

# GLOBAL TENDER NOTICE

FOR

THE SUPPLY OF REQUIRED ZERO GAP  
ACCESSORIES AND THE CONVERSION OF  
FOUR NUMBERS AGC AZEC ELECTROLYZER,  
TYPE AZM-T.5.6-F2 TRIPLE TYPE MONOPOLAR  
ELECTROLYZER IN TO ZERO GAP  
TECHNOLOGY.



THE TRAVANCORE COCHIN CHEMICALS LIMITED  
UDYOGAMANDAL P.O  
KOCHI – 683501  
KERALA - INDIA



## CONTENTS

Page No.

	GLOBAL TENDER NOTICE	3
	NOTICE INVITING TENDER	5
1	INTRODUCTION	5
2	BIDDER ELIGIBILITY CRITERIA	5
3	PREPERATION OF BID	5
4	PURPOSE AND SCOPE OF TENDER	6
5	TECHNICAL SPECIFICATIONS	7
6	TECHNICAL OFFER REQUIREMENTS	8
7	COMERCIAL OFFER	8
8	VALIDITY OF OFFER	9
9	GUARANTEE AND WARRANTY	9
10	GENERAL TERMS AND CONDITIONS	12
11	INTERPRETATION& ALTERATION OF TERMS AND CONDITIONS OF TENDER DOCUMENT	12
12	BIDDER TO GET INFORMATION	13
13	TIME LIMIT NOT EXTENDABLE	13
14	INSPECTION	13
15	INSURANCE COVERAGE	13
16	DELIVERY & ASSEMBLY SCHEDULE FOR THE CONVERSION WORK	13
17	SUBMISSION OF TENDER	13
18	CORRESPONDENCE	13
19	LAST DATE FOR SUBMISSION OF TENDER	13
20	LIQUIDATE DAMAGES	13
21	ARBITRATION AND GOVERNING LAW	13
22	FORCE MAJEURE	14
23	PROCEDURE FOR EVALUATING THE BIDS	14
24	TECHNICAL (50 Points)	15
25	CLARIFICATION OF TENDERS	15
26	TENDER OPENING	15
27	PAYMENT TERMS	15
28	SECURITY DEPOSIT	16
29	ELECTRONIC PAYMENT MANDATE FORM	17
30	BANK GUARANTEE FORMAT	18-19

E mail : [purchasetccl@gmail.com](mailto:purchasetccl@gmail.com)  
Web Site : [www.tcckerala.com](http://www.tcckerala.com)

Phone : 0484-2546289  
Fax : 0484-2545420

**THE TRAVANCORE COCHIN CHEMICALS LIMITED**  
(A Government Company)  
Udyogamandal P.O, Kochi – 683 501, Kerala.

**GLOBAL TENDER NOTICE**

**For the**

**SUPPLY OF REQUIRED ZERO GAP ACCESSORIES AND THE CONVERSION OF FOUR NUMBERS AGC AZEC ELCTROLYZER TYPE AZM-T.5.6-F2 TRIPLE TYPE MONOPOLAR ELECTROLYZER INTO ZERO GAP TECHNOLOGY.**

**Tender Reference No: GS/657/2018-2019**

1. Tenders are invited from Technology suppliers/ reputed parties for the Supply of required Zero gap accessories and the conversion of Four numbers AGC AZEC ELCTROLYZER, Type-AZM-T.5.6-F2 triple type monopolar Electrolyzer into Zero gap technology at the premises of TCC, Udyogamandal, Kerala, India.  
*Note: The bidders must have a clear knowledge about the existing AGC AZEC ELCTROLYZER, Type-AZM-T.5.6-F2 triple type monopolar Electrolyzer (which are now in operation) to do the necessary engineering for the conversion of four Electrolyzers with minimum downtime / production loss and optimum investment.*
2. Tender documents can be downloaded from our website, [www.tcckerala.com](http://www.tcckerala.com).
3. Cost of Tender document: ₹ 1,000/- (Rupees One Thousand Only) (non-refundable) including applicable taxes by DD/online payment in favor of The Travancore-Cochin Chemicals Limited; drawn on any scheduled bank/ nationalized bank/ foreign bank having branches in India, payable at Ernakulam. Those who have downloaded the Tender Document from the website should submit the proof of payment along with Part-I of the offer.
4. Earnest Money Deposit (EMD): ₹ 50,000/- (Fifty Thousand Only /Equivalent Foreign Currency) as DD or Online payment to TCC bank account or Bank guarantee from any Nationalized Bank/Scheduled Bank/foreign bank having branches in India for equivalent Amount. EMD shall not bear any interest and shall be released only after successful completion of the contract. EMD of the unsuccessful bidders shall be released within one month after executing the contract with the successful bidder.
5. Publishing of Tender Documents : **11.02.2019**
6. Last date of receipt of duly filled up tenders : **11.03.2019 @ 16:00 Hrs**
7. Opening of Unpriced bid : **14.03.2019 @ 14:00 Hrs.**

