supply line must be equipped with a pressure controller in order to maintain a constant feed pressure.
- Condensate traps must be provided close to the process line in order to produce dry steam.
- A master shut-off valve must be installed in the steam supply line.
- Steam pipes must be insulated as protection against personal injury.
- Before connecting the steam supply to the process line, the steam pipes must be blown clear with repeated blasts of steam, lasting 5 - 10 minutes.

Caution! Noncompliance with these requirements may endanger the equipment.

Characteristics:

- Quality	dry saturated steam
- Humidity	max. 5% condensate
- pH	8.5 - 9.2
- Carbon dioxide	max. 2ppm
- Chloride	max. 8 ppm
- Solid particles	max. 0.5 mm
- Turbidity	max. 3 ppm KMnO ₄

Water

General requirements:

- The water supply pipe must be equipped with a master shut-off valve.
- The supply pressure must be constant.
- For consumption and pressure data, see 'Technical data'.

- Water used in the plant must be soft (by watersoftening if necessary) and clean in order to avoid deposits. Deposits due to water of inferior quality circulating in the plant can cause malfunction of vital parts.
- Water hardness
- If the water is hard (high concentration of Calcium carbonate, CaCO_3), deposits will accumulate in devices such as valves. This process is accelerated at high temperatures. Cleaning results and detergent consumption will also be affected due to hard water. These effects become more severe the harder the water.

Corrosion

In order to minimize corrosion the water should:

- have low concentrations of chlorine (Cl_2) and/or chloride ions (Cl^-),
- be slightly alkaline. (The pH value is easily determined by means of litmus paper or a pH meter).
- Water used for cooling, product flushing, rinsing and cleaning should meet the WHO guidelines (stated below) or the European drinking water directive.

Caution! Noncompliance with these requirements may endanger the equipment.

Characteristics:

- Taste	none
- Smell	none
- Turbidity	max. 3 NTU
- Colour	max. 20 mg/l Pt
- Oxygen demand	max. 20 mg/l KMnO_4
- Tot. dissolved solids	max. 500 mg/l
- pH	7 - 8.5
- Hardness	<10° dH max. 180 mg/l CaCO_3
- Ammonium	trace amounts
- Ammonia	max. 0.5 mg/l NH_4
- Iron	none
- Manganese	none
- Nitrate	max. 30 mg/l NO_3
- Sulphate	max. 100 mg/l SO_4
- Chlorine (M, S)	max. 0.2 mg/l Cl_2
- Chloride (M, S)	max. 30 mg/l Cl^-
- Aggressive carbon acid	max. 0 mg/l CO_2
- Total amount of bacteria	max. 100/ml
- Total amount of 35°C coliform bacteria	max. 1/100 ml
- Total amount of 44°C coliform bacteria	max. 0/100 ml
- Copper	max. 0.05 mg/l Cu
- Zinc	max. 1.0 mg/l Zn

Feed water to steam boiler

- as stated above	
- Hardness	max. 0.1° dH
- Aluminum	max. 0.2 mg/l Al
- pH	8.5 - 9.0
- Silicon acid	max. 30 mg/l

SPECIFICATIONS & SCOPE OF SUPPLY

Sr. No	Description	Qty
1.	Balance tank Capacity, 100 L, MOC SS304, with float and top cover and three legs.	1 No
2.	Feed pump Centrifugal pump, Alfa Laval Make, all wetted parts in SS316L, SMS connections with single shaft seal with motor of Crompton make.	1 No
3.	Flow controller Mechanical flow controller, to control the product flow rate. MOC SS 304 with Unions at ends.	1 No
4.	Plate heat exchanger PHE Model : Tetra Plex MS6 KSR Frames : MS cladded with SS304 Plates : ALLOY 316/0.5 Thk Gaskets : NBR CLIP ON No of sections : Four Design temp : 110 deg C Design/test pr. : 6/8 Bar PHE Pasteuriser will be designed considering the CIP cleanability and keeping the CIP flow requirement which should be closed to the prod flow.	1 No
5.	Holding tube Holding tube will be designed for the specified holding time considering the CIP clean ability and fastest particle velocity. MOC is SS304. Holding tube will be made up of imported pipes and Alfa Laval fittings to match the internal surfaces get the best hygienic construction.	1 set
6.	New Generation Hot water system New Generation improved Hot water system will be THE based and will house an Stainless steel expansion vessel and other safety devices to take care of the volume expansion and increased pressure making the complete operational safety. It consists of the following components: <ul style="list-style-type: none">• Tetra Pak Tubular Heat Exchanger with SS316 inner tubes and SS304 outer shell.• Specially developed Stainless steel Expansion vessel, to take care of volume increase of hot water in the system,• Uniquely designed Pressure relief cum Safety Valve, to let excess water from the system and maintain required pressure,• Air vent, to vent air from the hot water system as it will disturb the Temperature control,• Pneumatically controlled Steam control valve, Sampson make with I/P converter and Air filter/pressure regulator.• Water make up valve, to initially fill the system, internals in SS 304, Legris make.• Steam trap, float type, Forbes Marshall make,	1 Set

	<ul style="list-style-type: none"> • Centrifugal pump, all wetted parts in SS316L, SMS connections with single shaft seal with motor. 	
7.	Control panel, <ul style="list-style-type: none"> • MOC: SS 304, Duly pre-wired and tested, & consists of the following Instruments and Controls: • Temperature Indicating Controller, • Alarm/Hooter with 'reset' switch to announce diversion of milk and completion of CIP cycles after pre-set timmings. • 1 No. Selector switch for selecting heating, production and CIP module. • Manual/Auto switch for operating flow diversion valve. • 11 Nos. Start/stop push buttons with indicating lamps for process pump (milk pump, hot water pump etc.) & motors • 1 No ON/OFF lockable switch with indicating lamp for incoming supply from 'Mains'. 	1 No
8.	Automatic Flow diversion Valve Imported Unique Single Seat Valve, Alfa Laval make, with wetted parts in SS 316, EPDM seat.	1 No
9.	Manual diversion valve at the Outlet of Pasteuriser Butterfly valve, Alfa Laval make for re-circulation during production and CIP and sanitation.	2 Nos
10.	Interconnecting pipes and fittings within Module All pipes are imported and fittings are Alfa Laval make to make the internal welding surfaces smooth and hygienic.	1 Lot
11.	Technical documentations Technical documentation consist of two sets of following: Equipment Layout drawings Flowchart Instruction Manual Technical manual Heat exchanger plattage drawing	2 set
	OPTIONS: included	
1b	Duplex Milk filter Model ECD 100 with butterfly valves, sampling cock and associated piping.	1 No
2a	Pasteurisation temp recorder, 2 point Jumo make. The temp recorder is micro processor based.	1 No
3a	Commissioning of module This is required for the installation checks and to start up the plant for the first time. It will be for three days (24 hrs) in one visit. Charges will be inclusive of traveling, lodging and boarding. It includes installation checks, pre-commissioning checks, maintenance training CIP& water trials, product trial, operators training and documentation i.e commissioning certificate, performance protocol,take over certificate etc. Customer to provide skill personnel and all the consumables	1 No

	required at the time of commissioning. If commissioning delays beyond specified days, customer will have to pay extra as per our service charges	
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Note : All the above components will be installed on **SS 304 SKID FRAME** in compact aesthetic modular construction except PHE pasteuriser.

PERFORMANCE CRITERIA

- Performance criteria to be attained are specified in this exhibit.
- No parameters other than those specified in this exhibit are guaranteed.

Performance criteria to be tested prior to commercial operation

Module

Performance criterion no 001

Parameter	Capacity (as specified in design basis)
Tolerance of variation	± 5%
Test point / test method / duration of test	Actual measurement at the outlet of Pasteuriser.

Module

Performance criterion no 002

Parameter	Pasteurisation Temperature (as specified in design basis)
Tolerance of variation	± 1°C
Test point / test method / duration of test	At the outlet of heating. One Test run

2 Conditions Precedent to be fulfilled by Purchaser

General requirements according to Design basis and utilities, Supply of trained operators, raw material (approved by Tetra Pak), consumables, as required by the Purchaser.

Tetra Pak Milk De-odourizer Module

BASIS OF DESIGN

Unit Description.

Tetra Pak Deaerator/ Deodorisation System

Basis of Design:

Product : Whole Milk, 16.5%
Capacity : 5 KLPH

Process Operation:

Deaeration level control will be automatically controlled with the help of the SPC valve and the differential pressure transmitter. The controls will be built into the a control panel supplied with the module

Utilities Required (Approx):

Chilled water : 5000 LPH (for Jacket cooling)
Tower water : 10000 LPH (for vapour cooling)
Electric power : 9kW, 415V, 50Hz, 3 phase
Process Water : 6000 LPH (during CIP)
CIP flow : 6000 LPH
Instrument Air, 6bar : 625 NL/Hr.

SPECIFICATIONS & SCOPE OF SUPPLY

Sr. No	Description	Qty
1.	DEARATION Vessel DC 750 Chamber and cover in stainless steel 304 construction specially rounded corners and internal sanitary finish. The bottom is in double wall construction for circulation of cooling water to avoid foaming of the product. This incorporates socket, SS spiral condenser, vacuum pump connection, chilled water inlet and outlet connection	1 No
2.	Extraction pump with VFD Centrifugal pump, Alfa Laval Make, all wetted parts in SS316L, SMS connections with single shaft seal with motor of Crompton make.	1 No
3.	Vacuum Pump Vacuum pump in cast iron construction complete with auto drain valve and directly coupled motor pump is used for extracting non-condensable gases from de-aerator vessel	1 No
4.	Level Control System Level control using Unique RV-P valve & differential Pressure transmitters to control level inside de-aerator.	1 Set
5.	PHE PHE for Vapour cooling using tower water	1 No
6.	Control Panel <ul style="list-style-type: none"> • PLC control panel for accurate control of the parameters • MOC: SS 304, Duly pre-wired and tested, & consists of the following Instruments and Controls: • Start/stop push buttons with indicating lamps for process pump & motors • 1 No ON/OFF lockable switch with indicating lamp for incoming supply from 'Mains'. 	1 No
7.	Interconnecting pipes and fittings within Module All pipes are imported and fittings are SS316 Alfa Laval make to make the internal welding surfaces smooth and hygienic.	1 Set

	Interconnecting piping to & fro from existing milk pasteurisation module is also included in scope of supply	
8.	Note: All the above components will be installed on SS 304 SKID FRAME in compact aesthetic modular construction	
9.	Technical documentations Technical documentation consist of two sets of following: Equipment Layout drawings Process and instrumentation drawing Instruction Manual Technical manual	1 No

PERFORMANCE CRITERIA

- Performance criteria to be attained are specified in this exhibit.
- No parameters other than those specified in this exhibit are guaranteed.

Performance criteria to be tested prior to commercial operation

Cream Pasteurisation Module

Performance criterion no 001

Parameter	Capacity (as specified in design basis)
Tolerance of variation	± 5%
Test point / test method / duration of test	Actual measurement at the outlet of Pasteuriser.

Cream Pasteurisation Module

Performance criterion no 002

Parameter	Pasteurisation Temperature (as specified in design basis)
Tolerance of variation	± 1°C
Test point / test method / duration of test	At the outlet of heating. One Test run

2 Conditions Precedent to be fulfilled by Purchaser

General requirements according to Design basis and utilities, Supply of trained operators, raw material (approved by Tetra Pak), consumables, as required by the Purchaser.

Commissioning Criteria for Deodorizer Module

- Please note that commissioning criteria for De-odourizer module is a subjective and qualitative criteria and it is not possible to define the performance quality parameters of final product. It is rather based on organoleptic parameters, quality of raw Cream and other input conditions.
- Module would be commissioned on vacuum parameters (as standard literature) and related temperature difference achieved for Cream applications. The parameters would be set during the commissioning based on the best available lab report (based on Organoleptic test) for final product.

Unit Description :

TETRA PAK CURD MILK PASTEURISATION MODULE 2000A

Basis of Design:

Product : 16.5% whole milk(Curd Milk)

Capacity : 2000 LPH

Temp Program : 4-90-4/45 for curd milk

Holding time : 360 sec

Regeneration Efficiency: 90%

Process Operation:

Pasteurization temperature control (by PID controller) will be automatic and flow rate by manual control valve. Flow will be diverted automatically with alarm if temp is below the past temp. Sequencing of production, sanitisation and CIP will be manual. Detergent addition in the balance tank and concentration monitoring will be manual.

Utilities Required (Approx.):

Steam at 3 bar : 190 Kg/hr

Approx. Total power : 9 kW, 415V, 3 PH, 50 Hz

Process water : 5500 LPH during CIP

CIP flow : 5500 LPH

Instrument Air, 6bar : 625 NL/Hr.

SPECIFICATIONS & SCOPE OF SUPPLY

Sr.No	Description	Qty
1.	Balance tank Capacity, 75 L, MOC SS304, with float & half openable cover.	1 No
2.	Feed pump + Booster Pump Centrifugal pump, Alfa Laval Make, all wetted parts in SS316L, SMS connections with single shaft seal with motor of Crompton make.	1+1 No
3.	Flow controller Mechanical flow controller, to control the product flow rate. MOC SS 304 with Unions at ends.	1 No
4.	Plate heat exchanger PHE Model : Tetra Plex M Series Frames : MS cladded with SS304 Plates : ALLOY 316/0.5 Thk Gaskets : NBR CLIP ON No of sections : Four Design temp : 110 deg C Design/test pr. : 10/13 Bar PHE Pasteuriser will be designed considering the CIP cleanability and keeping the CIP flow requirement which should be closed to the prod flow.	1 No
5.	New Generation Hot water system New Generation improved Hot water system will be THE based and will house and Stainless steel expansion vessel and other safety devices to take care of the volume expansion and increased pressure making the complete operational safety. It consists of the following components: <ul style="list-style-type: none"> • Tetra Pak Tubular Heat Exchanger with SS316 inner tubes and SS304 outer shell. • Specially developed Stainless steel Expansion vessel, to take care of volume increase of hot water in the system, • Uniquely designed Pressure relief cum Safety Valve, to let excess water from the system and maintain required pressure, • Air vent, to vent air from the hot water system as it will disturb the Temperature control, • Pneumatically controlled Steam control valve, ARI Armaturen make with I/P converter and Air filter/pressure regulator. • Water make up valve, to initially fill the system, internals in SS 304, Alfa Laval make. • Steam trap, float type, Forbes Marshall make with bypass valve • Centrifugal pump, all wetted parts in SS316L, SMS connections with single shaft seal with motor. 	1 Set
6.	Holding tube Holding tube will be designed for the specified holding time considering the CIP cleanability and fastest particle velocity. Holding Tube is spirally Wound by pipe bending machine & duly covered by SS Sheet which acts as insulation. Holding tube will be made up of SS304 pipes and Alfa Laval fittings to match the internal surfaces get the best hygienic construction.	

7.	Control panel <ul style="list-style-type: none"> • MOC: SS 304, Duly pre-wired and tested, & consists of the following Instruments and Controls: • Temperature Indicating Controller, • Alarm/Hooter with 'reset' switch to announce diversion of milk • Manual/Auto switch for operating flow diversion valve. • Start/stop push buttons with indicating lamps for process pump (milk pump, hot water pump etc.) & motors (contactors not included) • 1 No ON/OFF lockable switch with indicating lamp for incoming supply from 'Mains'. 	1 No
8.	Automatic Flow diversion Valve Imported Unique Single Seat Valve, Alfa Laval make, with wetted parts in SS 316, EPDM seat.	1 No
9.	Manual diversion valve at the Outlet of Pasteuriser Butterfly valve, Alfa Laval make for re-circulation during production and CIP and sanitation.	2 Nos
10.	Bypass arrangement for homogenizer Set of manual butterfly valves to bypass homogenizer.	1 set
11.	Temperature sensors	1 Set
12.	Pasteurization temp paperless recorder Jumo make 2 Pen paperless recorder	1 No
13.	Interconnecting pipes and fittings within Module All pipes are of SS304 and fittings are of Alfa Laval make to make the internal welding surfaces smooth and hygienic.	1 Lot
14.	Technical documentations Technical documentation consists of following: Equipment Layout drawings Flowchart Instruction Manual Technical manual Heat exchanger plattage drawing	1 set

Note : All the above components will be installed on **SS 304 SKID FRAME** in compact aesthetic modular construction except PHE pasteuriser.

Section I is closest to the frame plate.

Duty 1: **4-90-4**

Section	Flowrate(kg /h)	Media	Temperature progr.(°C)	dP(kPa)
I	2060	16.5% Whole milk	82 -> 90	14
	3000	Hot Water	87 <- 92	32
II	2060	16.5% Whole milk	61 -> 82	14
	2060	16.5% Whole milk	69 <- 90	14
III	2060	16.5% Whole milk	4 -> 61	36
	2060	16.5% Whole milk	12 <- 69	35
IV	6000	Ice Water	1.5 -> 4	122
	2060	16.5% Whole milk	4 <- 13	17

Duty 2: 4-90-45

Section	Flowrate(kg /h)	Media	Temperature progr.(°C)	dP(kPa)
I	2060	16.5% Whole milk	82 -> 90	14
	3000	Hot Water	87 <- 92	32
II	2060	16.5% Whole milk	61 -> 82	14
	2060	16.5% Whole milk	69 <- 90	14
III	2060	16.5% Whole milk	4 -> 61	36
	2060	16.5% Whole milk	12 <- 69	35
IV	1000	Hot Water	87 -> 23	4
	2060	16.5% Whole milk	45 <- 12	16

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All	80	ALLOY 316	0.50 mm	NBRP
Frame				
PV Code	Connection standard	Lengths		Accessories included
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 900 mm LT: 780 mm Total length: 990 mm Plate pack: 493 mm Net weight: 235 kg		Feet: LOW ADJ.
Max. working pressure: 10 bar		Test pressure: 13.0 bar		Design temp.: 120 °C

CIP Flow: 2500 LPH (25mm line size is considered)

CIP pressure drop : 185 kPa

TETRA PAK MILK RECHILLING-LOCAL UNIT, P5000

SPECIFICATIONS & SCOPE OF SUPPLY

Basis Of Design:

Product	Tetra Plex MS6-KSR
Capacity	5000 LPH
Temp Program	8-3 degc

Section I is closest to the frame plate.

