E-Tender Notice

E-Tender offers are invited for design, supply, installation & commissioning of 11 nos of 5000 Ltrs capacity Bulk Milk Cooling Units (BMCU). These BMCUs are to be installed at different village level Dairy co - operative societies. Details of our requirements, scope of contract, details of equipment and Terms and Conditions of this E-Tender are available on our website <www.gokulmilk.coop> and https://www.ncdfiemarket.com/index.php/auctions-2/#tab-44753. Earnest Money Deposit for this Tender is Rs.300,000/- (Rs.Three lacs only). E-Tender offer is to be submitted on or before **16.02.2026.** Right to accept or reject any or all Tenders without assigning any reason is reserved.

Managing Director Chairman
Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd.,
B-1, M.I.D.C., Gokul ShirgaonTal. Karveer, Dist. Kolhapur - 416234

KOLHAPUR ZILLA SAHAKARI DUDH UTPADAK SANGH LTD., KOLHAPUR

TERMS - CONDITIONS

1. E-Tender offers are invited for supply, installation & commissioning of 11 Nos of 5000 Ltr capacity Bulk Milk Cooling Units (BMCU). These BMCUs are to be installed at different village level Dairy co - operative societies. The bidder should have design, manufacturing & service back up to execute such jobs. Tenderer should give details of supplies of BMCU's made during last 3 years. This information is to be given alongwith technical details of BMCU's.

2. The job should be treated as 'TURN KEY' excluding civil work. Details as regards requirements, scope of contract, details of equipment / material are given herewith.

3. The Bidder should submit their E-Tender in Two bid system

4. a) **Technical Bid -** Technical bid included acceptance of general terms & conditions & eligibility criteria with specifications & EMD details.

5. b) **Commercial Bid -** Commercial bid as per prescribed format.

6. Bid must be accompanied by Earnest Money Deposit of Rs. 3,00,000/- (Rs. Three lac only) through RTGS. Please mentioned UTR No, date & amount in the technical offer. Remittance of EMD by any other mode shall not be accepted. Tender without EMD will not be considered. Earnest Money Deposit of unsuccessful Tenderer will be returned within two month. EMD reach on or before **16.02.2026**. RTGS details given below. UTR details must be attached with technical bid

Name of Project Authority	Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd., Kolhapur
Address of Project Authority	B-1, MIDC, Gokul Shirgaon, Tal Karvir, Dist. Kolhapur, State Maharashtra Pin Code 416 234
Name of Bank	Bank of Maharashtra
Bank A/c No.	60182028384
IFSC Code	MAHB0001575
Branch Name & Address	B-1, MIDC, Gokul Shirgaon, Tal Karvir, Dist. Kolhapur, State Maharashtra Pin Code 416 234

7. No escallation in the price will be given once the order is finalised.

8. Successful bidder will have to keep 3% interest free security deposit of the order value with us. Security deposit will be released after completion of successful and satisfactory trials . Successful bidders EMD will be transfered to security deposit. The bidder will have to deposit differential amount of security deposit.

9. Payment Terms:

   a) 30% advance of total contract value will be given after getting order acceptance and on submission of Bank Guarantee of equivalent amount & same will released after supply BMC units.

   50 % progressive payment of supply value against safe receipt and inspection of BMC Unit at site along with GST.

   10% payment after installation commissioning

   Balance 10% amount on submission of Performance Bank Guarantee valid for a period of one year from the date of satisfactory commissioning.

10. Income Tax at source will be deducted whatever applicable as provision of I.T. Act 1961 as amended from time to time

11. Delivery period within 2 months from date of order acceptance

12. Technical & Commercial E Tender is to be submitted on or before - **16.02.2026.**

13. We reserve right to accept or rejects any bid, postpone bidding process and reject all bids at any time prior to award of contract.

14. The tenderer has to submit Valid GST registration certificate with Technical bid

15. The right to ignore any tender which fails to comply with instructions is reserved with the Managing Director, Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd..

16. The tender offers shall remain valid for a period of 120 days from the date of opening the tender.

17. The Managing Director, Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd., reserves the right to accept or reject any or all the E- tenders without assigning any reason thereof.

18. The price quoted for the items should be F.O.R. respective DCS inclusive of all charges for packing, forwarding, transportation, unloading, transit insurance.. No price escalation will be allowed.

19. The offer should be inclusive of all the taxes, duties, levies as applicable.

20. The successful tenderer will have to pay Security Deposit as indicated in the Tender Form, within 15 days of order. This amount may be used for adjusting the penalty (if any), recovery of cost damages etc. besides any other amount to recover damages/extra cost resulting from failure/ irregularity of the contractor, as the Managing Director, Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd., may deem fit. In this regard, the decision of the Managing Director, Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd., will be final. Exemption from the payment of Security Deposit will not be granted.

21. Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd. reserves the right to reject the item either in full or in part, if at the time of delivery, the items supplied do not confirm to the quality and technical specification as stipulated in the tender.

22. The conditional, incomplete, defective or ambiguous tenders, as decided by the Managing Director, Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd., shall be rejected.