8. Opening of Price Bid : On an appropriate date after the completion of Technical evaluation, all technically qualified bidders shall be intimated.
9. The bid enquiry documents are not transferrable.
10. Amendments: At any time prior to the deadline for submission of bids, TCC may for any reasons deemed fit by it, modify the enquiry documents by issuing suitable amendments. All such amendment will be notified through our website [www.tcckerala.com](http://www.tcckerala.com).
11. Bidders shall ensure that, the bids complete in all respects, is submitted to the “Assistant General Manager (Materials)” The Travancore-Cochin Chemicals Limited, Udyogamandal P.O, Kochi-683501, Kerala, India, on or before the closing “date and time” failing which the bids will be treated as late and will be rejected.
12. In the event of critical dates such as last date for tender submission, Tender opening date for Cover 1 & 2 being declared as a holiday /closed day for TCC, the bids will be received/opened on the next working day at the appropriate time.
13. All queries related to the tender shall be sent to the Office of the

**“Assistant General Manager (Materials)”**  
**The Travancore-Cochin Chemicals Limited**  
**Udyogamandal .P.O, Kochi – 683 501,**  
**KERALA, INDIA,**  
**Tele-fax No.91-484-2546289**  
**Email: [purchasetccl@gmail.com](mailto:purchasetccl@gmail.com)**

## **NOTICE INVITING TENDER**

### **1. INTRODUCTION**

The Travancore-Cochin Chemicals Ltd (TCC) is a Public Sector Undertaking established in the year 1951, having its registered office and factory at Eloor, Udyogamandal, Ernakulam District in the state of Kerala, India. The company is engaged in the manufacture and marketing of caustic soda, chlorine, HCl acid, sodium hypochlorite and sodium chlorate.

TCC has a total Caustic Soda production capacity of 175 TPD comprising of one Monopolar Membrane Technology plant of 125 TPD and 2 Nos. 25 TPD Bipolar Membrane Plants. The company is planning to install a 75 TPD Bipolar Membrane Cell Plant for Caustic Soda production in its existing premises to augment the production capacity to 250 TPD . The company is also planning to convert its old generation 25 TPD UHDE electrolyzers (2x25 TPD =50 TPD) in to energy efficient Zero Gap electrolyzers to take advantage of the saving in energy front.

TCC markets its products all over India to various consuming sectors. It has an annual turnover of INR 2500 Million. The company is managed by a team of qualified and experienced professionals and has total employee strength of 500.

The company has got an excellent industrial relation and good record of safety. TCC is an ISO 9001:2015 ISO 14001:2015 and OHSAS 18001:2007 certified company.

### **2. BIDDER ELIGIBILITY CRITERIA**

The bidder must meet the following requirements to qualify for bidding:

- a) The bidder must be a Technology supplier or a reputed party having past and proven experience in Zero Gap conversion/retrofitting work of Electrolyzers of Caustic Soda manufacturing plants.
- b) The bidder must have carried out the retrofitting of the electrodes of any two Electrolyzers (monopolar or bipolar) for caustic soda production and the converted Electrolyzers should be in operation for the last two years.
- c) The average annual turnover of the bidder shall be minimum of INR 15 million for last 3 years.
- d) The bidder shall submit documentary evidence to prove all the above criteria.

### **3. PREPARATION OF BID**

The interested parties are required to submit offer in two covers, namely

Cover-I-Technical and Commercial Unpriced bids (“Fee/Pre-Qual/ Technical”).