Section	Flowrate(kg /h)	Media	Temperature progr.(°C)	dP(kPa)
I	5150	16.5% Whole milk	8 -> 3	78
	7000	Ice Water	5 < 1.5	131

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All				
				NBRP
Frame				
PV Code	Connection standard	Lengths	Accessories included	
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 750 mm LT: 630 mm Total length: 840 mm Plate pack: 92 mm Net weight: 128 kg	Feet: LOW ADJ.	
Max. working pressure: 10 bar		Test pressure: 13.0 bar	Design temp.: 120 °C	

CIP Flow : 5500 LPH (38mm Line size is considered)

CIP Pressure Drop : 81 kPa

TETRA PAK MILK CHILLING LOCAL UNIT, P10000**SPECIFICATIONS & SCOPE OF SUPPLY****Basis Of Design:**

Product	Tetra Plex MS6-KSR		
Capacity	10000 LPH		
Temp Program	35-4 degc		

Section I is closest to the frame plate.

Section	Flowrate(kg /h)	Media	Temperature progr.(°C)	dP(kPa)
I	10300	16.5% Whole milk	35 -> 4	31
	25000	Ice Water	13 <- 1.5	157

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All	81	ALLOY 316	0.50 mm	NBRP
Frame				
PV Code	Connection standard	Lengths		Accessories included
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 750 mm LT: 630 mm Total length: 840 mm Plate pack: 288 mm Net weight: 173 kg		Feet: LOW ADJ.
Max. working pressure: 10 bar		Test pressure: 13.0 bar		Design temp.: 120 °C

CIP Flow: 11000 LPH

CIP Pressure Drop : 31 kPa

TETRA PAK BUTTER MILK CHILLING LOCAL UNIT, P2000

SPECIFICATIONS & SCOPE OF SUPPLY

Basis Of Design:

Product	Tetra Plex MS6-KSR
Capacity	2000 LPH
Temp Program	35-4 degc

Section I is closest to the frame plate.

Section	Flowrate(kg /h)	Media	Temperature progr.(°C)	dP(kPa)
I	2240	Butter milk #5248	35 -> 4	51
	4000	Ice Water	16 <- 1.5	144

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All	25	ALLOY 316	0.50 mm	NBRP
Frame				
PV Code	Connection standard	Lengths	Accessories included	
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 600 mm LT: 480 mm Total length: 690 mm Plate pack: 92 mm Net weight: 124 kg	Feet: LOW ADJ.	
Max. working pressure: 10 bar		Test pressure: 13.0 bar	Design temp.: 120 °C	

CIP Flow : 2500 LPH (25 mm Line size is considered)

CIP Pressure Drop: 57 kPa

SPECIFICATIONS & SCOPE OF SUPPLY

TETRA PAK CURD MILK HEATING LOCAL UNIT, P2000

Basis Of Design:

Product	Tetra Plex MS6-KSR
Capacity	2000 LPH
Temp Program	4-45 degc

Section I is closest to the frame plate.

Section	Flowrate(kg /h)	Media	Temperature progr.(°C)	dP(kPa)
I	2060	16.5% Whole milk	4 -> 45	40
	3000	Hot Water	22 <- 48	82

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All	25	ALLOY 316	0.50 mm	NBRP
Frame				
PV Code	Connection standard	Lengths		Accessories included
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 450 mm LT: 330 mm Total length: 540 mm Plate pack: 92 mm Net weight: 121 kg		Feet: LOW ADJ.
Max. working pressure: 10 bar		Test pressure: 13.0 bar		Design temp.: 120 °C

CIP Flow: 2500 LPH (25mm Line size is considered)

CIP Pressure Drop: 58 kPa

SPECIFICATIONS & SCOPE OF SUPPLY

TETRA PAK MILK CHILLING UNIT, P5000

Basis Of Design:

Product	Tetra Plex MS6-KSR
Capacity	5000 LPH
Temp Program	35-4 degc

Type of PHE MS6 KSR

Section I is closest to the frame plate.

Section	Flowrate(kg/h)	Media	Temperature progr.(°C)	dP(kPa)
I	5150	16.5% Whole milk	35 -> 4	30
	12500	Ice Water	13 <- 1.5	151

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All	41	ALLOY 316	0.50 mm	NBRP
Frame				
PV Code	Connection standard	Lengths	Accessories included	
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 600 mm LT: 480 mm Total length: 690 mm Plate pack: 148 mm Net weight: 137 kg	Feet: LOW ADJ.	
Max. working pressure: 10 bar		Test pressure: 13.0 bar	Design temp.: 120 °C	

CIP Flow: 5500 LPH

CIP Pressure Drop: 30kPa

SPECIFICATIONS & SCOPE OF SUPPLY

TETRA PAK RECONSTITUTED MILK COOLING UNIT, P2000

Basis Of Design:

Product	Tetra Plex MS6-KSR
Capacity	2000 LPH
Temp Program	50-4 degc

Section I is closest to the frame plate.

Section	Flowrate(kg/h)	Media	Temperature progr.(°C)	dP(kPa)
I	2100	25.0% Whole milk	50 -> 4	32
	5000	Ice Water	18 <- 1.5	144

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All	31	ALLOY 316	0.50 mm	NBRP
Frame				
PV Code	Connection standard	Lengths	Accessories included	
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 600 mm LT: 480 mm Total length: 690 mm Plate pack: 113 mm Net weight: 129 kg	Feet: LOW ADJ.	
Max. working pressure: 10 bar		Test pressure: 13.0 bar	Design temp.:	
120 °C				

CIP Flow: 2500LPH

CIP Pressure Drop: 37 kPa

BATTERY LIMITS AND EXCLUSIONS

1. All civil works, including landscaping, building architectural work plastering, masonry work, insert plates foundations & drainage etc. will be in purchaser's scope.
2. All consumables, & raw material and packaging material etc., will be in purchaser's scope. Product piping to/from module shall be in Purchaser's scope.
3. 3 phase + neutral, 415 V, 50 Hz. LT power, including earthing, shall be provided by purchaser at motor terminals and control panel on the feed Module. MCC , Starters for Motors and control cables between MCC and control panel shall be arranged by Purchaser.
4. Steam, Process water, Air, chilled water in required quality (see below specification), quantity, temp. and pressure shall be made available at connection nozzles in the Module by the purchaser. All the necessary utility generation equipment and to & fro piping including headers, necessary isolation valves shall be arranged by purchaser.
5. Plant & administrative lighting, exhaust fans, ventilation etc. will be in purchaser's scope.
6. Effluent treatment plant shall be provided by the customer.
7. All structural and working platforms excluded from our scope.
8. Any other item not specifically mentioned in our scope of supply will be provided by the purchaser.

PRICE AND COMMERCIAL TERMS

Sr.No.	Name of item/items	N	Selling Price Ex WorkUnpacked Final discounted
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1.	Supply of 1N Tetra Pak Milk Pasteurisation Module, MP-5000A with Duplex Filter and 2 Pen Paperless Temp Recorder	1	INR 2,350,000/-
2.	Supply of 1 N Tetra Pak Deareation System Model DC 750 Cap-5000lph.	1	INR 3,550,000/-
3.	Supply of 1 N Curd Milk Pasteuriser Cap-2klph with 6 minutes Holding	1	INR 3,000,000/-
4.	Supply of 1 N Milk Rechiller Cap-5klph	2	INR 330,000/-
5.	Supply of 1 N Milk Chiller Cap-10klph	1	INR 240,000/-
6.	Supply of 1 N Curd Milk HeaterCap-2000lph	1	INR 165,000/-
7.	Supply of 1 N Butter Milk Chiller Cap-2000lph	1	INR 165,000/-
8.	Supply of 1 N RC Chiller Cap-2000lph	1	INR 170,000/-
9.	Supply of 1 N Milk Chiller Cap-5klph	1	INR 185,000/-
.	Commissioning Charges for item No 1,2and 3 Included	1	Included.

1	For Supply (Local): The above price is on Ex works unpacked Pune basis worked out after taking the modvat benefit on the raw material. This price excludes Packing & Forwarding, Transit insurance, GST, freight and octroi. Taxes, Duties and Other Levies on local equipment: 2% Packing & Forwarding,
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	<p>0.075% Transit Insurance, 18% GST, Freight at actuals. 18% GST will be applicable on the commissioning charges.</p> <p>Any variation in govt. taxes and duties will be to the customer's account</p>
2	<p>Payment Terms: 40% advance along with techno-commercially clear order and balance with all taxes and duties against Proforma Invoice before dispatch.</p>
3	<p>Delivery : 18-20 weeks. Delivery schedule is considered from the date of confirmed order with advance</p>
4	<p>Validity : This quotation is valid for 30 days from date of this quotation and thereafter subject to our written confirmation.</p>
5	<p>Warranty : The equipment is guaranteed for good workmanship and faulty material from 12 months from the date of delivery. Guarantee does not include normal wear and tear in parts like rubber and seals.</p>
6	<p>Force Majeure Our offer is subject to standard Force Majeure Clause</p>
7	<p>Escalation: Any increase in price due to changes in Government levies like taxes, duties and octroi etc will charged extra at actual at the time of dispatch.</p>
8	<p>Reservation: Tetra Pak reserves the right to make changes to specification of components due to Technological advances.</p>
9	<p>General Terms and Conditions: Our general terms and conditions for Equipment Sale forms a part of this quotation</p>

For Tetra Pak India Private Limited



Arun Tandon
Manager Sales KC & Module(North)

General Conditions of Product Sales

1. Scope of Supply

- 1.1 Seller shall supply the items of equipment, including, if applicable, software products, as specified in the Quotation ("Equipment") and fully comply with its responsibilities as outlined in the Quotation, including these General Conditions of Product Sales, in a timely and professional manner.

2. Purchaser's Responsibilities

- 2.1 Purchaser shall, at its own cost and expense, fully comply with its responsibilities as outlined in the Quotation, including these General Conditions of Product Sales, in a timely and professional manner.
- 2.2 Purchaser shall provide all ancillary installations, including but not limited to electricity and utility connections, and ensure that the conditions necessary for the installation and the testing procedures of the Equipment are fulfilled, to the extent not performed by Seller according to the Quotation. Purchaser shall also assume responsibility for the delivery, quality and installation of any equipment not supplied by Seller.
- 2.3 Purchaser shall provide all utilities, raw materials, facilities, labour and services which are necessary for the installation and testing procedures of the Equipment, to the extent not supplied by Seller according to the Quotation. Purchaser shall always give Seller unhindered access to the site.
- 2.4 Purchaser shall obtain all necessary licences, permits and approvals for the delivery, installation and testing procedures of the Equipment.
- 2.5 At the successful completion of each appropriate phase of the installation, completion and testing procedures, irrespective of minor deficiencies, Purchaser shall execute the certificates called for herein. Purchaser shall, if requested by Seller, execute a certificate for each relevant section when completed rather than the Equipment as a whole.

3. Price and Payment Terms

- 3.1 Purchaser shall pay Seller the purchase price of the Equipment ("Price") in accordance with the payment schedule.
- 3.2 The Price is exclusive of all taxes, duties and other charges or fees and any such impositions shall be paid by Purchaser.
- 3.3 The Price shall be put at Seller's free disposal in the country of Seller's principal place of business without any set-offs or deduction on account of counter-claims.
- 3.4 In the event Purchaser does not strictly comply with the terms of payment set out in the Quotation or herein, Seller

may, in addition to any other remedies available to Seller, suspend all performance until Purchaser has so complied.

- 3.5 In case of delayed payment, Purchaser shall pay Seller interest on the amount delayed at the rate specified in the Quotation or if no such rate is specified @ 18% per annum

4. Delivery

- 4.1 Delivery terms (including insurance premiums and freight) shall be in accordance with the terms specified in the Quotation. If no terms are specified, delivery of the Equipment shall be Ex Works (Incoterms 2000).
- 4.2 Regardless of the delivery terms specified, Seller shall have a lien on the Equipment until full payment has been made.
- 4.3 Purchaser shall be entitled to inspect the Equipment before delivery. Purchaser shall give Seller at least fifteen (15) days notice of its desire to inspect the Equipment. Purchaser shall bear all costs and expenses of such inspection.
- 4.4 In the event the delivery of the Equipment cannot be affected for non-payment of price by the Purchaser or for any reason attributable to Purchaser, the Seller shall charge a holding charge @ 2% of the value of goods per month or part thereof from the date the Equipment is ready for dispatch.

5. Completed Installation

- 5.1 If Seller has undertaken to carry out the mechanical installation of the Equipment and, to the extent applicable, other ancillary installations, the provisions of this clause shall apply. Otherwise this clause shall not form part of Seller's responsibilities.
- 5.2 As soon as Seller is of the opinion that the Equipment or any appropriate section thereof has been substantially installed and ready to perform its intended mechanical function Seller shall notify Purchaser. This notification will contain the programme of such demonstration and define which section(s) Seller proposes to demonstrate.
- 5.3 Upon the satisfactory completion of the demonstration Purchaser shall sign a Completed Installation certificate. The appearance of any defect, which does not unduly hinder the use of the Equipment for its intended mechanical function shall not obstruct the issue of the Completed Installation certificate. Seller shall be obliged to remedy any such outstanding item without undue delay.

- 5.4 Seller shall not be obliged to repeat any demonstration that has already been successfully completed. Seller shall be entitled to schedule repeat demonstrations under the same terms and conditions as the first if any defect or fault appear, which prevent the signing of the Completed Installation certificate.

6. Commissioning Tests

- 6.1 If Seller has undertaken to assist in the start-up and testing of the Equipment and to demonstrate that the Equipment serves its basic intended purpose, as specified by the commissioning criteria set out in the Quotation ("Commissioning Tests"), the provisions of this clause shall

- apply. Otherwise this clause shall not form part of Seller's responsibilities.
- 6.2 Purchaser shall carry out the Commissioning Tests under the supervision of Seller and in accordance with the instructions given by Seller. Seller shall, however, not be liable for any damage or loss except for direct physical damage to the Equipment incurred as a direct consequence of Seller's negligence.
- 6.3 As soon as Seller is of the opinion that the Equipment or any appropriate section thereof fulfils its basic intended purpose Seller shall notify Purchaser. This notification will contain the programme of the Commissioning Tests and define which section(s) Seller proposes to demonstrate.
- 6.4 Upon the satisfactory completion of the demonstration Purchaser shall sign a Commissioning Test certificate. The appearance of any defect, which does not unduly hinder the operation of the Equipment for its basic intended purpose shall not obstruct the issue of the Commissioning Test certificate. Seller shall be obliged to remedy any such outstanding item without undue delay.
- 6.5 Seller shall not be obliged to repeat any demonstration that has already been successfully completed. Seller shall be entitled to schedule repeat demonstrations under the same terms and conditions as the first if any defect or fault appear, which prevent the signing of the Commissioning Test certificate.
- 6.6 The use and operation of the Equipment shall be under Seller's control until the Commissioning Test certificate has been issued. If Purchaser takes control of the Equipment or takes an action, which is in conflict with Seller's decision, the Equipment will immediately be deemed as accepted by Purchaser and a Commissioning Test certificate shall be deemed to have been signed.
- ## 7. Performance Tests
- 7.1 If Seller has specified certain performance criteria for the Equipment determinable by performance tests during commercial operation, or if deemed appropriate by Seller in connection with the Commissioning Tests ("Performance Tests"), the provisions of this clause shall apply. Otherwise this clause shall not form part of Seller's responsibilities.
- 7.2 Purchaser shall carry out the Performance Tests under the supervision of Seller and in accordance with the instructions given by Seller. Seller shall, however, not be liable for any damage or loss except for direct physical damage to the Equipment incurred as a direct consequence of Seller's negligence.
- 7.3 As soon as Seller is of the opinion that the Equipment or any appropriate section thereof fulfils its specified performance criteria Seller shall notify Purchaser. This notification will contain the programme of the Performance Tests and define which section(s) Seller proposes to demonstrate.
- 7.4 Upon the satisfactory completion of the demonstration, Purchaser shall sign a Performance Test certificate.
- 7.5 Seller shall not be obliged to repeat any demonstration that has already been successfully completed. Seller shall be entitled to schedule repeat demonstrations under the same terms and conditions as the first if the specified performance criteria cannot be attained.
- ## 8. Non-fulfilment of Delivery, Installation, Commissioning and Performance Tests
- 8.1 Seller expects to deliver, install and commission the Equipment within a reasonable period of time after the acceptance of Seller's Quotation by Purchaser.
- 8.2 If Seller fails, through Seller's sole fault, to deliver, install or commission (as the case may be) the Equipment within twenty (20) weeks after the date specified in the Quotation in spite of repeated attempts and despite demonstration that Purchaser has fulfilled all its relevant obligation, Purchaser is entitled to put that section of the Equipment at the disposal of Seller against a refund of the Price attributable to such section.
- 8.3 If Seller fails, through Seller's sole fault, to attain the specified performance criteria within twenty (20) weeks after the date specified in the Quotation in spite of repeated attempts and despite demonstration that Purchaser has fulfilled all its relevant obligation, Purchaser is entitled to a reduction of the Price. Such reduction shall be in the same proportion as the shortfall in performance, subject to a maximum reduction of five (5) percent of the Price attributable to such section. If actual performance is less than ninety (90) percent Purchaser may instead of the five (5) percent price reduction put that section of the Equipment at the disposal of Seller against a refund of the Price attributable to such section.
- 8.4 If Seller is unable to supply/ install/ commission the Equipment, as set forth in clauses 4-7, through the fault of Purchaser, Purchaser shall nevertheless pay Seller in accordance with the payment schedule and Seller shall, in addition to any other remedies available to Seller, be entitled to compensation for any additional costs incurred by Seller as a result thereof.
- ## 9. Equipment Warranty
- 9.1 Seller shall remedy any defect in the Equipment resulting from Seller's faulty materials or workmanship. Seller's liability is limited to defects which appear within a period of one year after the end of the Commissioning Tests or eighteen (18) months from delivery of the Equipment, whichever occurs first. Provided, however, when the Equipment is ready for dispatch and has not been delivered by Seller due to reasons attributable to Purchaser, the period of warranty shall commence from the date the Equipment is ready for dispatch. When a defect in a part of the Equipment has been remedied, Seller shall be liable for defects in the repaired or replaced part under the same terms and conditions as those applicable to the original part.

