

# West Bengal Co-operative Milk Producers' Federation Ltd

LB-2, Sector – III, Salt Lake, Kolkata – 700 106.

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**NIT No : 10/5(BPP)/Tender/Equipment/01e**

**Date :15.9.2018**

**Managing Director, West Bengal Cooperative Milk Producer' Federation Ltd is pleased to invite tender (2<sup>nd</sup> Call) from eligible agencies/parties with proven experience on the field for execution of the below mentioned ONE item.**

1. Supply, installation and commissioning of plants and machineries including all pipeline and accessories in connection with complete **Milk Reception work** at Benmilk Training Centre Cattle Feed Plant Campus, Berhampore, Murshidabad, West Bengal.

**A) Item wise specification, technical details and scope of supply/work is given below :**

SL NOS	ITEM WITH DESCRIPTION	QTY
<b>1</b>	<b>MILK RECEPTION</b>	
1.1	Tanker unloading hose with S S fittings 76 mm crush proof hose with vulcanized end connection and SS 304 fittings  Type : wire braided polyethylene hose, food grade, The hose pipe assembly shall be complete with end connections. Tankers unloading hose size ( 73mm x 6m) shall be provided for unloading the tanker	6 mtr
1.2	<u>Tanker unloading pump</u> Capacity 5 KLPH Type Centrifugal Monobloc Function : the pump shall be used for transfer of milk from tankers to raw milk silos through the Raw Milk Chiller  Design : The pump shall be sanitary design and centrifugal mono block construction.  Finish : All stainless steel surface shall be polished to 150 grits  The Pump : Product part shall be made out of stainless steel conforming to AISI 316  Drive : The pump shall be provided with flanged motor with hygienic sealing arrangement. The motor shall be squirrel cage TEFC with IP55 protection suitable for 415 V 50HZ AC Supply. The pump and drive shall be integrated together. The pump shaft end for fixing the impeller shall be of stainless steel, The motor shall be efficiency class I	1 nos

SL NOS	ITEM WITH DESCRIPTION	QTY
1.3	<p>Accessories :</p> <p>Inlet/Outlet stainless steel (AISI 316) inlet and outlet shall end in stainless steel complete inlet shall be 230 mm above the finished floor level</p> <p>Motor shroud : The motor part of the pump shall be SS shrouded. Shroud should be easily removable. It shall have provision for air circulation and entry of electric cable.</p> <p>legs : The pump with drive shall be supported on legs with SS ball feet. The ball feet shall have provision for height adjustment of 50 mm</p> <p>Simplex Inline Stainer : The stainer shall be used for online filtration of tanker milk. It shall be provided in standard execution with ready to dismantle clamp design</p>	1 no
1.5	<p>Reception &amp; Tanker CIP Control Panel</p> <p>Type : Wall mounted, lockable water proof enclosure</p> <p>MOC : SS 304</p> <p>Controls : As per mentioned in Design basis</p>	1 no
1.6	<p>Self Supported Hot Dip Galvanized Steel Platforms Self supported hop dip galvanized steel platforms for approach of tanker man ways with SS railing</p>	
<b>2</b>	<b>CAN RECEPTION</b>	
2.1	<p><u>Can Tipping bar</u></p>	1 no
2.1.1	<p>Functional Requirement : The can tipping bar would be used as a can support in manual tipping of milk cans in to the weigh bowl</p>	
2.1.2	<p>Design requirement: The general design of the can tipping bar should be of horizontal wooden bar supported on two legs. The legs would be grouted down to the floor with the help of grouting bolts.</p>	
2.1.3	<p>Scope of supply : <u>Top bar</u> : it will be made of teak wood. The dimensions of the bar will be sufficient to take load of 40 litres milk filled can &amp; also the dynamic load due to jerk in manual handling of filled cans</p>	1 no
	<p>Legs : <u>The legs</u> will be made of MS 'C' class pipe with a provision to fix the structure on the foundation</p>	1 no
	<p>Painting :All MS surfaces are to be painted with a coat of epoxy primer followed by two coats of epoxy paint of ivory colour with through re-rusting.</p>	
2.2	<p><u>Dump Tank</u></p>	
2.2.1	<p>Functional requirement: It will work as a balance tank for milk in between the weigh bowl and milk chiller.</p>	

