



(Previously Known as Mother Dairy, Gandhinagar)

### Request for Quotation (RFQ)

AFD: PUR: HSG: Drum heating

14 February, 2019

To,

Dear Sir,

Sub: **Request for Quotation (RFQ)** "Drum heating tunnel system and pallet conveyor system for Butter Oil drum heating".

We invite your most competitive offer for above mentioned as per detailed specifications. Your offer should be based on following considerations:

1. The offer should reach:-AmulFed Dairy (A Unit Of GCMMF Ltd), Previously known as Mother Dairy, Plot No-35, Nr. Indira Bridge, Ahmedabad - Gandhinagar Highway. Village Bhat, Dist - Gandhinagar. Pin - 382 424.
2. Due Date: February **24, 2019 Before 17:00 hours**
3. The offer should be submitted in sealed cover super scribing on the top left hand corner offer for AFD: PUR: HSG: "Drum Heating Tunnel". If it is not super scribed it can be liable for rejection.
4. Offer received after due date for whatsoever reason may be rejected. We will not be responsible for postal delays.
5. Offer should valid for acceptance for 45 days from date for submission of offer.
6. The price should be quoted with all details.
7. Specify your tax condition. Non indication of above levies will mean that prices are inclusive of all taxes and above levies.
8. Realistic and earliest completion period should be indicated in offer.
9. It will not be binding on us to accept the lowest offer.
10. Right to accept/reject any/all offers without assigning reason is reserved by us.
11. Offers which are incomplete or not meeting the conditions are liable for rejection.
12. Payment terms within 30 days. If the payment term is document through bank, all banking charges shall be borne by the suppliers.
13. **Herewith this we are attaching vendor registration form please fill it up & provide along with offer, without vendor form offer must not consider.**
14. Offer should be sent through post or courier not by fax or personally.
15. The price should be quoted on F.O.R. basis inclusive of P&F, taxes and duties,

# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

freight etc. However if it is separate, it should be clearly mentioned in the quotation.

16. It should cover a warranty of at least one-year against manufacturing defect.

17. No queries regarding the status of the offer will be entertained at any time.

18. All the bidders have to submit the detailed GA drawing with bid.

19. You have to submit test reports of NABL approved lab for all the materials used.

**Eligibility Criteria: Turn over would be more than 50 lac and have experience of same type/capacity - minimum two installations.**

We are an ISO 9001: 2008, ISO 14001:2004 and ISO 22000:2005 company; we follow sustainable eco-friendly processes in our organization and expect the same to be followed at your end.

Note: If required please visit AmulFed Dairy, Gandhinagar with prior appointment to understand our requirement.

Mail id as mentioned below.

Shri Hardik Gajjar : [hardik.gajjar@amul.coop](mailto:hardik.gajjar@amul.coop)

Shri Sunil Sharma : [sunil@amul.coop](mailto:sunil@amul.coop)

Shri P K Sarkar : [pk Sarkar@amul.coop](mailto:pk Sarkar@amul.coop)

Yours Faithfully,

For AmulFed Dairy,

Purchase Depart.



(Previously Known as Mother Dairy, Gandhinagar)

**REQUEST FOR PROPOSAL (RFP) FOR**

---

**HEATING TUNNEL SYSTEM**

**&**

**PALLET CONVEYOR SYSTEM**

**FOR BUTTER OIL DRUM HEATING**

**(190 KG \* 4 DRUMS ON ONE PALLET)**

**FOR AMULFED DAIRY**

# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

## Contents

BROAD SCOPE OF WORK.....	5
TECHNICAL SPECIFICAITONS .....	6
BATTERY LIMITS AND EXCLUSIONS.....	7
EXCLUSIONS.....	<b>Error! Bookmark not defined.</b>
MAKES OF BOUGHTOUT ITEMS .....	10
GENERAL TECHNICAL SPECIFICATIONS: .....	10
PRICE SCHEDULE.....	11
TENTATIVE DESIGN CALCULATIONS.....	<b>Error! Bookmark not defined.</b>

# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

## BROAD SCOPE OF WORK

Design, getting design and drawings approved from AFDG team, manufacturing, supply, installation, testing and commissioning of ghee barrel (190 kg) heating (50 degree Celsius) system broadly comprising of:

Sr. No.	Description	Qty	Unit
1.	Heating tunnel System with LRB insulated and SS 304 21 mm sheet claded tunnel, steam coil membrane etc	1	Set
2.	Pallet Conveyor System	1	Set
3.	Installation, erection & commissioning	1	Job.