A sealed cover Superscribed ‘Cover-I’ with Tender reference number and due date, shall contain the following,

- a) Earnest Money Deposit (EMD) of ₹ 50,000/-(Rupees Fifty Thousand Only/ Equivalent Foreign Currency) as DD or Online payment to TCC bank account or Bank guarantee from any Nationalized Bank/ Scheduled Bank having branches in India, for equivalent Amount.
- b) Proof of online remittance / DD of ₹ 1,000 /- towards the cost of tender document.
- c) Documentary evidence to prove bidder eligibility criteria mentioned in (2) above,
- d) Detailed Technical and Unpriced commercial offer. (without any mention of price)

**Offers without the above are liable to be rejected.**

**Note: Bank account details for online payment and format of bank guarantee are attached as Annexure I and Annexure II**

Cover-II Price bid. (Financial).

A sealed cover Superscribed ‘Cover-II’ Priced Commercial Bid with Enquiry Number and due date shall contain the price details with split up for the following

Price details for the conversion of **Four** AGC AZEC ELCTROLYZER, Type-AZM-T.5.6-F2 triple type monopolar Electrolyzer into Zero gap technology using the zero gap accessories. Break up price of the following shall be furnished separately,

- a) For supply of zero gap accessories - **4 Sets** (with break up price /set, separately)
- b) For the supervision during the conversion/retrofitting of the above Electrolyzers at TCC site by TCC technicians including start-up and guarantee test run.

*Note: Applicable Taxes shall be shown separately.*

Any income tax/other payables in respect of such payment will be to the account of TCC and TCC shall be entitled to pay such tax with their own cost at source and pay the same to the department. All other applicable state and central government taxes, including GST under reverse charge, any other duties, Cess or statutory levies levied by central or state authorities will be to the account of TCC and TCC shall be entitled to pay such taxes with their own cost and pay the same to the department.

#### **4. PURPOSE AND SCOPE OF TENDER**

This Notice Inviting Tender is issued to receive firm quotations from Technology suppliers/ reputed parties having experience in retrofitting the electrodes of Caustic Soda manufacturing Electrolyzers

(monopolar or bipolar type) for the supply of required Zero gap accessories and the conversion of **Four numbers** AGC AZEC ELCTROLYZER, Type-AZM-T.5.6-F2 triple type monopolar Electrolyzer into Zero gap technology at the premises of TCC, Udyogamandal, Kerala, India.

**The scope of work is as stated below,**

- a) To supply the required zero gap accessories required for the retrofitting works of 4 No.s of AGC AZEC Electrolyzer AZM T 5.6-F2 triple type monopolar Electrolyzer into zero gap technology. Technology should be in such a way that existing copper meshes shall not be depressed and cathode support springs not to be removed.
- b) To supply the required tools required for the retrofitting works.
- c) To provide the supervision for the retrofitting works of above said 4 No.s of Electrolyzers into zero gap technology at our site with minimum down time.
- d) To provide operation and maintenance manual for the retrofitted Electrolyzers.
- e) To provide technical assistance in case of abnormality during operation and maintenance of retrofitted Electrolyzers.
- f) To provide training and development of TCC technicians to carry out the retrofitting works.
- g) To provide required zero gap accessories, services, technical support etc for the trouble free operation of the above retrofitted 4 No.s of AGC AZEC Electrolyzers for a minimum period of 8 Years. Bidder shall furnish documentary assurance for the same.

## 5. TECHNICAL SPECIFICATIONS

The retrofitted elements shall be suitable for the operation of our existing Electrolyzers having the following specifications.

Asahi Glass Company AZEC ELCTROLYZER, Type-AZM-T.5.6-F2 triple type monopolar Electrolyzer having three blocks each consist of **Six frames of cathode elements, Five frames of Anode elements** and total **30 Nos of membranes**.

