



**Gujarat Cooperative Milk Marketing Federation Ltd, Anand
Amulfed Dairy (Previously known as AmulFed Dairy)**

Plot No. 35, Nr. Indira Bridge,
Ahmedabad-Gandhinagar Highway
Village: Bhat, Dist: Gandhinagar
Gujarat, India-382428

Request for Bid (RFB) for “**Design, Supply (Including unloading at Site), Installation, Testing and Commissioning (DSITC) of Double Track Crate Washer at AFD on buyback offer basis**” as per given scope of work.

AFD: PUR: ENQ: 2024: 824





AMULFED DAIRY

(A Unit of Gujarat Co-operative Milk Marketing Limited)
Plot No. 35, Near Indira Bridge, Ahmedabad-Gandhinagar Highway
Village - Bhat, Dist - Gandhinagar - 382428
Phone: +91-79-3969055/56 Fax: +91-79-3969059

We invite sealed bids from eligible bidders for the following works: “**Design, Supply (Including unloading at Site), Installation, Testing and Commissioning (DSITC) of Double Track Crate Washer (Capacity 1200 Crates/ hour/ track) at AFD on buyback offer basis**” as per the scope of supply mentioned in the Inquiry.

Bid Reference	AFD: PUR: ENQ: 2024: 824
Bid Start	Starts from 09/12/2024
Bid Submission	Technical Submission up to 18/12/2024 before 6:00 PM
Last Date for Bid Submission & Opening	24/12/2024 before 4:00 PM
Completion period	2.0 months
EMD (Rs. in Lac)	0.30

Eligibility Criteria

- 1) Bidder should be having minimum one successful installations of similar nature working in India.
- 2) The Bidder/Supplier shall have turnover, in each of the last three years, at least Rs. 2 Cr and must have executed, in the last five years at least a contract of similar nature and of value not less Rs. 15 Lacs.

Technical Specification with scope : As per the Annexure-I

Bid Security:

All bids must be accompanied by bid security (Earnest Money Deposit – EMD) in the form DD or RTGS/Fund Transfer. The bids not accompanied by EMD shall be summarily rejected. The bid security shall be denominated in Indian Rupees of value as specified and shall be in the form of Demand draft or RTGS/Fund Transfer to below specified account in favor of AmulFed Dairy (A unit of GCMMF Ltd), payable at Ahmedabad.

The Bid security may be forfeited if

- ❖ A bidder or supplier withdraws its bid during the period of bid validity specified by the bidder/ supplier on the bid form or
- ❖ In case of successful bidder/ supplier, if the bidder/ supplier fails to sign the contract.
- ❖ EMD will be converted to Security Deposit (SD) on successful award of contract, and it will be released after commissioning.

Bank Detail for RTGS:

AmulFed Dairy, Gandhinagar (A unit of GCMMF Ltd)

HDFC Bank A/c. No: A/c. No. **00060310001593**
Branch Code: 0006 (NAVRANGPURA BRANCH)
Bank AD Code: 0510007-5700009
Swift code: HDFCINBB
IFSC Code: HDFC0000006

Procedure to participate in above inquiry:

- 1) All the interested bidders must participate in the inquiry through our purchase portal by registering your firm as a new vendor (if your firm already have registration in our PP, then you have to login to your account and request AFD to send RFQ).
- 2) Interested bidders have to register your firm in our Purchase portal.
 - a. Website for our portal is as >>>: <http://afdpurchase.amul.in/>
- 3) Offer through mail/hardcopy are not accepted and stand for rejection, your competitive bids should be submitted through our online portal only.
- 4) Detail technical specification as per Annexure-I for your reference.
- 5) Interested bidders must submit their technical specification/detail first, only after technical evaluation/approval, bidders will be invited for submission of commercial bid.

Warranty: 24 months from date of commissioning

Payment term:-

Payment for supply, installation and commissioning contracts must be strictly as below:

- 1) 20% advance of total basic value of contract (Supply + Erection & Commissioning) on submission of following:
 - (i) Acceptance of the order i.e.
 - a. Submission of the Duplicate copy of the order duly signed by the authorised signatory putting stamp of the Organisation.
 - b. Against a bank guarantee for equivalent amount valid for 60 days beyond the stipulated delivery (as per schedule of delivery/supply)/ completion period.
- 2) Payment against Supply and erection of equipments/material: (with 100% taxes)
65% payment of supply value within 30 days on safe receipt of goods at site
- 3) 15% balance payment within 30 days of satisfactory commissioning of machine. On submission of:

The Performance Security shall be in the amount of 15% of the Contract price up to sixty days after the date of completion of performance obligations including warranty obligations.

