



NAME OF WORK	:	Supply, Erection and Commissioning of Plant and Machineries (As per annexure I) for Salem Milk Union
TENDER NOTICE REFERENCE	:	No. 11880/Tender/P2/2020

PART-I

TECHNICAL BID

Tender document issued to M/s._____.

Tender downloaded from website on
..... at free of cost.

GENERAL MANAGER

TENDER INFORMATION

1.	Name and Address of the Purchaser	:	The General Manager, Salem District Co-operative Milk Producers' Union Ltd., Sithanur, Thalavaipatty (Post), Salem – 636 302.
2.	Name of the Work	:	As per Annexure (1)
3.	Tender Reference No.	:	No.11880/Tender/P2/2020
4.	Tender Estimated Value	:	Rs. 1.45 Crores (Approximately)
5.	Earnest Money Deposit)(EMD)	:	As per Annexure (1)
6.	Tender Documents Details	:	Tender documents can also be downloaded from the designated website www.tenders.tn.gov.in at free of cost.
7.	Date of Pre-Bid meeting	:	Date 04 .05.2022
		:	Time 11.00 A.M.
8.	Last date and time for submission of the two part tender – both technical and commercial bids.	:	Date 11.05.2022
		:	Time upto 2.00PM
9.	Date and time of opening of Part-I Technical Bid document	:	Date 11.05.2022
		:	Time at 2.30PM
10.	Date and time of opening of Part-II Financial Bid	:	Financial Bid will be normally opened within 60 days from the date of opening of Part I pre qualifications-technical bid. The date of opening of Financial Bid will be informed to the eligible tenderers who are found and declared as qualified as per Part I technical bid.
11.	Place of Pre-Bid meeting & Part-I Technical Bid and Part-II Price Bid opening	:	O/o The General Manager, The Salem District Co-operative Milk Producers' Union Ltd., Sithanur, Thalavaipatty (Post), Salem – 636 302.

ANNEXURE-I
LIST OF TENDER ITEMS

Sl. No.	Name of the Machinery	Qty. (Nos.)	EMD Rs.	Supply Duration	Erection	Location for Supply
1.	Can washer 800 cans/hr (Salem & Attur CC)	2 Nos.	48000/-	8 weeks	4 weeks	FBD & Attur CC
2.	Ghee pet Jar filling and sealing machine (capacity 100 ml to 5000 ml)	1 No.	15000/-	4 weeks	2 weeks	FBD
3.	Ghee Tin seaming machine	1 No.	5000/-	4 weeks	2 weeks	FBD
4.	Hydraulic Battery operated Fork Lift	1 No.	9500/-	4 weeks	1 week	FBD
5.	100% Oil free Screw Air compressor with inbuilt Dryer (Acoustic Type) Make : Atlas Copco/ELGI/ Ingersal Rand/Chicago pneumatic	2 Nos.	30000/-	4 weeks	2 weeks	FBD
6.	Reefer Vehicle (Cabin with chassis) to mount the 19 Feet container which includes of fabrication , erection and commissioning of PUF container, refrigeration system suitable for Ice cream transportation Preferred Make: Ashok Leyland / Eicher / TATA or equivalent as per standard	1 No.	23000/-	8 weeks	-	FBD
7.	SS 20 KL Milk Silo	1 No.	15,000/-	8 weeks	-	FBD

Noted and agreed to the above

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Signature of the Tenderer

NB: 1) For detailed specifications please refer the tender specifications

2) **Separate tender document** is to be used for each and every item of the above, for which the participants are willing to participate.

3) No other Technical specification except the tender item should be enclosed.

4) Submit the tender documents as per the tender terms and conditions.

5) Any other Technical specifications, payment terms & conditions, relaxations and etc., except the tender item should not be enclosed with the tender documents. Otherwise the tender documents will be rejected.

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1.0. TECHNICAL BID – CHECK LIST

PREAMBLE OF TENDER:-

1.1. The General Manager, SDCMPU Ltd. invites Bids by way of **OFF Line** from eligible bidders by two cover system and other accessories for the **Supply, erection and commissioning Plant and Machineries as per annexure 1**

1.2. BIDDER TO FILL IN THE CHECK LIST GIVEN BELOW: (State YES / NO for each item)

Kindly ensure compliance of the under-mentioned requirements, as per Tender Terms and Conditions.

1.3. The tender is offered for: _____ (Item Name)

Sl.No.	Details	Remarks
1.3.1	Whether two covers have been wax sealed separately as “Technical bid” & “Commercial bid” (whichever is applicable) and both the covers enclosed in a common overall envelope duly superscribed as “Tender for the Supply, erection and commissioning of ----- (to be filled by the tenderer)	Yes/No
1.3.2	Whether the EMD amount as per annexure 1 is enclosed in the technical bid	Yes/No.
1.3.3	If yes, whether D.D. is attached with the Tender offer - Part I Tech. Bid	Yes/No.
1.3.4	If yes, Details of D.D. No. date, Bank on which drawn etc. may be furnished D.D. No(s)..... dated..... for Rs..... drawn on (Bank)..... Branch.....in favour of General Manager, SDCMPU Ltd., payable at Salem	Yes/No.
1.3.5	If EMD exemption is sought for, whether necessary documentary proof/evidence such as EM Part – II as per MSMED Act 2006 for SSI Certificate enclosed in the technical bid.	Yes/No.

Noted and agreed to the above

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Signature of the Tenderer

1.3.6	Whether details of infrastructural facilities such as equipment / man-power / financial statement (FY 3 years) details etc., are enclosed.	Yes/No.
1.3.7	Whether details of past experience (i.e) Purchase order copy(s) for similar type and same capacity of item tendered for as per technical specification.	Yes/No.
1.3.8	Whether satisfactory performance certificate from client(s) for the above such supply with features mentioned in the technical specification of tendered item are enclosed	Yes/No.
1.3.9	If so, whether necessary supportive documents such as attested copies of Supply Order / Work order, delivery challans, Excise Gate pass etc., enclosed.	Yes/No.
1.3.10	Whether copies of attested GST certificates enclosed	Yes/No.
1.3.11	Whether latest 3 years annual sales tax return attached	Yes/No.
1.3.12	Whether copy of attested PAN card enclosed	Yes/No.
1.3.13	Whether the Corrigendum duly signed and sealed has been enclosed along with Technical Bid Part-I	Yes/No.
1.3.14	Whether all the pages in the tender documents – Part I (Tech. Bid) and Part II (Commercial Bid) have been duly signed by authorized signatory	Yes/No.
1.3.15	Whether the Commercial bid is filled in detail in the prescribed format for break-up, equipment-wise and for abstract	Yes/No.
1.3.16	Whether these two sealed covers for Part - I “Technical Bid” and Part II – “Commercial Bid” – put in a larger cover duly superscribed, addressed and wax sealed at appropriate places.	Yes/No.

Note: Please ensure that all the relevant boxes are marked YES / NO against each column.

Important Note: Bidders must ensure that all the required documents indicated in the tender document are submitted without fail. Bids received without supporting documents for the various requirements mentioned in the tender document are liable to be rejected at the initial stage itself.

2. TWO PART TENDER APPLICATION

TECHNICAL (PRE-QUALIFICATION) BID & PRICE BID APPLICATION

From	To The General Manager, The Salem District Co-op. Milk Producers' Union Ltd., Sithanur, Thalavaipatty (Post), Salem – 636 302
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Sir,

Sub: Two Part tender – Supply, erection and Commissioning of -----
----- Submission of Documents – Regarding.

X.X.X.

Having examined the two part tender documents consisting of Part I technical bid pertaining to pre-qualification and part II commercial bid with price quote, I/We hereby submit all the necessary documents and relevant information for bidding the above mentioned tender.

The application is made by me/us on behalf of in the capacity of duly authorized to submit this two part tender offer. Necessary evidence admissible in law in respect of authority assigned to me on behalf of the bidding firm is herewith attached.

I/We submit the documents herewith taking into consideration of all the instructions, terms and conditions in the detailed two part tender notice. I/We understand that the General Manager, SDCMPU Ltd, Salem reserves the right to reject any tender offer fully or partly without assigning any reasons thereof.