Make	M/s Asahi Glass Company, Japan
Cathode dimension	1220*1580mm
Anodic area	1.71m <sup>2</sup>
Operating current & CD	61.6KA @ 3.60KA/m <sup>2</sup> CD
Concentration of NaOH	32%
Operating Temperature	88oC
Hydrogen Pressure	270mm H <sub>2</sub> O

Chlorine Pressure	0±10mm H2O
<b>Feed Brine Quality</b>	
NaCl	300-310 gpl
Ca+Mg	≤20ppb
Si	≤5mg/l
Al	≤0.1mg/l
I	≤0.2 mg/l
Ba	≤0.5mg/l
Sr	≤0.06mg/l
Fe	≤0.1mg/l
Ni	≤0.01mg/l
Na2SO4	6-10gpl
NaClO3	≤10gpl
Free Chlorine	Not detected
Suspended Solids	≤1mg/l
pH	8.5-9.5
Temperature	70-75oC

## 6. TECHNICAL OFFER REQUIREMENTS

The proposal should contain following information;

- a) Details of Conversion Technology
- b) Details of materials used for conversion.
- c) Highlights of technology offered.
- d) Activity chart /schedule for the retrofitting works of Electrolyzers.
- e) Guaranteed power consumption, cathode life etc.
- f) Guaranteed quality and quantity of caustic soda.
- g) Additional precautions/safety points/protective devices/ care for membranes etc., to be taken for smooth operation/ shutdown/ startup of the retrofitted Electrolyzers.
- h) To provide technical assistance and train our Electrolyzer maintenance crew for the assembly of retrofitted electrolyzers.

## 7. COMMERCIAL OFFER

- a) Commercial offer should contain price for the supply of zero gap accessories for the retrofitting of Four Electrolyzer with price/set shown separately. The supervision charges for the assembly work for Electrolyzers at TCC site shall be quoted separately.
- b) The price quoted shall be CIF Cochin Port for imported and F.O.R TCC warehouse for indigenous items. The currency conversion rate shall be the prevailing rate at the time of effecting payment as per the payment terms mentioned in the tender document.



- c) The list of tools/ spares required for the assembly of Electrolyzers using the retrofitted elements shall be provided by the bidder.
- d) Taxes and duties shall be mentioned separately by the bidder or else rate quoted shall be considered as inclusive of all taxes and duties.

*Any income tax/other payables in respect of such payment will be to the account of TCC and TCC shall be entitled to pay such tax with their own cost at source and pay the same to the department. All other applicable state and central government taxes, including GST under reverse charge, any other duties, Cess or statutory levies levied by central or state authorities will be to the account of TCC and TCC shall be entitled to pay such taxes with their own cost and pay the same to the department.*

- e) The rate quoted shall be competitive and final. Generally there will not be price negotiation even with the L1 party.
- f) While making the offer the total cost for supply and supervision charges may be given with split figures as follows.

1. For supply of zero gap accessories - **4 sets** (with Price /set separately)
2. For supervision during the conversion in to zero gap technology at TCC site by TCC technicians including start-up and guarantee test run

- g) Order will be placed with the L1 party among technically qualified bidders considering the total price offered.

*The currency conversion rate for the above calculation shall be the prevailing rate on the date of opening the price bid.*

## **8. VALIDITY OF THE OFFER**

The bidders should keep their tender valid up to six (6) months from the last date fixed for receiving the tenders, and the rate quoted shall be firm and without any price escalation/revision till the successful completion of contract .

## **9. GUARANTEE & WARRANTY**

### **Equipment Warranty**

Bidder shall guarantee that retrofitted elements and the other accessories supplied by them are free from any defect and workmanship. This warranty should be valid for a period of 12 months from the date Start-up of the Electrolyser after completion of the retrofitting works or 18 months from the date of supply whichever is later. In case of failure before expiry of warranty period, bidder shall replace the same free of cost immediately.

## **Performance Guarantee**

Average element voltage of the zero gap electrolyser after retrofitting works shall be  $\leq 2.95$  Volt under standard operating conditions. The bidder shall conduct 72 hours guarantee test run within one month from the date of commissioning after retrofitting works. The guarantee test shall be conducted as per the plan commonly confirmed by TCC and bidder. During the test run, the bidder shall guarantee that under the standard operating condition of 3.6KA/m<sup>2</sup> running current density, Caustic Concentration of 32% and Electrolyzer temperature of 850 deg. C and with new membranes(either Nafion N982WX or AKC F-6801 series membranes)the average element voltage shall be  $\leq 2.95$  Volt. During the guarantee test, if the operating conditions like current density, Caustic concentration and temperature are not consistent with the guarantee conditions, then the bidder shall provide voltage correction formula to modify the average element voltage to standard operating conditions.