Equipment for a period of one (1) year but no longer than two (2) years from the delivery of the original Equipment.

- 9.2 Seller shall, at its option, repair, modify, replace or refund the portion of the Price attributable to any part of the Equipment found to be defective during the period specified above. Purchaser must notify Seller in writing of the claimed defect promptly after the appearance thereof. The notice shall contain a description of the defect.
- 9.3 Seller is obliged to carry out dismantling and re-installation of the affected part of the Equipment if this is necessary and requires special knowledge. If such special knowledge is not required, Seller has fulfilled its obligations in respect of the defect when a duly repaired or replaced part has been delivered to Purchaser. Purchaser shall arrange for any dismantling and reassembling of equipment not supplied by Seller to the extent that this is necessary to remedy the defect. Purchaser shall bear any additional costs, which Seller incurs for repair, dismantling, installation and transport as a result of the Equipment being located in a place other than the site, as set out in the Quotation.
- 9.4 Seller shall have no responsibility for defects in the Equipment to the extent caused by (i) ordinary wear and tear, (ii) use other than as stated in the Quotation, misuse, abuse, or improper storage, installation, maintenance, use of duplicate spare parts, operation or repairs by Purchaser or by persons not under the supervision of Seller and (iii) materials provided by or use of a design stipulated or specified by Purchaser.
- 9.5 If and to the extent that Purchaser will enter into separate license agreement with third parties regarding software products supplied and/or developed by these third parties, Seller shall have no responsibility to remedy defects in the software products covered by such separate license agreement.

10. Additional Warranties

- 10.1 The Equipment will conform with norms and standards specified in the Quotation, when operated in accordance with the intended purpose as well as in compliance with Seller's manuals and instructions. However, in the event of any enactment of or change in any law or regulation after the date of the Quotation which affects the costs and expenses of Seller and/or the delivery schedule, the Price shall be correspondingly increased or decreased and/or the delivery schedule shall be reasonably adjusted.
- 10.2 The Equipment will not infringe any patent, copyright, trade secrets or other proprietary rights of any third party, when operated in accordance with the intended purpose. However, Seller is not responsible for such infringement if and to the extent caused by any use of the Equipment in association or combination with any equipment not supplied by Seller.
- 10.3 The Equipment will be free from liens or encumbrances except for Seller's retention of lien.
- 10.4 Purchaser shall give Seller notice in writing promptly if any circumstances arise which are reasonably likely to result in a claim under the additional warranties appearing under this clause 10. Purchaser shall further give Seller the

opportunity to remedy or resolve any breach and Seller shall use reasonable efforts to effect such remedies. Seller reserves the right to control any litigation that may arise therefrom. In the event Purchaser is permanently unable to use any portion of the Equipment or that Purchaser's operation thereof is unreasonably restricted, Purchaser shall have the right to return such affected portion of the Equipment against a full refund of the portion of the Price attributable thereto.

11. Product Liability

- 11.1 Seller's liability for personal injury shall be determined in accordance with the applicable law.
- 11.2 Seller shall be liable for physical damage to property other than the Equipment caused by Seller only when such damage is caused by Seller's negligence. Seller shall, however, in no event be liable for damage to or loss of raw materials or final products.
- 11.3 Purchaser shall promptly give Seller notice in writing if any circumstances arise which are reasonably likely to result in a claim against Seller under this clause 11. Seller reserves the right to control any litigation that may arise therefrom.
- 11.4 The responsibility and liability for damage to or loss of the Equipment shall be determined in accordance with clause 4, 6, 7 and 9.

12. Variation Orders

- 12.1 Purchaser may request variations to the scope of Seller's obligations. Seller shall have no obligation to accept such variation until both Seller and Purchaser have executed a variation order form.

13. Technical Data etc

- 13.1 All drawings, technical data, commercial information and the like shall remain the property of the submitting party. Such information shall not, without the consent of the other party, be used for any other purpose than that, for which they were provided or otherwise be used, copied or communicated to a third party. This clause 13 shall not apply to data and information shown to be in the public domain or lawfully brought to one party's knowledge by third parties.

14. Software

- 14.1 To the extent the Equipment contains software products, Seller grants to Purchaser a non-exclusive license to use such software products for the intended operation of the Equipment. In respect of software products developed and/or supplied to Seller by third parties Purchaser's right of use shall be limited to the extent that may follow from separate license agreements between Purchaser and such third parties. Unless otherwise specified in the Quotation or

- in separate license agreement, Purchaser's license to use the software products shall be royalty-free.
- 14.2 Seller shall not be obliged to distribute future updates and upgrades of the software products unless specified in the Quotation.
- 14.3 Seller shall not be obliged to provide Purchaser with the source code for the software products. Purchaser shall not be entitled to download, reverse engineer or compile software products and shall only be allowed to make copies of the software products for backup purposes. Purchaser shall treat the software products and any documentation relating to such software products in the same manner as drawings and technical data and the like belonging to Seller, as set forth above in clause 13.
- 14.4 If Purchaser makes changes to any software products forming part of the Equipment without Seller's consent, Seller may void any warranty affected thereby.
- ## 15. Insurance
- 15.1 Until final payment has been made, Purchaser shall insure all Equipment for which it has risk of loss against loss, damage or destruction by theft, fire, or other casualty for the full replacement value of the Equipment. Purchaser shall further maintain adequate liability insurance covering any physical damage to property and personal injury for which Seller is not responsible.
- 15.2 Seller shall maintain adequate liability insurance covering any physical damage to property (other than raw materials or final products) and personal injury for which Seller is responsible.
- ## 16. Limited liability and Indemnification
- 16.1 Purchaser's sole and exclusive remedies for delays in delivery and installation of the Equipment, defective Equipment and failure to meet any commissioning and/or performance Criteria are as stated in this Quotation. It is further acknowledged that Seller guarantees only such parameters that are specified as commissioning and/or performance criteria in the Quotation. All other figures, design criteria, technical descriptions and other information are illustrative only.
- 16.2 Seller shall not be liable for any indirect, special, consequential or incidental damages including (but not limited to) loss of profit, loss of use, loss of production or loss of or damage to raw materials or final products, whether claimed in contract, tort (including negligence) under statute or otherwise.
- 16.3 Other than as specified in the Quotation, Purchaser shall indemnify and hold Seller harmless from any damage, loss or cost due to claims from any third party.
- ## 17. Force Majeure
- 17.1 A party may suspend performance of its obligations to the extent that such performance is delayed, impeded or prevented by unforeseeable circumstances beyond its reasonable control. A party claiming to be entitled so to suspend performance shall give written notice promptly to the other party specifying the nature and expected duration of the relevant circumstances.
- 17.2 A party suspended from its obligations by reason of such circumstances must take all reasonable steps to mitigate their length and effect. Promptly after the termination of such circumstances, the party suspended from its obligations shall forthwith notify the other party in writing.
- 17.3 If such circumstances shall continue for more than six (6) months, either party may terminate all such non-performed obligations, which are subject to suspension upon written notice to the other party.
- ## 18. Cancellation of Order:
- 18.1 The order once placed by the Purchaser shall not be allowed to be cancelled except agreed by Seller in exceptional cases. In the event Seller agrees for such cancellation, Purchaser shall be liable to pay to Seller all expenses incurred or committed or liable prior to the date of notice of cancellation subject however, due credit shall be given to the resale value, if any, for the items of equipment/component procured. The Seller also reserve the right to recover all additional cost, expenses which it may incur in disposing the equipment/ components as well as pro-rata profit on the part of order already executed.
- ## 19. Miscellaneous
- 19.1 Neither party shall assign any benefit or obligation hereunder without the prior written consent of the other party. However, Seller may assign the benefits and/or obligations hereunder to an affiliated or associated company within the Tetra Laval group without the prior consent of Purchaser, provided, that Seller shall remain responsible for the proper fulfilment of all of its duties as agreed.
- 19.2 The action or failure to act by Seller or Purchaser to enforce any one or all of the rights granted to either party shall not act as a waiver of that right nor be deemed to constitute acceptance of a breach of any of the provisions of the applicable document.
- 19.3 If there are any opposing or contradictory conditions or terms in any documents forming part of the Quotation, the specific term or condition shall be given precedence over the general.
- 19.4 The provisions of these General Conditions of Product Sales and the other documents forming part of the Quotation constitute the entire agreement of the parties and supersede all prior or simultaneous statements, promises, negotiations or the like. Consequently, no other terms and conditions, including without limitation any terms and conditions referred to by Purchaser, shall apply.
- 19.5 No change to or alteration of any document forming part of the Quotation may be made without the written agreement of both parties.
- 19.6 Unless otherwise agreed in writing, the Quotation shall remain open and valid for a period of ninety (90) days after

the date thereof, and shall thereafter become null and void if not extended by Seller in writing.

20. Disputes

- 20.1 These General Conditions of Product Sales and other documents comprising the agreement between Seller and Purchaser shall be governed by the Indian law in which Seller's principal place of business is located and the courts of that country and/or state shall have exclusive jurisdiction.
- 20.2 Any controversy or claim arising out of or relating to these General Conditions of Plant Sales and other documents comprising the agreement between Seller and Purchaser or the breach thereof, shall be referred to arbitration of a single arbitrator to be appointed by the Institute of Arbitration & Mediation (Institute), a Public Limited Company registered under Section 25 the Companies Act 1956 and having its Registered Office at 102, Corporate Plaza, 106 A Senapati Bapat Road, Shivaji Nagar, Pune 411 016. The said Arbitration shall be governed by the Rules of Arbitration of the Institute and be subject to the provisions of Arbitration and Conciliation Act, 1996. The venue of Arbitration shall be at Pune and only the courts at Pune shall be entitled to exercise jurisdiction in respect therewith.
- 20.3 Any arbitration award made in such arbitration proceeding shall be final and binding on both the parties hereto and shall be enforceable in any Court having jurisdiction over the matter.
- 20.4 During the course of arbitration proceedings both the parties hereto shall continue to execute their respective obligations hereunder.
- 20.5 The cost of arbitration shall be borne by the parties in equal proportion or as determined in the Award.

QUOTATION

M/S. Singhania Milk Products Private Limited Sitapur Uttar Pradesh India Ph.No. : 9415706960 Email : milksinghania@gmail.com	Quotation No. : Q11119 Quotation Date : 10/10/2023 Revision No. : 02 Revision Date : 24/11/2023 Ref. Date : 09/10/2023
Your Ref. : website Kind Attn. : Pulkit Singhania Contact No. : 9415706960 Email Id : milksinghania@gmail.com	

Dear Sir,

This refers to your enquiry regarding your requirement ,we are pleased to submit our quotation as per your requirement.

1 Hydraulic Goods Cum Passenger Lift

- BRAND	: FIPL
- Model Number	: FIPL-171-B
- Capacity (kg)	: 1.5 Ton
- Type	: Dual Cylinder Type
- Cylinder	: As per Requirement
- Platform Size	: 2500 x 2500 mm
- Travel	: G+2
- Well size	: As per Drawing
- Travel height	: 25 ft
- Pit Depth	: 1500mm
- Over Head Space	: 4500 mm
- Stops &Openings	: 3 Stop 4 Opening / 2stop 3 opening / 1stop 2 opening
- Power Supply	: 230 Volts, Single Phase, 50 Cycles
- Control	: Collective Micro process
- Operation	: Attendant Mode
- Cabin (If Required Cost Extra)	: M.S. POWDER COATED CABIN
- Entrance Door	: M.S. MANUAL COLLAPSIBLE DOOR
- Guide	: For Car T Sections Machined. (89 X 62 X 13)
- Details	: Indirect Acting Cylinder Single Acting Up stroking Cylinder M.S Cold Drawn hollow round seamless pipe and its material code is - ST-52 with hard chrome plating at 25 microns ,100 bar of pressure rating capacity. Cylinder is built with imported P.U (poly urethane) - "U" Cup oil sealing design for special hydraulic elevator piston and cylinder.

Page 1 of 3

QUOTATION

M/S. Singhania Milk Products Private Limited	Quotation No. : Q11119	Rev : 02
- Power Pack & Accessory (Regular)	: AC Power Pack with three phase induction motor, Gear Pump, Cartridge solenoid valve, Pressure relief valve, Flow control valve, Check valve, Suction filter with hydraulic hose pipe and fittings	
- Power Pack (Optional / More Safety)	: "Blain Make EV 100- 1.1/2" Connection	
- Safety	: Hose Rupture Valve, Blain Valve, Speed Adjustment, Mechanically and Electrically Safest Hydraulic Goods Lift.	
- Note	: There may be any specification/dimensional change. If these specifications are critical, the proposed application should be discussed.	
- Technical	: Door: 1 Nos in cabin, 3 Nos on Landing	

2 Installation and Erection charges

Price Details					
No. Item Details	UOM	Quantity	Rate	Amount (INR)	
1 Hydraulic Goods Cum Passenger Lift FIPL-171-B Goods Cum Passenger Lift C: 1500kg, P: 2500x2500 Level: G+M+1 H: 25 Feet ,Pit size: 3300mm x 2800mm	Nos	1.00	1600000.00	1600000.00	
2 Installation and Erection charges HSN/SAC : 998732 GST : 18.00%	Nos	1.00	110000.00	110000.00	
			Basic Amount	1710000.00	
			Sub Total	1710000.00	
			IGST(18.00%)	307800.00	
			Grand Total	2017800.00	

Amount in Words : INR Twenty Lakhs Seventeen Thousand Eight Hundred Only
Terms & Conditions :-

Prices	: The above prices quoted are ex-works our factory(Kuha Ahmedabad)
Taxes	: GST 18% applicable (HSN code 84279000)
Transportation	: Transportation charges will be in your scope. No our responsibility for transportation damages..
Packing & Forwarding	: 2%
Payments	: 50% advance along with P. O., 50% prior to dispatch against Proforma Invoice.
Delivery	: Generally Within 3-4 Weeks. On date of order will confirm delivery schedule.
Quotation Validity	: Our offer is valid for your acceptance for a period of 30 Days from the date. Thereafter, it will

Page 2 of 3

QUOTATION

M/S. Singhania Milk Products Private Limited	Quotation No. : Q11119	Rev : 02
	be subject to confirmation by us.	
Installation	: Not applicable for ready to use equipment Or Supervising installation & commissioning and Testing of Equipment shall be Extra. Man Power (if Required) ,Civil work, Welding and Drilling machine, Hydra/Forklift, required for installation is on Buyer/Client Scope.	
Load Testing	: We have the facility for load test up to 5 Ton in-house, if you need the load test at your site than you will have to arrange the load under the said crane along with respective Sling.	
Overdue Charges	: Overdue Interest & Warehousing charges If your ordered goods are not lifted after one week of delivery date mentioned in the P.O./Our order confirmation, 2% (of order value) per week will be charged being Overdue Interest & Warehousing charges	
Warranty	: (a)Warranty shall be valid for the period of 12 months (1 Year) from the date of Invoice. We hereby Warranty to replace free of cost Ex-works Our Factory (Kuha Ahmedabad) any component found defective due to bad workmanship or any Manufacturing defects only. (b) Warranty of bought out products will remain same as per main company terms. (c) No Warranty /Guarantee provided for electrical Components. (If any electrical failure occurs and due to this if any Mechanical component fails than the same shall not cover any Warranty /guarantee and the same will be supplied only on chargeable basis.)	
Cancellation	: An order once placed by the buyer cannot be cancelled without the prior consent in writing from us. In the event of our accepting the cancellation, all costs incurred by until our acceptance of cancellation will be borne by the buyer	
LD	: Liquidated Damages & Force Measure Clause We have given our delivery schedule in good faith & will try schedule. In case of delay in delivery of the Equipment concerned, we are no agreeable for payment of liquidated damages or any penalty. We are also not agreeable for any risk purchase by you. For such delays, we shall not be liable to any claim or for any compensation	
Hydraulic Oil	: Hydraulic Oil #46 or Hydraulic Oil #68 on buyer scope	

Thanks & Regards

FUTURE INDUSTRIES PVT.LTD.

DIPTI PATEL
+91 9099928360

GST No. : 24AACCF4095R1Z3
PAN No. : AACCF4095R
DOC No : QR/MKT/06

For, FUTURE INDUSTRIES PVT. LTD.