23. If the tenderer fails to complete the supply/complete the work within the period prescribed, the Managing Director, Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd., shall be entitled, at his option, to recover from the tenderer, as penalty a sum equivalent to half percent of the total cost for delay of each week or part thereof during which supply is delayed, subject to the maximum of 3% of the tendered cost of the contract.

24. The tenderer shall arrange for insurance etc. of his people employed for erection and installation work as per ESIS ACT, WORKMEN COMPENSATION ACT, and any other provision to meet statutory requirements of various Labour Acts/Rules. In case of accident to any of his person in his employment or agents during the period of installation, the office of the Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd. shall not bear any liability whatsoever. The entire responsibility primary and final in this respect will be that of tenderer.

RESPONSIBILITY FOR COMPLETING THE CONTRACT:

25. The responsibility for completing the contract and commissioning the BMC units rests with the tenderer.

26. It shall be the responsibility of the successful tenderer to have comprehensively insured the goods against any risk i.e. against the damages that may be caused during the stage of transition, execution, trials, fire, theft etc. till final handing over of the entire equipment to Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd. after satisfactory trials.

27. Contacting the purchaser (Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd.): -
From the time of tender opening to the time of contract award, if any tenderer wishes to contact Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd. on any matter related to the tender, it should do so in writing. Any effort by a tenderer to influence the Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd. in its decision on evaluation, tender comparison or contract award may result in the rejection of the tender.

28. For disputes, if any, the decision of the Chairman , Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd., shall be final.

29. The successful tenderer has to enter into the 'Contract Agreement', if required, for completion of the job, performance guarantee, etc., before disbursement of any payment.

30. The successful tenderer shall maintain a register to maintain record of daily progress of the project / work and shall take the signature of the concerned person in that register, on the same day. This register shall be produced before the project authority, as and when asked, during the progress of the project / work and shall be submitted after the completion of the project / work.

31. The Contractor shall not sublet the contract without our written permission.

32. A cause of delay giving an entitlement to extension of the time to complete an event of Force Majeure will be decided by sangh.

Process of E-tender :

Contact person (NCDFI):

Jagrut Gajab
Mobile – 9978696021
Email - contracts@ncdfiemarket.com

Contact person Gokul

Commercial queries

Kailas N. Molak
Manager (Purchase)
Mob.No. 9422775977
E mail **purchase@gokulmilk.coop**

Technical queries

Shivaji R. Patil
Asst. Manager (BMC)
Mob,No. 9370063163
E mail bmc@gokulmilk.coop

Tenderer will not have the access to online e-tender without making the payment towards transaction fee.

NOTE

Bidders are advised to remit the transaction fee well in advance before the closing time of the event so as to give themselves sufficient time to submit bid.

Information about tenders /corrigendum uploaded shall be sent by email only during the process till finalization of tender. Hence the vendors are required to ensure that their corporate email I.D. provided is valid and updated at the time of registration of vendor with NCDFI.

Bidding in e-tender :

a) Vendor(s) need to submit necessary EMD, Tender fees and

b) Transaction fees (If ANY) to be eligible to bid online in the e-tender. Tender fees and Transaction fees are non-refundable. No interest will be paid on EMD. EMD of the unsuccessful vendor(s) will be refunded by the tender inviting authority.

c) During the entire e-tender process, the vendors will remain completely anonymous to one another and also to everybody else.

d) All electronic bids submitted during the e-tender process shall be legally binding on

the vendor. Any bid will be considered as the valid bid offered by that vendor and acceptance of the same by the Buyer will form a binding contract between Buyer and the Vendor for execution of supply.

e) It is mandatory that all the bids are submitted with digital signature certificate otherwise the same will not be accepted by the system.

f) Buyer reserves the right to cancel or reject or accept or withdraw or extend the tender in full or part as the case may be without assigning any reason thereof.

g) No deviation of the terms and conditions of the tender document is acceptable. Submission of bid in the e-tender floor by any vendor confirms his acceptance of terms & conditions for the tender

h) Any order resulting from this tender shall be governed by the terms and conditions mentioned therein.

i) No deviation to the technical and commercial terms & conditions are allowed.

j) The tender inviting authority has the right to cancel this e-tender or extend the due date of receipt of bid(s) without assigning any reason thereof.

Managing Director

Technical Specification for Bulk Milk Cooler

5 KL- 11 nos.

Bulk Milk Cooler:

General Description and Scope of Work:

1.1 The design, supply, installation and commissioning of bulk milk cooler (BMC) including all accessories and optional components etc are included in the scope of work and is to be executed on turnkey basis. The operating conditions in villages are hot, humid, dusty and with fluctuating voltages of 130 to 300 V for single phase and 300 to 500 V for 3 phase.

1.2 The BMC shall be a complete unit with the refrigeration system, agitator, lockable inlet & outlet valve & union. Also included are supply of SS piping & milk hose 10 M long of food grade quality , unions and milk transfer pump, erection materials, pipe supports, floor plates, pipe clamps. The scope includes electrical & control panels and interconnecting cables, cable conduits, earth pit pipes with remove-able cover & earthing chambers as required by local electrical regulation.