SL NOS	ITEM WITH DESCRIPTION	QTY
	<p>Design requirement : <u>Capacity 1000 L</u> with at least 10 mm allowance in depth</p> <p>Dimension of tank : rectangular type</p> <p>Slope : 1: 1.5 towards the outlet (from all the three sides)</p> <p>Finish : All the welding joints are to be smooth to 120 grit polishes. All stainless steel surfaces are to be polished to 120 grits</p> <p>Joint curvature : all inside corners should have minimum radii of 25 mm</p> <p>2.2.2 Scope of supply : Top bar : it will be made of teak wood. The dimensions of the bar will be sufficient to take load of 40 litres milk filled can &amp; also the dynamic load due to jerk in manual handling of filled cans</p> <p><u>Tank</u> the walls of the tank will be fabricated from 1.6 mm stainless steel conforming AISI 304. the bottom of the tank will be fabricated from 2.0 mm thick stainless steel sheet conforming to SS 304. The top edges of the tank will be bent outward smooth.</p> <p>2.2.3 Accessories cover (optional) : The loose fitting tri-sectional top cover with lifting handles will be fabricated from 2 mm thick stainless steel sheet conforming to SS 304</p> <p>2.2.4 Legs : legs out of 63.5 mm dia 10G SS pipe (SS 304) with stainless steel ball feet will be provided at the bottom of the tank. The stainless steel ball feet will have provision for height adjustment of 50 mm</p> <p>2.2.5 Outlet : the single bottom of 38 mm diameter located in the middle of the long side. It will be fitted with 38 mm dia stainless steel 2 way plug type valve (made of forged steel/casting) with complete stainless steel SMS union on the other ends. The outlet will be cup type.</p>	1 no
2.3	<p>Inline Stainer</p> <p>2.3.1 Functional requirement; It will be installed in between milk dump tank &amp; milk transfer pump.</p> <p>2.3.2 Design requirement : Capacity 5000 lph</p> <p>2.3.3 Constructional features : The general design will be of tubular/disc type design with a concentric cylindrical filter made from SS 304 screen of 1.5 mm pitch</p> <p>2.3.4 Pressure drop : Pressure drop across the stainer will be not exceeding 0.3 Kg/cm.sq</p>	3 nos 4 nos

SL NOS	ITEM WITH DESCRIPTION	QTY
2.3.5	Finish : All welding joints are to be ground smoothly. All stainless steel surfaces are to be mirror polished.	
2.3.6	scope of supply stainer casing : The casing will be made from SS 304 10G pipe, with 100 mm dia or 1.6 mm SS plate in case of disc type.	
2.3.7	Filtering elements : The filtering element will be made from SS 304, 18 G screen of 1.5 sq .mm Pitch	
2.3.8	Blank & clamp : AISI 304 SS grooved blank fitted by means of SS clamp will be provided at opposite to the inlet end for easy removal of filtering element. The thickness of blank will be minimum of 15 mm 'O' ring will be provided between casing and blank.	
2.3.9	Inlet/Outlet : 51 mm dia inlet and 51 mm outlet will be manufactured from 10 G SS pipe of AISI 304 quality. Both inlet and outlet will be complete with SMS unions and will be integrated parts of outer casing	
2.4	<u>Reception pump</u>	
2.4.1	Capacity : 5 KLPH, Make : Standard. <u>Functional requirement</u> : the pump will be used for unloading and transfer of milk /CIP solution	
2.4.2	<u>Prime mover</u> : 3 Ph, 415 volt (+/- 10%) 50 Hz, TEFC, Squirrel cage AC induction motor with Class 'F' insulation of suitable H.P.	
2.4.2	Scope of supply: The pump : will be made from stainless steel conforming to SS 304. the impeller will be closed type manufactured from investment casting method and will be machined accurately. The impeller will be dynamically balanced to ensure proper rotary motion.	
2.4.3	The drive: the pump will be provided with flanged type electrical motor with hygienic mechanical sealing arrangement. The pump and drive will be integrated together. The shaft end for fixing the impeller will be AAISI 304 stainless steel.	