I/We hereby agree to hold the **tender offer valid for acceptance for a minimum period of 120 days from the date of opening of Part – I – Technical bid.**

Enclosures:

1. Evidence of authority to sign
2. Latest brochures if any
3. Part I pre qualification – Technical bid in separate sealed cover
4. Part II commercial bid with price quote in separate sealed cover.

3. INSTRUCTIONS TO THE TENDERERS

This two part tender document consists of:

Part I – Technical Bid for Pre-Qualifying

Part II – Commercial bid for price-quote schedule.

3.1 Read all the terms and conditions of the two part tender before to start filling up.

3.2 The tenderers are to submit the **original set** of the two part tender (both Part – I – Technical Bid and Part II Commercial Bid) duly filled in, attach necessary documents and are advised to retain the duplicate set of documents for records.

3.3 The part I – Technical Bid for Pre qualification consisting of pages.....and the Part II – Commercial bid for price-quote schedule consisting of pages..... should be submitted in two different covers duly superscribed as “Tender for the **Supply, erection and commissioning of -----(Item name to be filled by tender participants)** and again put both the sealed technical bid cover and commercial bid cover in a larger wax sealed cover duly superscribed as “**Supply, erection and commissioning of -----** and addressed to “The General Manager, The Salem District Cooperative Milk Producers’ Union Ltd, Sithanur, Thalavaipatti, Salem-636302 either in person or by post/ courier so as to reach on or before the time and date specified for tender opening. **Tenders received after the specified date and time shall be summarily rejected.**

3.4 a) If the envelope is not sealed and super-scribed as instructed, no responsibility will be assumed for any misplacement of tender or premature opening of the envelope or parcel.

b) Telegraphic/FAX Tenders will not be accepted

3.5 The quantities mentioned in the tender document are approximate. The tender accepting authority shall be permitted to vary the quantities finally ordered and execute the work through the contractor to the extent of 25% (Twenty five percent) either way of the requirements.

3.6 **Go through the check slip given and ensure compliance of the terms and conditions.**

3.7 The tenderer is specifically informed that all the pages in both Part I – Technical Bid and part II – Commercial Bid should be signed at the bottom of each page without any omission by the authorized signatory with name and seal of the firm.

- 3.8 If the Qualification application is made by a FIRM in partnership, it shall be signed by all the partners of the firm with their full names and current address or by a partner authorized by the firm (either as per Articles of the Deed of Partnership / by power of attorney) for signing in Tenders, Agreements etc. In which case, certified copy of the Registered deed of Partnership along with the current address of all the partners and a certified photocopy of the Registered Power of Attorney issued in favour of the Signatory, should be produced.
- 3.9 If the Qualification Application is made by a Limited Company or a Limited Corporation, it shall be signed by a duly authorized person holding the Power of attorney for signing the application, in which case, the certified copy of the power of attorney shall accompany the qualification application. Such limited company or corporation shall also furnish satisfactory evidence of its existence along with the Qualification schedule.
- 3.10 **The tenderer who are downloading the document from the web site are instructed to check the web site for corrigendum after the date of pre-bid meeting, for any amendments (corrigendum if any issued). They are instructed to download the above amendments and enclose it along with the technical bid document duly authenticating while submitting without fail. Failure to submit the pre-bid minutes will lead to rejection of the tender offer.**
- 3.11 The tenderer shall provide Raw material test certificates, Manufacturer Test Certificates and also arrange to provide instrument for identification of material to conform as per technical specification during the inspection. Detailed evaluation done on the basis of the Documents / Records / Evidences / Certificates produced by the Applicant in the Technical Bid.

4. GENERAL TERMS & CONDITIONS

4.1 Tender under sealed **two part tender system and other accessories** (i.e.) **Technical Bid (Prequalification) & Price Bid (item rate tenders)** are invited by the General Manager, SDCMPU Ltd. for the **Supply, erection and commissioning ---**
-----**(to be filled by tenderer)**

4.2 Tenderer details

- 4.2.1. The tenderer should be manufacturer / supplier of tendered item.
- 4.2.2. The tenderer should have previous experience in having supplied as per technical specification, in India either to any cooperative institution or reputed dairies / firms.
- 4.2.3. The tenderer should enclose copies of purchase order / supply order within a period of 5 years.
- 4.2.4. The performance report for above such supply from the reputed purchaser shall be enclosed in the technical bid part – I. The performance certificate received from purchaser / client should be of within a period of 5 years.
- 4.2.5. The Tenderer should have minimum experience in the manufacturing / supply of tendered item (see the annexure 1). Copies of Registration of firms with list of activities or GST registration certificate etc. should be enclosed as supporting document.
- 4.2.6. If the tenderer is an authorized dealer / supplier of a manufacturer, the tenderer shall furnish the authorization letter from the manufacturer for supply of tendered item.
- 4.2.7. If the tenderer is an authorized dealer / supplier for tendered item then the experience of the manufacturer for supply of **the same**, their performance and sales turn-over shall be taken for evaluation of technical bids, even if the supply has been made either by the manufacturer directly or through other agencies.

4.3 PART I TECHNICAL BID

- 4.3.1 PART I TECHNICAL BID, wherein the pre-qualification, based on various factors such as supply, capacity etc., suitability and eligibility of the tenderer will be evaluated, considered and decided prior to opening of commercial Bids under PART II of the tender.
- 4.3.2. THE PART I technical bid shall be opened in the presence of the tenderers or their authorized representative who opt to be present during the opening.

4.4 PART II Commercial Bid

- 4.4.1. The PART II Commercial Bid of the tenderers who do not satisfy any/all the terms and conditions specifically so mentioned under PART I technical bid, shall not be considered and shall not be opened **as non responsive**.
- 4.4.2. PART II Commercial Bid, wherein the rates tendered by those who qualify for and are selected as per the terms and conditions prescribed in PART I TECHNICAL BID only will be considered and decided for the award of the contract for the tendered item.
- 4.4.3. The Part II commercial bids shall normally be opened **within 60 days** from the date of opening of the Part I pre-qualification/ technical bid in the presence of tenderers or their authorized representatives who opt to be present. The date of such opening of commercial bid will be informed separately to those who qualify in the PART I technical bid.
- 4.5. The tenderer is specifically informed that all the pages in both Part I - Technical Bid and Part II – Commercial Bid should be signed at the bottom of each page without any omission by the authorized signatory with name and seal of the firm.
- 4.6. The tender forms are not transferable or assignable.
- 4.7. The signatory of the tender should indicate his/their status in which he/they have signed and submit necessary documentary proof admissible in law in respect of such authority assigned to him/them by the firm.
- 4.8. If the tender opening day is declared as a holiday, the tenders shall be received and opened immediately on the next working day at the same time and place.
- 4.9. **E.M.D. PAYABLE:**
- 4.9.1 Tender must be accompanied with the prescribed amount of EMD (as per annexure I) along with tender technical bid.
- 4.9.2 The EMD amount to be drawn by means of the Demand Draft only from any Indian Nationalised Bank or Scheduled Bank drawn in favour of the “General Manager, SDCMPU Ltd,” payable at Salem. **IT SHALL BE ENCLOSED WITH THE PART I TECHNICAL BID ONLY. No other form of remittance shall be accepted.**
- 4.9.3 Any tenderer claiming exemption from the payment of EMD, should enclose necessary valid documentary proof for SSI registration in the form of entrepreneurs memorandum (EM) No. Part-II as per new system and other accessories MSMED Act 2006 of Tamilnadu Small Industries Development Corporation / the District industries centre of Directorate of Industries and Commerce in respect of those

items for which the registration certificate has been obtained and tenders called for.

4.9.4 Domestic Small Scale Industrial Unit means an Industrial Unit in which the investment in fixed assets in Plant and Machinery whether held in ownership or on lease or by hire purchase does not exceed rupees one hundred lakhs and which manufactures the goods within the State and Registered with the Director of Industries and Commerce as defined under clause 2 (aa) of TNTT Act of 1998.