Notes: For all the payments to be made against bank guarantees, The Bank Guarantees should be obtained from Nationalized Bank or ICICI Bank, HDFC Bank, IDBI Bank, Kotak Mahindra Bank or acceptable Bank by AFD.

Liquidated Damages

Bidder/Supplier fails to deliver any or all of the Goods or perform the Services within the time period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages as under:

a. For the Supply Component:

A sum equivalent to **0.5%** of the delivered price of the delayed goods (As per the price break up furnished by the supplier and accepted by the Purchaser, which the supplier fails to supply within the time period specified in the contract for each week of delay.

b. For the Erection and Commissioning Component:

A sum equivalent to **0.5%** of the un – executed portion of each week of delay or part thereof beyond the time specified in the contract for the successful completion of the plant.

The total amount so deducted as per above, shall not exceed **5%** of the Contract value. Once the maximum is reached, the Purchaser may consider termination of the Contract.

Rights Reserved by AmulFed Dairy (A unit of GCMMF Ltd).

AmulFed Dairy (A unit of GCMMF Ltd), at its sole discretion and without assigning any reason thereof, reserves the right to accept and / or reject the whole or part of any or all the bids received.

Validity:

The offer should be valid for 120 days from the date of Bid opening.

Contact details: For any techno-commercial query you may contact Kishan Bhadja (9726585752), Yogendra Sodha (7046036777) or (E-mail- kishan.bhadja@amul.coop, yogendra.sodha@amul.coop, bharat.naik@amul.coop) of Purchase department.

SS CRATE WASHER FOR BUTTER MILK PACKING- DOUBLE TRACK
Quantity : 01 Nos.

FUNCTIONAL REQUIREMENTS:

The Crate Washer will be used for washing standard design HDPE Crates used for MILK/BUTTER MILK/FERM. Packing Section. Pouch Crates of all types generally used in Dairy Industry.

DESIGN REQUIREMENTS:

Capacity : 1200 Crates per hour / Track

For Crate Size: 475 mm x 375 mm x 165 mm
(L x W x H)

Configuration: Straight through type (Orientation of Crate – Straight/ reverse position)

Washing Sequence:

- Pre - rinse - A subsidiary branch taken from First - rinse Section.
- First - rinse at Nozzle pressure 2.0 Kg/cm² with pump of as required.
- Hot Detergent-rinse at Nozzle pressure 3.5 - 4.0 Kg/cm² with pump as required & temp. 70 to 80 degree centigrade.
- Hot water after - rinse at Nozzle pressure 2.5 - 3.0 Kg/cm² with pump as required & temp. 60 to 70 degree centigrade.

Pumps shall be of "GRUNDFOSS-Mechanical Seal Type" Make vertical multistage with High Energy Efficient (IE3) motor type of SS Body, SS Impeller, SS Shaft and Oil Seal (Mechanical Seal Type).

Service Requirements:

Steam	: At a pressure of 3.5 Kg/cm ²
Electric Power	: As per standard requirement.
Water / Recycle water	: As per requirement.
Air	: At a pressure of 6 Kg/cm ²

Finish: All welding joints are to be ground smoothly. All stainless steel surfaces are to be polished to 120 grits.

Temperature Control: Necessary temperature control arrangement will be provided to control the temperature of Detergent - rinse section and Hot water after- rinse section. SPIRAX make ON-OFF Pneumatic Control Valve with FESTO make Solenoid Valve shall be supplied. Solenoid Valve shall be Located in panel

SCOPE OF SUPPLY:

Main Enclosure: The main enclosure which houses washing and sterilizing sections will be made from 2mm thick Stainless Steel sheet conforming to AISI 304 for easy accessibility, it will have inspection doors all along the length on both sides.

Under Frame: The Under Frame will be made of SS 304 Quality, cold drawn Hollow Square section pipes (Size: 50 x 50 x 2 mm thk.). The assembly will have sufficient no. of stainless steel legs with stainless steel ball feet having 50 mm vertical adjustment.

