






# **THE WEST BENGAL STATE CO-OPERATIVE BANK LTD.**

**Registered Office & Head Office: 24A Waterloo Street, Kolkata - 700 069**

**THE W.B.STATE CO-OPERATIVE BANK LTD.  
24-A.Waterloo Street, Kolkata -700 069.**

**TENDER FOR OPERATION & MAINTENANCE OF  
THE AIR CONDITIONING SYSTEM IN THE HEAD  
OFFICE BUILDING OF THE W.B. STATE  
COOPERATIVE BANK LTD. AT 24-A. WATERLOO  
STREET, KOLKATA-700 069.**

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**CO-OPERATIVE ENTERPRISES BUILD A BETTER WORLD**





# THE WEST BENGAL STATE CO-OPERATIVE BANK LTD.

Registered Office & Head Office: 24A Waterloo Street, Kolkata - 700 069

Ref No- HO/L&E/390/2019-20

Date:- 23.05.2019

## **OFFER FOR OUTSOURCING THE OPERATION & MAINTENANCE OF PACKAGED TYPE 75 TON BATLIBOI MAKE AIR CONDITIONING MACHINE AT HEAD OFFICE AND KOLKATA MAIN BRANCH.**

### **ABOUT THE WEST BENGAL STATE CO-OPERATIVE BANK LTD:-**

THE WEST BENGAL STATE CO-OPERATIVE BANK LIMITED (WBSCB), having its registered office at 24A, Waterloo Street, Kolkata-700069 is a 100 years old Banking institution working as an Apex Bank of all Co-operative Banks in West Bengal and serving the needs of peoples from remote areas to State Capital. Bank has 43 branches in South 24 Parganas, North 24 Parganas, Coochbehar Districts and in Kolkata & Siliguri.

THE WEST BENGAL STATE CO-OPERATIVE BANK LIMITED (WBSCB) intends to outsource Operation & Maintenance of packaged type 75 Ton capacity Batliboi make Air Conditioning Machine at its Head Office and Kolkata Main Branch, both at 24A, Waterloo Street, Kolkata-700069 through an experienced service providers in this field.

We intend to solicit for this purpose Technical & Financial Bids from the prospective service providers on or before 14-06-2019 UP TO 4 PM and the Technical Bids and Financial Bids will be opened on 15-06-2019 at 03.30 PM and on 20-06-2019 at 02.30 PM respectively in the presence of service providers / their representatives.

Prospective service providers may collect the technical bid / financial bid format of RFQ from The **P.A. to Managing Director** or **A.G.M (Law & Estate)**, The West Bengal State Co-Operative Bank Limited, Head Office, 24A, Waterloo Street, Kolkata –700069 or can down load the same from the Bank's website [www.wbstcb.com](http://www.wbstcb.com). However, RFQs downloaded from website shall also accompany the Pay Order / Demand Draft along with the Technical Bid & financial Bid amounting Rs.1000.00 favouring **The West Bengal State Co-operative Bank Ltd.**

RFQ Reference	HO/L&E/390/2019-20 dated 23.05.2019
Date of issue of the RFQ	23/05/2019
Date and time for Pre-Bid Conference	07/06/2019 At 03:00 P.M.
Last Date and time for submission of Vendor Queries	07/06/2019 Up To 04:00 P.M.
Last Date and time for receipt of Complete proposal: (Technical Including Eligibility Criteria & Commercial Bids)	14/06/2019 Up To 04:00 P.M.
Website for Uploading Proposals	<a href="https://www.wbstcb.com">https://www.wbstcb.com</a>

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Date and Time of Opening of Technical Proposals	15/06/2019 At 03:30 P.M.
Date and Time of Opening of Commercial Offers only for the successful technical proposals	20/06/2019 at 02:30 P.M.
Officials to be contacted in case of any problem in submission of bid	1. Shri Amar Das, PA to M.D Mob: _____ 2. Shri Snehasis Chakraborty Mob-9073681048
Address for Communication	The West Bengal State Co-Operative Bank Ltd. 24A, Waterloo Street, Kolkata- 700069

No brokers/intermediaries shall be entertained. The qualitative requirements (QR) & specifications etc. are enclosed as Annexure I to IV of this tender document.

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## INVITATION TO TENDER

### 1.01.0 TENDERS:

- 1.01.01 Sealed tenders in duplicate are invited from bonafied, established and experienced contractors in the operation and maintenance of A.C. Plant and having adequate resources and desirous of undertaking **3-years (2019 - 2022)** Operation and all, inclusive Maintenance of an **A.C. Plant of about 75 TR capacity** installed in the Head Office Building of the **W. B. State Co-operative Bank Ltd.** at 24 - A. Waterloo Street, Kolkata - 700069.
- 1.01.02 Tender documents comprising the Specification, Price Schedule for various classes of work to be carried out and a set of Annexures etc. can be obtained from the **PA to Managing Director or Law & Estate Department** (2nd floor), the W.B. State Co-operative Bank Ltd. 24- A. Waterloo Street, Kolkata - 700 069 between 10 A M to 4 P.M. on any working day on payment of Rs. 1000/-.
- 1.01.03 The tenders shall be submitted in sealed Cover containing Bank draft towards Earnest Money, latest valid copy of Income Tax and GST clearance certificate and the Tender document duly signed. The name-of-the-work shall be clearly printed on the cover.
- 1.01.04 The tender shall be addressed to "**The Managing Director, The W. B. State Co-operative Bank Ltd. 24-A. Waterloo Street, Kolkata - 700 069**" and submitted to their office before 4 P. M. on or before 14.06.2019, The tenders will be opened thereafter in front of all the Bidders.
- 1.01.05 The Bidder shall quote in figures as well as in words the rate and amount tendered by them. The unit rate and break up of prices as asked for shall be furnished in the prescribed format attached with the tender document.
- 1.01.06 The work will be divided into two parts namely Part A and Part B.
- 1.01.07 **Part A** of the tender will comprise of Operation and Maintenance of the A.C Plant for a period of **one year** including supply of all spares, consumables, necessary tools & tackles and trained man-power. The contract can be renewed at the end of each year subject to satisfactory performance of the contractor, up to a maximum period of **three and quarter years i.e, from July, 2019 to October, 2022.**