- Guarantee runs should be completed within one month from the date of start-up of the retrofitted Electrolyser.
- Successful completion of guarantee test shall not relieve the bidder of their obligation and responsibility in any manner with regard to modification, rectification, replacement to meet warranty.
- During the guarantee test run, if the Electrolyser fails to meet the guarantee figures given, the bidder shall modify the Electrolyser and systems at his risk and cost to achieve the guarantee within the agreed stipulated time. The liability of the bidder in such an event shall be unlimited and TCC is free to penalize the bidder for his failure to meet the obligation.
- If any of the guarantee figures does not meet the offered values, the bidder should modify/rectify/replace the retrofitted spares at their cost and should bring the respective values within the guaranteed figures.
- The requirements of TCC are as below:

**Average element voltage** :  $\leq 2.95$  V

(With N-982 WX /AKC F-6801 membranes at an electrolyser Catholyte temperature of 85°C, 32wt% NaOH Concentration and Current Density of 3.6 KA/m<sup>2</sup>)

If the guaranteed Average element voltage is not attained during the performance guarantee test run, the contractor shall at TCC's option compensate TCC by paying liquidated damages as provided hereunder within thirty (30) days after both the parties mutually confirm the non-fulfilment of the performance obligations.

For each 20 milli volt excess in average Element Voltage against that of guaranteed values, compensation @ Rs 100 Thousand INR shall apply, provided that the excess average Element Voltage shall not exceed 60 milli volts.

**Coating Life Guarantee**

Coating life of retrofitted Cathode shall be guaranteed for minimum 8years from the date of service. Cathode over voltage of retrofitted cathode elements shall not be more than -1.28Volt vs Hg/HgO at 4KA/m2,900C, and 32%NaOH.If the cathode potential exceeds the guaranteed value within the guarantee period, then the bidder shall provide new Cathode meshes as replacement as mentioned below.

Within 4 year from startup-replace cathode meshes free of cost

After 4years from startup – replace cathode meshes as per the pro-rated price based on the following formula.

$$A=B * \frac{D-F}{C*365}$$

A= Price to be paid by the TCC

B= Prevailing market price for the replacement part

C=Guarantee life (year) of replacement part

D=Days from the guarantee date to problem confirmation date confirmed by the bidder

F=From the guarantee date, days that the technology supplier guarantees to provide free replacement part.

**Power Consumption Profile for 8 years**

Bidder shall provide the following details along with their technical offer.

Sl no	Description	Electrolyser Temperature Deg.C	NaOH Concentration	Average element voltage expected after retrofitting works (Volts)
1	After start-up			
2	End of 1st year			
3	End of 2nd year			
4	End of 3rd year			
5	End of 4th year			
6	In the 5th year (with new membranes)			
7	End of 6th year			
8	End of 7th year			
9	End of 8th year			

## **Production Quality**

After retrofitting work, the following product quality shall be guaranteed by the party under normal operating conditions using new membranes and recoated anodes.

### **Caustic soda lye**

NaOH	: Min 32% w/w
NaCl (32%NaOH basis)	: Less than 30 PPM w/w
NaClO <sub>3</sub> (32% NaOH basis)	: Less than 30 PPM w/w
Fe (32% NaOH basis)	:Less than 0.5 PPM w/w

## **Details of Membrane and Anode Supplied by TCC**

Membrane : Either Nafion N982WX or AKC F-6801 Series  
Anode : Recoated Anode

## **10. GENERAL TERMS AND CONDITIONS**

- a) TCC may consider any tender, not prepared in accordance with the provisions set forth in the Notice Inviting Tender, as incomplete and may reject the same. TCC also reserves the right to waive any formalities in any or all tenders.
- b) Before tendering, each bidder must verify suitability of the retrofitted elements to suit the operation of existing electrolyzers.
- c) Every tender-relevant document and drawing supplied by the bidder shall be made in English language only.
- d) The bidder shall not be entitled to claim any cost, charges, expense in connection with the preparation and submission of their tender even if TCC may decide to withdraw the invitation for tender.
- e) Conditional tenders are likely to be rejected.
- f) The selected tenderer/ supplier will be intimated of the acceptance of his tender in due course and shall be issued a PO and work order Separately.
- g) EMD of the unsuccessful bidders shall be released within one month after executing the contract with the successful bidder without interest.
- h) The company reserves the right to accept or reject part or whole of the tender without assigning any reason therefor.

