



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

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

Inquiry for Design, Supply, Installation testing and commissioning of Warehouse Management System using 2D QR code at different section of AmulFed dairy, Gandhinagar

AFD: PUR: ENQ: 2024: 869





We invite best competitive rates for Design, Supply, Installation testing and commissioning of Warehouse Management System using 2D QR code at different sections of AmulFed dairy, Gandhinagar as per the attached Annexure-A.

Inquiry Reference	AFD: PUR: ENQ: 2024:869	
Inquiry Start	05.12.2024	
Last date for Vendor Registration on	18.12.2024 (11:00 hrs)	
Purchase portal		
Last date of Technical bid Submission	18.12.2024 (18:00 hrs)	
Last date of commercial bid Submission	23.12.2024 (18:00 hrs)	

1. Procedure to participate in above inquiry:

- 1) All the interested bidders have to participate in the tender through our purchase portal by registering your firm as a new vendor (if your firm already have registration in our Purchase Portal, than 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) Interested bidders have to submit their technical specification/detail first, only after technical evaluation/approval, bidders will be invited for submission of commercial bid.
- 5) Submitted commercial bid were open on mentioned due date and time in online /presence of bidder's representative.

2. Submission & Opening of Bids

- This is a two stage bid.
- All the bidders shall submit the bids through online platform
 Phase-I Technical bid: Should be submitted as per the described date and time.
 The technical bid shall contain all the details except for the price.
- Phase- II- Only technical qualified/Successful Bidders invited to submit their commercial bid through online portal.
- Deviation sheet needs to be submitted separately and with justification of offered item/feature.

3. Rights Reserved by AFD

 AmulFed Dairy, Gandhinagar at all 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.

4. Validity

• The offer should must be valid for 60 days from the last date of bid submission.



5. Delivery Address:

AmulFed Dairy (A unit of GCMMFL) Plot no. 35, Near Indira bridge, Village – Bhat, Gandhinagar, Gujarat - 382428

- 6. Commercial offer through e-mail are not accepted and stand for rejection. Your competitive bid should be submitted in purchase portal only.
- 7. The price should be quoted on F.O.R basis inclusive of packing and forwarding, freight etc. However if it is separate, it should be clearly mentioned in the quotation. Taxes /GST will be extra at actual and should be mentioned clearly.
- 8. Bidder are abide by & bound to follow all the terms, conditions mentioned here in this Enquiry.
- 9. All pages of enquiry including rate form must be signed & sealed by bidder which are considered as your acceptance for all rates, terms & conditions mentioned in enquiry.
- 10. Management reserves the rights to accept or reject the any / all offers submitted by bidders, without assigning any reasons. Management decision in these regards would be considered as final and no complaints will be entertained. No telephonic/personal follow-up from your side will be entertained. Canvassing in any form may lead to disqualification.
- 11. Offer which are incomplete or not meeting the conditions or only for part items, are liable for rejections.
- 12.It is not binding on us to accept lowest offer.
- 13. The final supplier will be the combined decision of our technical team and management and no reason of final selection will be conveyed to any bidder.
- 14. Realistic earliest delivery period should be indicated.
- 15. We are ISO 9001:2000 and ISO 14001 certified unit. We follow eco-friendly processes in our factory and expect the same to be followed in your company.

Contact person- Bhargav Kanabar

Contact no: - 9376149034

Email Id: bharqav.kanabar@amul.coop / bharat.naik@amul.coop

Thanking you.

Encl: Annexure: A (Scope of work) & Annexure B (Rate Format)



Eligibility Criteria

Vendor should submit documents for following (as eligibility criteria):

- 1. Turnover of firm for last 3 years (2021-22, 2022-23, 2023-24) should be above Rs. 1.0 Crore (Sales + Services)
- 2. Minimum 1 similar nature of project / work should be carried out by vendor (PO copy required to submit with technical scope)



Annexure A

<u>Details of Inquiry (AFD:PUR:ENQ:2024:869) for Design, Supply, Installation testing and commissioning of Warehouse Management System using 2D QR code at different sections of AmulFed dairy, Gandhinagar.</u>

Warehouse Management System using 2D QR code

Background

Presently we are having 2D QR code based WMS, for Finished Goods inward and dispatch of Ice cream crates based on Batch code. We are using thermal printers for label printing.

Objective:

The objective is to streamline production, tracking, and dispatch processes through **web-based access**, barcode management.