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- 1.01.08 **Part B** of the contract will comprise of Overhauling /Repair/ Replacement of certain equipment/Component in the A.C. system (including condenser cooling water circulation system and air distribution system) which may be necessary during the 1st year of operation.
- 1.01.09 The Bidder shall be deemed to have carefully examined the specification, Special conditions and to have fully informed and satisfied himself as to the nature and character of the work to be executed, the site condition, the A.C. System / functioning of each equipment, present condition of each and every component of the A. C. System and other relevant matters / details.
- 1.01.10 Issue of tender document shall be stopped 3 days before the date fixed for the submission of the tender.
- 1.01.11 It will be obligatory on the part of the Bidders to tender and sign the tender documents for all the component part and that after the work is awarded, he will have to enter into an agreement for each component with the competent authority in the bank.
- 1.01.12 The tender document and the specification shall be returned even if no tender is submitted for the work.
- 1.01.13 Acceptance of a tender will rest with the **Employer, namely the W. B. State Cooperative Bank Ltd ( herein after called the Bank), 24 - A. Waterloo Street, Kolkata - 700 069**, which does not bind itself to accept the lowest tender and reserve to itself the authority to reject any or all of the tenders received without assigning any reason for doing so. All tenders, in which any of the prescribed conditions are not fulfilled or incomplete in any respect are liable to be rejected.
- 1.01.14 The Bank reserves to itself the right of accepting the whole or any part of the tender and the Bidders shall be bound to perform the same at the rate quoted.
- 1.02.00 EARNEST MONEY:**
- 1.02.01 The Bidders shall deposit an amount equal to 2.0% of the tender value in the form of **Bank Draft** drawn in favour of the **W.B.-State Co-operative Bank Ltd.**, with the tender as Earnest Money. The Operation & Maintenance cost of the A.C. Plant for **three years** will be treated as the **value of the tender**. Original Bank Draft should be submitted within tender closing date & time to the Law & Estate Department of the Bank.
- 1.02.02 The Employer is not liable to pay any interest on the Earnest Money. The Earnest money of the unsuccessful Bidders shall be refunded without any interest soon after

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the decision to award the work is taken or after the expiry of the validity period of the tender.

## 1.03.00 SECURITY DEPOSIT:

- 1.03.01 Successful Bidder to whom the work order will be awarded will have to deposit as initial security deposit a further sum to make-up 2.5% of the value of the accepted tender including Earnest Money. The initial **Security Deposit** will have to be made within 14 days from the date of acceptance of the tender, failing which the Employer at its discretion may revoke the letter of acceptance and forfeit the Earnest Money deposit furnished along with the tender. The initial **Security Deposit** will be invested by the Bank in a fixed deposit account for the duration of the contract period. It shall be refunded to the contractor along with the accrued interest within fourteen days after the completion of the O & M period.
- 1.03.02 Apart from initial security deposit made as above, **retention money** shall be deducted from progressive running bill @ 7.5% of the gross value of each running bill until the total security deposit i.e. the initial security deposit plus the retention money equals 10% of the value of the work order. The total cost of Replacement /Repair/ Overhauling and the Operation & Maintenance of the A.C. Plant for three years & 3 months will be treated as value of the work order.
- 1.03.03 The **retention money** will be refunded to the contractor six weeks after the completion of O & M period provided he has satisfactorily carried out the operation and maintenance during the entire contract period and handed over the A.C. Plant in perfect working condition at the end of the contract period. **No interest** is allowed on **retention money**.

## 1.04.00 TERMS OF PAYMENT:

1.04.01 The following terms of payment will be applicable

- a) Replacement / Repair:- 100% three weeks after successful re-commissioning the A. C. System
- B) Operation and Maintenance:- i) The payment will be made against quarterly running bills to be submitted at the end of the quarter after satisfactory completion of operation and maintenance of the A.C.Plant.

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- ii) Payment against spares if used during operation / maintenance/ annual overhauling shall be made against contractor's bill with supporting documents as detailed against Clause no. A2.04.03. after two weeks of satisfactory operation of the plant.

## 1.05.00 TAXES & DUTIES:

- 1.05.01 The Bidders shall include in their prices the GST as applicable and any other taxes / fees/localcharges leviable by local authorities. No extra claim on this account shall be entertained.
- 1.05.02 The Service Tax as applicable will be paid extra.
- 1.05.03 All rates quoted shall remain valid till the completion of O&M period and shall be free from variation due to increase or decrease in the cost of material, labour, GST and any other levies or any other reason whatsoever.

## 1.06.00 GUARANTEE:

- 1.06.01 The contractor shall guarantee that all equipment and material supplied And installed by him shall be free from any defects due to defective material and bad workmanship and that the equipment shall operate satisfactorily and that the performance and the efficiency of the equipment shall not be less than the guaranteed value. The guarantee shall be valid for a period of twelve months from the date of recommissioning of the plant.
- 1.06.02 The **guarantee** on the equipment which will be overhauled / repaired and the entire system shall be **valid for a period of 8 months** from the date of recommissioning. any equipment (or any part/ component in an overhauled /repaired item) found defective within the guarantee period shall be replaced free of all cost by the contractor. The services of the contractor's personnel if requisitioned during this period for such work shall be made available free of cost to the owner/ employer.
- 1.06.03 If the defects are not rectified within a reasonable period, the Owner/ Employer may proceed to do so at the contractor's risk and expenses without prejudice to any other right.
- 1.06.04 The O&M Contractor shall also guarantee maintenance of stipulated "Indoor Conditions" as specified in the Tender Document.