**B) The rate quoted should be inclusive of :**

- a) All process pipes as required inclusive of SS pipes made of AISI 304 conforming to standards of ASTM A-312. Pipes should be outside polished and inside pickled as per dairy standards. Piping should be done in welding execution conforming to sanitary design. Thickness of pipe should be of 1.6 mm.
- b) Non-pneumatic process valves and fittings : Plug valves, non-return valve, butterfly valve, tee, bend, union and various other fittings to be included as required conforming to dairy standards. The valves unions and other fittings are to be made from precision casting/forging machined to closest tolerances on CNC machines as per SMS standards.

- c) SS supporting pipes clamps etc : SS supporting pipes of square cross section should be used to support the pipe lines both on horizontal and vertical plains. SS support clamps of IDMC design with nipples should be used for supporting the pipes and fittings. SS floor plates of standard design should be used for vertical support in the entire piping and should be executed at two or three levels.
- d) No welding joints with SS pipe line, bends, T joints, valve joints would be allowed. All tit bit masonry work including equipment foundations is within the purview of this tender and to be carried out by successful bidder as and where required. Trial run of the equipment and machineries will be for 15(fifteen) consecutive days in presence of officials of Milk Federation.

**C) Bidders should submit rates inclusive of cost of material and labour and inclusive of inward/outward transportation and inclusive of packing and forwarding charges and any other such charges if any and inclusive of installation commissioning and trial run. GST and any other such applicable taxes and dutes are also to be mentioned separately. The distance of the site is 200 KM from Kolkata.**

**D) Last date of submission of tender along with credential certificate, technical details, organization/company profile, Tax clearance Certificates , PAN,Aadhar, TAN copy, authorization letter of manufacturer (as and where applicable) is 24.9.2018 by 5.00 PM.**

Interested bidders may visit the site if felt necessary before submission of their bids. The site is at Benmilk Training Centre, Cattle Feed Plant Berhampore campus, P O : Cossimbazar Raj, Berhampore, Dist : Murshidabad, West Bengal. Prior to such visit the bidder should contact Production Engineer & Principal BTC (Ph no : 9733912116) for necessary consent.

**E) Interested bidder should submit their bids in envelop duly Gala sealed and superscribing “NIT –Milk Reception” and “Not to be opened” at the top of the envelop and to be addressed to :**

**The Managing Director, West Bengal Cooperative Milk Producers’ Federation Ltd, LB-2, Sector III, Salt Lake, Kolkata – 700 106**

**F) The bid shall remain valid for (180) One Hundred and Eighty days from the date of opening the bid. Tender will be opened on 24.9.2018 for taking further necessary action by the Tender Committee. (date is tentative and may be changed if required)**

**G) Security Deposit :** Bidder who would be awarded Work Order, has to deposit security money @ **2% of total Order Value** within SEVEN DAYS from date of receipt of Work Order. Failing this the said Order will be treated as invalid.

**H) Payment Terms :** **60% (Sixty percent)** of the Work Order Value will be released on delivery/supply of equipment at the specified site. **30% (Thirty percent)** will be released on successful Installation and Commissioning and Trial Run as detailed for the whole Order. Balance **10% (Ten percent)** would be released after ONE YEAR from date of commissioning, OR submission of Performance Bank Guarantee equivalent to 10% for one year.

The Managing Director, West Bengal Cooperative Milk Producers' Federation Ltd at its sole discretion may adopt or reject any or all the bids either in part or in full. West Bengal Cooperative Milk Producers' Federation Ltd at Kolkata also does not bind itself to accept the lowest bid. Canvassing in any form will be treated as a disqualification for the bidder.

Managing Director  
The West Bengal Cooperative Milk  
Producers' Federation Ltd