It should cover all features of existing system & additionally shared as below:

- Web based application / Software (with license) for Production, warehouse & dispatch for multiple sections at AFD (Bhat). We may go live in phase manner in different department. Presently will go for Ice cream plant.
- Wi fi / LAN based production entry (Production IN) using handheld / automated scanning devices. Dispatch OUT will reduce stock from system.
- In case of automated scanning devices, 1 D barcode (product sticker) and 2 D QR code should be scanned, in background it should match, otherwise there should be error generation.
- Unique QR code labels for each and every Ice cream crate / Finished product / CBX (Selling unit) of different varieties based on batch generation.
- It should include Field of "Line no" in existing Label
- Material master database to be maintained include
 - ✓ User
 - ✓ Prefix
 - ✓ Price lot
 - ✓ Product
 - ✓ Line master
 - ✓ UOM
 - ✓ Vehicle
 - ✓ Conversion
 - ✓ Customer



Scope of new system:

Part 1: User Registration & Management

1.1 User Administration

- User Groups
 - Administrator
 - o Plant Manager
 - o Plant Operator

1.2 User Rights

- Admin Users:
 - o Full access to the system
 - o Manage master tables, product data, and user roles
- Normal Users:
 - Limited access to perform product-related tasks (barcode printing, dispatching, report generation)

Part 2: Product Management

2.1 User Login:

• Users will log in using their registered credentials (username and password).

2.2 Master Data:

• Admin User will have rights to Modify and Manage Master data (Product List).

2.3 Product Selection from Master Data:

• Upon logging in, users will select a product from the master product list for Label printing.

2.4 Label Printing:

- The user will specify the number of barcode copies to print.
- After submitting, the system will save this request to the database and print the specified number of labels.

Note: All the labels will have pre-defined Data from Master Data Table with QR Code generated from System.



Part 3: Dairy Production, (AFD - Bhat, Gandhinagar)

3.1 Production IN Entry:

- After Labels are printed, it will be manually pasted on the Ice cream crate / Finished product / CBX.
- When the Ice cream crate / Finished Product / CBX moves to the godown, users
 will scan the Label with the help of Handheld Scanner. The system will mark the
 product as Production IN Entry in the database.
- A "CSV" file is required to unload from system every day / at regular interval.

3.2 Warehouse IN Entry: (Selectable Option)

- If Officer Select Warehouse Entry Option then Job holder (labour) will scan Tray at the time of Warehouse Entry. The System will mark Product as Warehouse IN Entry. System will generate negative flag at Production IN Entry.
- If Warehouse Entry Option is not production flow will be as per description of Step 3.1 to
 - 3.3. (Step 3.2 will be bypassed if Warehouse IN Entry option is not selected.)

Note: Negative Entry means flag only. System will register Production OUT Entry at time of Dispatch Scanning Only.

3.3 Dispatch Out Entry:

• There will be 2 Ways of Product Out Entry at Dispatch:

a) Without Dispatch loading Slip:

- As per pre-planning with dispatch officer, Job holder (Labour) will takeout X number of Ice cream crate / Finished Product / CBX from godown.
- Job holder will scan each Label / QR code which is available on the Ice cream crate / Finished Product / CBX.
- On Each Label Scan system will mark the Product as **OUT Entry** in Database.

b) With Dispatch loading Slip:

- Dispatch Officer will select Ice cream crate / Finished Product / CBX number from
 Product In Entry Table from web based System and dispatch officer will print
 selected Ice cream crate / Finished Product / CBX list loading Slip & hand over to
 Job holder (labour).
- Job holder (labour) will takeout Ice cream crate / Finished Product / CBX which was printed on loading slip from godown to Dispatch.



- Job holder (labour) will scan each Label / QR code which is available on the Ice cream crate / Finished Product / CBX.
- On Each Label Scan system will mark the Product as **OUT Entry** in Database.
- While Scanning System will match label data & Dispatch loading Slip Data. If label data match with loading Slip data system will allow jobholder (labour) to Dispatch that Ice cream crate / Finished Product / CBX & System will mark that palate as OUT Entry in Database. If label data does not match with loading Slip data, system will generate alarm on handheld scanner.

Note: Dispatch officer will have rights to modify Dispatch loading Slip.

3.4 Palletize dispatch:

Dispatch Officer will select Ice cream crate / Finished Product / CBX (selling SKU) number from Product In Entry Table from web based System to prepare 1 pallet list. Dispatch officer will print 1 new QR code label and paste the same on pallet (physically pallet preparation done by Job holder (labour)). (Parent child relation established). When this pallet is dispatched as a whole all rolls will be considered as OUT ENTRY in 1 go.

This form shall be customize further based on requirement.

Plant visit is must to understand current system.