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## 1.07.00 SALARY OF THE O&M STAFF:

- 1.07.01 The rates of different category of Manpower that may be required for the proposed Services shall not be less than the Rates of Minimum Wages prescribed by the Government from time to time under Contract Labour (R&A) Act – 1970 and Minimum Wages Act-1948.
- 1.07.02 The O&M contractor will be wholly and exclusively responsible for payment of wages to the persons engaged by them in compliance with all the statutory obligations under all related legislations as applicable to it from time to time including Minimum Wages Act, Employees provident Fund, ESI Act etc. and the Bank will not incur any liability for any Expenditure whatsoever on the persons employed by them on account of any obligation. The O&M Contractor will require providing particulars of EPF, ESI of its employees engaged in the H.O. Building of the Bank. The O&M Contractor will comply all statutory provisions of law, rules and regulations of Act and keep the Bank informed about any amendment in the law from time to time.

## 1.08.00 VALIDITY:

- 1.08.01 The tender shall remain valid for a period of **Sixty days** from the date of submission.

## 1.09.00 BANKS' EMPLOYEE:

- 1.09.01 The Bidders shall furnish a list of his relatives (if any) working in the W.B State Co-operative Bank Ltd. along with their designation and addresses.
- 1.09.02 No employee of the W. B. State Co-operative Bank Lt. is allowed to work as a contractor or for a contractor within a period of two years of his retirement from Bank Service, without obtaining any prior written permission from the Bank.

## 1.10.00 OTHERS:

- 1.10.01 The contractor shall not be entitled to any compensation for any loss suffered by on account of delay in commencing or executing the work, whatever the cause for delays maybe.



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## DECLARATION BY THE BIDDER

To  
The General Manager (Admn.),  
The W. B. State Co-operative Bank Ltd.,  
24 - A. Waterloo Street,  
Kolkata - 700 069.

Dear Sir,

We hereby submit our tender for supplying all labour, material, spares and consumables for three years and 3 months Operation and Maintenance of the Air Conditioning Plant in the Head Office at 24. - A Waterloo Street, Kolkata -700069. Having carefully examined the tender document and having visited the site and having examined the actual conditions of all equipment and the complete A.C. System and all other conditions affecting the work, the undersigned propose to furnish all labour, material, spares, consumables, tools and tackles and all other items as required for the Replacement/ Repair/ Overhauling and Operation and Maintenance work for a sum as stipulated in the Price Schedule of our offer inclusive of GST and other levies as applicable on the date of this Offer. Our offer will be in accordance with all terms and condition in the tender document.




We have deposited as Earnest Money a sum of Rs \_\_\_\_\_ (Rupees ) by Demand Draft in your favour which amount will not bear any interest. We do hereby agree that this sum shall be forfeited by you in the event our tender is accepted and we fail to deposit Security amount when called upon to do so.

Our tender will remain valid for consideration for a period of **sixty days** from the date fixed for receiving the Tenders.

Yours faithfully,

Signature of Bidder  
(With Seal)

Dated:

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## SPECIAL CONDITION

3.00.00

### GENERAL:

3.00.01

The following special conditions shall be applicable to the O&M contract.

3.01.00

### SITE VISIT:

3.01.01

Before tendering the Bidders must visit site and fully satisfy themselves with the site condition, building/structural details or any other information, they may require. No extra charge made in consequence of any misunderstanding or incorrect information on any of these points or on ground of insufficient description shall be allowed.

3.02.00

### HANDING OVER OF A.C. PLANT AT THE END OF CONTRACT PERIOD:

3.02.01

After the completion of three years three months maintenance period, the contractor is required to handover the plant in perfect working condition. In case of any damage to the plant / equipment or any component / portion of the A.C. System, the same will be made good by the contractor.

3.03.00

### ACCIDENT OR INJURY TO WORKMEN:

3.03.01

The contractor shall be solely liable for any accident or injury that may happen to any of the personnel engaged by him in connection with the contract work.

3.03.02

The employer shall not be liable for any damage or compensation payable at law in respect of or in consequence of any accident or injury to any personnel in the employment of the contractor or his sub-contractor and the contractor shall indemnify and held harmless the employer against all such claim, damages compensation and proceedings.

3.03.03

The contractor shall forthwith report in writing the employer's authorized representative all cases of such accidents of their personnel / workmen at site.



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3.04.00 **SECURITY AT SITE:**

3.04.01 Safety and Security of all Plant, machineries, tools and tackles and material at site shall be sole responsibility of the contractor during the contract period. The contractor shall take all necessary precaution to prevent wastage, damage or theft or loss whatsoever to the plant, machineries, tools, tackles, material etc.

3.04.02 The contractor shall abide by all the security regulation at site promulgated by the Employer from time to time. The contractor shall not allow any person to enter the pump room/ rooms housing A. C. Units or bank premises without gate pass / permission from the Employer.

3.05.00 **WORKING TIME:**

3.05.01 It may not be possible for the contractor to carry out the work in certain areas during normal working hours when the Bank is functioning. In such cases, the contractor shall make necessary arrangement to work during holidays or after office hours for which they will follow the safety and security rules of the Bank as laid down by the employer. The contractor rate shall take into account this working after normal working hours and any extra claim on this account will not be entertained.

3.06.00 **SAFETY CODE:**

3.06.01 The contractor at his own cost arrange for the safety provision stipulated by the Government or local authorities in respect of all labour directly or indirectly employed for the performance of the work and shall provide all facilities in connection therewith.

3.06.02 The contractor shall take adequate precaution against fire and make adequate fire fighting arrangement as stipulated by the Government or Local authorities and shall be responsible for fire consequences.



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3.07.00 **PERFORMANCE REQUIREMENT:**

3.07.01 The following conditions shall be maintained in the A.C. space.-

- a) Temperature - 76° F±2° F
- b) R. Humidity - Around 60%

3.07.02 The equipment shall be operated and maintained in such a way that the total down time does not exceed 10% of the total operating days in a year.

3.08.00 **PENALTY' FOR NON-PERFORMANCE OF SPECIFIED ACTIVITIES:**

3.08.01 The contractor shall perform all their works strictly as per the specification. They shall maintain and operate the A.C. Plant and all equipment according to good engineering practices and in a workman like manner so that the guarantee against the "Performance Requirement" is fulfilled.

3.08.02 In case the contractor fails repeatedly to operate and maintain the plant as stipulated in the "**Performance Requirement**", the employer may issue necessary instruction to them to improve their performance. The contractor, on receipt of such instruction, shall take necessary steps immediately to rectify the defects within four days (unless agreed otherwise by the employer depending on the nature of the failure) and improve the performance to the desired level.