Prepared By
(Dipti Patel)

Approved By
(Dipti Patel)

ANNEXURE I

DAIRY PLANT CAPACITY - 5000 LPH							
PLANT AND MACHINERY							
S.NO	EQUIPMENT	CAPACITY	QTY	UNIT	MAKE	RATE	UNIT RATE
A	MILK RECEPTION SECTION						
1	Milk Hose Pipe With SS 304 SMS Union at both end.	2" Dla	6	Mtr	Hosex	4500.00	27000.00
2	Raw Milk Pump Centrifugal SS 304	5 KLPH	1	Nos	Zeutech	45000.00	45000.00
3	Inline Milk Strainer	STD	1	Mtr	Standard	12500.00	12500.00
4	Raw Milk Pump centrifugal SS 304	5 KLPH	1	Nos	Zeutech	45000.00	45000.00
5	Flow Meter	5 KLPH	1	Nos	E&H/Vega	155000.00	155000.00
6	Milk Storage Tank with Load Cell	15000 Ltrs	1	Nos	Sameco	1450000.00	1450000.00
	TOTAL						1734500.00
B	MILK PROCESSING SECTION						
1	Milk Transter Pump centrifugal SS 304	5 KLPH	1	Nos	Zeutech	32000.00	32000.00
2	Milk Homogeneizer	5 KLPH	1	Nos	GOMA	3200000.00	3200000.00
3	Pasteurised Milk Storage Tank with Load Cell (Vertical)	5000 Ltrs	3	Nos	Sameco	850000.00	2550000.00
7	Concentrae Milk System :-						
7.1	Concentrate Milk Pump	2 KLPH	1	Nos	Zeutech	42000.00	42000.00
7.2	Milk Concentrate Tank	2000 Ltrs	1	Nos	Sameco	310000	310000.00
8	CIP System PID Based Double Circuit	3 KL Tank	1	Set	Sameco	2500000	2500000.00
9	SS Pipe & Fittings	STD	1	Lot	std	2000000	2000000.00
	TOTAL						10634000.00
C	CREAM HANDLING SECTION						
1	Cream Balance Tank	500 Ltrs	1	Nos	Sameco	85000.00	85000.00
2	Cream Pump	2000 LPH	1	Nos	Sameco	42000.00	42000.00
3	Cream Storage Tank with Load Cell	5000 Ltrs	1	Nos	Sameco	950000.00	950000.00
4	Cream Pump	5000 Ltrs	1	Nos	Sameco	45000.00	45000.00

5	Ghee Storage Tank with Load Cell	3000 Ltrs	1	Nos	Sameco	885000.00	885000.00
	TOTAL						2007000.00
D	MILK PACKAGING SECTION						
1	Milk Pump Centrifugal SS 304	5 KLPH	2	Nos	Zeutech	45000.00	90000.00
2	Milk Storage Tank with load cell HMST	5000 Ltrs	2	Nos	Sameco	775000.00	1550000.00
3	Pouch Filling Machine (Single Head)	2500 PPH	2	Nos	Standard Packaging	750000.00	1500000.00
4	Packing Table	STD	4	Nos	Sameco	120000.00	480000.00
5	Crate Washer	1000 CPH	1	Nos	Swastik	1800000.00	1800000.00
6	Crate Conveyors for Products	500 CPH	1	Set	Swastik/Appex Engineering	1275000.00	1275000.00
7	Milk Cold Store with Freon Cooling System	7mx7mx3m	1	Set	Emerson Compressor	1500000.00	1500000.00
8	Crate Trolleys	STD	6	Nos	Sameco	25000.00	150000.00
9	Leaky Pouch Tank with Pump	1000 Ltrs	1	Nos	Sameco	285000.00	285000.00
10	Inline Filter	STD	3	Nos	std	12500.00	37500.00
11	Empty Crate Conveyor for Milk/Dahi product	std	1	Nos	Swastik/Appex Engineering	2100000.00	2100000.00
12	Filled Crate Conveyor for Milk/Dahi produ	std	1	Nos	Swastik/Appex Engineering	1550000.00	1550000.00
	TOTAL						12317500.00
E	DAHI SECTION 5000 KG/DAY						
1	Milk Storage Tank with load cell	5000 Ltrs	1	Nos	Sameco	775000.00	775000.00
2	Milk Pump	5 KLPH	1	Nos	Zeutech	45000.00	45000.00
3	Curd heating skid on ss frame with balance tank 200 ltr ,hot water	2klph	1	nos	Sameco	1250000.00	1250000.00
4	Homogeniser	2 KLPH	1	Nos	Goma	1250000	1250000.00
6	Milk Storage Tank with load cell	5000 Ltrs	1	Nos	Sameco	775000.00	775000.00
7	Milk Pump	2 KLPH	1	Nos	Zeutech	28000.00	28000.00
8	Culturing Vat with Stand	750 Ltrs	2	Nos	Sameco	150000.00	300000.00
9	Culturing Tank	500 Ltrs	1	Nos	Sameco	85000.00	85000.00

10	Cup Filling Machine	2600 CPH	1	Nos	Standard Packaging	2200000.00	2200000.00
11	Dahi Pouch Filling Machine Single Head	2500PPH	2	Nos	Standard Packaging	750000.00	1500000.00
12	SS Packing Table	STD	2	Nos	Sameco	25000	50000.00
13	Dahi Incubation	4Mx4M x3M	1	Nos	Avantika	450000	450000.00
14	Dahi Blast Cooling Room wth Freon based Refrigeration System	4Mx4Mx3M	1	Nos	Emerson Compressors	645000	645000.00
15	Dahi Cold Room	4Mx4Mx3M	1	Lot	Emerson Compressors	545000	545000.00
16	Curd cup handling trolley	150kg/trolley	8	NOS	Sameco	55000	440000.00
18	Curd matka handling trolley	150kg/trolley	8	NOS	Sameco	55000	440000.00
TOTAL							10778000.00
F	CHACH SECTION 5000 LTRS/DAY						
1	Milk Storage Tank with load cell	2500 Ltrs	1	Nos	Sameco	425000.00	425000.00
2	Milk Pump	2 KLPH	1	Nos	Zeutech	42000.00	42000.00
3	Curd Setting Tank with load cell	5000 Ltrs	1	Nos	Sameco	875000.00	875000.00
4	Pasturized water tank with load cell	3000 ltr	1	Nos	Sameco	385000.00	385000.00
5	Curd Pump	2 KLPH	1	Nos	Zeutech	42000.00	42000.00
6	Shearing Pump	2 KLPN	1	Nos	Zeutech	155000.00	155000.00
7	Chach Tank with load cell	5 KL	1	Nos	Sameco	775000.00	775000.00
TOTAL							2699000.00
G	SERVICE SECTION						
1	Refrigeration Section without compressor and Motor	for KCX-3 & KC-2	1	Set	SAMECO	5750000.00	5750000
2	Electricl Panel /Cables	STD	1	Lot	SAMECO	1800000.00	1800000
3	MS/GI Pipe & Fittings with Insulation and SS Cladding	STD	1	Lot	SAMECO	2500000.00	2500000
4	Steam Piping, Valves & Fittings	Prime/Equivalent	1	Lot	SAMECO	1500000.00	1500000
5	Air Compressor and air piping and accessories	25 HP	1	Nos	Elgi	1600000.00	1600000
6	Plastic Crates	12 Ltrs	2000	Nos	Neel Kamal	650.00	1300000

7	Lab Equipments	STD	1	Lot		1500000.00	1500000
8	RO plant	2klph/h	1	nos	reputed	525000.00	525000
	TOTAL						16475000
H	POWDER PACKING						
1	Supply of Automatic Vertical Form Fill Seal Machine (High Speed Servo Driven Auger Filler) With Auger and other accessories.	1 Kg Pouch	1	Nos	Inpack	2855000.00	2855000.00
A	MILK RECEPTION SECTION	1734500.00					
B	MILK PROCESSING SECTION	10634000.00					
C	CREAM HANDLING SYSTEM	2007000.00					
D	MILK PACKAGING SECTION	12317500.00					
E	DAHI SECTION - 5000 LPD	10778000.00					
F	CHAACH SECTION 5000 LTRS/DAY	2699000.00					
G	SERVICE SECTION	16475000					
H	POWDER POUCH PACKING	2855000					
I	ERCTION	2500000					
	TOTAL	62000000.00					
	GST @18%	11160000.00					
	GRAND TOTAL	73160000.00					

Sandeep

SAMECO ENGINEERS
 Plot No. 807 Village Bandia
 Parsakhera Ind. Area
 Bareilly U.P.-243502

ANNEXURE I

DAIRY PLANT CAPACITY - 5000 LPH							
PLANT AND MACHINERY							
S.NO	EQUIPMENT	CAPACITY	QTY	UNIT	MAKE	RATE	UNIT RATE
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2	Raw Milk Pump Centrifugal SS 304	5 KLPH	1	Nos	Zeutech	45000.00	45000.00
3	Inline Milk Strainer	STD	1	Mtr	Standard	12500.00	12500.00
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5	Flow Meter	5 KLPH	1	Nos	E&H/Vega	155000.00	155000.00
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3	Pasteurised Milk Storage Tank with Load Cell (Vertical)	5000 Ltrs	3	Nos	Sameco	850000.00	2550000.00
7	Concentrae Milk System :-						
7.1	Concentrate Milk Pump	2 KLPH	1	Nos	Zeutech	42000.00	42000.00
7.2	Milk Concentrate Tank	2000 Ltrs	1	Nos	Sameco	310000	310000.00
8	CIP System PID Based Double Circuit	3 KL Tank	1	Set	Sameco	2500000	2500000.00
9	SS Pipe & Fittings	STD	1	Lot	std	2000000	2000000.00
	TOTAL						10634000.00
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8	Crate Trolleys	STD	6	Nos	Sameco	25000.00	150000.00
9	Leaky Pouch Tank with Pump	1000 Ltrs	1	Nos	Sameco	285000.00	285000.00
10	Inline Filter	STD	3	Nos	std	12500.00	37500.00
11	Empty Crate Conveyor for Milk/Dahi product	std	1	Nos	Swastik/Appex Engineering	2100000.00	2100000.00
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F	CHACH SECTION 5000 LTRS/DAY						
1	Milk Storage Tank with load cell	2500 Ltrs	1	Nos	Sameco	425000.00	425000.00
2	Milk Pump	2 KLPH	1	Nos	Zeutech	42000.00	42000.00
3	Curd Setting Tank with load cell	5000 Ltrs	1	Nos	Sameco	875000.00	875000.00
4	Pasturized water tank with load cell	3000 ltr	1	Nos	Sameco	385000.00	385000.00
5	Curd Pump	2 KLPH	1	Nos	Zeutech	42000.00	42000.00
6	Shearing Pump	2 KLPN	1	Nos	Zeutech	155000.00	155000.00
7	Chach Tank with load cell	5 KL	1	Nos	Sameco	775000.00	775000.00
TOTAL							2699000.00
G	SERVICE SECTION						
1	Refrigeration Section without compressor and Motor	for KCX-3 & KC-2	1	Set	SAMECO	5750000.00	5750000
2	Electricl Panel /Cables	STD	1	Lot	SAMECO	1800000.00	1800000
3	MS/GI Pipe & Fittings with Insulation and SS Cladding	STD	1	Lot	SAMECO	2500000.00	2500000
4	Steam Piping, Valves & Fittings	Prime/Equivalent	1	Lot	SAMECO	1500000.00	1500000
5	Air Compressor and air piping and accessories	25 HP	1	Nos	Elgi	1600000.00	1600000
6	Plastic Crates	12 Ltrs	2000	Nos	Neel Kamal	650.00	1300000

7	Lab Equipments	STD	1	Lot		1500000.00	1500000
8	RO plant	2klph/h	1	nos	reputed	525000.00	525000
	TOTAL						16475000
H	POWDER PACKING						
1	Supply of Automatic Vertical Form Fill Seal Machine (High Speed Servo Driven Auger Filler) With Auger and other accessories.	1 Kg Pouch	1	Nos	Inpack	2855000.00	2855000.00
A	MILK RECEPTION SECTION	1734500.00					
B	MILK PROCESSING SECTION	10634000.00					
C	CREAM HANDLING SYSTEM	2007000.00					
D	MILK PACKAGING SECTION	12317500.00					
E	DAHI SECTION - 5000 LPD	10778000.00					
F	CHAACH SECTION 5000 LTRS/DAY	2699000.00					
G	SERVICE SECTION	16475000					
H	POWDER POUCH PACKING	2855000					
I	ERCTION	2500000					
	TOTAL	62000000.00					
	GST @18%	11160000.00					
	GRAND TOTAL	73160000.00					

Sandeep

SAMECO ENGINEERS
 Plot No. 807 Village Bandia
 Parsakhera Ind. Area
 Bareilly U.P.-243502

HPC GSTIN – 07GCNPS6557M1ZH



Hindustan Power Controls

(A House of 11KV to 33KV Sub-station Equipments & Spares)

Quotation

Ref No HPC/104/2023-24

Dtd 13/10/2023

M/S Singhania Milk Products Pvt Ltd

Ramnagar, Hardoi Road Distt Sitapur-261001

GSTIN : 09AAJCS5503L1Z0

Dear Sir,

We are Pleased to Submit our offer.

S.NO	DESCRIPTION	QTY (Mtr)	NETT PRICE	AMOUNT
1	Polycab /Havells Make 11KV (E) HT XLPE Cable Size – 3C*95 Sqmm	210	523.25	109882.5
2	ECKO Make 1.1KV Aluminium Armoured Cable Size - 3C*240 Sqmm	650	606.96	394524
3	ECKO Make 1.1KV Aluminium Armoured Cable Size - 3.5C*185 Sqmm	510	541.2	276012
4	ECKO Make 1.1KV Copper Armoured Cable Size - 4C*16 Sqmm	308	467.28	143922.2
5	ECKO Make 1.1KV Copper Armoured Cable Size - 4C*10 Sqmm	360	318.96	114825.6
6	3M Make 11KV(E) Heat Shrinkable Outdoor Type Jointing Kits For Cable Size – 3C*95 Sqmm	2	3220	6440
7	3M Make 11KV(E) Heat Shrinkable Indoor Type Jointing Kits For Cable Size – 3C*95 Sqmm	2	2322	4644
	TOTAL			1050250

Terms & Conditions

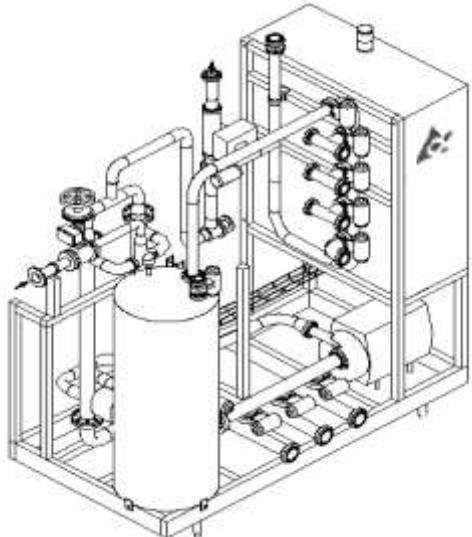
- 1) GST 18% Extra
- 2) Price is Ex-Works
- 3) Packing & Forwarding Charge Extra
- 4) Ready Stock Subject to Prior Sale
- 5) Validity of Offer Immediate
- 6) Payment 100% Before Dispatch Against Proforma Invoice

(For Hindustan Power Controls)



Singhania Milk Products Pvt. Ltd.

Quotation for: Key Components and Module



Quotation No. : 09102023/Rev 02



**Singhania Milk Products Pvt. Ltd.
Village - Ram Nagar, Hardoi Road
Sitapur - 261001 (U.P.) India**

Kind Attn.: Mr. Pulkit Singhania.

Subject : Quotation 09102023/Rev 02 dated 27.10.2023 for Key components and Modules.

Dear Sir,

This is with reference to undersign visit and had discussion with you on 15.10.2023, we are pleased to submit our revised final quotation for the duty you have specified.

Some of the Features and Values of the quoted unit which we believe will be most interest to you are:-

- Maximum Reliability
- Focus on Product Safety & Product Quality
- Quick Installation and Commissioning
- High Serviceability
- World Class Manufacturing
- Standard Components
- One single supplier
- Repeatable/Accurate production
- Lower product loss.
- Optimised utility consumption.
- Efficient CIP.
- Operator friendly.

We are pleased to bring it to your kind notice that by investing in our unit, you are assured of "Tetra Pak's Commitment to Product Life Cycle Support". We would also bring to you our knowledge and expertise in food processing systems.

This quotation consists of:

Tetra Pak Commitment to Product Life Cycle

Basis of Design

Specifications and Scope of supply

Performance Criteria

Price and Commercial Terms

General conditions of sale

We hope our offer is in line with your requirements and you will recognize the benefits of choosing Tetra Pak as your business partner when you make your decision.

We trust this offer and attached technical information is clear. Should you require any further information, please do not hesitate to contact us. We now look forward to hearing from you for further actions for Tetra Pak India Pvt. Ltd.

Arun Tandon

Manager-Sales KC & Module (North)

Tetra Pak India Pvt. Ltd. , Registered office: Plot No 53, MIDC, Chkan-Phase -II , Village Vasuli, Taluka Khed, Pune – 410501, India Telephone: +912135678101 ; Corporate Office- 15th Floor, One Horizon Centre, Golf Course Road ,DLF Phase 5, Sector-43I, Gurgaon-122002, Haryana Tel +911244124600, Fax+911244064308 Email: arun.tandon@tetrapak.com www.tetrapak.com

TETRA PAK'S COMMITMENT TO PRODUCT LIFE CYCLE SUPPORT

You are about to invest in new processing equipment and will no doubt be comparing details of product performance, availability and price. We would ask that you also take some time to consider the aspect of total life cycle support for the equipment you are about to purchase.

The need for continuous, uninterrupted production in today's food processing industry, as interruptions will often mean the cost of plant downtime will exceed the cost of capital equipment. As we see it, this need will be of increasing importance in future.

At Tetra Pak we have, over the years, built up a unique After Sales Operation which offers outstanding service.

Should you choose to purchase your equipment from Tetra Pak we will be able to offer you the following.

- Availability of spare parts 7 days a week.
- Access to 9 field based dedicated trained and well-equipped service engineers.
- Preventive maintenance agreements with services scheduled to suit your operating conditions.
- On-site diagnostic checks for all Separators, Homogenisers, Plate Heat Exchangers and complete liquid food processing plants.
- Information regarding equipment or plant optimization.
- Expertise on complete food processing systems.

Strong customer support is a philosophy within Tetra Pak and one of the cornerstones of our organization. We believe our After Sales Support and commitment to the product throughout its life cycle, will give you a competitive edge.

We hope you will recognize the benefits when you make your decision.

UTILITIES SPECIFICATION

Utilities specification: following are the guidelines for utility specifications which are to be supplied and connected by the purchaser.

Instrument air (IA)

General requirements

For consumption and pressure data, see 'Technical data'.

