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| **ISO-9001:2000 & HACCP ORGANIZATION** |

**Phone : 2333926, 2701010 Fax : 0144-2342925**

**TENDER FORM**

**TENDER FORM**

 Tender Copy issued to

 M/S ……………….

 ……………………….

1. Name of work : Supply, Erection & Commissioning of

 ICE Bank Tank

2. Estimated cost : Rs. Twenty Lac

3. Tender form cost : Rs. 200/-

4. Earnest money : Rs. 50,000/-

5. Period of completion : Four Month

6. Last date of sale of tender form : 21-01-2015 Time – 1.00 P.M

7. Date of receiving tender form : 21-01-2015 Time – 3.00 P.M.

8. Date of opening of tender form : 21-01-2015 Time – 3.30 P.M.

9. Income tax PAN. : …………………………………………..

10. TIN : …………………………………………..

11. Last 3 years income tax clearance : Either in original & photo copy.

12. Details of Experience for similar type of job : Either in original & photo copy.

13. The tender fee Rs. 200/- deposited vide receipt No………Date……………..

14 Earnest money Rs.50000/- deposited vide D.D No………Date…………….

15. Default parties are not allowed to filling tender . tender will not be

 Considered.

16. Total cost of the above job excluding service tax (if applicable) Rs……….

 I have carefully gone though all the clauses of tender document as enclosed in page no.1 to 9 and agree to work as per the terms & conditions laid in the tender

 Signature of contractor/ Tenderer

 With Seal

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TECHNICAL SPECIFICATION FOR SUPPLY, ERECTION & COMMISSIONING

OF ICE BANK TANK AT ALWAR MILK UNION :

(Supply, Installation, Testing & Commissioning- completion period –4months )

A.  **Scope of work:--**

 The refrigeration capacity of Alwar Milk Union is being enhanced. To cater to the

 additional load 1 number IBT need to be supplied and Installed.

 The job involves supply,erection, installation and commissioning of 1 No. Ice Bank

 Tank, IBT Agitator with motor for the IBT and wooden covers of Assam Teak/

 Seasoned wood, Chilled water pipe lines, Chilled water header, overflow and drain

 Piping, various ammonia valves and water line valves, insulation and aluminium

 cladding of various pipe lines, electricals alongwith accessories viz electronic float,

 solenoid valve, ice limit switch, oil purging line, digital type temp. indicators,

 pressure gauges etc. at ALWAR Milk Union. It also includes replacement of existing

 ammonia suction and Liquid lines. The new system is to be hooked up with the

 existing operating system.

 The supplier shall be required to ensure that no damage occurs to any of the existing

 structure equipments/ lines of the plant. If any existing structure/line is required to be

 removed for the job, the contractor has to make it good and restore to its existing

 state at his cost .

B.  **Important Note:-**

 The tenderer is advised to visit the site so as to apprise himself of actual site

 conditions & quantum of work involved.

1.0 **TECHNICAL SPACIFICATIONS:-**

1.1 IBT - 1 No.

 Ice Bank Tank of suitable dimensions (depth of the tank should be such that top of

 the water level on the new tank should match the top of the water level of the

 existing IBT) to accommodate approximate 1232 RMT Accumulating coil & 1 No.

 agitator is to be supplied and installed. The tank shall be fabricated out of 6mm

 thick M.S. sheet for walls including compartment/partition walls and 8mm thick

 M.S. sheet for bottom . The tank shall be complete with M.S. Frame structure and

 Sufficient stiffeners to keep all the sides of tank straight (without deflection) when

 full with water as well as during operation. 50mm thick wooden covers of Assam

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 Teak/Seasoned wood for tank, overflow, outlet and valved drain connection shall

 have to be provided. The tanks shall be supplied in knock down conditions and

 fabricated at site.