1.3 The indicative distances between BMC outlet to milk pump inlet is 3 m, BMC to Mains power point & DG set – 25 m can be considered for calculating cable & SS piping requirement, supports etc. However, the exact distances shall be as per site conditions. Complete piping & cabling actually necessary for installation shall be supplied.

1.4 The bidder's scope starts from can tipping bar/balance tank/milk pump & SS piping to inlet of the BMC for receiving the milk (as the case may be for a specific site). From BMC, the milk shall be transferred to Road Milk Tanker (RMT) through SS Piping & food grade quality flexible hose of adequate length and milk pump installed at milk collection centre near BMC.

1.5 The supplier shall quote the reputed make of all bought out components included in the bid, which shall be approved by the Purchaser before finalization of the contract.

1.6 The price for the optional items wherever specified in the enquiry shall be quoted.

1.7 The total job is on turnkey basis and includes supply, installation, testing, commissioning, training of the field personnel .

2	**Bulk Milk Cooler Tank:**	
S. No	**Particulars**	**Technical Specifications**
2.1	Standard applicable and cooling time required at 48 Deg. C ambient conditions	ISO 5708 Type 2 II (latest version) for 2 milk collections : Cooling 50% of first milk collection of its rated capacity in 3 hrs from 35 Deg C to 4 Deg C Cooling of 100% of milk volume after 50% of milk is added from second milk collection (average temp 10 Deg C to 4 Deg C) in 1 hr 30 minutes
2.2	Rated Capacity – Litres	5000L for 2 milk collection
2.3	Gross Capacity - Litres	+10% of Rated Capacity- Litres (must be 10% more than rated capacity)
2.4	Material of	AISI 304 (refer 2.8 & 2.9 below)

	Construction	
2.5	Tank evaporator	The tank evaporator plate should have adequate surface area ensuring that the milk is cooled in the local ambient conditions of 48 Deg. C and in the time periods as specified above. Laser welded with Operating pressure of 30 bars and crash test pressure of 60 bars. In case of rectangular/circular type bulk milk cooler, the evaporator shall be fixed at the bottom plate of the inner tank. For 5000 litre tanks the total evaporative area shall be divided and separated into two sections. Each section shall have separate suction & discharge ports connecting to each compressor.
2.7	Tank orientation	The preferred shape of the tank For 5000 litre BMC, tanks shall be completely closed type in cylindrical/ elliptical orientation with circular/elliptical dish ends and manhole of size 450mm minimum on top with lockable cover. The shape of the BMC tank shall conform to international sanitary design.
2.8	Evaporator plate thicknesses	5 kL BMCUs - 2mm Bottom and 0.8mm Top.
2.9	Thickness of Inner and Outer shell of tank	Close Type (5kL) inner 2.0mm; outer : 1.6mm
2.10	Agitators	1 OR 2 / Standard/ ISO 5708 Type 2 II (latest version) compliance ensuring even distribution of the milk fat when milk is agitated. **Motor - Serem Make**
2.11	Ball Feet	AISI 304 adjustable ball feet tamper proof and lockable with 50mm height adjustment.(Preferred 6 nos. for capacities 5kL).
S. No	**Particulars**	**Technical Specifications**
2.12	Tank Fittings & Accessories	**CLOSED TYPE BMC (5KL)** "No- foam" type inlet Outlet valve with locking arrangement and blank union. All SS fittings shall be of SMS standard. Air vent in SS construction with vermin proof design Top Manhole with locking arrangement. SS Ladder to be provided for approaching top manhole.
2.13	Type of Insulation	Injected, CFC Free PUF 40 kg / Cu. m.
2.14	Thickness of insulation	40 kg/Cu. m density, 50mm(min.) in the walls & 90mm below the evaporator to allow 1 Deg. C temperature rise at given ambient conditions in 4 hours after milk is brought to 4 Deg. C. and when the BMC is not operating.
2.15	Efficiency of Insulation	0.019 W-m/k
2.16	Facility to measure milk volume	1 no. Dip Stick and chart of AISI 304 3mm thick on wall of tank. Calibration accuracy- 0.5%. Laminated & Framed calibration chart. Hooks to be provided on both the sides of the open type tank.
2.17	Product contact surface	2 B Finish