## **11. INTERPRETATION & ALTERATION OF TERMS AND CONDITIONS OF TENDER DOCUMENTS.**

The bidder is free to seek clarification on terms and conditions of this tender form, but TCC alone possess the right to interpret the meaning of the terms and conditions mentioned herein.

## **12. BIDDER TO GET INFORMATION**

It is the duty of the bidder to get full information, clarification and additional data for making the offer before submission of tender.

## **13. TIME LIMIT NOT EXTENDABLE**

The time limit for submission of tender is generally not extendable. But TCC reserves the right to extend the time limit, if situation warrants.

## **14. INSPECTION**

Inspection of critical items identified by TCC shall be entrusted to competent inspecting agency, if found necessary.

## **15. INSURANCE COVERAGE**

The bidder shall arrange all risk insurance policy till TCC Warehouse for all import as well as indigenous materials.

## **16. DELIVERY & ASSEMBLY SCHEDULE FOR THE CONVERSION WORK**

Bidder should submit detailed time schedule for the supply and conversion of the Electrolyzers.

*Note: Bidder shall ensure that the conversions of existing electrolyzers are carried out with minimum production loss/ down time.*

## **17. SUBMISSION OF TENDER**

The Bidder may submit their Technical and Commercial proposals following the guidelines mentioned in the Bidder Eligibility Criteria.

## **18. CORRESPONDENCE**

All correspondence with regard to this tender shall be addressed to **The Assistant General Manager (Materials), The Travancore-Cochin Chemicals Limited, Udyogamandal P.O, 683 501, Kerala (India).**

## **19. LAST DATE FOR SUBMISSION OF TENDER**

The last date for submission of tender is fixed as **4 :00 PM on 11.03.2019**

## **20. LIQUIDATED DAMAGES**

If there is delay in completion of job beyond the stipulated time period mentioned in the PO and work order LD shall be levied @ 0.5% per day subject to a maximum of 5% of the basic work order value.

## **21. ARBITRATION AND GOVERNING LAW**

Governing Law:

The purchase agreement/work order shall be governed by the laws applicable to India.

All disputes arising out of the performance of the obligations under the purchase agreement/work order shall be settled through amicable negotiations between the parties hereto and in case no agreement can be reached, they should be settled by arbitration by sole arbitrator under the provisions of the Arbitration and Conciliation Act, 1996. If the parties are not able to nominate a sole arbitrator within a period of two (2) months from the conclusion of the unsuccessful negotiations for the settlement, each of the parties shall nominate an arbitrator as provided in the Arbitration and Conciliation Act, 1996 and the nominated arbitrators shall nominate the third arbitrator, then the third arbitrator shall be appointed in terms of the Arbitration and Conciliation Act, 1996. The seat of Arbitration shall be Cochin, Kerala State, India.

## **22. FORCE MAJEURE**

Force majeure referred to herein means an occurrence beyond the reasonable control and without the fault or negligence of the party affected including, but not limited to, Act of God, flood, typhoon, earthquake, tidal wave, landslide, fire, plague, epidemic, quarantine restriction, perils of the sea, war or threat of the same, civil commotion, blockade, arrest or restraint of government, rulers or people, requisition of vessel or aircraft, strike, lockout, sabotage, other labour dispute, explosion, accident or breakdown in whole or in part of machinery, plant, transportation or loading facility, governmental order or regulation, or any other causes or circumstances whatsoever beyond the reasonable control of the party affected.

Any delay or failure in performing the obligations under the purchase agreement/work order by either party hereto shall not constitute default the purchase agreement/work order or give rise to any claim for damages or loss or anticipated profits if the extent of such delay or failure is caused by force majeure.