4.9.5 **Tenders not accompanied with demand draft towards the prescribed EMD or the relevant documentary proof for the exemption thereon shall be summarily rejected.**

4.9.6 The EMD remitted by the tenderer shall be forfeited in full.

- If the tenderer submit fresh offer / revises offer in case of any omission subsequently after opening.
- If withdraws his tender or backs at before the expiry of validity period or after acceptance.
- If revises any of the terms quoted during validity period.

4.9.7. MODIFICATION AND WITHDRAWAL OF BIDS

4.9.7.1 No Tenderer shall be allowed to withdraw the tenders after submitting the tender.

4.9.7.2 A Tenderer may submit a modified Tender before the last date for receipt of tender. Provided that where more than one Tender is submitted by the same Tenderer, the lowest eligible financial tender shall be considered for evaluation

4.9.7.3 Each bidder's modification notice shall be prepared, sealed, marked and delivered with the outer and inner envelopes additionally marked MODIFICATION as appropriate.

4.9.7.4 No bid may be modified after the deadline for submission of Bids.

4.9.7.5 Bidders shall submit offers that comply with the requirements of the bidding documents, as indicated in the technical specifications. **“Alternatives will not be considered”.**

Communication to the unsuccessful Bidders will be sent after the communication sent to the successful Bidder. Within 90 (Ninety) days from the date of the receipt of refund vouchers duly stamped and signed from the unsuccessful Bidder, refund of Earnest Money Deposit will be made.

4.10 PAN/SALES TAX REGISTRATION/CLEARANCE CERTIFICATE:

4.10.1. Tenderers shall furnish attested Photostat copies of valid GST Registration Certificates along with the tender technical bid Part-I.

4.10.2. Tenderers shall furnish attested Photostat copy of PAN Registration Certificates along with the tender technical bid Part-I.

4.10.3 Tenderers have to furnish the copy of sales tax return filed for the previous month.

4.10.4 Tenderers have to furnish the acknowledgement copy of **Income tax return filed for last three years.**

4.11 SECURITY DEPOSIT

The successful tenderers would be required to sign an agreement and furnish a Security Deposit of 5% of the order value, drawn by means of Bank Draft from any Indian Nationalised Bank or Scheduled Bank drawn in favour of "General Manager, SDCMPU Ltd," payable at Salem **within 15 days.** The EMD already paid along with tender shall be adjusted against SD to be paid by the successful tenderer.

No exemption will be given from payment of Security deposit under any circumstances as per TTT Act and the same should be remitted by Demand Draft only. Bank guarantee or any other form of remittance will not be accepted.

4.11.1 The security deposit will be refunded only after the expiry of one year from the date of satisfactory completion of the contract complying to the specification of the equipment to take care of the workmanship of the agency.

4.12 AGREEMENT:

The successful tenderer has to execute an agreement on Rs.100/-non-judicial stamp paper incorporating the terms and conditions of the contract and the specification within 15 days from the date of intimation of the acceptance of the tender. In case of default of either of the conditions (i.e) remitting the security deposit or execution of the agreement within the time allowed, the EMD paid is likely to be forfeited by the Union.

4.12.1. If the contractor fails to execute the contract satisfactorily at the tendered rate, the security deposit will be forfeited

4.12.2. If the union incurs any loss / additional expenditure due to the negligence of the contractor in connection with the work during the period of contract, the same shall be recovered together with all charges and expenses from the contractor.

4.12.3 The breakages or damages, if any, caused by the contractor to the property of the Union, the cost will be recovered from the contractor.

4.12.4 **RATES AND PRICE:** This is a fixed price contract. Price adjustment clause (to account for raise or fall in the money value / statutory taxes during the contract

period) is not operatable for this contract. However any variation in the statutory levies and Taxes by State Government / Central Government shall be effected on the end price to the benefit of either the contractor or Union as the case it may be.

4.12.5 No interest shall be paid on Earnest Money Deposit/Security Deposit.

4.12.6 **The Agreement in Rs.100/- non-judicial stamp paper shall be signed and returned within 15 days of receipt of the supply, erection and commissioning order along with the D.D. for Security Deposit.**

4.13. PAYMENT TERMS:

4.13.1. SUPPLY:

a) If the single order of any successful tenderers is over Rs.1 crore, an advance payment of 10% of the basic value of the order will be considered against irrevocable bank guarantee for a period till completion of entire supply of plant machinery / equipment and such advance shall be recovered **with interest applicable at the time of recovery from the bills payable at the time of release of 80% basic price + taxes and other charges.** The above such machinery / equipment shall be hypothecated to Union in addition to other requirement. (OR)

80% of basic price + taxes and other charges shall be released on receipt of the plant machinery / equipment-wise in good condition at site.

b). The remaining 20% payment shall be released after the erection and satisfactory commissioning of the item at site.

(OR)

If the site is not ready due to unavoidable circumstances for carrying out the erection and commissioning of the equipments within 3 months period, then the balance 20% payment on supply will be considered for release on submission of irrevocable Bank Guarantee for a value equal to 20% of supply order value, for one year and extendable for another one year with an agreement on a non-judicial stamp paper to a value of Rs.100/- (Rupees hundred only) for execution of project subsequently without altering the erection and commissioning charges.

4.13.2. ERECTION AND COMMISSIONING:

a) 80% of the erection and commissioning charges shall be released on satisfactory completion of the erection and commissioning of the item.

b) Balance 20% of erection and commissioning charges shall be released after one year from the date of satisfactory commissioning and performance of item.

N.B: NO OTHER TERMS OF PAYMENT WILL BE ENTERTAINED.

PENALTY CLAUSE :

4.13.3. If the tenderer / Contractor fails in his due performance of the contract within the time fixed in the schedule accompanying the order or extension of time granted Liquidated damages will be levied

a) at 1% per month for the number of days that the supply / work has been delayed for the contract value less than Rs.50.00 lakhs (Rupees fifty lakhs); and at 0.5% per month, if the contract value is more than Rs.50.00 Lakhs (Rupees fifty lakhs) as below subject to:-

(i). The Liquidated Damages be imposed on the value of undelivered / delayed supply of materials / machineries instead of total value of contract, if the tender is for the supply, erection and commissioning of two or more number of machineries and where the materials / machineries can be put into use separately.

(OR)

(ii). The Liquidated Damages be imposed on the total value of the contract for delayed supply / completion of material / work as per the milestone fixed in the tender (i.e) turnkey job inclusive of Civil work, supply of Mechanical/ Electrical item, erection etc., since the machineries partly supplied could not be put into operation and affect the functioning of system and other accessories as per plan.

4.13.4. Time being the essence of contract no variation shall be permitted in the delivery time as prescribed in the delivery schedule. If the tenderer fails to supply and execute the work in full or part of the order as per the delivery schedule, the Union shall reserve the right to cancel the order besides forfeiture of Security Deposit.

Notwithstanding anything contained in the tender schedule, no obligation rests on the Union to accept the lowest tender and the Union shall also have the right to accept or reject any or all the tenders fully or partly without assigning any reasons.

4.13.5. For violation of any of the terms and conditions of the contract, the Union reserves the right to terminate the contract, with or without notice as applicable. On termination of contract, the Security Deposit is liable to be forfeited and any of the resultant loss beyond Security Deposit will be recovered from the contractor by legal means apart from forfeiture of any amount due to the contractor.

4.13.6. (a). If the tenderer defaulted in any of the previous tenders to execute agreement or to pay Security Deposit or to supply ordered quantity either in part or full will not be eligible from participating in this tender.

(b) If the successful tenderer defaulted to execute agreement or to pay Security Deposit or to supply ordered quantity either in part or full shall be debarred from participating in this subsequent tender for a period of 3 years.

4.14. WARANTEE:

A warrantee certificate shall be furnished on the workmanship, parts and performance of the equipment / system and other accessories for a period of 18 months from the date of supply or 12 months from the date of satisfactory commissioning ***whichever is later***. If any defects are noticed in the equipments during the warrantee period the same should be rectified at site at free of cost and charges.