Conveyor Chain: This will be made up of 28mm thickness Polyacetal Chain (In Centre Only). In between the individual crates, drive motor, drive transmission shaft and idler shaft - 1 no. /TRACK

Drive Unit will consist of suitable "SEW" Make Direct Shaft Mounted geared motor. SS Coupler (Love Joy) with necessary key way and fasteners provide in between Gear box and Shaft. 1 NO. /TRACK

Drive Sprocket-SS202

Washing Stations: The pumping and jetting arrangement will apply sufficient washing liquid to the inside and outside surface of the crates. Jetting pipe will be detachable type for easy maintenance and cleaning purpose.

Steam/Water Valves shall be SS Ball Valve of "AUDCO" Make.

Filter: A pressure filter will be provided in the liquid (Hot Detergent) recirculation line to prevent choking of Stainless Steel adjustable nozzles - 1 No.

Sump Tanks: This tank shall be made from Stainless Steel confirming to AISI 304 and would be used as Feed tanks for various washing liquids. Water Levels shall be maintained automatically by the provision of heavy duty SS Ball Float Valves - 6 Nos. (3 Nos. For Raw water & 3 Nos. For recycle water)

Water Heating Arrangement: For hot water, direct steam injection system shall be provided using steam injector & Silencer for mixing steam with water.

Pumps: Energy efficient vertical design pump of Grundfoss- make pumps to be supplied. Body and internal part shall be of SS. having 35 MWC discharge pressure should be supplied having suitable capacity to ensure effective cleaning shall be supplied. - 03 nos.

Spray Pattern: Required curtain type spray (Removable hexagonal type nozzles not required) Angular cut or hole required on nozzle pipe for curtain type spray. Close system required for header tank wise and provide Butter Fly valve at the end of Header for draining or cleaning of nozzle headers.

Make of Butter Fly Valve: IDMC- Size -51MM

Liquid Detergent System: Automatically operated liquid detergent system for maintaining PH in detergent Tank (Pump-Johnson Diversy).

Instrumentation: Pressure gauge shall install on Discharge Line of Pumps of all three Water Tanks. For temperature Indication, RTD shall install in hot water tank With Protection cover and after rinse tank and Indicator install in Main panel of Crate Washer.

Pressure Gauges will be of "Waree" Make and Digital Temp. Controllers and RTD will be of "RADIX" Make.

Water Recovery System: Water Remained on Crates should recover and return to hot water After Rinse tank. (With motorized blower unit)

Control Panel:

Crate washer shall have dedicated control panel. Control panel shall incorporate incomer, motor starters, on-off push buttons separate for all three pumps & Conveyor motor of both track(VFD Operated). Also provide Emergency Push Button on Panel for All three Pumps. R-Y-B phase wise Indicating Lamp and Pump ON indication lamp also required.

Main enclosure: It shall be fabricated out from 2 mm thk. SS 304 quality sheet, which shall be moisture and dust proof. - 1 No.

Switch gears: Each crate washer pump shall have soft starter.
Conveyor Geared motor Controlled through required VFD. VFD shall mount in Control Panel.

For Electrical Safety, Main Supply of Washer Come thro' RCCB in Main Panel.

Push Buttons and Indicating Lamps: There should be adequate number of ON/OFF/TRIP Push Buttons and indicating lamps for all the motors. All indicating lamps will contain related inscriptions. The panel will also have Emergency Stop Push Button to stop the total operation of the Crate Washer, in case of Emergency. Push Buttons shall be of "Schneider" Make.

Conveyor Chain motor ON-OFF control thro' switch separately on Panel.

Wiring: The control panel shall be completely pre-wired.

