## THE ICHHAMATI CO-OPERATIVE MILK PRODUCERS UNION LTD.

HATI PUKUR ROAD, BARASAT, NORTH 24 PARGANAS, PH no-2562-2688, Fax no-2584-2262

Ref. no:-IMUL: Tender: 387

Date- 09.09.13

To The District Informatics Officer Barasat, North 24 Parganas

Sir

Please find enclosed the specifications and terms & conditions for purchase of I no Milk Condensing Unit (500 lts capacity), 1 no IBT Unit for Existing Refrigeration System & 1 no Blue Star Make Walking cold store(10,000 lts. Capacity) at Berechampa Chilling Plant which will be published in the North 24 parganas district's govt. website (<a href="https://www.north24parganas.gov.in">www.north24parganas.gov.in</a>) as per approval of ADM(D), North 24 Parganas.

I hope your kind consideration regarding the matter.

Managing Director

## THE ICHHAMATI CO-OPERATIVE MILK PRODUCERS UNION LTD.

HATIPUKUR ROAD, BARASAT-700124, NORTH 24 PARGANAS PH NO-033-2562-2688, FAX NO-033-2552-1019, email-lchhamati123@yahoo.com

Ref no: - IMUL: Tender: 10DP: 384

Date - 11:09.13

## TENDER

The Ichhamati Co-operative Milk Producers' Union Ltd. is a Anand Pattern District level co-operative Society which is functioning under leadership of District Magistrate, North 24 Parganas. This Milk Union is inviting sealed quotation for setting up of 1 no 'IBT Unit for Existing Refrigeration System' for milk chilling. For details specification/ description of IBT Unit is as under:-

Technical Specification of Ice Bank Tank (IBT) with accessories for to be used for chilling & pasteurizing of 10/12 KL milk per day.

Functional requirement:- To chill water at 1 degree centigrade by using refrigeration system for circulation through plate heat exchanger so that raw milk could be chilled instantly.

Design requirement:- Ice accumulating coils fabricated from 32 mm nominal bore seamless MS pipe of best quality ( Total length of coil at around 650 metre ) in suitable sections and each sections complete with inlet and outlet headers, oil drain arrangement etc. the size of the coil should match with the tank size so that rate of chilling of water inside the tank would be maximum.

The main functions of ice accumulating coils are to accumulate ice equivalent to the refrigerational effect required as per cooling load, to meet the required heat transfer capacity and formation of ice when existing compressors are running simultaneously and the design should be such as to accumulate atleast 50 mm thickness of ice.

Liquid separator expansion valve complete with liquid level controller and solenoid valve along with complete bypass arrangement for regulating flow of liquid refrigerant for the said accumulating coil is to be provided.

Chilled water agitator comprises of 3 phase electric motor with suitable speed reducing arrangement of reputed company is to be provided at the tank.

Teakwood (suitably varnished) or fiber cover having 25 mm thick in two layers separated by water proof paper for the tank is to be provided. The cover should be made with sufficient handles in sections for easy removal and inspection of tank.

The main chilled water tank should be made of MS plate having thickness of minimum 6.0 mm inside (Side Wall) and minimum 8.0 mm thickness at bottom. The volume(inside) of the tank should be of 27.5 meter cube (Preferably 4 mt x 2.75 mt x 2.5 mt). Angle stiffeners of suitable size should be provided for accommodating cooling coils. The tank should be painted with corrosion resistive paint. Necessary drain connections with valves, race way for agitator should be provided at the tank. All nuts and bolts to be

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used at tank must be of stainless still for convenience maintenance work in future. The tank should be insulated at sides and bottom as specified below:-

For base, 100 mm thick heavy duty expanded polystyrene (having a mean density of 20 kg/cm sq in two 50 mm each for bottom). For sides, 100 mm thick normal duty expanded polystyrene resin (having a mean density of 16 kg/cm sq.) in two layers of 50 mm each. Sufficient quantity of sticking materials, vapour barriers of polythene sheets and chicken mesh should be provided for the tank insulation.

Any equivalent insulating materials may be accepted. In that case details should be furnished with specification.

The fabricated & insulated tank should be based on a concrete foundation to carry the load of tank. All four sides of insulated tank wall would be covered by 10 inch brick wall duly plastered & white washed.

Beside all above, interconnecting pipelines (MS seamless) of gas from refrigeration system duly painted are to be provided with the IBT. The IBT should be located within 6 meter(Approx).

Scope of bidder:- The bidder shall supply all the required materials at site (Berechampa Chilling Plant, North 24 Parganas), fabricate the tank with insulation, carryout the work of concrete foundation along with side brick walls, fix & fit all accessories, connect pipelines with existing refrigeration system, paint pipelines etc. The bidder shall arrange tools & tackles, welding machine etc. required for their job, electricity for welding / drilling etc. may be provided by the plant on requirement. The bidder shall take responsibility of commissioning / trail run of the whole unit with existing refrigeration section. The bidder have to give performance guaranty of whole jod for a period of one year from the date of commissioning. Bidder may visit the existing plant on any working day for further details.

The bidder should submit drawings, specifications & make of all individual items along with their bid. The bidder shall clearly mention the payment terms & time of completion of the job.

Authority of Milk Union reserves the right to accept or reject or regret the tender without reason there off.

Last date of submission of quotations:- 17.09.2013 at 12 noon. Opening date of tender:- 17.09.2013 at 1 P.M

Managing Director Ichhamati Milk Union