4.15. FORCE MAJEURE:

Failure or delay in the part of tenderer for supply due to force majeure causes enumerated here under shall be considered, provided the supplier produces documentary evidence.

- a). Any cause which is beyond the reasonable control of the tenderer.
- b). Natural phenomena, such as floods, drought, earthquakes and epidemics.
- c). Act of any Govt. Authority, domestic or foreign, such as wars declared or undeclared quarantines, embargoes licensing control on production or distribution restrictions.
- d). Accident and disruptions such as fire, explosion, increase in power cut with respect to date of tender opening etc..
- e). Strikes, slow down and lockouts.

The cause of force majeure condition will be taken into consideration only if the supplier notifies within 30 days from the occurrence of such eventualities. The purchaser shall verify the facts and grant such extension as the facts justify. For extension due to force majeure conditions, the supplier shall submit his representation with documentary evidence for scrutiny by the purchaser and decision of the purchaser shall be binding on the time.

4.16. DISPUTES AND ARBITRATION:

In case of disputes arising out of this tender, an arbitrator as mutually acceptable to the tenderer and Union will be appointed by General Manager, SDCMPU Limited. The arbitrator's decision shall be final, conclusive and binding on both the parties.

4.17. LEGAL JURISDICTION

In case if either party to the tender is aggrieved by the award of the arbitrator so appointed as per clause 4.16. or otherwise, they can appeal to Court. The courts situated in **Salem alone** shall have jurisdiction to entertain such disputes.

4.18. PERFORMANCE GUARANTEE:

If the value of supply order is Rs.50 lakhs or more, the contractor shall provide a performance guarantee at the time of getting 80% payment for the 10% of the supply order value of the item ordered as Bank Guarantee from a Nationalized Bank / Scheduled Banks for a period of one year and extendable to one more year if needed.

5.0. PRE QUALIFICATION CRITERIA – TECHNICAL BID (PART-I)

The pre-qualification tender/PART-I technical bid will contain the under mentioned aspects pertaining to the prospective suppliers about their suitability, capacity, financial status, antecedents, past performance etc. The conditions are:-

- 5.1. The tenderer should be manufacturer / supplier of item.
- 5.2. The tenderer should have previous experience in having supplied [similar type and minimum times of tendered quantity in one location](#), (see annexure 1) in India either to any cooperative institution or reputed dairies / firms and enclose copies of purchase order / supply order within a period of 5 years.
- 5.3. The performance report for above such supply from the reputed purchaser shall be enclosed in the technical bid part – I. The performance certificate received from purchaser / client should be of within a period of 3 years.
- 5.4. The Tenderer should have minimum experience of 5 Years in the manufacturing / supply of [above item](#). Copies of Registration of firms with list of activities/Sales tax registration certificate etc. should be enclosed as supporting document.
- 5.5. If the tenderer is an authorized dealer / suppliers of a manufacturer, the tenderer shall furnish the authorization letter from the manufacturer for supply of [above item](#).
- 5.6. If the tenderer is an authorized dealer / suppliers for item then the experience of the manufacturer for supply of item, their performance and sales turn-over shall be taken for evaluation of technical bids, even if the supply has been made either by the manufacturer directly or through other agencies.
- 5.7. The tenderer should have necessary infrastructural facilities such as capacity, manpower, solvency, suitability and eligibility for the item (OR) in case if the tenderer is a supplier then furnish authorization certificate from the manufacturers and their infrastructure facility details as mentioned above.

FINANCIAL: *The tenderer shall have average annual sales turn-over for the last three financial years equal to the tender estimated value and minimum annual sales turn-over in each of the last three financial years shall not be less than 50% of the tender estimated value.*

- 5.8 ENCLOSURES:** The tenderer should submit the following documents **duly attested by Notary Public** along with the Part – I technical bid.
1. Purchase orders as supportive documents to show the past supply having supplied to any of the reputed dairies / firm(s) /coop(s) in India.
 2. Satisfactory performance certificate from client(s) for the above equipments

tendered.

3. If the tenderer is an authorized suppliers of a manufacturer, the tenderer shall furnish the authorization letter from the manufacturer for supply of item.
4. Photostat copies of valid GST Registration, PAN Certificate.
5. Infrastructure facilities – Capacity of Firm/ Supplier

i)	Structure and Organisation with details of Technical Personnel etc – Annexure-A
ii)	Financial Capability Statement – Annexure-B
iii)	Building, Plant and Equipments
iv)	Details of Abandonment of work Litigation/debarring done – Annexure-C
v)	Affidavit – Annexure-D
vi)	Credit Facilities – Bank Certificate – Annexure-E

5.9. DELIVERY SCHEDULE:-

5.9.1. Supply : As per annexure 1

5.9.2. Erection & commissioning: As per annexure 1

VALIDITY OF PRICE TENDER:

The tender offer shall be kept for acceptance for a **period of 120 days** from the date of opening of Part – I Technical bid. The offers with lower validity period are liable for rejection.

Further the tenderer shall agree to extend the validity of the bids without altering the substance and prices of their bid for further period, if any required by Union (i.e) The Price Bid shall be valid for a period of at least 90 days (Ninety Days) from the date, notified for opening of Price Bid.

DEVIATION:

- a) The offers of the tenderers with deviations on technical / commercial terms of the tender will be rejected
- b) No alternate offer will be accepted.
- c) Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:
 - Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
 - Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or

financial failures etc.; and/or

- Participated in the previous bidding for the same work and had quoted unreasonably high bid prices and could not furnish rational justification to the employer.

Annexure – A

STRUCTURE AND ORGANISATION		
1	Name of the Applicant	:
2	Status	:
	Individual contractor	:
	Sole Proprietary Firm	:
	Firm in Partnership	:
	Private Limited Company	:
	Public Limited Company	:
3	Head Office/Registered office address with phone / Telex / Fax Number	:
4	Regional Office address with Phone / Telex / Fax Number	:
5	Local office (if any) address with Phone / Telex / Fax Number	:
5a)	Email ID	:
6	Field of activity of the Applicant as per deed of Partnership / Memorandum of Association /Articles of associates (Civil) Engineering Contractor / General Engineering Contractor / Electrical Items - Engineering Contractor etc, should be specified.)	:
7	Country and year of incorporation	:
8	Main line of Business	:
9	Name, position, status, capacity etc, of the Key personnel/ directors of the company(Attach organization chart showing the structure of the company / firm)	:
10	Name, capacity and address of the signatory who has Signed the qualification Application. Attested copy of authorization issued (either by power of attorney or as	:

Noted and agreed to the above

Signature of the Tenderer

	per articles of Partnership Deed / Memorandum of Association) in favour of the signatory to sign the qualification Application price Tender/ Agreement should be appended.	
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Annexure – B

FINANCIAL CAPABILITY

(Please Annex self attested copies)

1	Name and address of the Applicant	:			
2	Income Tax Permanent Account No. (PAN)	:			
3	TNGST / G.S.T. Registration No.	:			
4	Annual turnover as per audited statement of account duly certified by the Chartered Accountant during the preceding Three years (Attach attested copy of balance sheets)	:	TAX year	Figures	Words
		:	2019-20		
		:	2020-21		
		:	2021-22		
5	Financial Position	:			
	I. Cash in hand	:			
	II. Cash in Bank	:			
	III. Current Assets	:			
	IV. Current Liabilities	:			
	V. Working Capital	:			
	VI. Net worth	:			
6	Outstanding value of work already committed and in progress and time left for completion. (Details for each work to be furnished separately)	:			
7	Amount available in capital	:			

Noted and agreed to the above

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Signature of the Tenderer

	Account				
	I. Paid up share capital of (Partners or Share holders)	:			
	II. Called up and subscribed share capital	:			
	III. Reserves under capital account	:			
	IV. Surplus under capital account	:			
8	Net profit before tax during the preceeding three years	:	TAX Year	Figures	Words
		:	2019-20		
		:	2020-21		
		:	2021-22		
9	Applicant's financial arrangements.	:			
	(a) Own resources	:			
	(b) Bank credits/ Over Draft	:			
	(c) Other source (Specify the source)	:			