3.08.03 If, in spite of taking all measures, the contractor is unable to operate the plant at desired level of performance, a penalty will be levied @Rs. 1000/- (Rupees one thousand only) per day of non-performance subject to a maximum amount of 10% of the total contract value and the same shall be deducted from the security deposit and/or total contract price as detailed in clause 3.09.01. In case of inordinate delay, the employer reserves the right to terminate the contract with immediate effect.



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3.09.00 **RECOVERY OF SUMS DUE:**

3.09.01 If any claim for payment of money, whether penalty or not, arises out of or under this contract against the contractor, the employer shall be entitled to recover such sum by appropriating, in part or whole, the security deposit by the contractor. In the event of the Security deposit amount being insufficient, then the balance or the total sum recoverable as the case may be, shall be deducted from any sum due or which at any time thereafter may become due to the contractor under this or any other contract with the employer. Should this sum be not sufficient to cover the full sum re-coverable, the contractor shall pay to the employer, on demand, the remaining balance due.

3.10.00 **TERMINATION OF THE CONTRACT:**

3.10.01 In case the contractor fails to render satisfactory service during the O&M period or in spite of repeated notices do not exercise such due diligence to reduce the down time and/or rectify the faulty performance of the A.C. Plant, the O&M contract may be terminated with one months notice. Any expenses or losses incurred by **the Employer** in getting the work carried out by other contractor shall be adjusted against the amount payable to the contractor or against their Security Deposit.

3.11.00 **TRAINING OF O&M STAFF**

3.11.01 The Operating Staff of the A. C. Plant shall be adequately trained by the Contractor to enable them to carry out Routine Maintenance (as per Annexure- I ) and repair of minor break-downs in the A. C. Plant. The Operating Staff of the A. C. Plant shall also be adequately trained to carry out the Annual Overhauling of the Plant during Winter Shut-downs.





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## DAILY OPERATION, ROUTINE MAINTENANCE & ANNUAL OVERHAULING

### A2.00.00 SCOPE:

A2.00.01 The Contractors scope of work covers providing necessary services for day to day routine operation and year round maintenance including Annual Overhauling during winter shutdown to the Air Conditioning Plant in the **Head Office Building of the W. B. State Co-operative Bank Ltd.**, at 24 - A. Waterloo Street, Kolkata - 700 069, including supply of all spares and consumables in accordance with the specification, enumerated hereinafter.

A2.00.02 The scope of work and services will not be limited to supplying required manpower for day to day operation, data logging, routine maintenance, breakdown maintenance, annual overhauling, all spares / materials, consumables, tools and tackles, testing instruments, facilities for lifting/ handling/ Transporting of equipment/ heat exchangers as and when required but also include any other material or incidental which may be necessary during operation and maintenance even though not specifically mentioned. The scope of work will also include necessary insurance covering risk during transportation of equipment, risk of lives (3rd party) and risk of damages to property/document/any other valuables during lifting/handling of A.C. equipment/material.

A2.00.03 Any additional items, tools, services, consumables etc. which are not specifically mentioned herein but are required for satisfactory day to day operation and routine / breakdown maintenance to achieve designed inside condition (**i.e. 76° F ± 2° F DB & around 60 % RH**) and speedy restoration of the plant in case of forced outages; shall deemed to be covered under the scope of this specification.

### A2.01.00 EXISTING SYSTEM:

A2.01.01 The existing Air Conditioning Plant comprises of the following -

- a) 1. No.15 TR Packaged type A. C. Unit in the Ground Floor
- b) 1. No.15 TR & 1 No. 7.5 TR Packaged type A. C. Unit in the 1st Floor
- c) 1. No.15TR & 1.No. 7.5 TR Packaged type A. C. Unit in the 2<sup>nd</sup> Floor
- d) 1. No.15 TR Packaged type A. C. Unit in the 3<sup>rd</sup> Floor

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e) 2 Nos. 12.5 HP Pumps for circulation of condenser cooling water (one as 100 % stand-by), 1 No. Natural Draft type Cooling Tower of 100 % capacity, 1 No. Water Softening Plant, 2 Nos 0.5 HP (one as 100 % standby) Mono-block Pumps for the Water Softening Plant - all the above equipment are installed on the roof of the 3rd Floor.

f) One Ion Exchange type Water Softening Plant suitable for 11 hours Operation and one hour Regeneration. The Softening Plant was designed for softening about 1600 liters of hard water per hour to Commercially 0° Hardness.

A2.01.02 The above A. C. Units are working with F-22 Refrigerant.

A2.02.00 **OPERATION AND ROUTINE MAINTANENCE OF A.C. PLANT:**

A2.02.01 The O&M contractor shall operate the A.C. Plant during the office hour as detailed in this specification. Apart from operating the A.C. Plant, the contractor shall carry out periodical maintenance of the A.C. plant as detailed in the Annexure I enclosed with this specification. During winter shut down all the equipment shall be overhauled as per the maintenance schedule in Annexure I. The A.C. Plant (shall be recommissioned on 15<sup>th</sup> of March( OR 1<sup>st</sup> March, as per the direction of the Employer) after the completion of the annual overhauling during winter shut down. The contractors' rate shall include the cost of daily operation, periodical maintenance. Annual Overhauling during Winter Shut down, re-commissioning of the A. C. Plant after annual overhauling and attending to break-down services, if any, during annual operation of the A.C. Plant. During winter, the contractor will operate the blowers of all the Packaged type A. C. Units to maintain air circulation.

A2.03.00 **TOOLS AND INSTRUMENTS :**

A2.03.01 The contractor shall store a complete set of tools and measuring and testing instruments in the plant room for satisfactory Operation and Maintenance of the A.C. Plant. A minimum set of tools, as per the list in Annexure -IV, shall be kept Inside the plant room. If the contractor requires any other tools and tackles, testing/ measuring instrument, the same shall be arranged within minimum possible time but not more than a day.