- Oil, invariably introduced into compressed air from oil-lubricated compressors must be removed as completely as possible. Oil is a serious pollutant, which is hard to remove from instruments.
- Water will condense within the pneumatic system in quantities varying with the humidity of the input air, the temperature before and after the compressor, or after a temperature drop in a section of the air line routed through a cold zone.
- To avoid condensation, the air must be dried to an extent determined by the lowest temperature after the drier. Air expands and cools down in orifices and nozzles inside instruments with condensation as a result.
- For this reason, the dew point of the air at the instrument inlet must be at least 10°C below the lowest ambient temperature surrounding the equipment.
- Dirt in the form of solid particles down to a size of 10 microns (0.01 mm) must be removed, for instance by means of filters or filter-equipped reducing valves.
- Position the filters so they can be seen and easily checked. The filters must be checked daily and their cartridges or inserts renewed whenever necessary.
- The air supply line must include a master shut-off valve.
- The volume of the storage (tank) for compressed air should approximately 6 times the required capacity/h.

Caution! Noncompliance with these requirements may endanger the equipment.

Characteristics:

- Oil content	max. 10 mg/l
- Water content	none
- Dew point	min. 10°C below ambient temperature
- Solid particles	max. 0.01 mm

Steam

General requirements

For consumption and pressure data, see 'Technical data'.

The steam must be of good quality and free from condensate and air.

Supply line:

- The steam supply line must be equipped with a pressure controller in order to maintain a constant feed pressure.
- Condensate traps must be provided close to the process line in order to produce dry steam.
- A master shut-off valve must be installed in the steam supply line.
- Steam pipes must be insulated as protection against personal injury.

- Before connecting the steam supply to the process line, the steam pipes must be blown clear with repeated blasts of steam, lasting 5 - 10 minutes.

Caution! Noncompliance with these requirements may endanger the equipment.

Characteristics:

- Quality	dry saturated steam
- Humidity	max. 5% condensate
- pH	8.5 - 9.2
- Carbon dioxide	max. 2ppm
- Chloride	max. 8 ppm
- Solid particles	max. 0.5 mm
- Turbidity	max. 3 ppm KMnO ₄

Water

General requirements:

- The water supply pipe must be equipped with a master shut-off valve.
- The supply pressure must be constant.
- For consumption and pressure data, see 'Technical data'.
- Water used in the plant must be soft (by water softening if necessary) and clean in order to avoid deposits. Deposits due to water of inferior quality circulating in the plant can cause malfunction of vital parts.
- Water hardness
- If the water is hard (high concentration of Calcium carbonate, CaCO₃), deposits will accumulate in devices such as valves. This process is accelerated at high temperatures. Cleaning results and detergent consumption will also be affected due to hard water. These effects become more severe the harder the water.

Corrosion

In order to minimize corrosion the water should:

- have low concentrations of chlorine (Cl₂) and/or chloride ions (Cl⁻),
- be slightly alkaline. (The pH value is easily determined by means of litmus paper or a pH meter).
- Water used for cooling, product flushing, rinsing and cleaning should meet the WHO guidelines (stated below) or the European drinking water directive.

Caution! Noncompliance with these requirements may endanger the equipment.

Characteristics:

- Taste	none
- Smell	none
- Turbidity	max. 3 NTU
- Colour	max. 20 mg/l Pt
- Oxygen demand	max. 20 mg/l KMnO ₄
- Tot. dissolved solids	max. 500 mg/l
- pH	7 - 8.5
- Hardness	<10° dH max. 180 mg/l CaCO ₃
- Ammonium	trace amounts
- Ammonia	max. 0.5 mg/l NH ₄
- Iron	none
- Manganese	none
- Nitrate	max. 30 mg/l NO ₃

- Sulphate	max. 100 mg/l SO ₄
- Chlorine (M, S)	max. 0.2 mg/l Cl ₂
- Chloride (M, S)	max. 30 mg/l Cl --
- Aggressive carbon acid	max. 0 mg/l CO ₂
- Total amount of bacteria	max. 100/ml
- Total amount of 35°C coliform bacteria	max. 1/100 ml
- Total amount of 44°C coliform bacteria	max. 0/100 ml
- Copper	max. 0.05 mg/l Cu
- Zinc	max. 1.0 mg/l Zn

Feed water to steam boiler

- as stated above	
- Hardness	max. 0.1° dH
- Aluminum	max. 0.2 mg/l Al
- pH	8.5 - 9.0
Silicon acid	max. 30 mg/l

SPECIFICATIONS & SCOPE OF SUPPLY

BASIS OF DESIGN

Unit Description : TETRA PAK MILK PASTEURISATION MODULE MP5000A

Basis Of Design:

Product	: Whole Milk, 16.5%
Capacity	: 5000 LPH
Temp Program	: 4-50-72-80-4 deg C
Regen. Efficiency	: 90 %
Holding time	: 15 sec

Process Operation:

Pasteurization temperature control (by PID controller) and flow rate(by mechanical flow controller in case of milk pasteuriser) will be automatic. Flow will be diverted automatically with alarm if temp is below the past temp. Sequencing of production, sanitisation and CIP will be manual. Detergent addition in the balance tank and concentration monitoring will be manual. CIP flowrate will be approximately 1.2 times of the product flow rate.

Utilities Required (Approx):

Steam at 3 bar	: 70 kg/hr
Chilled water	: 12000 LPH (1.5 – 4 C)
Approx. Total power	: 5 kW, (3.7 kW Prod. Pump, 1.1 kW HW Pump) 415V, 3 PH, 50 Hz
Process water	: 6000 LPH during CIP
CIP flow	: 6000 LPH
Instrument Air, 6bar	: 625 NL/Hr.

Utilities specification: following are the guidelines for utility specifications which are to be supplied and connected by the purchaser.

Instrument air (IA)

General requirements

For consumption and pressure data, see 'Technical data'.

- Oil, invariably introduced into compressed air from oil-lubricated compressors must be removed as completely as possible. Oil is a serious pollutant, which is hard to remove from instruments.
- Water will condense within the pneumatic system in quantities varying with the humidity of the input air, the temperature before and after the compressor, or after a temperature drop in a section of the air line routed through a cold zone.
- To avoid condensation, the air must be dried to an extent determined by the lowest temperature after the drier. Air expands and cools down in orifices and nozzles inside instruments with condensation as a result.

- For this reason, the dew point of the air at the instrument inlet must be at least 10°C below the lowest ambient temperature surrounding the equipment.
- Dirt in the form of solid particles down to a size of 10 microns (0.01 mm) must be removed, for instance by means of filters or filter-equipped reducing valves.
- Position the filters so they can be seen and easily checked. The filters must be checked daily and their cartridges or inserts renewed whenever necessary.
- The air supply line must include a master shut-off valve.
- The volume of the storage (tank) for compressed air should approximately 6 times the required capacity/h.

Caution! Noncompliance with these requirements may endanger the equipment.

Characteristics:

- Oil content	max. 10 mg/l
- Water content	none
- Dew point	min. 10°C below ambient temperature
- Solid particles	max. 0.01 mm

Steam

General requirements

For consumption and pressure data, see 'Technical data'.

The steam must be of good quality and free from condensate and air.

Supply line:

- The steam supply line must be equipped with a pressure controller in order to maintain a constant feed pressure.
- Condensate traps must be provided close to the process line in order to produce dry steam.
- A master shut-off valve must be installed in the steam supply line.
- Steam pipes must be insulated as protection against personal injury.
- Before connecting the steam supply to the process line, the steam pipes must be blown clear with repeated blasts of steam, lasting 5 - 10 minutes.

Caution! Noncompliance with these requirements may endanger the equipment.

Characteristics:

- Quality	dry saturated steam
- Humidity	max. 5% condensate
- pH	8.5 - 9.2
- Carbon dioxide	max. 2ppm
- Chloride	max. 8 ppm
- Solid particles	max. 0.5 mm
- Turbidity	max. 3 ppm KMnO ₄

Water

General requirements:

- The water supply pipe must be equipped with a master shut-off valve.
- The supply pressure must be constant.
- For consumption and pressure data, see 'Technical data'.

- Water used in the plant must be soft (by watersoftening if necessary) and clean in order to avoid deposits. Deposits due to water of inferior quality circulating in the plant can cause malfunction of vital parts.
- Water hardness
- If the water is hard (high concentration of Calcium carbonate, CaCO_3), deposits will accumulate in devices such as valves. This process is accelerated at high temperatures. Cleaning results and detergent consumption will also be affected due to hard water. These effects become more severe the harder the water.

Corrosion

In order to minimize corrosion the water should:

- have low concentrations of chlorine (Cl_2) and/or chloride ions (Cl^-),
- be slightly alkaline. (The pH value is easily determined by means of litmus paper or a pH meter).
- Water used for cooling, product flushing, rinsing and cleaning should meet the WHO guidelines (stated below) or the European drinking water directive.

Caution! Noncompliance with these requirements may endanger the equipment.

Characteristics:

- Taste	none
- Smell	none
- Turbidity	max. 3 NTU
- Colour	max. 20 mg/l Pt
- Oxygen demand	max. 20 mg/l KMnO_4
- Tot. dissolved solids	max. 500 mg/l
- pH	7 - 8.5
- Hardness	<10° dH max. 180 mg/l CaCO_3
- Ammonium	trace amounts
- Ammonia	max. 0.5 mg/l NH_4
- Iron	none
- Manganese	none
- Nitrate	max. 30 mg/l NO_3
- Sulphate	max. 100 mg/l SO_4
- Chlorine (M, S)	max. 0.2 mg/l Cl_2
- Chloride (M, S)	max. 30 mg/l Cl^-
- Aggressive carbon acid	max. 0 mg/l CO_2
- Total amount of bacteria	max. 100/ml
- Total amount of 35°C coliform bacteria	max. 1/100 ml
- Total amount of 44°C coliform bacteria	max. 0/100 ml
- Copper	max. 0.05 mg/l Cu
- Zinc	max. 1.0 mg/l Zn

Feed water to steam boiler

- as stated above	
- Hardness	max. 0.1° dH
- Aluminum	max. 0.2 mg/l Al
- pH	8.5 - 9.0
- Silicon acid	max. 30 mg/l

SPECIFICATIONS & SCOPE OF SUPPLY

Sr. No	Description	Qty
1.	Balance tank Capacity, 100 L, MOC SS304, with float and top cover and three legs.	1 No
2.	Feed pump Centrifugal pump, Alfa Laval Make, all wetted parts in SS316L, SMS connections with single shaft seal with motor of Crompton make.	1 No
3.	Flow controller Mechanical flow controller, to control the product flow rate. MOC SS 304 with Unions at ends.	1 No
4.	Plate heat exchanger PHE Model : Tetra Plex MS6 KSR Frames : MS cladded with SS304 Plates : ALLOY 316/0.5 Thk Gaskets : NBR CLIP ON No of sections : Four Design temp : 110 deg C Design/test pr. : 6/8 Bar PHE Pasteuriser will be designed considering the CIP cleanability and keeping the CIP flow requirement which should be closed to the prod flow.	1 No
5.	Holding tube Holding tube will be designed for the specified holding time considering the CIP clean ability and fastest particle velocity. MOC is SS304. Holding tube will be made up of imported pipes and Alfa Laval fittings to match the internal surfaces get the best hygienic construction.	1 set
6.	New Generation Hot water system New Generation improved Hot water system will be THE based and will house an Stainless steel expansion vessel and other safety devices to take care of the volume expansion and increased pressure making the complete operational safety. It consists of the following components: <ul style="list-style-type: none">• Tetra Pak Tubular Heat Exchanger with SS316 inner tubes and SS304 outer shell.• Specially developed Stainless steel Expansion vessel, to take care of volume increase of hot water in the system,• Uniquely designed Pressure relief cum Safety Valve, to let excess water from the system and maintain required pressure,• Air vent, to vent air from the hot water system as it will disturb the Temperature control,• Pneumatically controlled Steam control valve, Sampson make with I/P converter and Air filter/pressure regulator.• Water make up valve, to initially fill the system, internals in SS 304, Legris make.• Steam trap, float type, Forbes Marshall make,	1 Set

	<ul style="list-style-type: none"> • Centrifugal pump, all wetted parts in SS316L, SMS connections with single shaft seal with motor. 	
7.	Control panel, <ul style="list-style-type: none"> • MOC: SS 304, Duly pre-wired and tested, & consists of the following Instruments and Controls: • Temperature Indicating Controller, • Alarm/Hooter with 'reset' switch to announce diversion of milk and completion of CIP cycles after pre-set timmings. • 1 No. Selector switch for selecting heating, production and CIP module. • Manual/Auto switch for operating flow diversion valve. • 11 Nos. Start/stop push buttons with indicating lamps for process pump (milk pump, hot water pump etc.) & motors • 1 No ON/OFF lockable switch with indicating lamp for incoming supply from 'Mains'. 	1 No
8.	Automatic Flow diversion Valve Imported Unique Single Seat Valve, Alfa Laval make, with wetted parts in SS 316, EPDM seat.	1 No
9.	Manual diversion valve at the Outlet of Pasteuriser Butterfly valve, Alfa Laval make for re-circulation during production and CIP and sanitation.	2 Nos
10.	Interconnecting pipes and fittings within Module All pipes are imported and fittings are Alfa Laval make to make the internal welding surfaces smooth and hygienic.	1 Lot
11.	Technical documentations Technical documentation consist of two sets of following: Equipment Layout drawings Flowchart Instruction Manual Technical manual Heat exchanger plattage drawing	2 set
	OPTIONS: included	
1b	Duplex Milk filter Model ECD 100 with butterfly valves, sampling cock and associated piping.	1 No
2a	Pasteurisation temp recorder, 2 point Jumo make. The temp recorder is micro processor based.	1 No
3a	Commissioning of module This is required for the installation checks and to start up the plant for the first time. It will be for three days (24 hrs) in one visit. Charges will be inclusive of traveling, lodging and boarding. It includes installation checks, pre-commissioning checks, maintenance training CIP& water trials, product trial, operators training and documentation i.e commissioning certificate, performance protocol,take over certificate etc. Customer to provide skill personnel and all the consumables	1 No

	required at the time of commissioning. If commissioning delays beyond specified days, customer will have to pay extra as per our service charges	
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Note : All the above components will be installed on **SS 304 SKID FRAME** in compact aesthetic modular construction except PHE pasteuriser.

PERFORMANCE CRITERIA

- Performance criteria to be attained are specified in this exhibit.
- No parameters other than those specified in this exhibit are guaranteed.

Performance criteria to be tested prior to commercial operation

Module

Performance criterion no 001

Parameter	Capacity (as specified in design basis)
Tolerance of variation	± 5%
Test point / test method / duration of test	Actual measurement at the outlet of Pasteuriser.

Module

Performance criterion no 002

Parameter	Pasteurisation Temperature (as specified in design basis)
Tolerance of variation	± 1°C
Test point / test method / duration of test	At the outlet of heating. One Test run

2 Conditions Precedent to be fulfilled by Purchaser

General requirements according to Design basis and utilities, Supply of trained operators, raw material (approved by Tetra Pak), consumables, as required by the Purchaser.

Tetra Pak Milk De-odourizer Module

BASIS OF DESIGN

Unit Description.

Tetra Pak Deaerator/ Deodorisation System

Basis of Design:

Product : Whole Milk, 16.5%
Capacity : 5 KLPH

Process Operation:

Deaeration level control will be automatically controlled with the help of the SPC valve and the differential pressure transmitter. The controls will be built into the a control panel supplied with the module

Utilities Required (Approx):

Chilled water : 5000 LPH (for Jacket cooling)
Tower water : 10000 LPH (for vapour cooling)
Electric power : 9kW, 415V, 50Hz, 3 phase
Process Water : 6000 LPH (during CIP)
CIP flow : 6000 LPH
Instrument Air, 6bar : 625 NL/Hr.

SPECIFICATIONS & SCOPE OF SUPPLY

Sr. No	Description	Qty
1.	DEARATION Vessel DC 750 Chamber and cover in stainless steel 304 construction specially rounded corners and internal sanitary finish. The bottom is in double wall construction for circulation of cooling water to avoid foaming of the product. This incorporates socket, SS spiral condenser, vacuum pump connection, chilled water inlet and outlet connection	1 No
2.	Extraction pump with VFD Centrifugal pump, Alfa Laval Make, all wetted parts in SS316L, SMS connections with single shaft seal with motor of Crompton make.	1 No
3.	Vacuum Pump Vacuum pump in cast iron construction complete with auto drain valve and directly coupled motor pump is used for extracting non-condensable gases from de-aerator vessel	1 No
4.	Level Control System Level control using Unique RV-P valve & differential Pressure transmitters to control level inside de-aerator.	1 Set
5.	PHE PHE for Vapour cooling using tower water	1 No
6.	Control Panel <ul style="list-style-type: none"> • PLC control panel for accurate control of the parameters • MOC: SS 304, Duly pre-wired and tested, & consists of the following Instruments and Controls: • Start/stop push buttons with indicating lamps for process pump & motors • 1 No ON/OFF lockable switch with indicating lamp for incoming supply from 'Mains'. 	1 No
7.	Interconnecting pipes and fittings within Module All pipes are imported and fittings are SS316 Alfa Laval make to make the internal welding surfaces smooth and hygienic.	1 Set

	Interconnecting piping to & fro from existing milk pasteurisation module is also included in scope of supply	
8.	Note: All the above components will be installed on SS 304 SKID FRAME in compact aesthetic modular construction	
9.	Technical documentations Technical documentation consist of two sets of following: Equipment Layout drawings Process and instrumentation drawing Instruction Manual Technical manual	1 No

PERFORMANCE CRITERIA

- Performance criteria to be attained are specified in this exhibit.
- No parameters other than those specified in this exhibit are guaranteed.

Performance criteria to be tested prior to commercial operation

Cream Pasteurisation Module

Performance criterion no 001

Parameter	Capacity (as specified in design basis)
Tolerance of variation	± 5%
Test point / test method / duration of test	Actual measurement at the outlet of Pasteuriser.

Cream Pasteurisation Module

Performance criterion no 002

Parameter	Pasteurisation Temperature (as specified in design basis)
Tolerance of variation	± 1°C
Test point / test method / duration of test	At the outlet of heating. One Test run

2 Conditions Precedent to be fulfilled by Purchaser

General requirements according to Design basis and utilities, Supply of trained operators, raw material (approved by Tetra Pak), consumables, as required by the Purchaser.