Annexure – C

INFORMATION REGARDING CURRENT LITIGATION / DEBARRING / EXPELLING OF APPLICANT OR ABANDONMENT OF WORK BY THE APPLICANT

1. (a) Is the Applicant currently involved in any Arbitration /litigation relating to any contract works Yes/No
(b) If Yes, Details thereon

2. (a) Has the Applicant or any of it's constituent partners been Debarred/Expelled by any agency during the last Three years Yes/No
(b) If yes, Details thereon

3. (a) Has the Applicant or any of it's constituent Partners failed to complete any contract work during the past Three years. Yes/No
(b) If yes, give details thereon

Annexure – D

AFFIDAVIT

(To be furnished in a Twenty Rupees Non-Judicial Stamp Paper duly

Certified by Notary Public)

- 1). I/We the undersigned solemnly declare that all the statements made in the documents, records etc., attached with this application are true and correct to the best of my/our knowledge.
- 2). I/We the undersigned do hereby certify that neither my/our firm/company nor any of it's constituent partners have abandoned any work/works of similar nature and magnitude in India, during the Last Three years.
- 3). I/We the undersigned do hereby certify that any of the contracts awarded to me/us has not been terminated/rescinded, due to breach of contract on my/our part, during the last Three Years.
- 4). I/We the undersigned authorize (s) and request any bank / person / firm / corporation / Government Departments to furnish pertinent information deemed necessary and requested by the General Manager, SDCMPULtd., Sithanur, Thalavaipatti, Salem 636 302 to verify the statement made by me/us or to assess my/our competence and general reputation.
- 5). I/We the undersigned, understand(s) that further qualifying information / clarifications on the statement made by me / us may be requested by the General Manager, SDCMPULtd., Sithanur, Thalavaipatti, Salem 636 302, and agree(s) to furnish such information/clarification within SEVEN Days from the date of receipt of such request from the General Manager, SDCMPULtd., Sithanur, Thalavaipatti, Salem 636 302.

Dated Signature of Applicant with Seal:

To be signed by the officer authorized by the Firm/Company to sign on behalf, the Firm/Company with company's seal)

Note: In case of sole proprietary concern, affidavit should be signed only by the sole proprietor.

(Title of the Officer)

(Title of the firm/Company)

(Date)

The above named deponent has understood the contents well and solemnly and sincerely declared and affirmed by the deponent in my presence at.....and signed before me on this day of..... (Seal).

(Signature of the Notary Public)

Annexure – E
SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT
‘FACILITIES

BANK CERTIFICATE

This is to certify that M/s is a reputed company with a good financial standing. If the contract for the work, namely, _____ is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs..... to meet their working capital requirements for executing the above contract.

Signature of Senior Bank Manager

Name of the senior Bank Manager

Address of the Bank

Stamp of the Bank

Note: Certificate should be on the letter head of the bank.

6.0 EVALUATION AND COMPARISON OF THE TENDER OFFERS

- 6.1. The tenders will be evaluated strictly as per the Tamilnadu Transparency in Tenders Act 1998 and the Tamil Nadu Transparency in Tenders Rule 2000 and amendments made thereon in the Act & Rules by the Government.
- 6.2. The tender offers received will be examined to determine whether they are in complete shape, all required datas have been furnished, properly signed and generally in order and confirms to all the terms and conditions of the specification without any deviation.
- 6.3. For the purpose of evaluation of tender offers, the following factors will be taken into account for arriving the evaluation price.
 - a). The quoted price will be corrected to arithmetical errors.
 - b). In case of discrepancy between the price quoted in words and figures, lower of the two shall be considered.
 - c). The evaluation of offer will be computed by taking into account supply & erection and commissioning put together.
 - d). Evaluation of the price of an imported item, the price has to be determined inclusive of the customs duty. The percentage of customs duty, CVD, Edu. Cess etc., are to be indicated with break-up.
 - e). In evaluation of the price of articles which are subject to GST, the price has to be determined separately for machineries. Packing and forwarding, insurance, Transportation etc. and applicable GST.
- 11.4. The amount and percent of customs tariff duty, cess/excise duty, cess GST and surcharge etc., shall be indicated clearly in the offer.

TENDER DOCUMENT

COMMERCIAL BID (PART- II)

SUPPLY, ERECTION AND COMMISSIONING OF

.....
..... (Item name to be filled by
tender participants) DURING THE YEAR 2022-23

QUALIFICATION

The commercial offers of such of those tenderer who qualify themselves for being considered for Supply, erection, and commissioning of the item by fulfilling the entire terms and conditions as laid in Part I “Technical Bid” of this tender, will be considered for the finalization of the tender.

Other commercial offers not qualifying as above will be rejected outright.

Note: **Separate Commercial Bid (Part-II)** should be used for each and every item, for which the participants are willing to participate.

PRICE QUOTE SCHEDULE-I (PLANT & MACHINERIES)

Supply, Erection and Commissioning of

..... (Item name
to be filled by tender participants)

Sl		Qty	Unit rate	Amount.
A	SUPPLY:			(In Rupees)
1	Basic Price (Break up details for the above in a separate sheet for Price, Customs tariff, duty and cess etc., with			
2	Packing & Forwarding if any			
3	Transportation charges to site including loading and unloading charges			
4	Transit insurance			
	Sub Total - (A)			
B	Discount if any			
	GST (indicate %)			
D	END Price (A-B+C)			

E	ERECTION & COMMISSIONING CHARGES PER UNIT (in Rs.)	Material cost if any	Labour Cost	Total
1	Unpacking, shifting and positioning			
2	Erection & commissioning charges			
3	Taxes if any (percentage to be			
4	Education cess (percentage to be indicated)			
	Sub Total (E)			
F	TOTAL END PRICE (D+E)			

Note:-

- 1) The rates should be quoted separately for each item mentioned above.
- 2) The tenderer shall furnish break up details for the above in a separate sheet for Price, Customs tariff, duty and cess etc., with the percentage.
- 3) All the rates should be only in terms of Indian Rupees.
- 4) Tenderer should indicate the origin of the country from which the equipment is imported.
- 5) Phrases like 'Extra', 'as applicable', 'at the prevailing rate' etc. should not be quoted to avoid ambiguity.
- 6) If the tenderer claims Excise Duty, the tenderer should be a manufacturer and furnish excisable paid invoice.
- 7) Both the tables have to be fill compulsorily.
- 8) **Strikeout the columns which is not applicable and enclose additional sheet, if any, required.**

TECHNICAL SPECIFICATION

I. CAN WASHER WITH ACCESSORIES

DESCRIPTION

The work consists of supply, erection and commissioning of straight through can washer, can conveying system with accessories.

The scope of work includes following.

Design, supply, erection, testing & commissioning of straight through can washer accessories with can loading and unloading conveyor system.

FUNCTIONAL REQUIREMENTS

It should be used for conveying the cans with milk to the dipping area (Approximately- 20meter) and for conveying the empty cans from can washer to vehicle parking area (Approximately- 10meter). The can washer should have drip draining, washing, sterilizing and drying standard milk cans and can lids.

DESIGN REQUIREMENTS

Can conveying system

Capacity : 600 Cans/hr

The can conveying system should be of stainless steel pit less type, all the parts and chain are to be of stainless steel (SS304). The size of the supports should be adequate to carry the can with milk to the dipping point. The motor and gearbox are of reputed make.

The approximate distance for the conveyor system.

1. Load conveyor-20 meter
2. Unloading conveyor-10 meter

Can Washing Sequence capacity 600 cans/ Hr

- Fresh Water pre-rinse
- Pressure water first rinse having minimum 3.5 Kg/Sq.Cm discharge head
- Pressure hot detergent cleaning having minimum 3.5 Kg/sq.Cm discharge head and 70 Deg. Celsius temp.
- Pressure hot water after rinse having minimum 3.5 Kg./Sq.Cm discharge head and 80 Deg. Celsius temp.
- Live steam sterilization.
- Hot air drying at 100 Deg. Celsius temp.