 However all civil jobs pertaining to construction of foundation for IBT and wall all

 around IBT (after insulation) etc. shall be carried out by A.Z.D.U.S.S.Ltd. Milk

 Union, and is not in the scope of tenderer .

 The wooden covers for the tank should be fabricated in two equal layers each of

 1010 X 600 X 25mm thick Assam Teak / seasoned wood . The two layers should be

 separated by a water proof paper . the covers should be made in sections for easy

 removal and inspection of tanks . The covers should be suitably varnished and

 provided with sufficient no. of sturdy lifting handles .

 As per existing neighbouring IBT in the new IBT fabficated where 16 sets

 are required. Each set shall have 14 coils. Necessary horizontal and vertical

 stiffeners /supports to be clamped with coils to keep them in position. At the bottom

 the coils shall have to be supported on M.S. channel of at least 75 X 40mm size. All

 these shall have to be galvanized. General arrangement drawing of the coils

 accumulator etc. shall have to be got approved by the supplier before fabrication.

 Note:-The dimensions of IBT Tank can be altered to suit to site condition.

* 1. The set of Ice Accumulating coil is required to be supplied and installed. This

 Set of coils shall be accommodated in the IBT. The Ice Accumulating coil is

 required to be fabricated out of 32mm N.B.M.S. ‘C’ class ERW pipe TATA make

 sand blasted and spray galvanized after fabrication with the upper and lower

 headedrs, oil purging arrangement etc. complete with accumulator, requisite

 ammonia valves etc. the ice accumulating coils should be designed to ensure

 accumulation of minimum of 50mm thick ice.

 For the IBT 1 Nos. upper header for one set of columns of 16 sets coils shall be

 provided And the upper header shall be of 4” in dia and of M.S. ‘C’ class TATA

 make pipe. Similarly for the IBT 1 Nos. lower headers for one set of columns of

 Corresponding 16 sets coils shall have to be provided and lower header shall be of

 3”dia and M.S. ‘C’ class TATA make pipe. All the headers should be duly sand

 blasted and spray galvanised with rises.

1.3 The total length of Ice Accumulating coils shall be approximately 1232RMT.

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1.4 The coil is to be so arranged in the tank so that there is a 5” clear air gap berween

 the adjacent coil in horizontal plane and 5” clear air gap between the adjacent coils

 in vertical plane. However the first coil and the last coil shall have an air gap of 4”

 from the wall (including the partition/compartment wall). General arrangement

 drawing of the coils, accumulator and valves arrangement shall have to be got

 approved by the contractor before fabrication. However there can be variation as

 per site conditions for accommodation of coils but it should be symmetrical to the

 existing operating coil set.

1.5 The coil is to be placed in the IBT in such a fashion that top pipe of the coil is

 preferably nearly 11” below the top of IBT. The important point is that top water

 level in new tank should match the top water level of existing tank.

1.6 Oil purging connections and valves shall have to be provided and installed.

1.7 Suitable accumulator shall have to be provided and placed on the IBT, with due

 connections and fittings and accessories properly/placed. The accumulator shall

 have to be suitable insulated with 4” thick insulation and aluminium cladded . The

 drawing of the details of accumulator and arrangement of fitting and accessories

 upon it shall have to be got approved from A.Z.D.U.S.S.Ltd.

 The requirement of ammonia suction line approx.4” dia X 5 Mtr. For the

 accumulator should be of MS ‘C’ class TATA make. This shall have to be supplied

 and installed with ammonia flanged valve of Super/Super Maini make in between

 the suction line and the accumulators. This piping shall have to be suitably insulated

 with 2” thick insulation and cladded with the aluminium sheet after making due

 connections to the accumulators. This pipe line shall be suitably supported on wall

 supports as per existing arrangement.

 Ammonia liquid line approx. 11 Mtr. Of MS ‘C’ class TATA make shall have to be

 provided from the receiver to the IBT . The length of suction and liquid line may

 vary. Hence supplier must quote their unit rate for supply and erection and insulation

 of gas pipes.