Commissioning Criteria for Deodorizer Module

- Please note that commissioning criteria for De-odourizer module is a subjective and qualitative criteria and it is not possible to define the performance quality parameters of final product. It is rather based on organoleptic parameters, quality of raw Cream and other input conditions.
- Module would be commissioned on vacuum parameters (as standard literature) and related temperature difference achieved for Cream applications. The parameters would be set during the commissioning based on the best available lab report (based on Organoleptic test) for final product.

Unit Description :

TETRA PAK CURD MILK PASTEURISATION MODULE 2000A

Basis of Design:

Product : 16.5% whole milk(Curd Milk)

Capacity : 2000 LPH

Temp Program : 4-90-4/45 for curd milk

Holding time : 360 sec

Regeneration Efficiency: 90%

Process Operation:

Pasteurization temperature control (by PID controller) will be automatic and flow rate by manual control valve. Flow will be diverted automatically with alarm if temp is below the past temp. Sequencing of production, sanitisation and CIP will be manual. Detergent addition in the balance tank and concentration monitoring will be manual.

Utilities Required (Approx.):

Steam at 3 bar : 190 Kg/hr

Approx. Total power : 9 kW, 415V, 3 PH, 50 Hz

Process water : 5500 LPH during CIP

CIP flow : 5500 LPH

Instrument Air, 6bar : 625 NL/Hr.

SPECIFICATIONS & SCOPE OF SUPPLY

Sr.No	Description	Qty
1.	Balance tank Capacity, 75 L, MOC SS304, with float & half openable cover.	1 No
2.	Feed pump + Booster Pump Centrifugal pump, Alfa Laval Make, all wetted parts in SS316L, SMS connections with single shaft seal with motor of Crompton make.	1+1 No
3.	Flow controller Mechanical flow controller, to control the product flow rate. MOC SS 304 with Unions at ends.	1 No
4.	Plate heat exchanger PHE Model : Tetra Plex M Series Frames : MS cladded with SS304 Plates : ALLOY 316/0.5 Thk Gaskets : NBR CLIP ON No of sections : Four Design temp : 110 deg C Design/test pr. : 10/13 Bar PHE Pasteuriser will be designed considering the CIP cleanability and keeping the CIP flow requirement which should be closed to the prod flow.	1 No
5.	New Generation Hot water system New Generation improved Hot water system will be THE based and will house and Stainless steel expansion vessel and other safety devices to take care of the volume expansion and increased pressure making the complete operational safety. It consists of the following components: <ul style="list-style-type: none"> • Tetra Pak Tubular Heat Exchanger with SS316 inner tubes and SS304 outer shell. • Specially developed Stainless steel Expansion vessel, to take care of volume increase of hot water in the system, • Uniquely designed Pressure relief cum Safety Valve, to let excess water from the system and maintain required pressure, • Air vent, to vent air from the hot water system as it will disturb the Temperature control, • Pneumatically controlled Steam control valve, ARI Armaturen make with I/P converter and Air filter/pressure regulator. • Water make up valve, to initially fill the system, internals in SS 304, Alfa Laval make. • Steam trap, float type, Forbes Marshall make with bypass valve • Centrifugal pump, all wetted parts in SS316L, SMS connections with single shaft seal with motor. 	1 Set
6.	Holding tube Holding tube will be designed for the specified holding time considering the CIP cleanability and fastest particle velocity. Holding Tube is spirally Wound by pipe bending machine & duly covered by SS Sheet which acts as insulation. Holding tube will be made up of SS304 pipes and Alfa Laval fittings to match the internal surfaces get the best hygienic construction.	

7.	Control panel <ul style="list-style-type: none"> • MOC: SS 304, Duly pre-wired and tested, & consists of the following Instruments and Controls: • Temperature Indicating Controller, • Alarm/Hooter with 'reset' switch to announce diversion of milk • Manual/Auto switch for operating flow diversion valve. • Start/stop push buttons with indicating lamps for process pump (milk pump, hot water pump etc.) & motors (contactors not included) • 1 No ON/OFF lockable switch with indicating lamp for incoming supply from 'Mains'. 	1 No
8.	Automatic Flow diversion Valve Imported Unique Single Seat Valve, Alfa Laval make, with wetted parts in SS 316, EPDM seat.	1 No
9.	Manual diversion valve at the Outlet of Pasteuriser Butterfly valve, Alfa Laval make for re-circulation during production and CIP and sanitation.	2 Nos
10.	Bypass arrangement for homogenizer Set of manual butterfly valves to bypass homogenizer.	1 set
11.	Temperature sensors	1 Set
12.	Pasteurization temp paperless recorder Jumo make 2 Pen paperless recorder	1 No
13.	Interconnecting pipes and fittings within Module All pipes are of SS304 and fittings are of Alfa Laval make to make the internal welding surfaces smooth and hygienic.	1 Lot
14.	Technical documentations Technical documentation consists of following: Equipment Layout drawings Flowchart Instruction Manual Technical manual Heat exchanger plattage drawing	1 set

Note : All the above components will be installed on **SS 304 SKID FRAME** in compact aesthetic modular construction except PHE pasteuriser.

Section I is closest to the frame plate.

Duty 1: **4-90-4**

Section	Flowrate(kg /h)	Media	Temperature progr.(°C)	dP(kPa)
I	2060	16.5% Whole milk	82 -> 90	14
	3000	Hot Water	87 <- 92	32
II	2060	16.5% Whole milk	61 -> 82	14
	2060	16.5% Whole milk	69 <- 90	14
III	2060	16.5% Whole milk	4 -> 61	36
	2060	16.5% Whole milk	12 <- 69	35
IV	6000	Ice Water	1.5 -> 4	122
	2060	16.5% Whole milk	4 <- 13	17

Duty 2: 4-90-45

Section	Flowrate(kg /h)	Media	Temperature progr.(°C)	dP(kPa)
I	2060	16.5% Whole milk	82 -> 90	14
	3000	Hot Water	87 <- 92	32
II	2060	16.5% Whole milk	61 -> 82	14
	2060	16.5% Whole milk	69 <- 90	14
III	2060	16.5% Whole milk	4 -> 61	36
	2060	16.5% Whole milk	12 <- 69	35
IV	1000	Hot Water	87 -> 23	4
	2060	16.5% Whole milk	45 <- 12	16

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All	80	ALLOY 316	0.50 mm	NBRP
Frame				
PV Code	Connection standard	Lengths		Accessories included
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 900 mm LT: 780 mm Total length: 990 mm Plate pack: 493 mm Net weight: 235 kg		Feet: LOW ADJ.
Max. working pressure: 10 bar		Test pressure: 13.0 bar		Design temp.: 120 °C

CIP Flow: 2500 LPH (25mm line size is considered)

CIP pressure drop : 185 kPa

TETRA PAK MILK RECHILLING-LOCAL UNIT, P5000

SPECIFICATIONS & SCOPE OF SUPPLY

Basis Of Design:

Product	Tetra Plex MS6-KSR
Capacity	5000 LPH
Temp Program	8-3 degc

Section I is closest to the frame plate.

Section	Flowrate(kg /h)	Media	Temperature progr.(°C)	dP(kPa)
I	5150	16.5% Whole milk	8 -> 3	78
	7000	Ice Water	5 < 1.5	131

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All				
				NBRP
Frame				
PV Code	Connection standard	Lengths	Accessories included	
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 750 mm LT: 630 mm Total length: 840 mm Plate pack: 92 mm Net weight: 128 kg	Feet: LOW ADJ.	
Max. working pressure: 10 bar		Test pressure: 13.0 bar	Design temp.: 120 °C	

CIP Flow : 5500 LPH (38mm Line size is considered)

CIP Pressure Drop : 81 kPa

TETRA PAK MILK CHILLING LOCAL UNIT, P10000**SPECIFICATIONS & SCOPE OF SUPPLY****Basis Of Design:**

Product	Tetra Plex MS6-KSR		
Capacity	10000 LPH		
Temp Program	35-4 degc		

Section I is closest to the frame plate.

Section	Flowrate(kg /h)	Media	Temperature progr.(°C)	dP(kPa)
I	10300	16.5% Whole milk	35 -> 4	31
	25000	Ice Water	13 <- 1.5	157

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All	81	ALLOY 316	0.50 mm	NBRP
Frame				
PV Code	Connection standard	Lengths		Accessories included
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 750 mm LT: 630 mm Total length: 840 mm Plate pack: 288 mm Net weight: 173 kg		Feet: LOW ADJ.
Max. working pressure: 10 bar		Test pressure: 13.0 bar		Design temp.: 120 °C

CIP Flow: 11000 LPH

CIP Pressure Drop : 31 kPa

TETRA PAK BUTTER MILK CHILLING LOCAL UNIT, P2000

SPECIFICATIONS & SCOPE OF SUPPLY

Basis Of Design:

Product	Tetra Plex MS6-KSR
Capacity	2000 LPH
Temp Program	35-4 degc

Section I is closest to the frame plate.

Section	Flowrate(kg /h)	Media	Temperature progr.(°C)	dP(kPa)
I	2240	Butter milk #5248	35 -> 4	51
	4000	Ice Water	16 <- 1.5	144

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All	25	ALLOY 316	0.50 mm	NBRP
Frame				
PV Code	Connection standard	Lengths	Accessories included	
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 600 mm LT: 480 mm Total length: 690 mm Plate pack: 92 mm Net weight: 124 kg	Feet: LOW ADJ.	
Max. working pressure: 10 bar		Test pressure: 13.0 bar	Design temp.: 120 °C	

CIP Flow : 2500 LPH (25 mm Line size is considered)

CIP Pressure Drop: 57 kPa

SPECIFICATIONS & SCOPE OF SUPPLY

TETRA PAK CURD MILK HEATING LOCAL UNIT, P2000

Basis Of Design:

Product	Tetra Plex MS6-KSR
Capacity	2000 LPH
Temp Program	4-45 degc

Section I is closest to the frame plate.

Section	Flowrate(kg /h)	Media	Temperature progr.(°C)	dP(kPa)
I	2060	16.5% Whole milk	4 -> 45	40
	3000	Hot Water	22 <- 48	82

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All	25	ALLOY 316	0.50 mm	NBRP
Frame				
PV Code	Connection standard	Lengths		Accessories included
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 450 mm LT: 330 mm Total length: 540 mm Plate pack: 92 mm Net weight: 121 kg		Feet: LOW ADJ.
Max. working pressure: 10 bar		Test pressure: 13.0 bar		Design temp.: 120 °C

CIP Flow: 2500 LPH (25mm Line size is considered)

CIP Pressure Drop: 58 kPa

SPECIFICATIONS & SCOPE OF SUPPLY

TETRA PAK MILK CHILLING UNIT, P5000

Basis Of Design:

Product	Tetra Plex MS6-KSR
Capacity	5000 LPH
Temp Program	35-4 degc

Type of PHE MS6 KSR

Section I is closest to the frame plate.

Section	Flowrate(kg/h)	Media	Temperature progr.(°C)	dP(kPa)
I	5150	16.5% Whole milk	35 -> 4	30
	12500	Ice Water	13 <- 1.5	151

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All	41	ALLOY 316	0.50 mm	NBRP
Frame				
PV Code	Connection standard	Lengths	Accessories included	
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 600 mm LT: 480 mm Total length: 690 mm Plate pack: 148 mm Net weight: 137 kg	Feet: LOW ADJ.	
Max. working pressure: 10 bar		Test pressure: 13.0 bar	Design temp.: 120 °C	

CIP Flow: 5500 LPH

CIP Pressure Drop: 30kPa

SPECIFICATIONS & SCOPE OF SUPPLY**TETRA PAK RECONSTITUTED MILK COOLING UNIT, P2000****Basis Of Design:**

Product	Tetra Plex MS6-KSR
Capacity	2000 LPH
Temp Program	50-4 degc

Section I is closest to the frame plate.

Section	Flowrate(kg/h)	Media	Temperature progr.(°C)	dP(kPa)
I	2100	25.0% Whole milk	50 -> 4	32
	5000	Ice Water	18 <- 1.5	144

Plates (Gaskets are Clip-on if not otherwise mentioned)				
Section	Quantity	Material	Thickness	Gasket
All	31	ALLOY 316	0.50 mm	NBRP
Frame				
PV Code	Connection standard	Lengths	Accessories included	
ALS	SMS 51 <input type="checkbox"/> Other (state below):	LC: 600 mm LT: 480 mm Total length: 690 mm Plate pack: 113 mm Net weight: 129 kg	Feet: LOW ADJ.	
Max. working pressure: 10 bar		Test pressure: 13.0 bar	Design temp.:	
120 °C				

CIP Flow: 2500LPH

CIP Pressure Drop: 37 kPa

BATTERY LIMITS AND EXCLUSIONS

1. All civil works, including landscaping, building architectural work plastering, masonry work, insert plates foundations & drainage etc. will be in purchaser's scope.
2. All consumables, & raw material and packaging material etc., will be in purchaser's scope. Product piping to/from module shall be in Purchaser's scope.
3. 3 phase + neutral, 415 V, 50 Hz. LT power, including earthing, shall be provided by purchaser at motor terminals and control panel on the feed Module. MCC , Starters for Motors and control cables between MCC and control panel shall be arranged by Purchaser.
4. Steam, Process water, Air, chilled water in required quality (see below specification), quantity, temp. and pressure shall be made available at connection nozzles in the Module by the purchaser. All the necessary utility generation equipment and to & fro piping including headers, necessary isolation valves shall be arranged by purchaser.
5. Plant & administrative lighting, exhaust fans, ventilation etc. will be in purchaser's scope.
6. Effluent treatment plant shall be provided by the customer.
7. All structural and working platforms excluded from our scope.
8. Any other item not specifically mentioned in our scope of supply will be provided by the purchaser.

PRICE AND COMMERCIAL TERMS

Sr.No.	Name of item/items	N	Selling Price Ex WorkUnpacked Final discounted
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1.	Supply of 1N Tetra Pak Milk Pasteurisation Module, MP-5000A with Duplex Filter and 2 Pen Paperless Temp Recorder	1	INR 2,350,000/-
2.	Supply of 1 N Tetra Pak Deareation System Model DC 750 Cap-5000lph.	1	INR 3,550,000/-
3.	Supply of 1 N Curd Milk Pasteuriser Cap-2klph with 6 minutes Holding	1	INR 3,000,000/-
4.	Supply of 1 N Milk Rechiller Cap-5klph	2	INR 330,000/-
5.	Supply of 1 N Milk Chiller Cap-10klph	1	INR 240,000/-
6.	Supply of 1 N Curd Milk HeaterCap-2000lph	1	INR 165,000/-
7.	Supply of 1 N Butter Milk Chiller Cap-2000lph	1	INR 165,000/-
8.	Supply of 1 N RC Chiller Cap-2000lph	1	INR 170,000/-
9.	Supply of 1 N Milk Chiller Cap-5klph	1	INR 185,000/-
.	Commissioning Charges for item No 1,2and 3 Included	1	Included.

1	For Supply (Local): The above price is on Ex works unpacked Pune basis worked out after taking the modvat benefit on the raw material. This price excludes Packing & Forwarding, Transit insurance, GST, freight and octroi. Taxes, Duties and Other Levies on local equipment: 2% Packing & Forwarding,
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	<p>0.075% Transit Insurance, 18% GST, Freight at actuals. 18% GST will be applicable on the commissioning charges.</p> <p>Any variation in govt. taxes and duties will be to the customer's account</p>
2	<p>Payment Terms: 40% advance along with techno-commercially clear order and balance with all taxes and duties against Proforma Invoice before dispatch.</p>
3	<p>Delivery : 18-20 weeks. Delivery schedule is considered from the date of confirmed order with advance</p>
4	<p>Validity : This quotation is valid for 30 days from date of this quotation and thereafter subject to our written confirmation.</p>
5	<p>Warranty : The equipment is guaranteed for good workmanship and faulty material from 12 months from the date of delivery. Guarantee does not include normal wear and tear in parts like rubber and seals.</p>
6	<p>Force Majeure Our offer is subject to standard Force Majeure Clause</p>
7	<p>Escalation: Any increase in price due to changes in Government levies like taxes, duties and octroi etc will charged extra at actual at the time of dispatch.</p>
8	<p>Reservation: Tetra Pak reserves the right to make changes to specification of components due to Technological advances.</p>
9	<p>General Terms and Conditions: Our general terms and conditions for Equipment Sale forms a part of this quotation</p>

For Tetra Pak India Private Limited



Arun Tandon
Manager Sales KC & Module(North)

General Conditions of Product Sales

1. Scope of Supply

- 1.1 Seller shall supply the items of equipment, including, if applicable, software products, as specified in the Quotation ("Equipment") and fully comply with its responsibilities as outlined in the Quotation, including these General Conditions of Product Sales, in a timely and professional manner.

2. Purchaser's Responsibilities

- 2.1 Purchaser shall, at its own cost and expense, fully comply with its responsibilities as outlined in the Quotation, including these General Conditions of Product Sales, in a timely and professional manner.
- 2.2 Purchaser shall provide all ancillary installations, including but not limited to electricity and utility connections, and ensure that the conditions necessary for the installation and the testing procedures of the Equipment are fulfilled, to the extent not performed by Seller according to the Quotation. Purchaser shall also assume responsibility for the delivery, quality and installation of any equipment not supplied by Seller.
- 2.3 Purchaser shall provide all utilities, raw materials, facilities, labour and services which are necessary for the installation and testing procedures of the Equipment, to the extent not supplied by Seller according to the Quotation. Purchaser shall always give Seller unhindered access to the site.
- 2.4 Purchaser shall obtain all necessary licences, permits and approvals for the delivery, installation and testing procedures of the Equipment.
- 2.5 At the successful completion of each appropriate phase of the installation, completion and testing procedures, irrespective of minor deficiencies, Purchaser shall execute the certificates called for herein. Purchaser shall, if requested by Seller, execute a certificate for each relevant section when completed rather than the Equipment as a whole.