Available Services:

- Steam: at 3.4 Kg/sq.cm Pressure
- Water :Well Water at 3 Kg/Sq.Cm
- Finish: All welding joints are to be ground flush and finished to 150 grit. All Stainless surfaces are to be polished 150 grits.

SCOPE OF SUPPLY:

1.1 **Main Enclosure**: The main enclosure which houses the washing sterilizing and drying sections should be made from 2mm thick stainless steel (AISI 304) inspection doors all along its length at front side for easy, Can guides should be provided all along the inside length.

1.2 **Under Frame**: The complete under frame should be made from AISI 304 stainless steel. The complete assembly should have sufficient number of legs with stainless steel ball feet having 50mm vertical adjustment.

1.3 **Conveyor Chain**: The machine conveyor should ensure that the individual cans and lids remain properly spaced. The drive motor, transmission, drive shaft and idler shaft should have adequate and accessible provision for adjustment and tensioning.

1.4 **Drip Saver**: It will be fabricated from 2mm thick stainless steel sheet conforming to AISI 304. It should be 2000mm long and supplied as an integral part

of the machine where drips from emptied cans/lids are recovered before the inverted cans/lids enter washing section. A suitable stainless steel outlet with a stainless steel drain cock should be provided in the drip saver away from the can washer body. It should be given a generous slope towards the outlet for free flow of milk.

1.5 **Condensate Box**: The vapour duct ending in a Condensate box should be provided on top of the can washer for condensing flash vapour from the can washer. The warm water from the Condensate box can be used in the hot water section of the can washer. The condenser and duct should be made from stainless steel conforming to AISI 304. There should also be an exhaust blower of suitable capacity mounted on flanged type motor to suck vapour from the can washer and throw out non condensable gases. Exhaust fan should have protection against chemical fumes and moisture. The exhaust fan impeller should be of Stainless Steel.

1.6 **Can Discharge**: The clean and dry cans should be discharged from the machine on to a clean can conveyor in the up right position. The system should also be provided with a mechanical arrangement to place the clean lids on the cleaned cans.

Washing Stations:

1.7.1 **Washing**: The Pumping and jetting arrangements should be spraying sufficient washing liquid to the inside and outside surfaces of the cans and the lids.

1.7.2 **Filters**: In re-circulation of liquid in first rinse, detergent section and after rinse plate type suction filters should be provided to prevent choking of pump impeller and nozzles. The filter should be fabricated from AISI 304 SS material.

1.7.3 **Sump Tanks**: These should be made from stainless steel AISI 304 and now should be used as feed tanks for various washing liquids. Correct operating levels should be maintained automatic in the entire sump tank by necessary float valves. There should not be any intermixing between the different liquids.

1.7.4 **Water Heating Arrangement**: For hot water direct steam injection system should be provided with steam water ejector for mixing steam with water. For

detergent heating indirect system with SS heating coil ending in a steam trap should be provided. Condensate from the coil should be discharged into the hot water tank. Suitable drain points to be provided to drain the used liquid.

1.7.5 Air Heating Arrangement: For drying hot air to be used and blower, air heater and ducting etc., to be provided. Impeller housing of blower and ducting should be from AISI 304 whereas coil of air heater from SS tubes of 16 G. 304.

1.7.6 Jet Nozzles : Nozzles for jets should be made from stainless steel conforming to AISI 304 - 1 lot.

1.7.7 No Can No Jet: No can no jet system should be provided for pre-rinse water and steam sterilization sections.

1.7.8 Pumps: The Centrifugal monoblock type pump set having cast iron impeller, cast iron body shaft with gland type seal having 35MWC discharge pressure should be supplied having capacity 20000 LPH shall be supplied. - 3 Nos.

2.1 Instruments: Suitable connections / Thermowell should be provided on the delivery sides of the pumps and on the sump tanks for fixing pressure and temperature gauges.

2.2 Control Panel

2.2.1 Main Enclosure: The enclosure and supporting structure should be made from stainless steel conforming to AISI 304. The enclosure should be moisture, dust and vermin proof.

2.2.2 Mimic Diagram: It should show the complete can washing process including can conveying system with LEDS showing the operation of various motors.

2.2.3 Push Buttons And Indicating Lamps: ON/OFF Push buttons for all the motors and 4 sets as extra. All the push buttons should have indicating lamps and suitable inscriptions.

2.2.4 Wiring : The Control Panel should be completely prewired. The wiring should be done by copper wires and be dressed in accordance with the standard practice.

Battery Points:

1. Civil: The Union shall carry out all the civil works related to the erection of the above equipments.
2. Electrical: All Electrical connection to the equipments will be made by Union.
3. All the service utilities such as steam, water line connections will be provided by Union.

Eligibility Criteria

The Bidder should have supplied at least five similar Machines in India. They have to submit copy of Invoice, completion certificate with satisfactory performance certificate with contact person and phone number.

Delivery Schedule

Supply : 8 weeks from the date of P.O

Erection and commissioning: 4 Weeks

II. GHEE PET JAR FILLING AND SEALING MACHINE

(100ML TO 5000ML)

DESCRIPTION

The work consists of supply, erection and commissioning of Ghee pet jar filling machine with accessories.

Empty bottles will be fed at one end, the system should clean the jar, flush the jar through Air or nitrogen and the required quantity of ghee is filled and sealed in the induction sealer. The placing of cap is manual.

The scope of work includes following.

Supply of ghee pet jar filling machine with the following accessories

TECHNICAL SPECIFICATIONS

Machines	Automatic linear 1 head filler, conveyor and accessories
Bottles	PET/ glass bottles with shape and dimensions will be defined
Capacity	100 ML -5000 ML
Product tank	A service tank in SS 304 with float arrangement to be supplied
Liquid	Ghee
Filling temperature	45 ⁰ C
Bottles/ Hours	500 B/ H with 100 ML bottles (indicative speed) 250 B/H with 5000ML bottles (indicative speed)
Working height	800 ± 50mm
Working direction	Bottle from LEFT → Right
Overall dimensions	4 meters length X 2 meter width
Compressed Air requirement	6-8 Kg/cm ² @ 15 CFM (Union scope)
Preferred make of the accessories	
Pneumatic	SMC/FESTO

Electric motors	Motovario or equivalent
Control panel/ control box	Should be in SS 304
PLC	Omron or equivalent
Touch screen (HMI)	Omron or equivalent
Power supply (24DC)	Omron or equivalent
Main switch door	schneider or equivalent
Stop relays	Schneider or equivalent
Contractors	ABB or equivalent
Emergency stop push buttons	Schneider or equivalent
Signal light	Schneider or equivalent
Limit switches	Omron or equivalent
Photocells	LEUZE/SICK/BAUMER/IFM/KEYENCE
Proximity switches	SICK or equivalent

Battery Points:

1. Civil: The Union shall carry out all the civil works related to the erection of the above equipments.
2. Electrical: All Electrical connection to the equipments will be made by Union.
3. All the service utilities such as steam, water line connections will be provided by Union.

Eligibility Criteria

1. The Bidder should have supplied at least Ten similar Machines in India. They have to submit copy of Invoice, completion certificate with satisfactory performance certificate with contact person and phone number.

Delivery Schedule

Supply : 4 weeks from the date of P.O

Erection and commissioning : 2 Weeks

III. SUPPLY, ERECTION AND COMMISSIONING OF ROUND CAN SEAMING MACHINE WITH ACCESSORIES AT SALEM DAIRY

DESCRIPTION

The work consists of supply, erection and commissioning of round can seaming machine with accessories to seam the can filled with ghee.