2.18	Weld surface finish	min. 150 Grit, all joints minimum 25mm radius curvature
2.19	Tank cleaning Brushes	1 tank cleaning brush and one 1500mm long pipe cleaning brush. 6 No. SS pipe hooks for 3kl/5kl BMC
2.20	CIP Facility	Spray balls for closed type tanks. For closed type tanks, facilities for cleaning in place shall be provided which include CIP spray balls & SS Piping from balance tank through milk pump to BMC and back to balance tank.
2.21	Milk Tank Controls Panel	Required
.1	Wall or Tank mounted	To be specified by bidder
.2	MOC of Panel & thickness	AISI 304 / 1.6mm
.3	Temperature Display	LCD- 0 to 100 Deg. C with one decimal accuracy
.4	Cooling & agitation controls	Required – controls for management of cooling control and agitation, provision for cut-off/ restart, intermittent operation of agitator, auto & manual facility
.5	Battery back-up	Required
.6	RS 232 port for Temperature sensor	RS 232 connectivity for temperature data transfer shall be provided.
2.22	Refrigeration Controls Panel	Required
.1	Wall mounted	Wall mounted
.2	MOC of Panel & Thickness	AISI 304 / 1.6mm
.3	Rating of Contactors	Standard to meet functional requirements of the Refrigeration, Control Panel
S. No	**Particulars**	**Technical Specifications**
.4	UV/OV trip facility	Required
.5	Neutral Protection unit	Required
.6	Timer On-Delay	Required
.7	Auto/manual Mode (Selector Switch)	Required
2.23	Servo Voltage Stabilizer	Required for stabilizing the power supply to BMC from grid or DG set
.1	Voltage range	130 to 300 V for single phase and 300 to 500 for 3 phase BMC
.2	Rating	25kVA-3 Phase for 5kl BMC
.3	MOC, thickness & type of structure	MS Powder coated, 1.6mm. & pipe structure
.4	Accessories for 3 phase stabilizer	40A MCCB for incoming, 40A phase selector, change-over and bypass switch, LED lamps, Servo controlled correction transformer, Digital V,I,F indicator for input & output, 63A terminal blocks, OV/UV trip with delay time, single phase preventer, static type energy meter with 10- 60A capacity. Brass metal glands, MCB's (TPN 40A - 2 nos., TPN 32A -1 no, TPN 16A-1 no), Metallic pump socket, Servo Motor.

.5	Operating features	Cable entry from top, response time-5 milliseconds, should withstand 150% load on surge duty, capacity of terminals should be 150% of rated current, Dimmer with CRGO core, separate Auto/manual facility, plug in type control card for each phase, correction speed-105v/s, Efficiency- 99.5%
2.24	Domestic Power Distribution Board	Required
.1	Operating features	It would get single phase power from grid supply directly as well as stabilized power from main control panel and feed power for lighting, electric geyser/solar water heating system, testing equipment ,computer and printer.
.2	Accessories for 5kl BMC domestic power distribution board	MS Powder coated 1.6mm enclosure, 32 DP Change over switch, 32 A DP MCB as incoming, 3 nos. 10 A MCB SP for lighting, 3 nos. 20 A MCB SP for geyser/Solar water heater, AMCU etc.
.3	Accessories for 3 phase stabilizer	40A MCCB for incoming, 40A phase selector, change-over and bypass switch, LED lamps, Servo controlled correction transformer, Digital V,I,F indicator for input & output, 63A terminal blocks, OV/UV trip with delay time, single phase preventer, static type energy meter with 10- 60Acapacity. Brass metal glands, MCB's (TPN 40A - 2 nos., TPN 32A -1 no, TPN 16A-1 no), Metallic pump socket, Servo Motor.
.4	Operating features	Cable entry from top, response time-5 milliseconds, should withstand 150% load on surge duty, capacity of terminals should be 150% of rated current, Dimmer with CRGO core, separate Auto/manual facility, plug in type control card for each phase, correction speed-105v/s, Efficiency- 99.5%.
S. No	**Particulars**	**Technical Specifications**
2.25	Domestic Main Distribution Board	Required
2.26	Earthing	As per IS: 3043 - 1987 (reaffirmed 2001) - "Code of practice for earthing". Pipe type earthing with funnel at top - 4 nos. to be provided with distance between each pit as per local statutory requirement. Suitable G I Strip (minimum 25x3mm) to be used for connecting earth pit with nearest equipment earthing point. From this point earthing to other points can be looped by suitable GI Strip or PVC insulated copper conductor cable of green color (size minimum 1 x 4 Sq.mm).The scope of work includes excavation for the earth pit, construction of suitable chamber, filling with necessary materials (e.g. charcoal & salt) and complete with cover.Supplier will test and demonstrate the resistance as per local EB requirement and furnish record as required.