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A2.04.00 **SPARES & CONSUMABLES :**

- A2.04.01 The rates to be quoted by the contractor for operation and routine maintenance shall include the cost of all consumables like grease, gland packing, chemicals/ acids for de-scaling and coil cleaning, paints and primers for touch up and painting, kerosene and other cleaning agents, cotton waste, adhesives, nuts/ bolts/washers, Gaskets for pipes and pumps, any type of fabricated support for pipe or equipment and any other type consumable which may be required during operation and maintenance of A.C. Plant.
- A2.04.02 The contractors rate also include replacement of following items free of cost during the three years of maintenance period –
- Gauges (both for water and Refrigerant Systems) and thermometers for the measurement of Pressure and temperature.
  - Vibration isolation pads, all types of gaskets etc.
- A2.04.03 All other Spares, Refrigerant and Re-Winding of burnt-out stators of Electric-Motors shall be supplied on chargeable basis and necessary written approval shall be obtained from the Employer before procurement of the spares. The cost of these spares will be worked out on the basis of value indicated in the purchase voucher **plus** the GST and Contractor's overhead and profit. The contractor shall indicate their rate for overhead and profit in terms of percentage of the value in the purchase vouchers (Refer to the Price Schedule). The labour component for replacing the spares will be included in the cost of maintenance.
- A2.04.04 The spares shall be procured from the Manufacturers or their authorized dealers. The Employer reserves the right to insist on submitting three quotations for the Spares from the contractor before approving the procurement action.



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- A2.04.05 If the .Refrigerant gas in any Packaged Unit leaks out more than once in a year, the cost of refrigerant shall be bourn by the contractor.
- A2.04.06 Any Spare / component / Stator-Winding, which were replaced during overhauling of the A.C. Plant in the preceding winter shut down, if breaks down or found defective or not giving required performance shall be replaced free of cost by the contractor. This will also be applicable in case of motor winding.
- A2.04.07 During the period of operation and maintenance, if-any equipment / component/ parts is damaged due to negligence / incompetence on part of operators/ workmen, the contractor shall replace free of cost such equipment /component/ part to its original specification.
- A2.05.00 **MANPOWER / LABOUR :**
- A2.05.01 All manpower / labour required during O&M period for routine operation and maintenance and also for breakdown maintenance shall be included in the rate for O&M quoted by the Bidder. One Supervisor with required number of skilled operator/technician shall be permanently posted at site during O&M period . The service of an Electrician, if required, shall be available at short notice.
- A2.05.02 The contractor shall carry out daily, weekly, monthly, half yearly maintenance as per the chart given in Annexure -I. In order to avoid sudden break-down, the contractor shall also carry out regular preventive maintenance as per the instructions given in manufacturers manual which shall be collected by the bidders from the manufacturers. The rate for O&M shall include the above work.



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- A2.05.03 In case of any break-down, the contractor shall immediately take corrective action to put the plant back into operation within two days. The total down time shall not be more than 10% of the total operating period.
- A2.06.00 **RECORD OF PLANT OPERATION :**
- A2.06.01 The contractor shall maintain proper log book to record date wise running hours of The plant, all failure/ break downs, cause of such breakdowns, remedial measure undertaken including list of spares/quantity of gas replaced and the same shall be produced to the employer's representative at regular intervals as per his instruction. This log book shall be maintained in a systematic and presentable form as per Annexure - II.
- A2.06.02 The log. book for operation of the plant shall record all the readings as per the format in Annexure - II.
- A2.06.03 The contractor shall provide Sling Pschycrometer, Tongue tester, digital thermometer and pressure gauges and other recording instruments free of cost for noting daily readings.
- A2.07.00 **DURATION OF DAILY OPERTION**
- .A2.07.01 Generally the plant will run about. 9 - 10 hours all working days
- A2.07.02 The cleaning of plant room, AHU rooms, Plant and equipment and routine checks shall be completed before 8:30 AM and plant shall be operated at least one hour before the office starts. The plant shall be switched off by 5:30 PM or earlier as per instruction from Employer.
- A2.07.03 In case of operation on Sundays, holidays and beyond 5:30 PM on weekdays, notices will be served on the contractor and they are bound to operate the plant, as directed by the Employer's authorized representative. The contractor may indicate separately, their rates for operating the plant on Sundays, holidays and beyond 5:30 PM on week days



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A2.08.00 **ACCESS TO PLANT AND EQUIPMENT**

A2.08.01 The employer's representative shall at all times have free access to the plant and the contractor shall extend every facility to them for inspection and examination.

A2.09.00 **CLEANLINESS AND UP-KEEP OF INSTALLATION:**

A2.09.01 The contractor shall keep the A.C. Plant rooms, Pump room and areas around Cooling tower/water softening plant in clean and tidy condition to the satisfaction of the Employer's representative. The contractor shall make his own arrangement for supply of brush, brooms; ladders etc. for cleaning operation and shall be included in his rates.

A2.09.02 The plant and equipment shall be wiped/cleaned daily before operating the plant. All necessary provisions like cotton waste, cloths, brush, kerosene or any type of cleaning agent, broomsticks for cleaning the plant room etc. required for such cleaning shall be provided by the contractor and shall be included in his rates.

A2.10.00 **SAFETY AND SECURITY :**

A2.10.01 The contractor shall be responsible for proper operation, maintenance and safety of all equipment in the A.C. system and ensure employment of only trained, skilled and experienced operators to run the A.C. plant and system and they shall be conversant with the sequence of starting and stopping the plant and also stopping the plant in case of emergency.

A2.10.02 The contractor shall adopt adequate safety measures at site. The workmen shall use protective cloths at site whether or not engaged in actual execution of work or supervision thereof. The workmen shall also use helmet, safety belts, gloves, masks etc. as are necessary

A2.10.03 The contractor shall provide identity badges to their workmen which shall be properly displayed by them at site.

A2.10.04 The contractor must provide necessary First Aid Box in the A.C. Plant room and the workmen shall be trained for providing First Aid in case of any Electrical accidents.