1.8 Suitable electronic float of Manik/Manor make alongwith solenoid valve

 interconnecting ammonia line and valve (bye pass line, expansion valve, strainer

 etc.) as required shall have to be provided for proper flow of refrigerant in ice

 accumulating coils.

 (Schematic drawing be got approved before installation)

 All pipes to be used are to be of Tata Make ‘C’ class ERW only.

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* 1. Supplier should note that scope of work includes complete supply, installation,

 testing and commissioning of IBT , Ice accumulation coils, agitator motor

 etc and therefore all allied work and requisite material falls in the scope of supplier.

 The suction and liquid lines are to be supplied.

1.10 One No. Ice Accumulating limit switch of Danfoss/Indofoss make to be provided

 for automatic stoppage of ammonia compressors when desired thickness of ice is

 achieved on all sets of coils.

**2.0 TESTING:-**

2.1 The coil set shall have to be pressure tested at 18 Kg./Sq.cm. pressure for leakage of

 joints etc and finally flushed with Nitrogen followed by vacuum testing before

 charging of Ammonia.

2.2 One M.S. ladder shall have to be supplied and installed for making access to the

 top of the tanks.

2.3 The IBT is to be painted suitably from inside with two coats of anti-rust paint.

* 1. The IBT shall have suitable chilled water with 5HP TEFC motor (Cromption/Jyoti/NGEF/Siemens make) and 18” dia impeller with proper guiding chute to be provided at IBT for ensuring proper circulation/ agitation of water through spacing and all around IBT.
	2. Suitable overflow, make up water and drain pipe line shall have to be provided to cater to the new IBT and it should be of MS ‘C’ class of TATA make suitable supported maintaining aesthetic symmetry. The overflow pipe of 3” dia MS ‘C’ class TATA make with funnel arrangement shall have to be provided for the IBT. The drain pipe of 2” dia MS ‘C’ class TATA make with gate valve of 2” size of Fountain/Kalsi make shall have to be provided for the set.
	3. Minimum number of Ammonia valve are required for the system as specified below .

 (a) Ammonia angle valve 3” one

 (b) Ammonia valve 1” two

 (c ) Ammonia valve ¾” two

 (d) Ammonia angle valve ½” five

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* 1. The chilled water outlet pipe of 100mm dia MS ‘C’ class TATA make shall have to be provided alongwith 100mm strainer with 100mm sluice two valve of Fountain/Kalsi make. It shall be led to suction of the existing chilled water pumps.
1. All welding joints should be ground finished.

3.1 Sufficient quantity of insulation material (expanded polystyrene ) for chilled water

 tank is to be supplied and fitted.

1. 100mm thick heavy density expanded polystyrene having average density of 18 Kg./m3 for floor of the tank in two layers of 50mm each.
2. 100mm thick normal density expanded polystyrene having average density of 16 Kg./m3 for sides of the tank in two layers of 50mm each.
3. Sufficient quantity of vapour barrier like tarfelt and polythene sheet, bitumen, chicken wire –mesh etc. as required are included.
	1. All ammonia valves are to be of Frick/Super/Super Maini or equivalent make and

water line valves of Leader /Fountain /Kalsi or equivalent make.

* 1. The necessary compressor oil and annonia gas required shall be provided by A.Z.D.U.S.S.Ltd Alwar and shall have to be charged into the system by the contractor while commissioning the plant
	2. All pipe lines, cable installation should be properly supported.
	3. The power supply shall be provided by ALWAR Milk Union free of cost. The supply shall be made at one point at site .The contractor shall make his own arrangement to carry and distribute the power wherever it is required within the site as per Indian Electricity Rules.

The temporary supply lines shall be removed and the site shall be cleared by the contractor after the completion of the work at his own cost.