JOB IS TO BE CONSIDERED ON TURN-KEY BASIS WITHIN THE BATTERY LIMITS TO MEET THE REQUIREMENT OF ATTAINING THE GHEE TEMPERATURE OF 50 DEGREE CELSIUS INSIDE THE GHEE BARREL UNIFORMLY AS PER THE TENTATIVE DESIGN CALCULATIONS GIVEN.



(Previously Known as Mother Dairy, Gandhinagar)

## TECHNICAL SPECIFICATIONS

### HEATING TUNNEL WITH STEAM HEATER & BLOWER

- CONVEYOR GEAR MOTOR SYSTEM 1 SET - Suitable
- BLOWERS WITH MOTOR - 1 LOT - Suitable
- Steam Coil MEMBRANE - 1 set
- STEAM CONTROL VALVE WITH THERMOSTATIC CONTROL TO MAINTAIN CHAMBER TEMPERATURE AT 90 C TO ACHIEVE BUTTER OIL TEMPERATURE IN DRUM AT 50 DEGREE CELSIUS WITH SUITABLE APT (AUTOMATIC PUMPING TRAP) AND CONDENSATE RECOVERY LINE 50 NB SS 304 UPTO 60 TPD POWDER PLANT CONDENSATE TANK (APPROXIMATELY 100 M) WITH INSULATION AND CLADDING
- Speed of Heating drum system- 60 Drum/Hour
- GLASS WOOL PACKING 50 mm LRB Slab FOR AVOIDING HEAT LOSS
- TUNNEL IS TO BE MADE FRAMED OUT OF CRCA SS 304 2 mm 50 MM SS 304 5 mm SQUARE PIPE AND SS 304 2 mm cladding BOTH OUTER AND INNER SANDWICHED IN-BETWEEN GLASSWOOL LRB SLAB/MATTRESS OF 50 MM THICKNESS 144 KG/M<sup>3</sup> CONFORMING TO IS 8183 (**LIGHTLY RESIN BONDED (LRB) ROCK WOOL MATTRESS ARE MADE OUT OF MOLTEN ROCKS (BASALT) TRANSFORMED INTO FIBRES AND THEN BONDED WITH THERMOSETTING BINDER FORMING MATTRESS AND THEN IT IS STITCHED WITH BOTH SIDES GI HEXAGONAL WIRE NETTING.**)
- LP STEAM PIPELINES AND INSULATION AND CLADDING AS PER REQUIREMENT FROM NEAREST STEAM HEADER (APPROXIMATELY 20 M)
- Alternative offer can be submitted for induction heating
- Heating Tunnel 5000 MM Long made of SS304 50 mm 5 mm thick square box and inner and outer with 14 gauge CRCA SS 304 2B Mill finish sheet sandwiched in-between 50 LRB mattress
- CONVEYOR LENGTH 8 M Long SUITABLE HEAVY DUTY LONG LASTING BELT
- CONTROL PANEL MOC MS 14 GAUGE POWDER COATED AFTER 7 TANK PROCESS

# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

## BATTERY LIMITS AND EXCLUSIONS

The battery limits for the plant are as follows:

Item	Purchaser's Scope	Supplier's Scope Includes
<b>Civil works</b>	All masonry / RCC works such as foundations / grouting of equipment like compressors, housing for the equipment, breaking and making good of walls, floors, slabs, construction of trenches for cables, pipes, any excavation works and construction of lockable space, etc.	Supply of necessary foundation bolts along with the template
<b>Raw/Soft Water lines</b>	Soft water at min. 3.5bar (g) pressure and flow duly connected to the equipment wherever required including isolation valves	----- Nil -----
<b>Compressed air lines</b>	Moisture free air at 6 bar pressure duly connected to the equipment wherever required including isolation valves	TAPPING FROM THE NEAREST COMPRESSED AIR HEADER APPROXIMATELY 20 M SS 304 SCHEDULE 10 PIPE 15 NB WITH VALVES
<b>Cooling Tower water lines</b>	Cooling Tower water supply line at +29.0 deg C temperature and 3.5 bar pressure (g) duly connected to the equipment wherever required including isolation valves. Cooling Tower water return with isolation valve onward from outlet of the pasteurizers	----- Nil -----
<b>Steam and Condensate</b>	To provide the LP steam at 3.5 bar (g) Pressure duly connected to the equipment wherever required including isolation valves. Onward transfer of condensate from the generation point	TAPPING TO BE TAKEN FROM THE NEAREST LP STEAM HEADER. Condensate shall be TAKEN TO 60 TPD POWDER PLANT CONDENSATE TANK SS 304 LINE PRS WITH BYPASS ARRANGEMENT 3.5 TO 1.5 BAR G SHALL BE PROVIDED

# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

<b>Power</b>	Outgoing Feeder in MCC	Supply and Laying of power cables, DOUBLE EARTING and control cables between MCC and your control panel and individual Equipments, conduits, cable trays and earthing from your control panel. Earthing pit and interconnection with grid.
<b>Electrical &amp; instrumentation and Automation</b>		All E&I and automation including connection, supply all type of cable and software updating etc.
<b>Raw Materials and Consumables</b>	Purchaser shall provide raw material (Whole milk) consumables, CIP detergent etc as required for trial runs, commissioning and performance demonstrations. Man power required to operate the Plant during the above period.	----- Nil -----
<b>Dairy Effluent</b>	Collection, transfer and treatment of effluent from the point of generation to ETP. ETP and production of tertiary water/recycled water.	Shall be left at the generation points.
<b>Laboratory Equipment's</b>	Any laboratory equipment's required for the testing of the raw material / product shall be provided	----- Nil -----
<b>Power &amp; Water for commissioning</b>	Power and Water shall be supplied at free of cost for Construction and the Product trials	----- Nil -----





(Previously Known as Mother Dairy, Gandhinagar)

EXCLUSIONS :

1. Plant illumination, lightning arrestor etc.
2. Permanent water and power supply at the time of commissioning of the plant.
3. Any kind of spares.
4. Fire extinguishing equipment's for building and electrical & control panel rooms
5. Lockable temporary store and office space during the execution/erection of the project.
6. Any statutory approvals related to utilities such as IBR, electrical etc.
7. Flow measurement instruments for all utility headers
8. Any item(s) and service(s) not explicitly mentioned in your scope of supplies/work.
9. Any foundation, pedestal for machine and separators etc. Generally such pedestals are made in civil with proper finishing tiles.
10. Supply of consumables, cleaning chemicals, laboratory facilities & quality control equipment.

# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

## MAKES OF BOUGHTOUT ITEMS

Description	Makes
Heating Tunnel System	As per approved Design and drawings
Conveyor system	As per approved Design and drawings
Steam Accessories	As per approved Design and drawings
Instruments	As per approved Design and drawings

## GENERAL TECHNICAL SPECIFICATIONS:

1. All motors shall be IP 55 IE 3 efficiency with service factor 1.0 for continuous duty
2. All electrical equipments must be doubly earthed.
3. Good Manufacturing Practices (GMP) is must

# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

## PRICE SCHEDULE

Steam heating tunnel and conveyor for ghee barrel heating			
Description	Qty	UoM	Amount (Rs)
Tunnel 5 m x 2.5 m x 2.5 m	1	set	
Conveyor 8 m X 2 m	1	set	
Steam accessories	1	Lot	
Instruments	1	Lot	
Control Panel	1	set	
Blowers	1	lot	
Steam lines	1	lot	
Cables etc	1	lot	
Transparent 2 mm overlapping PVC strips at tunnel entry and exit	1	lot	
Supply Total			
I&C			
Total			

GST Extra as applicable and must be mentioned with HSN code

# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

<b>Induction heating tunnel and conveyor for ghee barrel heating</b>			
Description	Qty	UoM	Amount (Rs)
Tunnel 5 m x 2.5 m x 2.5 m	1	set	
Conveyor 8 m X 2 m	1	set	
Induction heating accessories	1	Lot	
Instruments	1	Lot	
Control Panel	1	set	
Blowers	1	lot	
Steam lines	1	lot	
Cables etc	1	lot	
Transparent 2 mm overlapping PVC strips at tunnel entry and exit	1	lot	
Supply Total			
I&C			
Total			

# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

## TENTATIVE DESIGN CALCULATIONS

Throughput Requirement	60 drums/ hr = 1 drum/min =1 pallet in 4 minutes
Each Pallet containing 4 drums retention time in tunnel	4 minutes
Tunnel length	5 m
Conveyor speed	5 m/ 4 minutes = 1.25 m /minute
Conveyor pulley diameter	200 mm
Pulley RPM required	2 rpm
Use motor pole	8
Motor speed	750 rpm synchronous = 720 rpm
Gear ratio required	360:1
GEARED Motor	SEW/ BONFIGLIOLI/REPUTED
BELT	HABASIT/REPUTED
Pulley	ELECON/ REPUTED

Steam heating load =  $190 \text{ kg} \times 0.6 \text{ KCal/kg C (approximation)} \times (55-20) = \text{KCal/ min} = 4000 \text{ KCal/min} = 2,40,000 \text{ KCal/hr}$ , say  $2,50,000 \text{ KCal/hr} = 450 \text{ kg/hr}$  steam flow rate, say  $500 \text{ kg/hr}$  steam flow rate.

Sufficient numbers high speed blowers (estimated 8 numbers 600 mm diameter 1200 rpm)/ fans to be considered in design to maintain uniform temperature across the tunnel and all around the drums for uniform melting to attain 50 C temperature preventing any hot spot on the drum to avoid ghee burning/ overheating possibility. Fan blade shall be GI. Motor shall be outside on top of tunnel.

Steam coil membrane must be fabricated with 2 mm SA 516 plate and Heavy duty ERW 15 NB steam pipe coil as shown tentatively the arrangement in the drawing with 50 NB header and 15 NB pipes welded on 2 mm plate that will work as fins. Bidder to submit proper design and drawing of steam coil membrane, steam distribution pipes with calculation for approval.

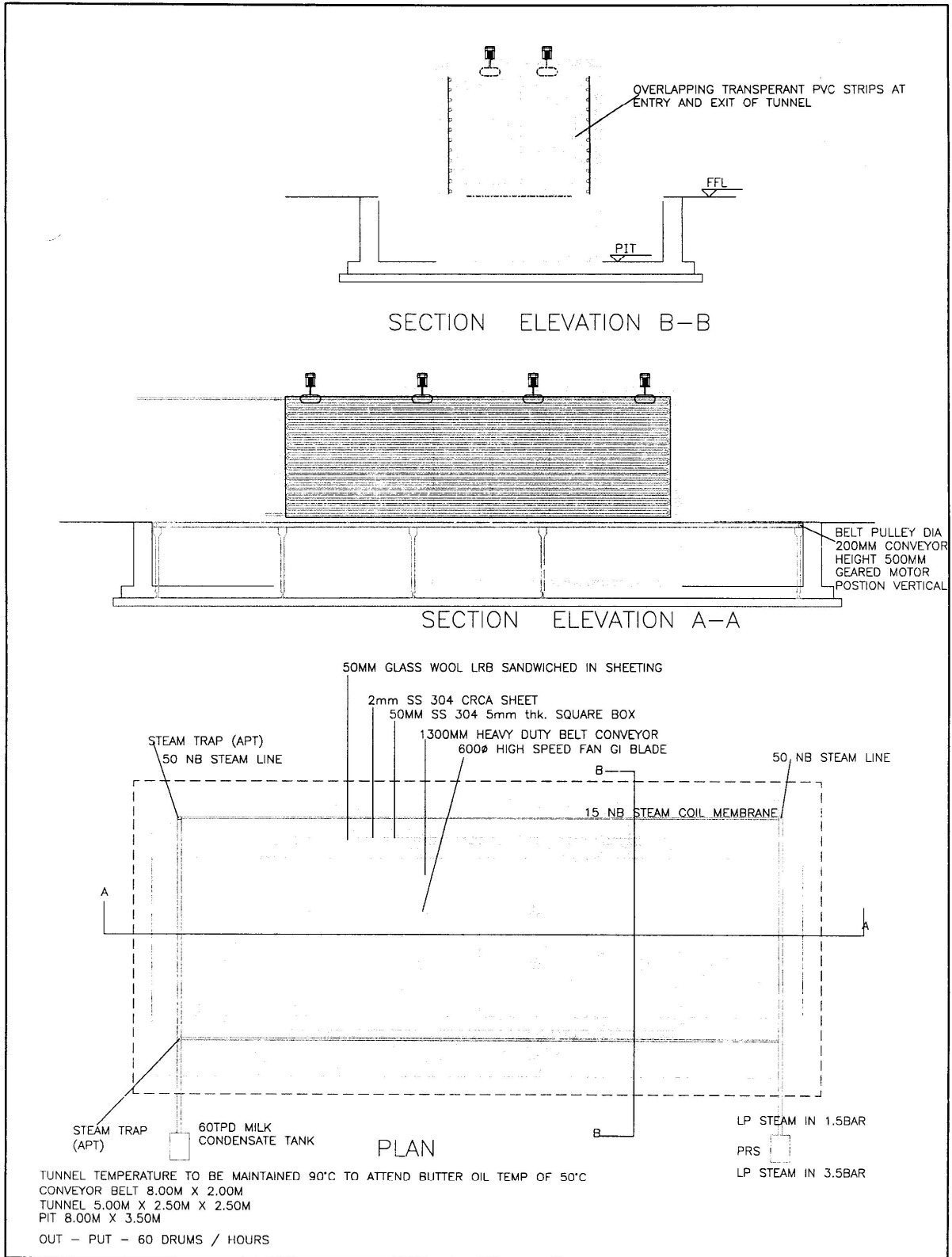
Alternative bid can be submitted with Induction heating in place of steam heating