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- A2.10.05 Smoking will not be permitted inside A.C. Plant rooms or Pump room.
- A2.10.06 The contractor shall keep at least **one powerful torches** at site for emergency and the torch cells shall be supplied by the contractor.
- A2.11.00 **STATIONERIES: .**
- A2.11.01 All stationeries for maintaining Log books/records etc. shall be provided by the contractor. The rate shall include this cost.
- A2.12.00 **WINTER OPERATION :**
- A2.12.01 During the period of Winter shutdown, the blowers of the Packaged Units shall be operated to maintain air circulation in the A.C. space. The Bidders shall include the cost of this operation in their rate for overhauling.
- A2.13.00 **ANNUAL OVERHAULING DURING WINTER SHUT-DOWN :**
- A2.13.01 During Winter Shut-Down (usually from middle of November to end February of any Financial Year) of the A. C. Plant, Annual Overhauling has to be carried as per the details listed under Clause No. 6 of the Annexure - I, which forms a part of this Tender.
- A2.13.02 The O&M contractor shall submit a program to the Bank giving a time Schedule for completing the Annual Overhauling and Re-commissioning of the A.C. Plant during the Winter Shut-Down period ( i.e. from Mid-November to end February) before 15th October of the respective Year.
- A2.13.03 During the Annual Overhauling, the O&M Contractor shall ensure that the completion date of each item of work as listed under Item No. 6 in **Annexure-I** shall be recorded and it will be signed by the Supervisor of the O&M Staff. Necessary format for this work shall be finalized by the O&M Contractor and get approved by the Bank before end October of the respective year.
- A2.13.04 In case any major repair/replacement will be necessary to the A. C. Plant during the Winter Shut-Down, the same will be intimated by the O&M Contractor to the Bank with an estimate before end September of the particular Year.
- A2.13.05 The Cost of the Spare or any other item of work, which may be required during Annual Overhauling shall be worked as per the basis detailed in the Clause- A2. 04. 03 of this Chapter.



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## PRICE SCHEDULE (PART-A)

**THE W.B. STATE Co.-OPERATIVE BANK LTD.  
H. O. BUILDING, KOLKATA.**

1. Monthly Rate for routine operation of the A.C. Plant including carrying out of its preventive' maintenance, attending to the breakdown services and carrying out of annual overhauling / re-commissioning for three years & 3 months period strictly as per the terms and condition detailed in the specification

Rs.....per month

**Note: Rates applicable for a period of twelve months in a year.**

2. Percentage towards overhead and profit which will be claimed by the contractor on the cost of spares as per Clause No.A2.04.03 of the Chapter" **Daily Operation, Routine Maintenance & Annual Overhauling**" of the Tender Specification during the three years & 3 months contract period. .... %

3. Hourly rate for operating the A.C. Plant beyond the schedule period of operation as per Clause No. A2.07.03 **Rs..... Per Hour**



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## PRICE SCHEDULE PART-B

W.B. STATE CO-OPERATIVE BANK  
H. O. BUILDING, KOLKATA.

W.E.F-01.07.2019

SI No	Items	Quantity	Unit	Unit Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
	Carrying out following items of replacement work Inclusive of all Material/ consumables/ labour/ taxes/ duties/ handling charges and other expenses. if any -				
1	Carrying out descaling the copper tubes inside the Shell & Tube Condensers in the Packaged A C. Units with Chemical circulation, brushing and rinsing.				
	7.5 TR A. C. Packaged Units (Unit Rate)				
	15.0 TR A. C. Packaged Units (Unit Rate)				
2	Replacing the distribution header for spray nozzles in the Cooling Tower with Heavy Class G. I. Pipes complete with threaded fittings and supports				
	Main distribution Header (unit rate)		R.ft		
	Branch pipes (unit rate)		R.ft		
	Spray Nozzles (unit rate)		No		
	Note:The distribution pipes will be replaced, if found corroded. -				
3	Replacing the damaged/missing Louvers In the Natural Draft Cooling Tower. (The louvers shall be of treated wood and suitably painted)				
	Unit Rate of the Louver				
4	Replacing damaged Psyphone & cock, if found .with Stainless Psyphone & cock (unit rate)		No		

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5	Replacement of the internals of the following TPN Isolating Fuse Switch Units with HRC Fuses for the incoming power supply				
	HRC Fuses -				
	63 Amps (Unit Rate)				
	100 Amps (Unit Rate)				
	Fuse Holders-				
	63 Amps (Unit Rate)				
	100 Amps (Unit Rate)				
5	Earthing of all AC. equipment in the following areas interconnecting the Equipment and Control Panel (inside respective Room) to the nearest Earthing System of the Building with twin GI wires( minimum 6 mm dia as per standard code of practice and as per the norms of electrical supply authority	1050	R.ft		
	a) A. C. Plant Room in the Gr. Floor .	45	R.ft.		
	b) A. C.Plant Room in the 1st. Floor	90	R.ft.		
	c) A C.Plant Room in the 2nd. Floor	90	R.ft.		
	d) A. C.Plant Room in the 3rd. Floor	45	R.ft.		
	e) e) 12.5 HP Pumps in the Roof Top	125	R.ft.		
	f) Control Panels in respective A. C. Plant Room & Pump Room to nearest Earth Point in respective Floors in the Building.	250	R.ft.		
	g) 0.5 HP Pumps in the Roof Top (with 4mm G.I.wire)	50	R.ft.		
	<b>TOTAL</b>				
	<b>Rs.</b>				

**NOTE :- Above rates shall be inclusive of GST.**

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## ANNEXURE-I

### MAINTENANCE SCHEDULE FOR THE A.C. PLANT

#### 1. DAILY:-

- (a) Keep the A. C. Units and all the ancillary items clean by dusting them and then wiping them with wet cloth.
- (b) Clean all the rooms housing the A. C. Packaged Units and the area around Cooling Tower & the Water Softening Plant.
- (c) Check whether the Crank case Heaters are in working condition every morning prior to starting the Compressor in the A. C. Units.
- (d) Check the Supply Voltage prior to starting the A. C. Units
- (e) Check the water level in the Cooling Tower Sump and the make-up water flow.
- (f) Check the filters visually.
- (g) Check if there is any abnormal noise in the Pump or in the Blower.
- (h) Check if refrigerant suction pipe is sweating
- (i) Check the DB temperature at the canvas and filter.
- (j) Check if the fresh air inlet damper at the correct position.
- (k) Check the Water Meter in the Softening Plant, if it is supplying correct quantity of Soft water.

