

**TRAVANCORE TITANIUM PRODUCTS LTD.  
KOCHUVELI P.O, THIRUVANANTHAPURAM-695 021  
(A Government of Kerala Undertaking)**

**SUPPLY OF VORTEX FLOWMETER (VFM) FOR THE COPPERAS RECOVERY PLANT  
AT TRAVANCORE TITANIUM PRODUCTS LTD.**

**Re-TENDER NO: TTPL/PROJ/FLOWMETER/RT/20-21**

**Dated: 31.05.2021**

Client : TRAVANCORE TITANIUM PRODUCTS LTD

Consultant : KITCO Ltd.

Probable Amount of Contract : Rs. 2,17,413/-

Cost of Tender Form : Rs.590/- (inclusive of 18% GST)

Earnest Money Deposit : Rs. 3,261/-

Time of completion : 30 days

Last Date of Receipt of Tender : 08.06.2021 upto 12.00 hrs.

Date of opening of Tender : 08.06.2021 at 2.00 hrs.

Venue of Receipt of Tender :  
General Manager (Tech) i/c  
Travancore Titanium Products Ltd.,  
Post Box No.1,  
Kochuveli,  
Thiruvananthapuram - 695021.  
Mob : 9400386073  
Ph. No : 0471-2500765  
Fax No : 0471-2501127  
www.travancoretitanium.com

Issued by :  
General Manager (Tech) i/c  
Travancore Titanium Pructs Ltd.,  
Post Box No.1,  
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## **1.0 NOTICE INVITING TENDER & GENERAL CONDITIONS OF CONTRACT**

1.01 Sealed tenders are invited by Travancore Titanium Products Ltd., Kochuveli.P.O, Thiruvananthapuram -695 021 from eligible contractors/ firms for Supply of Vortex Flowmeter (VFM) For The Copperas Recovery Plant At Travancore Titanium Products Ltd, Thiruvananthapuram .

The schedule of quantities, tender drawings, specifications and commercial conditions of the Contract are appended.

### **Eligibility Criteria**

1. The bidder shall be OEM/ Authorized supplier of OEM for Flow meter and shall be in the business field of last 7 years. For proof of requisite experience, the bidder shall submit satisfactory completion certificate for the work done and purchase order/ work order for the respective completion certificate in the designated cover.
2. The average annual turnover of the bidder should not be less PAC value during the last three preceding years.(Audited balance sheet, profit and loss account of the last financial years (2017-2018, 2018-2019, 2019-2020 ,2020-2021) shall be submitted in the designated cover). Certificate from Chartered accountant with stating the average annual turnover to be submitted along the bid.
3. The bidder should have PAN and GST. The firm shall be registered with registrar of companies / Partnership firm / Proprietorship in India.
4. Partnership firms shall furnish full names of all partners in the tender. It may, however, be signed in the partnership name by one of the partners or by a duly authorized representative, followed by the name and designation of the persons signing.
5. Joint venture / Consortium shall not be permitted.

(The proof of the above shall be submitted as PDF format in designated covers)

The schedule of quantities, tender drawings, specifications and commercial conditions of the Contract are appended. The applicant/bidder may be a firm registered in India with experience in the field of similar items till 31.12.2020. For those who have submitted NSIC/MSME certificate, the category of works from which the bidder could be exempted from paying EMD and tender fee shall be mentioned in the certificate issued by the authority (NSIC /MSME) Category shall be related to similar works. Otherwise the bidder shall remit the Tender fees and EMD without fail. Similar Work means erection of mechanical equipment and allied works.

- 1.02 The general information of the project is given in Annexure to this NIT. The information is only indicative. The tenderers are required to visit the site and familiarize themselves with the site conditions, nature of strata, availability of construction materials, etc., before quoting. The drawings, general & special conditions of contract, schedule of quantities and the technical specifications may be carefully studied before they offer their prices. No claims for extra compensation over and above the quoted rates will be entertained by Travancore Titanium Products Ltd. on the ground that the tenderer have misjudged site conditions, nature of strata, tender conditions or any item of tender. The tender documents can be obtained from the office of Travancore Titanium Products Limited on payment of cash or DD for **Rs.590/-** (inclusive of 18 % GST) drawn in favour of TTPL, payable at Thiruvananthapuram between during office hours between 10.00 am to 2.00 pm on all working days (from Monday to Friday) and on Saturday upto 11.00 hrs. This payment is not refundable. The quoted tender documents signed & sealed in all pages and complete in all respects shall be forwarded so that it reaches the office of Travancore Titanium Products Limited, Kochuveli P.O, Thiruvananthapuram 695 021, **on or before 12.00 hrs. on 08.06.2021.** Any tender received after the due time on this date will be rejected.
- 1.03 The bidders are requested to submit all the required documents for pre-qualification and the price bid in the appropriate covers provided.
- 1.04 The offer shall be valid for 90 days from the price bid opening date. The firm period of a tender is the period from, the date of opening of the price bid to the date up to which the offer given in the tender is binding on the bidder.
- 1.05 After the public opening of the tenders, the information relating to the examination, Clarification, evaluation and comparison of tenders and recommendations concerning the award of Contract all shall be intimated.
- 1.06 Subject to Travancore Titanium Product's right to accept any tender and reject any or all tenders; the work will be awarded to the tenderer whose bid has been determined to be substantially responsive to the tender documents and who has offered the lowest Evaluated Tender Price provided further that the tenderer has the capability and resources to carry out the contract effectively.