The machine should have the following features

Supply of round can seaming machine with the following

- Will seam metal tops on to Metal, composite (paper) or plastic cans
- Pneumatic can lifting system with and automatic can sensor or push button activation eliminating operator fatigue
- Supplied with centralized control panel including a digital production counter
- There should be no spillage of product from the can during seaming
- Cans should remain absolutely stationary during seaming
- Should be of heavy duty body made from close grain cast iron
- Ability to accept a large range of can size with a quick change over time
- Exposed metal parts are to be powder coated for durability and finish
- Should be supplied complete with 1 set of seaming rollers and 1 seaming chuck for one diameter

TECHNICAL SPECIFICATIONS OF ROUND CAN SEAMING MACHINE

Output capacity	25-30 cans per minute
Diameter Range	1.60" to 8" (40mm to 200mm)
Max.Container Height	11.80" (300mm)
Max.Sheet Thickness	0.012" (0.30mm)

Battery Points:

1. Civil: The Union shall carry out all the civil works related to the erection of the above equipments.
2. Electrical: All Electrical connection to the equipments will be made by Union.

Eligibility Criteria

1. The Bidder should have supplied at least Ten similar Machines in India. They have to submit copy of Invoice, completion certificate with satisfactory performance certificate with contact person and phone number.

Delivery Schedule

Supply: 6 weeks from the date of P.O

Erection and commissioning: 1 Week

IV. Battery operated Fork Lift

S.no	Description	Detail	Unit
1	Load Capacity	1500	kg
2	Load center	600	mm
3	Width across forks	230-830	mm
4	Travel speed Laden	5.5	kmph
5	Travel speed Unladen	6.5	kmph
6	Lift speed laden	0.11	m/s
7	Lift speed unladen	0.15	m/s
8	Lowering speed Laden	0.17	m/s
9	Lowering speed Unladen	0.17	m/s
10	Gradient Laden	8	%
11	Gradient Unladen	10	%
12	Fork length	1200	mm
13	Fork width	100	mm
14	Brake	Electro magnetic	
15	Wheel material	Polyurethane for all wheels (Should be strong enough to carry full load)	
16	Min Under clearance	85	mm
17	Turning radius with platform	1675	mm
18	Motor Details – Traction	1.2	KW
19	Lift motor	3	KW
20	Battery	Above 300 AH, 24V	
21	Maximum fork height	4.5	mm
22	Overall height in lower position	2125	mm
23	Free lift	1475	mm
24	Overall height raised	5125	mm
25	Period of supply	6 to 8 weeks	
26	Erection & correction	1 week from the supply	
Preferred Make : VOLTAS/GODREJ/NILKAMAL/EQUIVALENT			

Noted and Agreed to the above

Signature of the Tenderer with seal

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V. 100% Oil Free Screw Air Compressor With Dryer

Power rating	55 kW (75 HP), 3 phase
Motor	Inverter duty Motor (Siemens/ABB/ELGI)
Motor Drive Type	Variable speed, 415 v, 3ph, 50Hz 3ph Induction Squirrel Cage Motor
Motor Efficiency	95.00 % min
Motor IE Level	IE 3
Inverter Drive	Siemens/ABB/DanfossL&T/Simatec
Pressure Range	7 – 13 Bar
Operating Pressure	7 Bar
Air Output	Min 160 CFM – Max 380 CFM
Noise Level	69 dB (A)
Enclosure	Acoustic enclosure
Oil Out Level	ISO 8573 Class '0'
Dryer	Separate dryer
Compressor	Refrigerant Compressor
Pressure Switch	Fan Control Pressure Switch
Refrigerant Types (Gas)	R136
Heat Exchanger	Aluminium Plate Heat Exchanger
Ambient Temp.	Max. Ambient Temp. 40°C, Min. Ambient 5°C
Maximum Allowable Inlet Temp	40°C
Dryer air temperature at Outlet	+3°C
Power Supply for dryer	230v/50Hz
Drain	Electronic Water Drain(Zero loss)
<u>UD and Oil Remove filters</u>	
Filter Type	Pre Filter,Fine Filter,Carbon filter
Test Method	ISO 12500-1: 2007, ISO 8573-2: 2007
CFM	400 CFM
Period of supply	8 To 10 Weeks
Erection & Commissioning	2 weeks from the supply
Preferred Make	ATLAS COPCO/ELGI/INGERSAL RAND /Equivalent

Noted and Agreed to the above

Signature of the Tenderer with seal

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VI. REEFER VEHICLE (CABIN WITH CHASSIS) TO MOUNT THE 19 FEET CONTAINER WHICH INCLUDES OF FABRICATION , ERECTION AND COMMISSIONING OF PUF CONTAINER, REFRIGERATION SYSTEM SUITABLE FOR ICE CREAM TRANSPORTATION

A.SPECIFICATION FOR PUF INSULATED REFRIGERATED CONTAINER

S.No.	Particulars	Description
1.	Outer dimension	19 feet
2.	PUF thickness	100 mm
3.	Fabrication process	<ul style="list-style-type: none"> The outer shell will be manufactured out of the HR sheet of CortenA/ equivalent(atmospheric corrosion resistance sheet)press formed into various profiles .The structured shall be made out of 2.5 mm /2.0 mm thickness sheet and side /end panels will be of vertically corrugated steel of thickness 1.60 mm. All six sides of the body and door are homogeneously insulated with polyurethane foam (CAST-IN-SITU).The PUF material will have average density in 36-40 kg /m³thermal conductivity value of 0.017 w/m dag . The average insulation thickness will be 100 mm minimum
4.	Frame work	Stainless steel L angels
5.	Water drain	Drain pipe with closing will be provided in the front end of the container body
6.	Bottom sub frame	Mild steel
7.	Mounting material	Container is mounted on the chassis using u clamp on the sub frame
8.	Bottom floor (Inner)	The body floor will have 12 mm marine plywood timber laid over the insulation and

Noted and Agreed to the above

Signature of the Tenderer with seal

		the top most layer of the floor will be with fully TIG welded aluminium T. grating are laid for return air evaporation .(The grating will improve the efficiency of return air evaporation and hence better performance of the refrigerating machine)
9.	Painting	Framework is initially painted with primer material and finally painted with polyurethane paint material as per the requirement of the customer
10.	Stickering	Printed in –house on 3M R vinyl sheets using advanced latex printing technology and self lamination system assuring longer life to the print
11.	Curtain	Polar grade detachable PVC curtains will be provided
12.	Foot step	Stainless steel foot steep with aluminium chequered plate for providing better grip
13.	Electronics & Lighting	Necessary bright lights (3 Nos LEN) for cold room use and Anti cold room (1 No LED) to be provided with switch controls in the room entrance and also from drivers cabin .
14.	Insulation	Containers doors will be sealed with rubbers of EPDM quality ensuring longer life and ensuring there is no loss of temperature
15.	Door frame and Hinges	Stainless steel grade materials will be used
16.	Container Locking	Bloxwich type door lock mechanism will be provided made of stainless steel alloy
17.	Rear Door	A double leaf rear door would be provided with aluminium/stainless steel door frames of and FRP(Fibre RE-IN forced plastic), having a box which type door locking gears and composite silicon door seals covered with EPDM multi-lip rubber making the

Noted and Agreed to the above

Signature of the Tenderer with seal

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		container air-tight and leak proof .
18.	Rear Mudguard	Stainless steel rear mud guards with high quality rubber mud flaps will be provided
19	Indicator Lighting	12V/24V indicator lights of 4 numbers shall be placed on the outside four corners of the container
20.	Reflector stickering	3M reflector stickers shall be provided in accordance with the RTO norms
21.	Fasteners	Stainless steel /Aluminium rivets will be used

B.SPECIFICATION FOR TRUCK REFRIGERATION UNIT TO MOUNTED ON 19 FT CHASSIS

1. Carrier make OASIS 250 mode /Thermo king T-600 self powered truck refrigeration unit required for ice cream transportation by maintaining a temperature of (-)25⁰c in an insulated container .
2. The refrigeration system to meet the following requirement as :-
 - a. Single piece, self-contained system with independent diesel engine drive type which is nose mounted on the container .
 - b. Able with stand extreme high ambient temperature (+)50⁰c.combnithmltiple deliveries of goods and frequent door opening (20 times/day)
 - c. Refrigeration to be CFC free R404 A.
3. Unit full control and microprocessor control unit consisting of all functional controls with safety to be available near dash in driver's cabin
4. The system should also have provisions to run on 3 phases ,4 wires,50Hz,AC supply source as stand by .
5. Accessories requirement :-
 - o Battery with box
 - o Diesel tank
 - o Plunger tube for vehicle fuel tank
 - o Automatic ,phase reverser
 - o Oil drain extensions

Delivery Schedule :

Supply : 8 weeks from the date of issue of the P.O.