#### 2. WEEKLY:-

- (a) Clean the air filters by water jet making sure that direction of the jet is opposite to the normal direction of air flow through the filter. Fix the clean filters always in the same orientation so that the direction of air flow through the filter is same throughout the life of the filters.
- (b) Clean the return air grill on the A. C. Unit.
- © Clean the Strainer Basket in the Pot Strainer and the Strainer in the Cooling Tower Sump.
- (d) Check the V-belt tension and the alignment of the Blower Motor drive.
- (e) Check refrigerant leakage with halide leak detector.
- (f) Adjust pump gland to maintain slight leakage



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- (g) Examine the starters of all the Motors for burnt contacts.
- (h) Check all the Spray Nozzles in the Cooling Tower against clogging
- (i) Clean and flush Cooling Tower basin
- (j) Check the Make-up water, if it is supplying commercially 0° Soft Water.

### 3. MONTHLY:

- (a) Check setting and operation of all protective and emergency operating control switches like *HP/LP*, Oil safety- Switch, Operating thermostat and flow switches.
- (b) Check the pressure relief valve in the condensers and reset, if necessary.
- (c) Check the hardness of make-up water and the hardness of water in the Cooling Tower Sump.
- (d) Clean the clogging nozzles in the Cooling Tower.
- (e) Check the operation of the float valve and the make - up water quantity to ensure overflow.
- (f) Check the operation of the flow switches and its inter - locking with the compressors.

### 4. Quarterly :-

- (a) Check all the motor leads and other Electrical connection for loose contact.
- (b) Check gland packing in the Pumps and renew, if required
- (c) Check coupling alignment in the Pump
- (d) Check coupling pin and bushes in the Pump for wear
- (e) Check holding down bolts in the Pumps for tightness
- (f) Clean the Blades of the Impeller in the Blower.
- (g) Clean the Evaporator Coil with water.
- (h) Flush the Condensate Drain System.
- (i) Check the freeness of the Fire Dampers, fuse element and other electrical connection with the interlocking of the Fire Damper.

### 5. Half - Yearly :-

- (a) Repeat all the items of quarterly service.
- (b) Clean the surface of all the Supply / Return air Grills and Diffusers with soft brush and clean cloth.
- (c) Check all the Earth wires connecting all the A. C. equipment to the main Earth.





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## 6. Annual Overhauling during winter shut down :

Annual Overhauling and re-commissioning shall be carried out as per the following Schedule

### (a) Packaged A. C. Units -

- i) Cleaning the blades of the Impeller and Impeller Housing and painting the same with synthetic enamel paint.
- ii) Check wobbling of the fan wheel.
- iii) Clean the Blades of the Impeller in the Blower.
- iv) Check the bearing noise and replace, if necessary. Grease the bearings
- v) Cleaning and painting the fan chamber.
- vi) Clean external surface of the Cooling Coil with chemical solution & rinsing the same
- vii) Flush the condensate drain pipes
- viii) Cleaning the Condensate Drain Tray and apply two coats of Black synthetic enamel paint.
- ix) Leak test all coil bends and check for weak spots
- x) Check all filters and replace, if necessary
- xi) Clean all the contact points inside starter / Contactors
- xii) Check and adjust all the safety switches for the compressors.
- xiii) Check and adjust the thermostats of the A. C. Units.
- xiv) Clean and paint the surface of the condensers with two coats of red oxide primer and two coats of synthetic enamel paint.
- xv) De-scale the condenser tubes with acid circulation and using nylon brush (The designed condensing pressure is 230 psig maximum)
- xvi) Check the lead partition inside the condenser-heads and pressure relief valves.
- xvii) Clean and paint the compressors and the internal surface of the Packaged A. C. Units with two coats of black synthetic enamel paints.
- xviii) Check the canvas connections and replace, if necessary



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## (b) Motors: -

Heat Varnish and greasing the bearings following Motors-

- i) Blower Motors in all the Packaged Units
- ii) 12.5 HP and 0.5 HP Pump Motors

## (c) PUMPS: -

Overhauling and greasing the bearings of the following Pumps -

- i) 2 Nos. "Beacon" Horizontal Split casing Pump model 3L3
- ii) 2 Nos. 0.5 HP Mono-block Pump.
- iii) Check all the anti-vibration mountings and the ribbed VI pads below the Pump Bases.

## (d) Cooling Tower: -

- i) Clean the Sump of the Cooling Tower
- ii) Dismantle and overhaul the valves in drain and make-up water line.
- iii) Check operation of float valves
- iv) Clean and paint the Suction Strainer.
- v) Check all the Spray nozzles and replace the defective ones
- vi) Paint all the wooden members of the Cooling Tower with one coat of primer and two coats of synthetic enamel paint.

## (e) Electrical control panel and cabling: -

- i) Inspect all incoming & outgoing cables for wear and cuts
- ii) Check indication of overheating, arcing due to insulation breakdown.
- iii) Check all connections for loose contact
- iv) Check all indication Lamps.
- v) Check all the HRC fuses and replace the defective ones
- vi) Check the main Earthing and double earth connection to respective A. C. Equipment.
- vii) Checking all the interlocking with flow switches and the fire dampers.

## (f) Piping and Valves :-

- i) All the valves in the condenser water circulation system shall be dismantled, serviced and then re-fixed in original position.



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- ii) Check all pipe supports and tighten wherever necessary
- iii) The surfaces of all the Exposed pipes shall be cleaned with wire brush and then with cloth and painted with two coats of primer red oxide and finished with two coats of Synthetic "enamel paint.
- IV) Cleaning and applying two coats of synthetic enamel paint over the pipe running inside the Building.
- v) Check all the Thermo-wells and operation of the psyphone & cock in the pipeline.