Report requirement

All reports should ask option for particular interval / day :

- Live Production, Ware house & Dispatch activities monitoring report (for particular interval, day wise)
- Summarised Label print report printed vs scanned
- Summarised Inward
- Detailed Inward report
- Detailed Dispatch reports
- Summarised Dispatch,
- SAP production (in csv format with and without item description)
- Vehicle wise repot
- Summarised Stock
- Line wise production
- Unplanned receipt report
- Unplanned issue report.
- Label printing Label scan label discard (manual entry filed) = difference of label



Annexure A-1

Basic Hardware & Software requisites

1. Software:

- Software development language would be any. (with required license)
- Different types of Pre-defined reports can be gendered via system.
- Admin User will have manual Production IN/OUT Entry right.
- Communication with handheld scanner will be via wireless.
- Duplication of Label printing facility will be available in system with duplication mark.
- Vendor should also include any required software's / Licenses in their offer.
- SQL Server Express Edition or equivalent database would be installed on Server PC
- Backup: Auto scheduled backup (daily / weekly/ monthly)
- Production to warehouse, warehouse to warehouse, warehouse to dispatch, Production to dispatch. Provision should be available for either or all of above cycle.

2. Hardware:

a) There will be standalone Master Database Server system with Redundancy (RAID 1) for AmulFed dairy, Bhat, Gandhingar. Server must have capability to handle operation of multiple section of AFD not only ice cream plant.

3. Non-Functional Requirements

3.1 Performance

- Efficient handling of concurrent users and data processing.
- Fast response times for barcode printing and data integration.

3.2 Reliability

- High availability with minimal downtime.
- Regular system maintenance and updates.

3.3 Scalability

Ability to scale resources and storage based on business growth.

3.4 Usability

- Intuitive user interface.
- Comprehensive training and support.



4. Web-Based Access

- Platform: Web-based interface with secure login
- Role-based access controls
- **5.** Service support (software) : 5 year from installation
- **6.** Service support (OEM Hardware) : 5 year from installation
- **7.** Team Training: Proper training & documentation is required for end user.



Annexure A-2

Scope A-2/1

Hand held Terminals (for scanning at Ice cream Production + dispatch section) : quantity = 5 Each.

We require wireless android handheld device with scanning acknowledgement system.

Make for HHT	Zebra,/ Motorola / Honeywell / Hikvision	
Cradle	Single slot cradle with power supply and USB cable	
OS	Android base (upgradable)	
Runtime license	Per terminal	
Care pack		
	covers incidental damage to the terminal	

^{*}Above Make are preferable, vendor can suggest better or equivalent make / model.

Vendor has to ensure integration of above handheld scanning devices with vendor's software & hardware.

Scope A-2/2

With respect to point no. 3.2 (page 3): Warehouse IN entry following is required

- We require top mounted fixed scanners (2 nos.) on two conveyors for scanning of Icecream FG crates which are taken in airlock room. (There should not be any manual intervention). Conveyors is in AFD scope.
- Scanners should work between temp. range of -5 to 5 deg c in airlock room.
- Minimum scanning speed should be 15 crates/minute.



Annexure A- 3

AmulFed dairy's Scope

- 2 nos Wi Fi modules (Access point device) (1 for Ice cream Production area & 1 for Ice cream Dispatch section)
- For any future implementation hand handled scanner + Wi Fi or automatic / online scanning mechanism + LAN connection will be in AFD's scope.
- Printer Type Direct Thermal Print (TCI /TSC Printer)
- The current scope does not involve SAP integration, it can be accomplished upon additional request in the future.

Delivery / site Address:

AmulFed Dairy Plot no. 35, Near Indira bridge, Village BHAT, Gandhinagar -382428 Gujarat



Annexure B

Inquiry: AFD:PUR:ENQ:2024:869

Rate Format for Design, Supply, Installation testing and commissioning of Warehouse Management System using 2D QR code at different sections of AmulFed dairy, Gandhinagar.

Name of Bidder / firm:

Sr. No.	Particular		Amount (Rs.)		
			Basic	GST	Total
1	Software (with 1 year warranty)	1 lot			
2	Software support (5 year after warranty)	1 lot			
3	Server / Hardware with 5 year OEM warranty	1 lot			
4	Hand held Terminal as per technical scope A-2/1	5 each			
5 *	Top mounted fixed scanner as per technical scope A-2/2	2 each			

^{(*} We may consider as separate item)

Warranty	: 12 months from installation	
Delivery period	<u>:</u>	
Payment Terms	s: After commissioning of total project + ι	user acceptance. Within 30 days of
bill submission.		
I have understo	od the terms and conditions properly conta	ain in Enquiry & Annexure A.
Bidder's Sign		Company Seal & Name
blader 3 Sign		Company Scar & Name
Date:		