



**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 "**Modification in the PLC/SCADA/MIS in the Existing APS Pre-Processing Plant of APS**" as per given scope of work.

AFD: PUR: ENQ: 2019:99





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: **"Modification in the PLC/SCADA/MIS in the Existing APS Pre-Processing Plant of APS"** as per the scope of supply mentioned in the Inquiry".

Bid Reference	AFD: PUR: ENQ: 2019:99
Bid Start	Starts from 24.09.2019
Submission	Up to 02.00 pm of 1.10.2019
Completion period	Max. 1 months from PO.

Eligibility Criteria

- 1) Bidder should be having minimum 2 numbers of successful commissioning of similar Job/system in India or Outside India.

Technical Specification : As per the Annexure-I

Submission of Bid :

Bidders fulfilling above eligibility criteria eligible for submission of bids in their name only.

- 1.1 The bid shall be submitted through hardcopy before above due date is acceptable.
- 1.2 The Price Break up sheet (in separate sealed Envelope) and technical document shall be submitted at the office address mentioned below.
- 1.3 The price Break up sheet should be entitled with reference of "Price Break Up for, **"Modification in the PLC/SCADA/MIS in the Existing APS Pre-Processing Plant of APS"**.

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

AmulFed Dairy (A unit of GCMMFLtd), 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 2 Months from the date of Bid opening.

Contact details: For any techno-commercial query you may contact Palak Shah (7359001666), or (E-mail-palak.shah@amul.coop) of Purchase department.

Annexure-I

MODIFICATIONS IN THE PLC/ SCADA/ MIS IN THE EXISTING PRE PROCESSING PLANT OF APS

SCOPE OF THE WORK:

Existing Pre Processing of APS plant is having ROCKWELL make automation system which includes Tetrapak Plant master Operating System. Purchaser envisages modifying existing Automation system for expansion of existing plant which includes addition/modifications/alteration of existing facility. Following scope to be considered for addition/modifications/alteration of existing automation system including PLC program, SCADA, MIS:

1. ADDITION OF 2X60 KL Flavored milk/Cream storage silo in the existing pre processing plant. This include in the modification of existing valve battery of the low acid products.
2. ADDITION of one unloading header with 1X20 KLPH transfer pump to UHT line (U5) for C series silo.
3. ADDITION of 1X50 KLPH transfer line for Curd transfer in C series.
4. ADDITION of Sugar syrup transfer line in C series
5. Addition of product transfer line from New Preprocess to existing Preprocess in C series
6. Installation of 4 new valves in U5 forward line in A series and merging it with C series forward line of U5.
7. New RO water header to be provided for Spice preparation tank of existing pre processing facility. Available nearby RO water header to be extended up to Spice preparation tank. New vortex flow meter will be added in place of magnetic flow meter.
8. Facility for water flush after recovery transfer from existing APS recovery to existing APS pre processing shall be provided. This activity shall be performed from the SCADA of the existing pre processing section. Valves will be added in recovery area and accordingly logic will be modified.
9. Modification in the product and CIP piping of the existing pasteurizer and D-11 tank including valves, pipes and fittings for supply of milk to D11, transfer of product from D-11 to A series Silo (with and without pasteurizer).
10. Modifications in the CIP circuit of 30 KLPH in the existing CIP kitchen of Pre Processing plant is in the scope of work to facilitate CIP of new 2X60 KL cream silo and other modified CIP routes.
11. Related changes in existing program due to new objects installation including interlocks where ever required as per process requirement.
12. Modification/addition in existing MIS reports as per addition of new objects, new Product ID and functionalities e.g. CIP/Production reports related to new equipment. Trends reports e.g. Silo Temperature while storing product in silo, CIP trends etc for as per new Updation
13. Modification in existing SCADA to include the new objects and new scheme

14. Modification in existing APS recovery for diverting recovery from new sterilizer (U5)
15. Modification in logic of U5 transfer line and Communication/Signal exchange of new Pre process and new sterilizer (U5) in APS
16. Integration of new Remote I/O panel with existing system with commissioning.
17. ADDITION of one RTD in Curd chiller and accordingly changes in logic for cooling tower pump ON-OFF during circulation/transfer of curd in B series.

Modification required for operational issues and other functional requirement :

1. Chemical (Lye/Acid) consumption reports for existing dosing system.
2. After Lye/Acid dosing there is a provision of water push but during water push Flow meter totalizer is adding the quantity. So there is a requirement to stop the totalizer during water push in both Lye and Acid. Need to change in logic.
3. Report generation issue in CIP/Production reports in OS1.
4. If we start the pasteurization of A14/15 through L1130 then during finalization water push is started from E11 tank but actual requirement is water push start from L1116. Need to change in logic.
5. There is no interlock of manual mode (If any valve in manual) in transfer lines of L1508, L1511 and L1408
6. Incorrect material ID faults, even if same product ID at source, transfer line and destination. It is required to be done in A series.
7. L1111 line production report error-Kesar shown in all variants. The product should be shown in reports as per selected.
8. G11 tank Production/CIP reports not generated.
9. Fine tuning to be done in few of the CIP forward line valves for their opening and closing sequence.
10. If we put Almix in maintenance mode then also its all activities starts in auto mode. Need to modify in logic.
11. Calculation of TR (Chilled water load consumption) and inclusion of the same in MIS.

Details of the existing Automation system:

Automation Hardware Details:

Make of the Controller	: Allen Bradley
Model	: Controllogix 5575(1756-L75)
Spare Memory	: 13 MB used out of 32 MB

Automation Software Details:

RS Logix 5000
Wonderware : WindowMaker, WindowViewer
SCADA on Tetra PlantMaster

MIS Software details: SQL based MIS software (TPM).

Bidder to visit site to understand scope of the work and to prepare detailed offer as per above mentioned scope. Required clarifications regarding scope of the work to be submitted before pre bid meeting.

Annexure-II

Price Schedule Form		
Summary Sheet		
SN	Summary Heads	Amount
1	2	3
1	Total Ex-factory, Packed	
2	Transportation	
3	Insurance	
4	GST/Custom Duty	
5	Total Supply Price delivered at Site (1+2+3+4)	
6	Total Installation & Commissioning with GST	
7	Total Bid Price (5+6)	

Note:

1	Bid must be submitted strictly as per this pro forma (items break-up sheet shall be submitted in hard copy in sealed envelope at office address mentioned in IFB with marking of "DO Not Open Before").
2	Amount against Sr. No 1 to 3 & 7 must be the total worked out in items break-up sheet.
3	Please quote charges for transportation (Sr. no 4) and insurance (Sr. no 5) as a percent of ex-factory, packed (Sr. No 1).
4	List of Spares with unit prices, valid for one year, must be submitted.
5	In all the cases all the responsibility till commissioning of the plant will remain of Bidder/Supplier.

Signature of Authorized Signatory of Bidder/Supplier