3.0	**Refrigeration Unit**	
Sr. No.	**Description**	**Specifications Requirement**
3.1	Standard adopted for conditions of 48 deg, C ambient conditions	ARI standard .520-2004 applicable for refrigeration units operating at higher ambient temperature conditions .To faciltate for milk collection of BMCs operating as per ISO 5708 Type 2II standard.
3.2	Design Parameters	O Dec.C evaporation and applicable discharge temperature at minimum 60 Deg.C condesing temperature.
3.3	Type	Direct Expansion.
3.4	Type of Refrigerant	Freon 22 or CFC free refrigerant.(As per New Govt. norms)
3.5	Cooling capacity of each compressor	Adequate capacity to ensure milk cooling time periods specified and ambient conditions of 48 Deg.C mentioned above. Compressor selected should be compatible.
3.6	Number of Compressor	5kL – 2 nos.
3.7	Type of Compressor	Emerson make energy efficient.
3.8	Type of Condenser	Air cooled. Condensing temperature should not be less than 60Deg.
3.9	Condenser surface area	Design and provide substantially adequate condensing area to meet functional requirements of the refrigeration until in very hot conditions specified above.
3.1	Reciever volume	6 ltrs. Minimum.
3.11	Condenser Fan	With internal thermal protection device ,enclosure ahall be of metal (plastic body is not permitted) (Copper winded marathon make motors 450 sweep preffered)
3.12	Pump down system	Required.
3.13	Protective Grill	To provide removable wire mesh screen in front of condenser fins.
3.14	Expansion valve	Thermostatic expansion valve with MOP (minimum operating pressure).
3.15	Drier,Solenoid valve,Slight glass, Fan and reciever	Required for safe and efficient operation of the unit.
3.16	Accessories	Isolation valves at suction & discharge sides of the compressors,all pipes,valves,fittings & controls shall comply with the latest relevant National or International code applicable,Copper piping between BMC and condensing unit shall be supported/routed by cable tray and cable tray supports. Condensing unit should be placed on platform with stand compulsory

4.0	**Milk Pump Feeding System for accessories**	
Sr. No.	**Description**	**Specifications Requirement**
4.1	SS 304 Milk Pump	Centrifugal in SS construction (2HP)
4.2	Flow Rate	10000 LPH for 5kL BMC
4.3	Head in mwc	10 m

4.4	Pump inlet/outlet	38/51MM with SMS Union for 5kL BMC
4.5	Pump Accessories	Adjustable ball feet (min. 50mm), One spare mechanical seal to be provided. Motor having 'E'/'F class insulation and having IP 55 protection. Pump shall have SS shroud.
4.6	Food grade tanker loading/unloading hose pipe	10 meters length and Size 38mm transparent with SS cap , chain and union
5.0	**Water Handling System for BMC**	
S. No.	**Description**	**Specification Requirement**
5.1	Water Pump with foot	Mono block for filling the OH tank.
5.2	Capacity	0.75 HP, 10 mwc
5.3	Waterline schematic indicating valves/fittings etc	The OH tank to supply water to BMC for cleaning and washing. Also, the water shall be supplied to ETC Solar water heater mounted on roof of building. Sketch to be provided
5.4	HDPE water tank 1000L	The tank shall confirm to ISI :12701/96 rotational molded polyethylene (HDPE) heavy duty, hygienic construction, closed type with manhole for cleaning & maintenance
5.6	System Interconnecting Piping	Piping for cold water should be of APVC and for hot water it should be CPVC(both ISI marked). Piping is required between cold water tank outlet to solar water heater unit and other point in BMC area.
6	**DG Set**	
S. No.	**Description**	**Specification Requirement**
6.1	General operating and design conditions	DG make should be Cummins/Eicher make . DG shall be of capacity :- 25 kVA Air cooled for 5 kL BMC The DG set should be heavy duty design , industrial type, rated for continuous operation for the refrigeration system, milk tank agitator & milk dispatch pump, hot water geyser (approx. 2,0 kW), AMCU, Lightings, Ceiling fan. The diesel engine and alternator should be mounted on specially designed combination base plate and MS structure of extremely rigid fabrication. The base frame should be suitable for mounting the set on AVM pads over the foundation.
6.2	Confirmation to regulatory norms for environment and Approval from Local authorities	DG set should carry a valid approval certificate issued as per CPCB norms complying with the provision of the Environment (Protection) second Amendment Rules 2002, vide notification no G. S. R. 371 (E), dated 17th May 2002 & amended by GSR 448 (E) dt.12/07/2004. Also compliant with new CPCB II norms applicable from April 1, 2014. The exhaust pipe with exhaust muffler with insertion loss of minimum 25 dB (A) is connected to the exhaust manifold preferably with flexible bellows. In case the DG Set is located within the BMC building, the