Noted and Agreed to the above

Signature of the Tenderer with seal

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C. PRODUCT SPECIFICATIONS

GVW.....10,900 KG or Equivalent
Engine.....4 cylinder common rail system
Power 130 hp @2400 rpm or Equivalent
Torque 450nm@1250-2000 rpm or Equivalent
Clutch..... 330 dia single plate dry type or Equivalent
Gearbox.....6 speed overdrive
Brakesdual line air brakes
Battery.....12V-100ah or Equivalent
Tyre.....8.25X1616PR or Equivalent
Fuel tank.....105L/200L or Equivalent
TCD(mt).....14.5(17ft)

VARIANT

	14	17	19	Payload
CBC	✓	✓	✓	6.95 T
FSD		✓		
DSD				
HSD		✓	✓	

14' DSD BODY *-17'HDS BODY

BODY OPTION (All dimensions in mm)

Body	L	B	H	Body	L	B	H	Body	L	B	H
Standard	L	2260	593	Standar d	L	2306	591	Standar d	L	2260	1105
Length	4432(14')/5287(17')/5810(19')/6096(20')										
Preferred Make: Ashok Leyland / Eicher / TATA or equivalent as per standard											

Delivery Shedule :

Supply : 8 weeks from the date of issue of the P.O

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VII. 20 KL VERTICAL SS MILK SILO

1.0 FUNCTIONAL REQUIREMENTS:

The milk silo would be used to store chilled thick milk at 3 to 4°C temperature.

2.0 DESIGN REQUIREMENTS

2.1 CAPACITY : 20000 Lts., Vertical

The volume of the silo should be such that after filling it upto this rated capacity the level would be at least 100 mm below the line where cylindrical shell joins the conical top (i.e) The gross capacity should be at least 10% higher than the rated capacity as above to avoid agitational or accidental spillage of milk.

2.2 Constructional Features:

Double walled, insulated and welded construction of sanitary design.

2.3 Slope:

The bottom of the silo should have 1:15 slope towards inlet cum outlet for free and complete drainage of liquid.

2.4 Metal contact:

The only metal to metal contact between the inner and the outer shells should be at the places where fittings for the tank are provided. At the places where mild steel stiffeners are provided insulated padding should be fixed between the inner stainless steel shell and stiffeners.

2.5 Finish:

All welding joints should be of tig welding. All stainless steel surfaces are to be polished to 150 grits.

2.6 Joint Curvature:

The radii of all welded and permanent attachment joints should be at least 6 mm. Where the conical top and flat bottom join the cylindrical shell, the radii should not be less than 25 mm.

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INSTALLATION:

It should be suitable for outside installation. The accessories mounted on top should be weather proof.

SCOPE OF SUPPLY:

3.0 Inner cylindrical body.

The inner shell, conical top and flat bottom should be fabricated from 3.0 mm, 3 mm and 3 mm thick SS plates respectively confirming to AISI SS 304 – 1 No.

3.1 Outer Cylindrical Body:

The outer shell, conical top and flat bottom should be fabricated from 2 mm, 2 mm and 4 mm thick stainless steel plates respectively conforming to AISI –SS 304 – 1 No.

Stiffeners between inner and outer shells and supporting structure for bottom of mild steel to be provided.

3.2 Insulation:

The entire inner shell (including the alcove portion) conical top and flat bottom should be insulated with rigid Polyurethane Foam case-in-situ. The insulation will be homogenous on the entire surface of the inner shell and the average insulation thickness shall be 90mm. The insulation material shall be applied in Cast-in-Situ method and the material will have average density 32-36Kg/cu.cm and coefficient of thermal conductivity of 0.017w/mK. The stiffener rings also shall be insulated with suitable thermal plugs so that no metal-to-metal contact exists between the inner and outer shell. The insulation should with stand high temperature of 98°C during in place of cleaning. It should not permit more than 1°C rise in temperature in 18 hours when temperature gradient is 35° C. and milk temperature is 4°C.

3.4 ACCESSORIES:

3.4.1 Inlet Cum Outlet:

One number of 51 mm dia. cup type inlet cum outlet with two way stainless steel; (AISI -SS304) flanged valve ending with compete stainless steel union.

3.4.2. Air Vent:

Stainless steel (AISI -SS304) 450 mm dia. air vent to prevent formation of partial vacuum during CIP and pressure during filling - 1 No.

Stainless Steel (AISI -SS304) cleats should be provided near the air vent for fixing and hanging rope ladder - 1 No.

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3.4.3. **Sight Glass:** Stainless Steel (AISI -SS304) sight glass assembly should be provided with toughened glass. It should be provided in such a way that one can easily read from the lowest level up to the highest level marks. - 1 No.

3.4.4. **Sand Blasted Level Marks:**

It should be calibrated at 500 L Intervals and provided on the inner shell at opposite side of the sight glass.

3.4.5. **Light Glass:**

Stainless Steel (AISI -SS304) light glass assembly should be provided with toughened glass and stainless steel lamp shade for mounting 24 V and 100 Watt bulb. The lamp holder should be made of brass - 1 No.

3.4.6. **Agitator:**

It should be paddle type in Stainless steel (AISI -SS304) construction complete with geared motor of adequate capacity and should be able to uniformly mix milk in the tank within 10 minutes. The agitator shaft should be a rod. GEAR MOTOR should be provided with SS cover - 1 No.

3.4.7. **Level Indicator/Transmitter:**

Digital battery operated level indicator and transmitter flange type in stainless steel (AISI -SS304) food grade having accuracy of 0.25% should be installed. The preferred make is Yokogawa, Endre- Hausser, Siemens. 1 No.

3.4.8. **Spray Ball:**

Removable stainless steel (AISI -SS304) cleaning device located at the apex of the conical top to provide flooding of liquid over the complete interior surface during CIP. It should have stainless steel union at the outer end connection - 1 No.

3.4.9 **Sampling Cock:**

It should be provided near outlet valve and should be stainless steel (AISI -SS304) construction of sanitary design. - 1 No.

3.4.10 **Thermowell:**

300 mm long stainless steel (AISI -SS304) inclined pocket suitable for mounting stem type dial thermometer should be suitably located in the alcove. It should have 21 mm BSP male threads (Digital thermometer is within the scope of supply).

3.4.11 **Lifting Lugs:**

Stainless steel (AISI -SS304) lifting lugs 16 mm should be provided at top. - 6 Nos.

3.4.12 **Anchor Points:**

Anchor points, pipes and sockets should be provided on the top of the tank so that safety railings and platform could be welded to them after installation - 1 set

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3.4.15. **Ladder:**

Suitable stainless steel ladder fabricated in AISI SS 304 with necessary supports should be provided along with the body of the tanks.

3.4.16 **Railing:**

Circular railing made out of 38 mm dia SS 304 pipe with 150 mm wide x 2mm thick SS kick plate to be provided all along the periphery of the tank. The railing shall be complete with suitable numbers of vertical posts of 900mm height. The railing pipes shall be supplied loose and assembled at site.

3.4.17. **Level probe socket:**

Provision for high level and low level probe sockets should be provided.

3.4.18. A Stainless steel panel to accommodate the Digital temperature indicator and digital level indicator with wiring should be fitted in front of the tank at visible height.

3.4.19 **Man way**

Round shaped stainless steel (AISI -SS304) man way on the bottom of the silo and the dimension approximately 450 mm dia and provided with leak proof hinged insulated stainless steel (AISI -SS304) door with locking facility.

4.0 **TESTS:**

The following tests should be conducted by the manufacturer at its works.

4.1 Dye penetration test for welding joints.

4.2 Water fill-up test of inner vessel for water TIGHTNESS.

4.3 The chilled water temperature loss should be less than 1deg c for the period of 24 hours

Supply period - 4 to 6 weeks

Erection & commissioning - 2 weeks from the supply.

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