If either party hereto shall delay or envisage delay in performing obligations the purchase agreement/work order by reasons of force majeure and cannot avoid or prevent said delay by any reasonable effort, it shall promptly notify the other party hereto of the occurrence of force majeure.

Under the circumstances of force majeure, both parties shall discuss in good faith to find appropriate counter measures to be taken.

After cessation of the intervention by such causes or circumstances as referred in this chapter hereof, work and service the purchase agreement/work order, however, shall be resumed as soon as practicably possible and contractual time limits shall be extended to the extent as affected by such intervention by afore mentioned reasons

## **23. PROCEDURE FOR EVALUATING THE BIDS.**

The tender committee will evaluate and compare the pre-qualified tenders in two stages viz., technical evaluation and commercial evaluation. The comparison will be done in 50 Points scale.

## 24. TECHNICAL (50 Points)

Technical aspects are evaluated considering Coating guarantee of retrofitted cathode, average guaranteed element voltage, experience in the field, Training for our technicians, delivery period etc as mentioned below:-

Coating life Guarantee for cathode element : 10 Points

Experience in retrofitting similar Electrolyzers in India/Abroad : 10 Points

Average guaranteed element voltage of  $\leq 2.95$  V : 10 Points

under standard operating condition and at  $3.6 \text{ kA/m}^2$   
current density after retrofitting

Training and development for TCC technicians to carry out the : 10 Points  
retrofitting work.

For Minimum Delivery Period : 10 Points

Only the Bids scoring minimum 35 points in technical evaluation will be considered for commercial evaluation.

## 25. CLARIFICATION OF TENDERS

For evaluating the tenders on a common platform, the tendering authority may ask bidders individually for clarification of their tender, including breakup of unit rates. The bidder shall be required to provide a detailed analysis of the unit rates or prices entered by him in various items of the schedule of prices when requested in writing by the tendering authority during tender evaluation.

**Note: The rate quoted shall be competitive and final.**

## 26. TENDER OPENING

The date of opening of Un-priced Technical Bid shall be on **07.03.2019 at 14:00 Hrs** and Price bid opening date will be intimated to the Bidders and if they desire, may depute their representative duly authorized in writing to be present at the time of opening of tenders.

## 27. PAYMENT TERMS

### Supply of Materials

90% within 30 days after receipt subject to acceptance of goods at our stores.

Remaining 10% will be released against bank guarantee for equal amount having validity of 18 months with grace period of one month.

### Supervision Charges

90% of Supervision charges will be paid with in 30 days of completion of job after certification of invoice by the concerned authority.

Remaining 10% will be released against bank guarantee for equal amount having validity of 18 months with grace period of one month.

## **28. SECURITY DEPOSIT.**

The successful tenderer shall deposit 5% of the contract value as interest free security deposit. The EMD of the successful tenderer shall be adjusted towards the security deposit and the balance amount shall be paid by Demand Draft in favor of THE - TRAVANCORE- COCHIN CHEMICALS LTD. drawn on any nationalized bank/foreign bank having branch in India, payable at Ernakulam / Udyogamandal / Aluva or bank Guarantee in the format given in Annexure II, before commencement of the work for the due performance of the contract. The Security deposit shall be refunded after completion of the work subject to certification of your invoice by our officer concerned.




**Electronic Payment Mandate Form****(Mandate for receiving payments through RTGS/NEFT)**

01	Principal Name	The Travancore Cochin Chemicals Limited
02	Address with Phone No.	P.B No.4004. Udyogamandal – 683501 Ernakulam Dist – Kerala Ph: <b>0484-2545011 to 2545014</b>
03	Permanent Account	AAACT6207B
04	Particulars of Account	
	a Name of the Bank	State Bank of India
	b Name of the Branch	Aluva
	c Branch Code	70147
	d IFS Code of the Bank	SBIN0070147
	f City Name	Ernakulam
	g Branch Location	Aluva
	h Branch Telephone No.	0484-2629550
	i Type of Account	Cash Credit
	j Account Number	00000057044540454
05	E mails address of Principal	mail@tcckerala.com

**Swift code:****SBININBBXT17**

We hereby declare that the details given above are correct and complete. If the transaction is delayed /lost because of incomplete or incorrect information, we would not hold the company responsible.