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GENERAL TERMS AND CONDITIONS

1. The equipment/material shall be supplied as per specifications mentioned in

 tender form

2. The order shall be governed by General terms and conditions of supply

 mentioned in the tender form and accepted by contractor.

3. The unit price break up for supply of equipment material and job work is as

 follows:-

 a) Ex- factory Cost .

 b) Packing and Forwarding

 c) Sales Tax CST against C form

 d) Freight & Insurance

 e) Erection testing & commissioning

 f) Others

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 Total for Price Rs.

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 T**his price should be quoted in the form at Sr. No. 16**

4. Terms of Payment :

On the job order, Alwar Milk Union is not bounded to make any payment in advance for any material, equipment or job. A part of the total equipment & material cost may be given to the supplier on the safe receipt of the same. The partial payment will not exceed more than 70% of the equipment and material cost. Part of the total order value will be paid on installation, erection, commissioning and completion of the job to reach 90% of the total order value. This balance amount will be approximately 20% of the order value. Rest 10% of the total order value will remain unpaid for one year as a warranty money.

5. Security Deposit :-

Contractor has to furnish a security amount equal to 5% of contract/Total order value for the due fulfillment of the order for one year from the date of commissioning. No interest will be payable on this amount. The successful bidder will be allowed to adjust Ernest money in the form of security and he has to deposit balance amount to make total deposit 5% of the total value.

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6. Delivery period. Four months

7. Delivery destination . Alwar Zila Dugdh Utpadak Sahakari Sangh Ltd.,

 Alwar.

8. Octroi:-

 Octroi duty if applicable at destination shall be paid extra on all dispatches on

 presentation of original related documents.

9. Billing :-

Bill along with the delivery documents of the equipments shall be raised in duplicate (Two copies ) in the name of A.Z.D.U.S.S. Ltd. Alwar in the break up form as per price break up balance mentioned above.

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10. The TIN Number of the Alwar Milk Union are :

 Alwar : 08380602956

 As per Rajasthan sales tax rules , you are required to obtain form 47, from

 Alwar Milk Union for transfer of goods to Rajasthan. The same shall be

 provided on request by the Alwar Milk Union a fortnight before dispatch of

 goods .

11. Compensation for delay in supply shall be charged up to maximum of 5% of

 the total quoted cost of the job.

12 Warranty :-

 The equipment carry a warranty as per general tender terms & condition

 for a minimum period of one year from the date of commissioning of the

 equipment for satisfactory performance of the supplied equipment according

 to the specification, rated capacity etc as mentioned in the order .

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13. Settlement of dispute :-

 In the event of any dispute in the interpretation of the terms of this point in

 agreement/ purchase order or difference of opinion between the parties on

 any of the purchase order arising out of or in connection with the agreement /

 accepted purchase order or with regard to performance of any obligation

 hereunder by the either party, the parties here to shall use their best of the

 efforts to settle such disputes or difference of opinion amicable by mutual

 negotiations.

 In case, no agreement is reached between the two parties in respect of

 concerning any of this herein contained or arising out of this supply order /

 tender / agreement as to the rights, liabilities or duties of the said parties

 hereunder or as to the recovery of any amount, the same shall be referred to

 the sole arbitrator of A.Z.D.U.S.S.Ltd. Alwar for adjudication.

 The arbitration shall be in accordance to the law of arbitration & conciliation

 Act 1996. The decision of the sole arbitrator shall be final & binding on both

 the parties .

 All the dispute pertaining to the said contract shall vest to the jurisdiction of

 courts at Alwar.

14. You will provide three set of manual containing details of the equipment

 and list of spare parts.

15. If any casualty any damage in dairy occurs during the job work, it is

completely contractors liability towards every workman working for contractor A.Z.D.U.S.S.Ltd. will not be responsible in any way for any casualty and regulation of labour laws, Factory low or any other law to be fulfilled.

Managing Director Contractor/ Tenderer

A.Z.D.U.S.S.Ltd.

 Alwar

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