		exhaust pipe with insulation & cladding of adequate length be provided extending the original pipe over the roof of the building to avoid pollution in and around the location. Supplier to obtain the approval of Local authorities in case it is required by the rules.
6.3	Diesel Engine	The diesel engine should be suitable for Power Generation application type air or water cooled and capable of developing required BHP when running at 1500 rpm under NTP conditions. The engine should be built to IS 10000/ISO 3046/BS 5514/649 and rated for continuous running of 24 hours with an overload capacity of 10 % for a period not exceeding 1 hour in any 12 hours running. Diesel engine up to 20 kW should have valid BIS license and certificate clearly mentioning use for 'General purpose application as per IS 10001 norms.(or as per current govt. norms) Engine ratings should be for operation at full load condition and should be suitable to take 100% block load. Self-starting arrangement with 12V suitable rated heavy-duty Lead Acid accumulator type battery with Solid-state battery charging arrangement and cables. Standard set of tools. First fill of Lubricating oil, First fill of coolant, Lubricating oil pressure & temp. gauge, Standard set of tools. First fill of Lubricating oil, First fill of coolant, Lubricating oil pressure & temp. gauge, Control panel for engine with engine safety temperature, V-belt failure, low lub oil pressure, low water level in radiator auxiliary failure, air cleaner choke indicator. Steel Diesel Storage barrel of 200 lit capacity with manual pump
6.4	Engine Instrument Panel (Mechanical and/or electronic gauges)	Consist of Ignition key, Starting push button, Lubricating oil pressure gauge, Temperature gauge for cooling water, Temperature gauge for lubricating oil, RPM meter (Analog type) Battery charging ammeter & battery charger.
6.5	Alternator	The engine should be closely / flexible coupled to suitable self excited, self regulated (through an AVR) alternator developing required kVA at 0.8 power factor,1 phase/3 phase, 50 cycle/sec, 230 volts AC power supply under NTP conditions when running at 1500 RPM. The alternator should be brushless type, screen protected and fitted with end shield & ball roller bearings.The alternator shall have 'H'class of insulation.It shall conform to IS 13364 (Part 1) 1992 up to 20 KVA, IS 13364 (part II) 1992 or IS4722 of 1992 above 20 KVA.
6.6	Control Panel	The diesel generating set to have suitable control panel duly pre-wired with the following instruments: One ammeter with selector switch, One energy meter with selector switch, Hour meter, One suitable capacity MCCB with overload and short circuit protection to disconnect power supply in case load of generating set increases beyond permitted limits. The rupturing capacity of the MCCB should not be less than 25 kA. One set of indicating lamps and control fuses.

7.0	**Installation, commissioning, trial runs and putting the BMCU in operation on**

	milk	
S No	**Particulars**	**Works required to be carried out**
7.1	Installation of BMCU and supporting accessories.	The installation work should be carried in the best workman like manner in conformity to the relevant codes of practices of BIS standards applicable for mechanical & electrical installation. Installation of all equipment & interconnecting piping, including minor civil works such as earthing pit & chamber, providing stainless steel pipe supports, SS base plates, clamps, valves, unions etc. required to secure the equipment & piping to walls and floors is to be provided. Supply, laying, connecting, terminating all necessary electrical and control cables through the cable trays, GI pipes/conduits, cable gland sockets at ends, isolators, junction boxes etc are included in the scope of the work. Cable trays and supporting steel members such as Galvanized angles /channel / flats shall be used and fixed/installed at appropriate places to ensure safe installation. The laying of cables on the floor or under the floor is not permitted except for milk pump. Copper piping between BMC tank and condensing unit under suppliers scpe.
7.2	Interconnecting piping for the entire plant	SS 304 piping 38 mm dia., 1.6mm thick Provide and install extended pipe for connecting milk hose for milk tanker loading – unloading
7.3	Cables & Electrical	Cable between D G Set and main panel shall be steel armored. For all electrical cables, suitable water tight cable glands and lugs should be used at ends. Specification for PVC insulated cables (for voltage up to 1100V): Part 1 with copper conductor (revised).(cable for main switch to stabilizer should be 6sq.mm.4 core armoured) Flexible electrical connections shall be made only to items normally movable in service. Such flexible shall be PVC insulated copper conductor cable not less than 24/0.20 mm in size (see IS 694 (Part1-1964*) and earth continuity conductors of PVC insulated copper conductor shall be done.
7.4	Tool box with required tools	A standard tool box of GI sheet with necessary tools for normal maintenance. It should include Electric Tester, Screw Driver Set, Allen Key 3mm & 6mm, Pipe Wrench 12" Long, Screw Spanner 12", Fix spanner Set 6-27, Gasket for SS Unions/valves- 3 sets and extra mechanical seal for pump,Combination Plyer ,Black & Decker blower 1000 to 1400 rpm.
7.5	Operation manuals	2 sets i.e. one in local language and one in English
7.6	P&I Drawing for the complete system offered	Drawing to be provided

7.7	Commissioning	Supplier shall arrange commissioning & performance trial runs of the bulk milk cooling system ensuring that BMC meets all performance parameters. The supplier shall supply all the consumables except diesel for D G Set required during commissioning of the plant. Diesel for commissioning of D G Set shall be provided by purchaser. In case of unavailability of Milk, Supplier has to take trial on Water.
7.8	Training	Supplier shall arrange for training of the operating team of DCS for efficient operation and maintenance of the complete system for 3 days.
7.9	Warranty	All equipment (including bought out items) supplied & installed by the contractor shall have a comprehensive warranty of 18 Month from date of commissioning or 24 months from the date of supply, whichever is earlier.
7.10	Inspection	Client reserves right to inspect all the components of the bulk milk cooling system during fabrication/ manufacturing stage, finished stage before dispatch of the equipments. The milk cooling tank shall be checked with dye penetration test for welding defect, surface roughness check, water tightness test / hydraulic test.
7.11	Fire Extinguisher	Supply and install one no ,A B C Stored Pressure type fire extinguisher of capacity 1 kg with each: 5 kL BMC- 12 Nos.