All design and drawings must be submitted and got approved before commencement of fabrication. However, approval does not absolve the bidder from the performance requirement of the complete system.

# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)



# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

## VENDOR REGISTRATION FORM

(FOR MANUFACTURERS)

ADDRESS REGISTERED OFFICE	OF	MOBILE NOS.	FAX NOS.	E-MAIL

1. NAME OF THE PRODUCTS / ITEMS :
2. NAME & DESIGNATION OF PRINCIPAL OFFICER / PERSONS TO BE CONTACTED :
3. STATUS (WHETHER AN INDIVIDUAL/ PARTNERSHIP FIRM/PUBLIC/PRIVATE LIMITED COMPANY) :
4. IN CASE OF PARTNERSHIP FIRM :  
(A) WHETHER IT HAS BEEN REGISTERED?  
(B) IF REGISTERED PROVIDE CERTIFIED, EXTRACT FROM THE REGISTERED OF THE FIRM  
(C) NAME OF ALL PARTNERS  
(D) DETAILS OF PARTNERSHIP DEED (ENCLOSE COPY)
5. IF PROPRIETARY CONCERN, NAME & ADDRESS OF THE PROPRIETOR :
6. IF PRIVATE/PUBLIC LIMITED COMPANY PLEASE ENCLOSE COPY OF MEMORANDUM/ ARTICLE OF ASSOCIATION :
7. YEAR OF ESTABLISHMENT OF FIRM :  
YEAR OF COMMENCEMENT OF COMMERCIAL PRODUCTION
8. NAME OF THE PRODUCTION IN CHARGE WITH TECHNICAL BACKGROUND & EXPERIENCE IN LINE :  
DIPLOMA/DEGREE & EXPERIENCE IN YEARS

# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

Data on Factory

ADDRESS OF REGISTERED OFFICE	TELEPHONE NO	MOBILE NO.	FAX NO.	E-MAIL

2. S.S.I. / MSMED REG.NO. (PLEASE ENCLOSE COPY OF REGISTRATION CERTIFICATE) :

3. WHETHER GST IS APPLICABLE? IF YES : PLEASE GIVE RATE(%)

4. GST REGISTRATION NO. :

5. FSSAI No (If applicable) - \_\_\_\_\_ Valid from \_\_\_\_\_ Valid Up to \_\_\_\_\_  
Kindly attach a copy of the same.