3. Price and Payment Terms

- 3.1 Purchaser shall pay Seller the purchase price of the Equipment ("Price") in accordance with the payment schedule.
- 3.2 The Price is exclusive of all taxes, duties and other charges or fees and any such impositions shall be paid by Purchaser.
- 3.3 The Price shall be put at Seller's free disposal in the country of Seller's principal place of business without any set-offs or deduction on account of counter-claims.
- 3.4 In the event Purchaser does not strictly comply with the terms of payment set out in the Quotation or herein, Seller

may, in addition to any other remedies available to Seller, suspend all performance until Purchaser has so complied.

- 3.5 In case of delayed payment, Purchaser shall pay Seller interest on the amount delayed at the rate specified in the Quotation or if no such rate is specified @ 18% per annum

4. Delivery

- 4.1 Delivery terms (including insurance premiums and freight) shall be in accordance with the terms specified in the Quotation. If no terms are specified, delivery of the Equipment shall be Ex Works (Incoterms 2000).
- 4.2 Regardless of the delivery terms specified, Seller shall have a lien on the Equipment until full payment has been made.
- 4.3 Purchaser shall be entitled to inspect the Equipment before delivery. Purchaser shall give Seller at least fifteen (15) days notice of its desire to inspect the Equipment. Purchaser shall bear all costs and expenses of such inspection.
- 4.4 In the event the delivery of the Equipment cannot be affected for non-payment of price by the Purchaser or for any reason attributable to Purchaser, the Seller shall charge a holding charge @ 2% of the value of goods per month or part thereof from the date the Equipment is ready for dispatch.

5. Completed Installation

- 5.1 If Seller has undertaken to carry out the mechanical installation of the Equipment and, to the extent applicable, other ancillary installations, the provisions of this clause shall apply. Otherwise this clause shall not form part of Seller's responsibilities.
- 5.2 As soon as Seller is of the opinion that the Equipment or any appropriate section thereof has been substantially installed and ready to perform its intended mechanical function Seller shall notify Purchaser. This notification will contain the programme of such demonstration and define which section(s) Seller proposes to demonstrate.
- 5.3 Upon the satisfactory completion of the demonstration Purchaser shall sign a Completed Installation certificate. The appearance of any defect, which does not unduly hinder the use of the Equipment for its intended mechanical function shall not obstruct the issue of the Completed Installation certificate. Seller shall be obliged to remedy any such outstanding item without undue delay.

- 5.4 Seller shall not be obliged to repeat any demonstration that has already been successfully completed. Seller shall be entitled to schedule repeat demonstrations under the same terms and conditions as the first if any defect or fault appear, which prevent the signing of the Completed Installation certificate.

6. Commissioning Tests

- 6.1 If Seller has undertaken to assist in the start-up and testing of the Equipment and to demonstrate that the Equipment serves its basic intended purpose, as specified by the commissioning criteria set out in the Quotation ("Commissioning Tests"), the provisions of this clause shall

- apply. Otherwise this clause shall not form part of Seller's responsibilities.
- 6.2 Purchaser shall carry out the Commissioning Tests under the supervision of Seller and in accordance with the instructions given by Seller. Seller shall, however, not be liable for any damage or loss except for direct physical damage to the Equipment incurred as a direct consequence of Seller's negligence.
- 6.3 As soon as Seller is of the opinion that the Equipment or any appropriate section thereof fulfils its basic intended purpose Seller shall notify Purchaser. This notification will contain the programme of the Commissioning Tests and define which section(s) Seller proposes to demonstrate.
- 6.4 Upon the satisfactory completion of the demonstration Purchaser shall sign a Commissioning Test certificate. The appearance of any defect, which does not unduly hinder the operation of the Equipment for its basic intended purpose shall not obstruct the issue of the Commissioning Test certificate. Seller shall be obliged to remedy any such outstanding item without undue delay.
- 6.5 Seller shall not be obliged to repeat any demonstration that has already been successfully completed. Seller shall be entitled to schedule repeat demonstrations under the same terms and conditions as the first if any defect or fault appear, which prevent the signing of the Commissioning Test certificate.
- 6.6 The use and operation of the Equipment shall be under Seller's control until the Commissioning Test certificate has been issued. If Purchaser takes control of the Equipment or takes an action, which is in conflict with Seller's decision, the Equipment will immediately be deemed as accepted by Purchaser and a Commissioning Test certificate shall be deemed to have been signed.
- ## 7. Performance Tests
- 7.1 If Seller has specified certain performance criteria for the Equipment determinable by performance tests during commercial operation, or if deemed appropriate by Seller in connection with the Commissioning Tests ("Performance Tests"), the provisions of this clause shall apply. Otherwise this clause shall not form part of Seller's responsibilities.
- 7.2 Purchaser shall carry out the Performance Tests under the supervision of Seller and in accordance with the instructions given by Seller. Seller shall, however, not be liable for any damage or loss except for direct physical damage to the Equipment incurred as a direct consequence of Seller's negligence.
- 7.3 As soon as Seller is of the opinion that the Equipment or any appropriate section thereof fulfils its specified performance criteria Seller shall notify Purchaser. This notification will contain the programme of the Performance Tests and define which section(s) Seller proposes to demonstrate.
- 7.4 Upon the satisfactory completion of the demonstration, Purchaser shall sign a Performance Test certificate.
- 7.5 Seller shall not be obliged to repeat any demonstration that has already been successfully completed. Seller shall be entitled to schedule repeat demonstrations under the same terms and conditions as the first if the specified performance criteria cannot be attained.
- ## 8. Non-fulfilment of Delivery, Installation, Commissioning and Performance Tests
- 8.1 Seller expects to deliver, install and commission the Equipment within a reasonable period of time after the acceptance of Seller's Quotation by Purchaser.
- 8.2 If Seller fails, through Seller's sole fault, to deliver, install or commission (as the case may be) the Equipment within twenty (20) weeks after the date specified in the Quotation in spite of repeated attempts and despite demonstration that Purchaser has fulfilled all its relevant obligation, Purchaser is entitled to put that section of the Equipment at the disposal of Seller against a refund of the Price attributable to such section.
- 8.3 If Seller fails, through Seller's sole fault, to attain the specified performance criteria within twenty (20) weeks after the date specified in the Quotation in spite of repeated attempts and despite demonstration that Purchaser has fulfilled all its relevant obligation, Purchaser is entitled to a reduction of the Price. Such reduction shall be in the same proportion as the shortfall in performance, subject to a maximum reduction of five (5) percent of the Price attributable to such section. If actual performance is less than ninety (90) percent Purchaser may instead of the five (5) percent price reduction put that section of the Equipment at the disposal of Seller against a refund of the Price attributable to such section.
- 8.4 If Seller is unable to supply/ install/ commission the Equipment, as set forth in clauses 4-7, through the fault of Purchaser, Purchaser shall nevertheless pay Seller in accordance with the payment schedule and Seller shall, in addition to any other remedies available to Seller, be entitled to compensation for any additional costs incurred by Seller as a result thereof.
- ## 9. Equipment Warranty
- 9.1 Seller shall remedy any defect in the Equipment resulting from Seller's faulty materials or workmanship. Seller's liability is limited to defects which appear within a period of one year after the end of the Commissioning Tests or eighteen (18) months from delivery of the Equipment, whichever occurs first. Provided, however, when the Equipment is ready for dispatch and has not been delivered by Seller due to reasons attributable to Purchaser, the period of warranty shall commence from the date the Equipment is ready for dispatch. When a defect in a part of the Equipment has been remedied, Seller shall be liable for defects in the repaired or replaced part under the same terms and conditions as those applicable to the original part.

Equipment for a period of one (1) year but no longer than two (2) years from the delivery of the original Equipment.

- 9.2 Seller shall, at its option, repair, modify, replace or refund the portion of the Price attributable to any part of the Equipment found to be defective during the period specified above. Purchaser must notify Seller in writing of the claimed defect promptly after the appearance thereof. The notice shall contain a description of the defect.
- 9.3 Seller is obliged to carry out dismantling and re-installation of the affected part of the Equipment if this is necessary and requires special knowledge. If such special knowledge is not required, Seller has fulfilled its obligations in respect of the defect when a duly repaired or replaced part has been delivered to Purchaser. Purchaser shall arrange for any dismantling and reassembling of equipment not supplied by Seller to the extent that this is necessary to remedy the defect. Purchaser shall bear any additional costs, which Seller incurs for repair, dismantling, installation and transport as a result of the Equipment being located in a place other than the site, as set out in the Quotation.
- 9.4 Seller shall have no responsibility for defects in the Equipment to the extent caused by (i) ordinary wear and tear, (ii) use other than as stated in the Quotation, misuse, abuse, or improper storage, installation, maintenance, use of duplicate spare parts, operation or repairs by Purchaser or by persons not under the supervision of Seller and (iii) materials provided by or use of a design stipulated or specified by Purchaser.
- 9.5 If and to the extent that Purchaser will enter into separate license agreement with third parties regarding software products supplied and/or developed by these third parties, Seller shall have no responsibility to remedy defects in the software products covered by such separate license agreement.

10. Additional Warranties

- 10.1 The Equipment will conform with norms and standards specified in the Quotation, when operated in accordance with the intended purpose as well as in compliance with Seller's manuals and instructions. However, in the event of any enactment of or change in any law or regulation after the date of the Quotation which affects the costs and expenses of Seller and/or the delivery schedule, the Price shall be correspondingly increased or decreased and/or the delivery schedule shall be reasonably adjusted.
- 10.2 The Equipment will not infringe any patent, copyright, trade secrets or other proprietary rights of any third party, when operated in accordance with the intended purpose. However, Seller is not responsible for such infringement if and to the extent caused by any use of the Equipment in association or combination with any equipment not supplied by Seller.
- 10.3 The Equipment will be free from liens or encumbrances except for Seller's retention of lien.
- 10.4 Purchaser shall give Seller notice in writing promptly if any circumstances arise which are reasonably likely to result in a claim under the additional warranties appearing under this clause 10. Purchaser shall further give Seller the

opportunity to remedy or resolve any breach and Seller shall use reasonable efforts to effect such remedies. Seller reserves the right to control any litigation that may arise therefrom. In the event Purchaser is permanently unable to use any portion of the Equipment or that Purchaser's operation thereof is unreasonably restricted, Purchaser shall have the right to return such affected portion of the Equipment against a full refund of the portion of the Price attributable thereto.

11. Product Liability

- 11.1 Seller's liability for personal injury shall be determined in accordance with the applicable law.
- 11.2 Seller shall be liable for physical damage to property other than the Equipment caused by Seller only when such damage is caused by Seller's negligence. Seller shall, however, in no event be liable for damage to or loss of raw materials or final products.
- 11.3 Purchaser shall promptly give Seller notice in writing if any circumstances arise which are reasonably likely to result in a claim against Seller under this clause 11. Seller reserves the right to control any litigation that may arise therefrom.
- 11.4 The responsibility and liability for damage to or loss of the Equipment shall be determined in accordance with clause 4, 6, 7 and 9.

12. Variation Orders

- 12.1 Purchaser may request variations to the scope of Seller's obligations. Seller shall have no obligation to accept such variation until both Seller and Purchaser have executed a variation order form.

13. Technical Data etc

- 13.1 All drawings, technical data, commercial information and the like shall remain the property of the submitting party. Such information shall not, without the consent of the other party, be used for any other purpose than that, for which they were provided or otherwise be used, copied or communicated to a third party. This clause 13 shall not apply to data and information shown to be in the public domain or lawfully brought to one party's knowledge by third parties.

14. Software

- 14.1 To the extent the Equipment contains software products, Seller grants to Purchaser a non-exclusive license to use such software products for the intended operation of the Equipment. In respect of software products developed and/or supplied to Seller by third parties Purchaser's right of use shall be limited to the extent that may follow from separate license agreements between Purchaser and such third parties. Unless otherwise specified in the Quotation or

- in separate license agreement, Purchaser's license to use the software products shall be royalty-free.
- 14.2 Seller shall not be obliged to distribute future updates and upgrades of the software products unless specified in the Quotation.
- 14.3 Seller shall not be obliged to provide Purchaser with the source code for the software products. Purchaser shall not be entitled to download, reverse engineer or compile software products and shall only be allowed to make copies of the software products for backup purposes. Purchaser shall treat the software products and any documentation relating to such software products in the same manner as drawings and technical data and the like belonging to Seller, as set forth above in clause 13.
- 14.4 If Purchaser makes changes to any software products forming part of the Equipment without Seller's consent, Seller may void any warranty affected thereby.
- ## 15. Insurance
- 15.1 Until final payment has been made, Purchaser shall insure all Equipment for which it has risk of loss against loss, damage or destruction by theft, fire, or other casualty for the full replacement value of the Equipment. Purchaser shall further maintain adequate liability insurance covering any physical damage to property and personal injury for which Seller is not responsible.
- 15.2 Seller shall maintain adequate liability insurance covering any physical damage to property (other than raw materials or final products) and personal injury for which Seller is responsible.
- ## 16. Limited liability and Indemnification
- 16.1 Purchaser's sole and exclusive remedies for delays in delivery and installation of the Equipment, defective Equipment and failure to meet any commissioning and/or performance Criteria are as stated in this Quotation. It is further acknowledged that Seller guarantees only such parameters that are specified as commissioning and/or performance criteria in the Quotation. All other figures, design criteria, technical descriptions and other information are illustrative only.
- 16.2 Seller shall not be liable for any indirect, special, consequential or incidental damages including (but not limited to) loss of profit, loss of use, loss of production or loss of or damage to raw materials or final products, whether claimed in contract, tort (including negligence) under statute or otherwise.
- 16.3 Other than as specified in the Quotation, Purchaser shall indemnify and hold Seller harmless from any damage, loss or cost due to claims from any third party.
- ## 17. Force Majeure
- 17.1 A party may suspend performance of its obligations to the extent that such performance is delayed, impeded or prevented by unforeseeable circumstances beyond its reasonable control. A party claiming to be entitled so to suspend performance shall give written notice promptly to the other party specifying the nature and expected duration of the relevant circumstances.
- 17.2 A party suspended from its obligations by reason of such circumstances must take all reasonable steps to mitigate their length and effect. Promptly after the termination of such circumstances, the party suspended from its obligations shall forthwith notify the other party in writing.
- 17.3 If such circumstances shall continue for more than six (6) months, either party may terminate all such non-performed obligations, which are subject to suspension upon written notice to the other party.
- ## 18. Cancellation of Order:
- 18.1 The order once placed by the Purchaser shall not be allowed to be cancelled except agreed by Seller in exceptional cases. In the event Seller agrees for such cancellation, Purchaser shall be liable to pay to Seller all expenses incurred or committed or liable prior to the date of notice of cancellation subject however, due credit shall be given to the resale value, if any, for the items of equipment/component procured. The Seller also reserve the right to recover all additional cost, expenses which it may incur in disposing the equipment/ components as well as pro-rata profit on the part of order already executed.
- ## 19. Miscellaneous
- 19.1 Neither party shall assign any benefit or obligation hereunder without the prior written consent of the other party. However, Seller may assign the benefits and/or obligations hereunder to an affiliated or associated company within the Tetra Laval group without the prior consent of Purchaser, provided, that Seller shall remain responsible for the proper fulfilment of all of its duties as agreed.
- 19.2 The action or failure to act by Seller or Purchaser to enforce any one or all of the rights granted to either party shall not act as a waiver of that right nor be deemed to constitute acceptance of a breach of any of the provisions of the applicable document.
- 19.3 If there are any opposing or contradictory conditions or terms in any documents forming part of the Quotation, the specific term or condition shall be given precedence over the general.
- 19.4 The provisions of these General Conditions of Product Sales and the other documents forming part of the Quotation constitute the entire agreement of the parties and supersede all prior or simultaneous statements, promises, negotiations or the like. Consequently, no other terms and conditions, including without limitation any terms and conditions referred to by Purchaser, shall apply.
- 19.5 No change to or alteration of any document forming part of the Quotation may be made without the written agreement of both parties.
- 19.6 Unless otherwise agreed in writing, the Quotation shall remain open and valid for a period of ninety (90) days after

the date thereof, and shall thereafter become null and void if not extended by Seller in writing.

20. Disputes

- 20.1 These General Conditions of Product Sales and other documents comprising the agreement between Seller and Purchaser shall be governed by the Indian law in which Seller's principal place of business is located and the courts of that country and/or state shall have exclusive jurisdiction.
- 20.2 Any controversy or claim arising out of or relating to these General Conditions of Plant Sales and other documents comprising the agreement between Seller and Purchaser or the breach thereof, shall be referred to arbitration of a single arbitrator to be appointed by the Institute of Arbitration & Mediation (Institute), a Public Limited Company registered under Section 25 the Companies Act 1956 and having its Registered Office at 102, Corporate Plaza, 106 A Senapati Bapat Road, Shivaji Nagar, Pune 411 016. The said Arbitration shall be governed by the Rules of Arbitration of the Institute and be subject to the provisions of Arbitration and Conciliation Act, 1996. The venue of Arbitration shall be at Pune and only the courts at Pune shall be entitled to exercise jurisdiction in respect therewith.
- 20.3 Any arbitration award made in such arbitration proceeding shall be final and binding on both the parties hereto and shall be enforceable in any Court having jurisdiction over the matter.
- 20.4 During the course of arbitration proceedings both the parties hereto shall continue to execute their respective obligations hereunder.
- 20.5 The cost of arbitration shall be borne by the parties in equal proportion or as determined in the Award.