***Other Required machinery ***

S No	Particulars	Specifications
1	**Can Tipping Bar**	Should be a horizontal wooden bar supported on two legs of MS`B 'class pipe and flange on bottom of the pipe for grouting. Top bar should be made of teak wood. All MS surfaces are to be painted with a coat of epoxy primer followed by two coats of epoxy paint of ivory color after thorough de-rusting.

General Arrangement & Drawing, Designs- Shall be approved by – KZSDUSL for all.

Additional Technical Requirements	
1	We required suitable capacity RCCB in stabilizer for leakage current protection & phase reversal protection
2	BMC'S S S tank's evaporating plate guarantee should be minimum 5 years. If this plate is leakages during guarantee Manufacturer will replace same capacity BMC'S SS tank without any extra charges at DCS level.
3	We require suitable capacity 3 nos. main fuse with neutral link & suitable capacity L&T make main switch with enclosed powder coated box fitting on wooden board for standard installation of BMCU.
4	Manufacturer will supply required accessories for installation of condensing unit on terrace of DCS (As per site condition) without any additional charge
5	Manufacturer will provide 51 mm SS assembly with PVC hose pipe.

Civil Work

Civil work for BMCU'S with all accessories installation are in scope of society not a scope in supplier.

Comprehensive (including repair / replacement) Warranty/ guarantee >

For all items / good supplied shall be as mentioned in technical specifications.

The supplier also warrants that the goods and equipment, supplied, installed and commissioned under the Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The supplier further warrants that the goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except insofar as the design or material is required by the Purchaser's Specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions obtaining in the country of final destination.

The Supplier also guarantees that the Goods supplied shall perform satisfactorily as per the designed/ rated/ installed capacity as provided for in the Contract.

This Comprehensive warranty/guarantee shall remain valid till warranty period mentioned in technical specification after the Goods have been delivered at site, installed and the system successfully tested, commissioned and accepted by the Purchaser.

Any complaint during this warrantee/guarantee shall be attended to within 24 hours by the bidder at no cost. Upon receipt of such notice or complain, the Supplier shall, with all reasonable speed, repair or replace the defective Goods or parts thereof, without costs to the Purchaser.

If the Supplier, having been notified, fails to remedy the defect(s) within a reasonable period, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

The Supplier shall guarantee the complete installation for satisfactory performance for a minimum period mentioned in technical specifications from the date of commissioning. Any defect arising out of faulty installation or use of substandard material or workmanship shall be rectified by the Supplier at his own cost.

Please Note: Initial acceptance of goods is not the final acceptance of quality.

In case materials are found substandard at our union/village societies/Member Farmer's Farm, on receipt of the same we reserve our right to reject the material out rightly. Labor Charges if any will also be recovered from you. We reserve the right to send your material for testing at any laboratory of our choice and in case the result is found unsatisfactory we reserve the right to take any action as deemed fit.

FOR D.G.SET:-

Scope of work

Inspection and Tests

The Purchaser or its representative shall have the right to inspect and/or test the Goods to confirm their conformity to the Contract. The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery and/or at the Good's final destination. Comprehensive

Storage of Equipment

The Supplier shall be responsible for the proper storage and maintenance of all materials/equipment under Supplier's custody. Supplier shall take all required steps to carry out frequent inspection of equipment/materials stored as well as erected equipment until the same are taken over by the Purchaser.

Testing and Commissioning:

The Supplier shall operate, maintain and give satisfactory trial run of the equipment satisfactorily for a maximum period as mutually agreed by supplier/purchaser/owner of the equipment at the rated output. All rectification of damages/defects and routine trouble shooting should be carried out by the Supplier.

During this period, Supplier shall incorporate/execute necessary minor modifications during the trial period for maximizing operational efficiency. The Supplier should also execute minor modifications as may be suggested by the manufacturer/Owner. The supplier shall suggest recommended log sheet Performa for recording necessary operating data and pass it on to the Owner in proof of satisfactory rated output and performance of the equipment.

The Supplier shall demonstrate proper working of all mechanical and electrical controls, safety and protective device, in presence of the Owner's engineer and the same should be duly recorded. After conducting testing, in case particular equipment is not working properly or not giving ratedoutput the Supplier will furnish a detailed report to the Owner stating therein the detailed account of the performance of the equipment with possible reasons for improper or not working of the same.

Further, before the commencement of testing or commissioning, the Owner reserves the right to invite the original manufacturer's representative at the cost of the Suppliers for start-up help, assist and guide the Supplier during commissioning in the following cases:

- The Supplier has no previous experience of commissioning and start-up of the similar equipment.
- The Owner is of the opinion that the Supplier is not capable to commission and start-up of certain specific equipment.

However, in either of the cases the manufacturer’s representatives would be called with prior information to the Supplier and the Supplier will have to extend all Co-operation to such representatives in good spirit and in the interest of the work.

The necessary quantities of cleaning chemicals, lubricants etc., required for the installation, commissioning, testing and start-up of all the equipment till handing over are to be supplied the Supplier and nothing extra would be paid for these.