For THE TRAVANCORE - COCHIN CHEMICALS LTD.

  
ISSAC MATHEW  
Dy. Financial Controller

For THE TRAVANCORE - COCHIN CHEMICALS LTD.

  
JIJU FRANCIS  
CHIEF FINANCIAL OFFICER

Signature of Authorized Signatory

**Bank Certificate**

We certify that The Travancore Cochin Chemicals Limited has a cash credit account with us and we confirm that the details above are correct as per our records.

कुले भारतीय स्टेट बैंक  
For STATE BANK OF INDIA

मालिक/प्रधान अधिकारी / Manager, Asst. Manager  
सहायक अधिकारी / Assistant Manager, Aluva

Authorized officer of the Bank

Date  
Place

04/4/2017  
Aluva;



## FORMAT OF THE BANK GURANTEE

Guarantee No. \_\_\_\_\_ Dt. \_\_\_\_\_

Amount of Guarantee: ` \_\_\_\_\_

Guarantee Cover from \_\_\_\_\_ to \_\_\_\_\_

Last Date of Lodgement of Claim \_\_\_\_\_

This deed of guarantee executed by the -----(Bank) having it Head Office at -----  
----- (Address) and amongst other places, a branch at -----(Place and address)  
(hereinafter referred to as “the Bank”) in favour  
\_\_\_\_\_ (hereinafter referred to as  
“the Beneficiary”) for an amount not exceeding ` \_\_\_\_\_ (Indian Rupees \_\_\_\_\_  
only) at the request of \_\_\_\_\_ (hereinafter referred to as “the Contractor”).

This guarantee is issued subject to the conditions that the liability of the Bank under this guarantee is limited to a maximum of ` \_\_\_\_\_ (Indian Rupees \_\_\_\_\_ only) and the guarantee shall remain in full force upto \_\_\_\_\_ (date of expiry) and cannot be invoked otherwise than by a written demand or claim under this guarantee served on the Bank on or before the \_\_\_\_\_ (last date of lodgement of claim).

Whereas .....( Beneficiary), incorporated under the companies Act 1956, having its Registered Office at -----(Address) shall unless repugnant to the context or meaning has issued a .....dated..... and -----(Contractor with address) shall unless repugnant to the context or meaning have submitted a bid for the supply of .....under Reference No.....and Bidder having agreed to furnish as a condition precedent for participation in the said tender an unconditional and irrevocable Bank Guarantee of exceeding Indian Rupees .....only for the due performance of bidder’s obligations as contained in the terms of the tender notice and other terms and conditions contained in the bidding documents supplied by beneficiary which amount is liable to be forfeited on the happening of any contingencies mentioned in the said documents.

2. We, -----(Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur merely on a demand from the -----(Beneficiary) stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the ----- (beneficiary) by reason of breach by the said contractor(s) of any of the terms or conditions contained in the said Agreement or by reason of the contractor(s) failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee.

3. We, -----(Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and

that it shall continue to be enforceable till all the dues of the beneficiary under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or the -----( beneficiary) certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said contractor(s) and accordingly discharge this guarantee.

4. We, -----(Bank), further agree with the beneficiary that the beneficiary shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the beneficiary against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted the said contractor(s) or for any forbearance, act or omission on the part of the beneficiary or any indulgence to the beneficiary to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

5. We ----- (bank ) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the beneficiary in writing.

6. Upon its expiration, this Bid Guarantee shall be null and void, and shall be immediately returned to us for cancellation, any action of maintaining the original of this Bid Guarantee or any of its amendment shall then give no right to the Beneficiary for lodging any more claim.

7. Notwithstanding anything contained herein:

- a) Our liability under this Bank (Guarantee shall not exceed ` \_\_\_\_\_ (Indian Rupees \_\_\_\_\_ only)
- b) This Bank Guarantee shall valid up \_\_\_\_\_(Date of expiry); and
- c) We are liable to pay the Guaranteed amount or any part thereof under this guarantee only if you serve upon us a written claim or demand on or before \_\_\_\_\_(Date of last lodgement of claim)

Dated at **Place** the \_\_\_\_\_ day of \_\_\_\_\_.