Expansion Civil estimate

<u>DETAILED ESTIMATE OF PROPOSED SINGHANIYA MILK FACTORY</u>					
<u>AT-SITAPUR ROAD, - LUCKNOW (U.P.)</u>					
<u>COMBINED ABSTRACT OF COST</u>					
S.N.	DESCRIPTION OF ITEM	QTY	UNIT	RATE	AMOUNT (IN LACS)
1	COST OF BUILDING				
(a)	COST OF CIVIL WORKS			(AS PER DETAILED ATTACHED)	252.97
(b)	COST FOR INTERNAL W/S AND SANITATION			(@5%)	12.65
(c)	COST FOR FIRE FIGHTING WORK		L.S.		5.00
(c)	COST FOR INTERNAL ELECTRIFICATION WORK			(@12.5%)	31.62
				TOTAL	302.24
				SAY RS.	302.24
					LAC

Ar. SANJAY MATHUR
B.Arch., A.I.I.A
Regn. No.- CA/90/13246

DETAILED ESTIMATE OF PROPOSED SINGHANIYA MILK FACTORY							
AT-SITAPUR ROAD, - LUCKNOW (U.P.)							
ABSTRACT OF COST							
(AS PER D.S.R.- 2023*0.735 & APPLICABLE COST INDEX-115 FOR LUCKNOW)							
S.N.	DESCRIPTION OF ITEM	D.S.R. NO.	QUANTITY	UNIT	D.S.R. RATE	RATES WITH COST INDEX	AMOUNT
						SCHEDULED	M.R.
					[D.S.R.RATE*0.735]	X 115-107 /107	
1	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge. All kinds of soil						
(a)	0.00 LVL. TO 1.50 MTR.	D.S.R.-2.6.1	431.871	CUM	177.50	140.22	60555.47
1a.	Filling available excavated earth (excluding rock) in trenches, plinth,sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	(D.S.R.-2.25)	302.309	CUM	196.00	154.83	46806.82
2	Excavating, supplying and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation etc. complete.	(D.S.R.-2.25a)	0.000	CUM	700.50	553.36	0.00
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	(D.S.R.-4.1.8)	81.747	CUM	6812.00	5381.16	439893.87
4	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	(D.S.R.-2.27)	67.264	CUM	2123.75	1677.66	112845.93
5	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1:2 (1 cement:2 coarse sand) to match the existing floor. With Chloryphosphos/ Linadane E.C. 20% with 1% concentration.	(D.S.R.-2.35.3.1)	467.566	SQM	310.05	244.93	114518.61
6	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering,finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	(D.S.R.-5.3)					
(a)	Ground Floor		4.011	CUM	11505.50	9088.81	36458.07
(b)	First Floor		3.498	CUM	11505.50	9088.81	31795.37
(c)	Terrace Floor		0.262	CUM	11505.50	9088.81	2383.09
7	As in item no. 6 above but for slabs (Using 1:1.5:3 Mix concrete).	(D.S.R.-5.3)					
(a)	Ground Floor		76.993	CUM	11505.50	9088.81	699771.73
(b)	First Floor		87.366	CUM	11505.50	9088.81	794049.29
(c)	Terrace Floor		6.820	CUM	11505.50	9088.81	61986.03
8	As in item 6 but for the lighter beams i.e. having spans upto 6 m.	(D.S.R.-5.3)					
(a)	Ground Floor		81.048	CUM	11505.50	9088.81	736629.05
(b)	First Floor		49.226	CUM	11505.50	9088.81	447408.11
(c)	Terrace Floor		3.232	CUM	11505.50	9088.81	29371.53
9	As in item 6 above but in R.C.C. Raft foundation and footing with approved stone ballast. (Using 1:1.5:3 Mix concrete)	(D.S.R.-5.1.2)	218.103	CUM	9045.75	7145.72	1558504.55
10	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :	(D.S.R.-5.2.2)					

(a)	Ground Floor		34.512	CUM	10852.95	8573.32	295882.54	
(b)	First Floor		20.138	CUM	10852.95	8573.32	172645.30	
(c)	Terrace Floor		2.268	CUM	10852.95	8573.32	19444.30	
11	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:Cement mortar 1:6 (1 cement : 6 coarse sand)	(D.S.R.-6.1.2)	10.637	CUM	7132.95	5634.70	59935.53	
12	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size).	(DSR-4.10)	40.550	SQM	410.85	324.55	13160.64	
13	Painting on D.P.C. with two coats of airblown bitumen 85/50 or 85/25 @ 1.7 kg/sqm approx. including cost of fuel if any.	(DSR-4.13)	40.550	SQM	146.15	115.45	4681.58	
14	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :Cement mortar 1:6 (1 cement : 6 coarse sand)	(D.S.R.-6.4.2)						
(a)	Ground Floor		151.592	CUM	9105.95	7193.27	1090440.21	
(b)	First Floor		91.429	CUM	9105.95	7193.27	657674.95	
(c)	Terrace Floor		33.556	CUM	9105.95	7193.27	241376.46	
15	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level,Cement mortar 1:4 (1 cement :4 coarse sand)	(D.S.R.-6.13.2)						
(a)	Ground Floor		301.470	SQM	1123.80	887.75	267629.58	
(b)	First Floor		173.474	SQM	1123.80	887.75	154001.38	
(c)	Terrace Floor		8.955	SQM	1123.80	887.75	7949.80	
16	Mild steel or iron in plain work such as reinforced concrete or reinforced, brick work (when not included in anover all rates) wrought to required shape as necessary including bending for proper completion of the work and including supply of steel its wastage bend hooks and authorised over lapping shall be measured upto floor two level.	(DSR-5.22.6)						
(a)	Ground Floor		474.565	QTL	10785.00	8519.65	4043127.44	
(b)	First Floor		216.732	QTL	10785.00	8519.65	1846476.79	
(c)	Terrace Floor		17.346	QTL	10785.00	8519.65	147778.85	
17	15 mm cement plaster on rough side of single or half brick wall of mix:1:6 (1 cement: 6 coarse sand)	(DSR-13.5.2)						
(a)	Ground Floor		709.392	SQM	395.35	312.31	221548.81	
(b)	First Floor		430.176	SQM	395.35	312.31	134347.42	
(c)	Terrace Floor		48.120	SQM	395.35	312.31	15028.26	
18	12 mm cement plaster of mix :1:6 (1 cement: 6 coarse sand)	(DSR-13.4.2)						
(a)	Ground Floor		768.339	SQM	343.65	271.47	208579.02	
(b)	First Floor		492.525	SQM	343.65	271.47	133704.50	
(c)	Terrace Floor		356.982	SQM	343.65	271.47	96908.99	
19	15 mm cement plaster on rough side of single or half brick wall of mix :1:4 (1 cement: 4 coarse sand).	(DSR-13.5.1)	44.709	SQM	411.75	325.26	14542.20	
20	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers.Per bag of 50 kg cement used in the mix	D.S.R.-13.21						
(a)	Ground Floor		57.625	BAGS	22.10	17.46	1006.02	
(b)	First Floor		36.939	BAGS	22.10	17.46	644.89	
(c)	Terrace Floor		26.774	BAGS	22.10	17.46	467.41	
21	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	(DSR-5.30)	355.640	RM	78.40	61.93	22025.62	
22	Homogeneous VINYL floor (armstrong) simpurity with diamond 10 coating . Thickness 2mm & 2 mtr. Wide thickness of wear layer would be 2mm & single layered. Operation complete as per direction of Engineer - In - Charge.	M.R.						
(a)	Ground Floor		0.000	SQM	2025.00	1599.66	0.00	
(b)	First Floor		387.559	SQM	2025.00	1599.66	619960.60	
23	Homogeneous VINYL floor (armstrong) simpurity with diamond 10 coating . Thickness 2mm & 2 mtr. Wide thickness of wear layer would be 2mm & single layered. Operation complete as per direction of Engineer - In - Charge.	M.R.						
(a)	Ground Floor		0.000	SQM	2025.00	1599.66	0.00	
(b)	First Floor		13.238	SQM	2025.00	1599.66	21175.44	

24	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :25 mm thick	(D.S.R.-11.26.1)						
(a)	Ground Floor		80.760	SQM	1948.25	1539.03	124292.16	
(b)	First Floor		53.760	SQM	1948.25	1539.03	82738.45	
(c)	Terrace Floor		2.700	SQM	1948.25	1539.03	4155.37	
25	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	(D.S.R.-11.27)						
(a)	Ground Floor		6.947	SQM	2354.70	1860.10	12921.21	
(b)	First Floor		6.947	SQM	2354.70	1860.10	12921.21	
(c)	Terrace Floor		0.495	SQM	2354.70	1860.10	920.75	
26	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	(D.S.R.-8.31)						
(a)	Ground Floor		88.543	SQM	1267.95	1001.62	88686.58	
(b)	First Floor		88.543	SQM	1267.95	1001.62	88686.58	
27	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth	(DSR-4.17)	102.183	SQM	749.30	591.91	60483.52	
28	Trimixing of the surface of the cement concrete laid.	M.R.	366.424	SQM	353.90			129677.31
29	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: (Both side laminated)							
	(a) 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws. Single leaf.	(DSR-9.21.1)	21.000	SQM	2392.65	1890.08	39691.72	
	(b) Double leaf	(DSR-9.21.1+9.26)	0.000	SQM	2499.35	1974.37	0.00	
30	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete :2nd class teak wood 50 x 12 mm	(DSR-9.40.1.1)	56.200	RMT	221.10	174.66	9815.82	
31	Mild steel or iron work							
(a)	Providing and fixing mild steel round holding down bolts with nuts and washer plates complete.	(DSR-10.19)	171.600	KG	97.20	76.78	13176.04	
(b)	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	(DSR-10.25.2)	3285.000	KG	172.60	136.35	447896.40	

(c)	Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of uPVC multi-chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh shall be paid separately). Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made.						
(d)	Three track three panels sliding window with fly proof SS wire mesh (Two nos. glazed & one no. wire mesh panels) made of (small series) frame 92 x 44 mm & sash 32 x 60 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension (Area of window upto 1.75 sqm).	(DSR-9.1474.1)	161.100	SQM	10993.55	8684.39	1399055.36
(d)	Angle iron door chaukhats 40*40*5	(DSR-10.31)	168.600	KG	130.50	103.09	17380.79
32	Fixing of Door, windows/ventilators chaukhats in position.	M.R.					
	Door chaukhats		0.000	NO	80.00		0.00
	Window chaukhats		0.000	NO	70.00		0.00
	Ventilator chaukhats		0.000	NO	40.00		0.00
33	Distempering (Two coat) with oil bound distemper of approved brand and manufacture & of required shade on undecorated wall surface to give an even shade over & including a priming coat with cement primer of approved brand & manufacture such as Berger,J&N, Shalimar, Asian paints after thoroughly brushing the surface free from mortar droppings & other foreign matters & also including preparing the surface even with plaster of paris or approved synthetic material & sand papered smooth including cost of all materials. (For Internal wall surface)	(DSR-13.41.1)					
(a)	Ground Floor		709.392	SQM	185.65	146.65	104035.76
(b)	First Floor		430.176	SQM	185.65	146.65	63087.39
(c)	Terrace Floor		48.120	SQM	185.65	146.65	7057.03
34	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm) (Outer surface)	(DSR-13.47.1)					
(a)	Ground Floor		768.339	SQM	171.10	135.16	103849.47
(b)	First Floor		492.525	SQM	171.10	135.16	66570.17
(c)	Terrace Floor		356.982	SQM	171.10	135.16	48250.05
35	Distempering (Two coat) with oil bound distemper of approved brand and manufacture & of required shade on undecorated wall surface to give an even shade over & including a priming coat with cement primer of approved brand & manufacture such as Berger,J&N, Shalimar, Asian paints after thoroughly brushing the surface free from mortar droppings & other foreign matters & also including preparing the surface even with plaster of paris or approved synthetic material & sand papered smooth including cost of all materials. (For ceiling surface)	(DSR-13.41.1)					
(a)	Ground Floor		479.069	SQM	185.65	146.65	70257.81
(b)	First Floor		552.686	SQM	185.65	146.65	81054.01
(c)	Terrace Floor		40.392	SQM	185.65	146.65	5923.68
36	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	D.S.R.-13.80					
(a)	Ground Floor		1956.800	SQM	156.05	123.27	241219.08
(b)	First Floor		1475.387	SQM	156.05	123.27	181874.16
(c)	Terrace Floor		445.494	SQM	156.05	123.27	54917.03

37	Providing and fixing 150 mm bright finished floor brass door stopper with rubber cushion, necessary brass screws etc. to suit shutter thickness complete.	(DSR- 14.34)	11.000	NOS	271.45	214.43	2358.76	
38	Providing and fixing Stainless steel 304 grade sliding door bolts, of 16mmx250mm solid rod with required nuts, screws, keeper, etc. all item to s.s. 304 grade only and supplied along with material test certificate. (OZ-ALD-01(16x250mm)	(M.R.)	11.000	NOS		902.00		9922.00
39	Providing and fixing Stainless steel 304 grade tower bolts (barrel and plate type) with required nuts, screws, keeper, etc. all item to s.s. 304 grade only and supplied along with material test certificate.							
	(a) 300 mm x 10mm -(OZ-TB-S-12")	(M.R.)	11.000	NOS		504.00		5544.00
	(b) 250 mm x 10mm (OZ-TB-S-10")	(M.R.)	11.000	NOS		420.00		4620.00
40	Providing and fixing Stainless steel 304 grade handles with plate fixed with S.S. screws,etc. complete of size 10mm 125mm all item to s.s. 304 grade only and supplied along with material test certificate. (ODG-11-10x125)	(M.R.)	22.000	NOS		295.00		6490.00
41	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of min 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to							
	IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. d) Finishing the surface with 20 mm thick							
	jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge : With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	(DSR-22.7.1)	503.678	SQM	1684.60	1330.76	670271.76	
42	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade.Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture : (M.S. works).	(D.S.R.-13.62.1)	258.975	SQM	226.25	178.73	46285.81	
43	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade.Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture : (Wood works).	(D.S.R.-13.62.1)	42.000	SQM	226.25	178.73	7506.53	
44	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with : 4 mm thick	(DSR-10.30.1)	164.250	SQM	1064.65	841.02	138138.15	
45	Construction of drain alongwith apron.	(A.R.-III)	113.537	RM	1469.51	1160.85	131798.96	
46	Providing & laying of light cinder filling under floor of toilets & other sunken roofs.	MR	8.989	CUM	2200.00			19775.27

47	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : (a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours. (b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	(D.S.R.-22.5)	37.966	SQM	617.05	487.44	18506.18	
48	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge.	(D.S.R.-10.28)	454.500	KG	772.40	610.16	277317.68	
49	Chequered precast cement concrete tiles 22 mm thick in footpath & courtyard, jointed with neat cement slurry mixed with pigment to match the shade of tiles, including rubbing and cleaning etc. complete, on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand). Ordinary cement without any pigment	D.S.R.-11.20.4	14.040	SQM	1056.35	834.47	11715.92	
50	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after .							
	The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer-in- charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding.	(D.S.R.-14.72)	1617.846	SQM	338.25	267.20	432291.19	
51	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters. 80x1.25 mm M.S. laths with 1.25 mm thick	(DSR-10.6.1)	32.760	SQM	3653.20	2885.86	94540.68	
52	Providing and fixing ball bearing for rolling shutters	(DSR-10.7)	4.000	NOS	492.35	388.93	1555.73	
53	Centering and shuttering including strutting, propping etc. and removal of form for :							
a)	Foundations, footings, bases of columns, etc. for mass concrete	D.S.R.-5.9.1	164.539	SQM	392.15	309.78	50970.92	
(b)	Suspended floors, roofs, landings, balconies and access platform with water proof ply 12 mm thick	D.S.R.-5.9.20	1131.852	SQM	1028.40	812.39	919503.16	
(c)	Lintels, beams, plinth beams, girders, bressumers and cantilevers with water proof ply 12 mm thick	D.S.R.-5.9.21	1365.146	SQM	841.95	665.10	907960.32	
(d)	Columns, Pillars, Piers, Abutments, Posts and Struts	D.S.R.-5.9.6	459.185	SQM	961.30	759.38	348696.86	

54	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.						
	12.5mm thick square edge PVC laminated Gypsum Tile of size 595x595mm made of Gypsum plasterboard, manufactured from natural gypsum as per IS 2095 part 1 and laminated with while 0.16mm thick fire standard PVC film on the face side and 12 micron metallized polyester on the back side with all edges seated with the face side PVC film which goes around and wraps the edges and is bonded to the edges and the back side metallized polyester film so as to make the tile a completely sealed unit.						
	(DSR - 12.52.3)	366.424	SQM	2215.15	1749.86	641191.83	
55	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :						
	For fixed portion : Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	(DSR-21.1.1.3)	2383.050	KG	539.85	426.46	1016266.62
56	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminium doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineerin- charge.						
	Pre-laminated particle boad with decorative lamination on one side and balancing lamination on other side	21.2.1	127.143	SQM	1139.30	899.99	114427.91
57	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):						
	With float glass panes of 5 mm thickness/weight not less than 12.50kg/sqm)	21.3.2	84.762	SQM	1505.25	1189.08	100788.56
58	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture including providing and fixing top & bottom pivot & double acting hydraulic floor spring type fixing arrangement and making necessary holes etc for fixing required door fitting all complete as per direction of Enginee in charge (Door handle lock to be paid seperately)	PWD -LKO- 21.18/M.R.	18.480	SQM	3921.00		72460.08
						TOTAL	25048133.11
							248488.67
						G. TOTAL	25296621.78
				Say Rs.	252.97		

ANALYSIS RATE FOR TRIMIX FLOORING

S.No.	DESCRIPTION OF ITEM	NO	L	B	H	QTY	UNIT	RATE	AMOUNT
1	Trimixing of the surface of the cement concrete laid. (M.R.)	1	10.00	10.00		<u>100.00</u>	SQM	350.00	35000.00
2	Providing and laying in position bitumen hot sealing compound for expansion joints etc. (DSR-16.46.1*0.8667) Using grade 'A' sealing compound.	6	10.00			<u>60.00</u>	RM	6.50	390.02
<u>COST OF 100.00 SQM. C.C. FLOOR TOTAL 35390.02</u>									
<u>HENCE COST OF 1.00 SQM. C.C. FLOOR SAY RS. 353.90</u>									

Ar. SANJAY MATHUR
 B.Arch., A.I.I.A
 Regn. No.- CA/90/13246