Cleaning of Site

All soils, filth or other matters of an offensive nature taken out of any trench, drain or other places shall not be deposited on the surfaces, but shall at once be carted away by the Supplier from the site of work for proper disposal.....

The Supplier shall not store or place the equipment, materials or erection tools on the drive ways and passages and shall take care that his work in no way restricts or impedes traffic or passage of men and materials during erection, the Supplier shall without any

additional payment, at all time keep the working and storage area used by him free from accumulation of dust or combustible materials, waste materials rubbish packing, wooden planks to avoid fire hazards and hindrance to other works.

If the Supplier fails to comply with these requirements in spite of written instructions from the Owner, the Owner will proceed to clear these areas and the expenses incurred by the Owner in this regard shall be payable by the Supplier. Before completion of the work, the supplier shall remove or dispose off in a satisfactory manner all scaffolding, temporary structures, waste and debris and leave the promises in a condition satisfactory to the Owner. Any packing materials received with the equipment shall remain as the property of the owner and may be used by the Supplier on payment of standard charges to the Owner and with prior approval of the owner. At the completion of his work and before final payment, the Supplier shall remove and shall restore the site to neat workman like conditions at his cost.

TRAINING OF PERSONNEL

Necessary staff as may be deputed by the Owner shall be trained by the Supplier for operating the equipment. The personnel will be associated for the training during the installation, testing, commissioning and start-up period and the training tenure can be extended for a period of one week from the date of commissioning and start-up. If training requirement of Society, D.G.SET operator you should give to practical and theoretical training in group .Totally expense in scope of supplier.

After sales and service

Any complaint during this warrantee/guarantee shall be attended to within 24 hours by the bidder at no cost. Upon receipt of such notice or complain, the Supplier shall, withall reasonable speed, repair or replace the defective Goods or parts thereof, without costs to the Purchaser. Preventive maintenance of D.G.SET must be done as per standard Running hours.

Repair/replacement) warranty/guarantee (DG set & related Components

The supplier warrants that the goods and equipment, supplied, installed and commissioned under the Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The supplier further warrants that the goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except insofar as the design or material is required by the Purchaser’s Specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions obtaining in the country of final destination. The Supplier also guarantees that the Goods supplied shall perform satisfactorily as per the designed/ rated/ installed capacity as provided for in the Contract.

This Comprehensive warranty/guarantee shall remain valid till warranty period mentioned in technical specification after the Goods have been delivered at site, installed and the system successfully tested, commissioned and accepted by the Purchaser.

Any complaint during this warrantee/guarantee shall be attended to within 24 hours by the bidder at no cost. Upon receipt of such notice or complain, the Supplier shall, with all reasonable speed, repair or replace the defective Goods or parts thereof, without costs to the Purchaser.

If the Supplier, having been notified, fails to remedy the defect(s) within a reasonable period, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.
The Supplier shall guarantee the complete installation for satisfactory performance for a minimum period mentioned in technical specifications from the date of commissioning. Any defect arising out of faulty installation or use of substandard material or workmanship shall be rectified by the Supplier at his own cost.

Please Note:
In case materials are found substandard at our union/village societies, on receipt of the same we reserve our right to reject the material out rightly. Labor Charges if any will also be recovered from

you. We reserve the right to send your material for testing at any laboratory of our choice and in case the result is found unsatisfactory we reserve the right to take any action as deemed fit.

Initial acceptance of goods is not the final acceptance of quality.

Supplier’s warrantee certification should be provided as per warrantee/ guarantee mentioned herewith along with operational & maintenance manual in local languages i.e. English/Marathi .

Should any inspected or tested Goods fail to conform to the Specifications, the Purchaser may reject them and the Supplier shall either replace the rejected Goods or make all alternations necessary to meet specification requirements free of cost to the Purchaser.

The Purchaser's right to inspect, test, and, where necessary, reject the Goods after the Goods arrival at the destination shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to Goods shipment.

****

Format
(Commercial offer)

To,
The Managing Director
Kolhapur Zilla Sahakari Dudh
Utpadak Sangh Ltd.,
Kolhapur

Sub - E -Tender offer for supply of BMCU's

Dear Sir,

With reference to the E- Tender Notice Published in **Daily Business Stardard, Mumbai,** we are submitting our E Tender offer for supply, installation & commissioning of Bulk Milk Cooling Units at village level milk societies decided by you.

We have studied particulars & specifications of required BMCU's and Terms Condition of this E -Tender.

Price schedule in the format given by you is attached herewith.

Place :

Date :

Name, Signature and Seal of Tenderer

Format

PRICE SCHEDULE

SUPPLY PRICE-

Sr. No.	Particulars	Unit Price per BMCU Rs.	
1	Price of 5000 Ltrs. capacity BMC Unit with accessories (Packing & forwarding, Freight, Transit Insurance, Installation & Commissioning charges are included)	-	
2	GST	-	
Grand Total Price (1 + 2)		-	
(Rs.			**)**

Seal & signature of Tenderer

Date