Sr. No.	Technical specification-DOUBLE TRACK CRATE WASHER		SUPPLIER SHOULD FILL THEIR DATA	REMARKS
1	CAPACITY	1200 Crates/ Hour/track		
2	TRACK	DOUBLE		
3	CLEANING MEDIA	WATER / RECYCLE WATER		
4	CRATE SIZE	475 mm x 375 mm x 168 mm (L*W*H)		
5	MATERIAL	SS-304		
6	STEAM CONTROL FOR MIDDLE TANK & AFTER RINSE TANK	Pneumatically Actuated-Spirax Make Steam Control Valve AND ALSO PROVIDE BALL VALVE (AUDCOMAKE-SS304) IN MAIN LINE TO CONTROL STEAM FOR ON-OFF PER SEPRATE TANK		
7	VALVES FOR RAW WATER	MAIN VALVE FOR MAKE UP WATER LINE AND OTHER THREE VALVES FOR SEPRATE TANKS-BALL VAVLE-AUDCO OR L&T-SS304 INCLUDING FLOAT VALVE SYSTEM		
8	VALVES FOR RECYCLE WATER	MAIN VALVE FOR MAKE UP RECYCLE WATER LINE AND OTHER THREE VALVES FOR SEPRATE TANKS-BALL VAVLE-AUDCO OR L&T-SS304 INCLUDING FLOAT VALVE SYSTEM		
9	FILTER SYSTEM	SS FILTER ON EACH TANK / EACH PUMP (AS PER AFD DESIGN)		
10	WATER RECYCLING	REQUIRED (WITH HIGH-SPEED BLOWER UNIT)		
11	SPRAY PATTERN IN WASHER	REQUIRED CURTAIN TYPE SPRAY (INDIVIDUAL NOZZLES NOT REQUIRED, ANGULAR CUT OR HOLE REQUIRED ON NOZZLE PIPE FOR CURTAIN SPRAY, MINIMUM GAP BETWEEN NOZZLE AND CRATE FOR BETTER CLEANING		
12	NOZZLES/HEADER CLEANING SYSTEM	CLOSE SYSTEM REQUIRED FOR HEADER TANK WISE AND PROVIDE BUTTERFLY VALVE AT THE END OF HEADER FOR DRAINING OR CLEANING OF NOZZLES OR HEADER. MAKE OF BF VALVE : IDMC		
13	PRESSURE GAUGE	PROVIDE PRESSURE GAUGE ON PUMP DISCHARGE PIPE LOCALLY -- MAKE : WARREE		

14	CONVEYOR CHAIN	POLYACETAL-28MM-8MM SS PIN TYPE (IN CENTRE ONLY)		
15	GEARED MOTOR/TRACK	SEW-WITH SSLOVE-JOY COUPLER(URATHENE) & VFD CONTROLLED, BEARING-SKF MAKE		
16	DRIVE SPROCKET	ID-35.5 , TEETH-10,SS202		
17	DRIVEN SPROCKET	ID-35.5 , TEETH-10,NYLON, WITH SLEEVE-25*35-L-50		
18	CHANNEL	SS-304, ANGLE - 25*25*5		
19	CHAIN GUIDER	NYLON-WHEEL TYPE (AS PER AFD DESIGN)		
20	PUMPS	GRUNDFOSS MAKE-MECH SEAL TYPE-ENERGY EFFICIENT-IE3-SS BODY		
21	PUMP DISCHARGE	SHALL HAVE DIFFERENT LINE FOR BOTH TRACK ("T" IN PUMP DISCHARGE LINE WITH BF VALVE FOR CONTROL)		
22	ELECTRICAL PANELS	SINGLE PANEL REQUIRED WITH MOTOR PROTECTION SYSTEM AND DIGITAL TEMP. INDICATOR FOR HOT WATER TANK & AFTER RINSE TANK. FOR ELECTRICAL SAFETY MAIN SUPPLY OF WASHER COME THRO RCCB		
23	RTD AND TEMP CONTROLLERS	MAKE : RADIX		
24	LIQUID DETERGENT SYSTEM	AUTOMATIC LIQUID DETERGENT SYSTEM FOR MAINTAINING PH (REQUIRED PH IS 10 MINIMUM) -- MAKE - JOHNSON DIVERSY OR ANY EQUIVALENT		

Sr. No.	Below mentioned details required for Technical Comparison	
1	Water Consumption in Ltr/HR	
2	Power Consumption In KWH	
3	Quality Of water required for Crate washer	
4	Steam Consumption / HR	
5	Drying System/Water recovery System	
6	Total Weight of washer	
7	USED SQ. PIPE & SS SHEET DETAILS	
8	USED ROUND PIPE & FITTING DETAILS	
9	Material testing certificate	
10	GA DRAWING OF CRATE WASHER	