### (g) Ducts:

- i) Check all the damper operation. Clean and lubricate.
- ii) Clean the fresh air intake duct and adjust the damper for required quantity of fresh air.
- iii) Check all grills & diffusers and clean & adjust the louvers for correct air distribution
- iv) Visually check the duct support, noise and vibration

### (h) Water Softening Plant:-

Overhaul the water softening plant as per the recommendation of the manufacturer and replenish the ion exchange resin, if necessary:

### (i) Painting:

- i) All the equipment, piping and insulated surfaces of drain and suction lines shall be given two coats of synthetic enamel paints after thorough cleaning of the surfaces. The rusted areas shall be scraped with wire-brush and two coats of red oxide shall be applied over which enamel paint shall be provided. Following color code shall be followed.

- a) Hot gas line -Red
- b) Liquid line - Yellow
- c) Suction line - Green
- d) Condenser water – G.I.
- e) Drain line - Black
- f) Equipment - Battleship Gray
- g) AHUs - Battleship Gray

All the equipment shall be numbered and arrow marks shall be indicated over the pipe surface in the direction of flow.

### Notes :

- (i) Most of the work under the heading annual Maintenance will be taken up during Annual Overhauling.
- (ii) Overhauling of Equipment shall be as per manufacturer's recommendation only.

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- (iii) Do not use loose compressor oil/transformer oil.
- (iv) The contractor to fix a framed and glazed Maintenance Schedule in the Plant room. The grade of compressor oil to be indicated.
- (v) The contractor shall also fix a framed and glazed first-aid procedure against Electrical shock.in the plant room.
- (vi) Apart from the routine checks/maintenance described in this annexure, any other type of maintenance recommended by the manufacturers and which are required according to good engineering practices shall also be carried out at regular interval in a systematic manner to the entire satisfaction of the employer.

## 7. RE-COMMISSIONING:

- i) On completion of overhauling the A.C. Plant shall be re-commissioned, all controls shall be adjusted and the system shall be balanced' by the contractor for satisfactory performance.
- ii) The performance of the A.C. System as well as individual equipment shall be tested during operation of the plant in peak summer. This test shall be carried to determine whether the plant meets the rated capacity. All instruments required for measuring parameters during such tests shall be supplied by the contractor.



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## ANNEXURE - II

As per existing Log Book

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## ANNEXURE -III

### RECORD OF BREAK-DOWN AND LIST OF SPARE REPLACED

#### EQUIPMENT - NAME AND SERIAL NO:

Date & Time	Nature of Breakdown	Cause of breakdown	Date of Completion of Repair	Details of Spare/ refrig used

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## Annexure-IV

### LIST OF TOOLS

Item	Qty	Description
1	1	Double Ended Spanners set - 6 pes., 8mm - 25mm (5/16" - 1")
2	1	Ring Spanner set - 6 pes., 9.5 mm - 25 mm (5/8" - 1")
3	1	Screw Wrench 300 mm (12")
4	1	Screw Wrench 200 mm (8")
5	1	Pipe Wrench 350 mm (14")
6	1	Screw Driver 200 mm (8")
7	1	Screw Driver 100 mm (4")
8	1	Screw Wrench (Insulated Handle) 150 mm (6")
9	1	Off-set Screw Wrench 100 mm (4")
10	1	Pliers: Combination (Insulation) 150 mm (6")
11	1	Ratchet Wrench 6 mm (1/4")
12	1	Ratchet Wrench 9.5 mm (3/8")
13	1	Flaring Tool 6 mm - 15 mm (1/4" -5/8")
14	1	Tube Cutter 19 mm (3/4")
15	1	Allen Screw Wrenches Set, 7 pes
16	1	Pressure Gauge 0 - 300 psi
17	1	Compound Gauge 30" - 0 - 150 psi
18	1	Pocket Thermometer
19	1	Leak Detector
20	1	Phase Detector
21	1	Oil Can : Flexible Spout
22	1	Hammer 3/4 Kg. (1 - 1/2) lbs
23	1	Chisel Flat 19 mm (3/4")
24	1	Copper-Iron Punch 19 mm (3/4")
25	1	Center Punch
26	1	Rawl Plug Punch with one bit No. 14
27	1	Hacksaw 300 (12")
28	1	Hacksaw Blades 300 mm (12")
29	1	File - Flat Bastard 200 mm (8")

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**CO-OPERATIVE ENTERPRISES BUILD A BETTER WORLD**



# THE WEST BENGAL STATE CO-OPERATIVE BANK LTD.

Registered Office & Head Office: 24A Waterloo Street, Kolkata - 700 069

Ref No- HO/L&E/390/2019-20

Date:- 23.05.2019

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30	1	File - Flat Smooth 200 mm (8")
31	1	File - Round Bastard 200 mm (8")
32	1	File -Brush
33	1	File Handle
34	1	Calipers : Outside
35	1	Calipers : Inside
36	1	Divider
37	1	Try Square (Small) 100 mm (4")
38	1	Foot Rule: Steel 150 mm (6")
39	1	Feeler Gauge
40	1	Spirit Level : Ord. 200 mm (8")
41	1	Pocket Knife
42	1	Torch Light (with 2 Cells)
43	1	Paint Brush 19 mm (3/4")
44	1	Crow Bar (Small) 300 mm (12")
45	1	Test Lamp Holder
46	1	Insulating Tape Roll
47	1	Copper Pipes, 6 mm (1/4")
48	1	Connector 1/4"MPT X 1/4"SAB
49	1	Connector 1/8"MPT X 1/4"SAB
50	1	Place Tee 1/4" SAE
51	1	Flare elbow 1/4" MPT X 1/4" SAE
52	1	Flare Nuts 1/4" SAE
53	1	Adaptor for CO2 Cylinder 1/2" FPT X 1/4" SAE
54	1	Adaptor for Refrigeration Cylinder 3/4" FPT X 1/4" SAE
55	1	Tool Box (GSS) with lock, 425 mm X 250 mm X 138 mm high (17" X 10" X 5 1/2")
56	1	Gauge Adaptors 1/8" FPT X 1/4" SAE
57	1	Clamp Meter
58	1	Flat Nose Pliers 6"
59	1	Side Cutting Pliers 6"

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