## **(A) PRODUCTION**

1. INSTALLED CAPACITY OF PLANT :  
(ENCLOSE DETAILS)

2. MONTHLY CAPACITY OF PRODUCTION :  
(MT/Unit etc)

3. NO. OF SHIFT PLANT IS RUNNING :

4. SPARE CAPACITY OFFERED FOR AMULFED DAIRY GANDHINAGAR :

5. SOCIAL ECONOMIC ZONE (Y/N)

6. CERTIFICATE (IF AVAILABLE PROVIDE COPY) :

- IMS / ISO CERTIFICATE (Y/N)
- HACCAP CERTIFICATE (Y/N)
- FSSAI CERTIFICATE (Y/N)

7. GIVE LIST OF MACHINERY, & EQUIPMENT INSTALLED FOR QUALITY CONTROL :

(IF APPLICABLE) AS PER FOLLOWING TABLE



# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

NAME OF THE MACHINE	TYPE	MAKE	SIZE	QTY	SPL. ATTACHMENT

NAME OF THE TESTING EQUIPMENT	TYPE	MAKE	SIZE	QTY	SPL. ATTACHMENT

## 7. LAST 3 YEARS PRODUCTION/TURN OVER DATA :

YEARS	PRODUCTION	TURNOVER/LACS RS.

## LIST OF LEADING BUYERS WITH VALUE OF BUSINESS OF EACH

ITEM	NAME & ADDRESS OF BUYER	ANNUAL VALUE OF BUSINESS (IN LACS)

## MISCELLANEOUS DATA :

1. NAME OF THE BANKERS :
2. INCOME TAX CLEARANCE CERTIFICATE NO :  
LATEST ANNUAL REPORT/IT RETURN (ENCLOSE COPY)
3. WHETHER ANY OF YOUR RELATIVE IS WORKING WITH :  
US OR WITH OUR MEMBER DAIRIES. IF YES PLEASE GIVE  
DETAILS

# AmulFed Dairy

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

4. ANY OTHER INFORMATION YOU LIKE TO FURNISH :
  
5. IN CASE YOU ARE/WERE A SUPPLIER  
(A) TO GUJARAT CO.OP. DAIRIES, PLEASE MENTION NAME OF DAIRY:  
ITEMS SUPPLIED, QUANTITY, PERIOD OF SUPPLY ETC.  
(B) IF IT IS DISCONTINUES REASONS :
  
6. YOUR PREFERRED DAY OF THE WEEK FOR OUR VISIT TO YOUR FACTORY :

## **DECLARATION**

THE ABOVE INFORMATION IS TRUE IN ALL RESPECTS AND WE UNDERTAKE TO INFIRM YOU IF ANY CHANGE IN THE ABOVE PARTICULARS REGARD BUSINESS FROM TIME TO TIME.

PLACE : SIGNATURE OF AUTHORISED REPRESENTATIVE

DATE : OF THE FIRM UNDER PROPER SEAL

FOR OFFICE USE:

VENDOR REGISTER ENTRY NO. :DATE:

CATEGORY: VENDOR NO:

INFORMATION RECEIVED  
COMPLETELY SATISFACTORY

RECOMMENDED

APPROVED IS

PURCHASE EXECUTIVE

TEAM LEADER (PUR)

GENERAL MANAGER

## **CHECKLIST OF DOCUMENTS TO BE SUBMITTED**

- COPY OF PAN CARD
- COPY OF EXCISE REGISTRATION (IF APPLICABLE)
- COPY OF GST REGISTRATION
- COPY OF BALANCE SHEET OF LAST THREE YEARS
- COPY OF TIN REGISTRATION

# **AmulFed Dairy**

A UNIT OF GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION LIMITED

(Previously Known as Mother Dairy, Gandhinagar)

- COPY OF MSMED REGISTRATION
- COPY OF INCOME TAX RETURN OF LAST THREE YEARS
- COPY OF ISO CERTIFICATIONS (IF ANY)
- COPY OF SERVICE TAX REGISTRATION
- COPY OF FASSAI REGISTRATION (IF APPLICABLE)

**PLEASE SEND THE FILLED FORM ALONG WITH ALL DOCUMENTS AS MENTIONED ABOVE TO THE FOLLOWING ADDRESS:**

***GENERAL MANAGER***

***AMULFED DAIRY,***

(A UNIT OF GCMMF LTD)

PLOT NO 35,

Nr. INDIRA BRIDGE, AHMEDABAD-

GANDHINAGAR HIGHWAY,

P.O. BHAT- 382428

GANDHINAGAR