Before commencing the work and within 15 days the letter of award of work of the tender has been intimated to him, the tenderer shall make a security deposit as given in clause 1.11 of this notice and furnish the same for the proper fulfillment of the contract and shall execute an agreement for the work in required non-judicial stamp paper of value not less than Rs.200/- in the prescribed format.

If the tenderer fails to execute the agreement as stated above within the specified period, the earnest money deposit shall be forfeited to Travancore Titanium Products Ltd. and fresh tenders called for or the matter otherwise disposed off. If as a result of such measures due to the default of the tenderer to pay the required deposit, execute the agreement or take possession of the work site, any loss to Travancore Titanium Products Ltd. results, the same will be recovered from the tenderer by deducting from any amount due to him from other works or revenue recovery or by suitable course of action including legal proceedings.

Tenders not properly filled, mutilated with incorrect calculations or generally not complying with the conditions are susceptible to be rejected.

- 1.07 In the case of percentage rate contract only a single rate as an overall percentage above or below or at par with the rate given in the schedule by a single entry at the specified column of the schedule under the head quoted rate, may be made. The overall percentage rate accepted and specified in the agreement shall not be varied on any account whatever. In case of item rate tender, only the rate quoted shall be considered. In event no rate has been quoted for any item(s) leaving space both in figure(s), word(s), and amount blank, it will be presumed that the contractor has included the cost of this / these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly.

The bidder should quote each and every items. The rate thus quoted will deemed to include the cost of all materials, labour, hire charges for all machinery's, cost of fuel, power, all leads and lifts, taxes, levies, royalties all over heads contingencies, profits, etc. and the quoted price is all inclusive. The total contract price shall also be worked out and entered in

- 1.08 If the tender is made by an individual it shall be signed with his full name and his complete address shall be given. If it is made by partnership firm it shall be signed with the co-partnership name by a member of the firm who shall sign his own name and give the name and address of each partner of the firm and attach a copy of 'Power of Attorney' with the tender authorizing him to sign on behalf of the other partners. A certified copy of the 'Registered Partnership Deed' shall also be submitted along with the tender. A certified copy of the registered deed shall also be submitted along with the tender. The tender should be in a sealed cover.

#### **1.09 EMD**

- 1.09.1 Tenderers shall deposit an amount of Rs.3,261/- as Earnest Money along with the tender. Earnest Money Deposit shall be drawn from Nationalized bank in the form of crossed demand draft\BG in favour of Travancore Titanium Products Ltd. EMD of the unsuccessful tenderers will be refunded without any interest on finalization of the contract with the successful Tenderer.

- 1.09.2 EMD deposited with Travancore Titanium Products Ltd. will be forfeited,
- i) if a bidder withdraws his bid during the period of validity specified.
  - ii) if the successful bidder fails within the time limit to sign the contract document or fails to furnish the required security deposit.
- 1.09.3 EMD will be refunded to the Contractor after remittance of the security deposit and execution of the agreement.

#### **1.10 Performance Security Deposit**

- 1.10.1 Within 15 days of issue of letter of acceptance, the Contractor should submit 3% of the Contract Value as Performance Guarantee. Of this, 50% of the Performance Guarantee shall be in the form of Treasury Fixed Deposit. Balance 50% of Performance guarantee shall be in the form of Bank Guarantee. In addition to Performance Guarantee, Security Deposit shall be collected by deduction from the running/final bill of the Contractors @ 2.5% of the gross amount of each running and / or final claims. On satisfactory completion of the work the security deposit deducted @ 2.5% from each RA bill will be released.
- 1.10.2 On completion of Defects Liability Period, the Engineer-in-Charge shall recommend on demand from the Contractor to refund to him the performance guarantee and the same will be refunded by the Travancore Titanium Products Ltd. provided that the Engineer-in- Charge is satisfied that there is no demand outstanding against the contractor.
- 1.10.3 All the deposits of EMD AND SECURITY DEPOSIT will not bear any interest whatsoever.
- 1.10.4 Income tax at the rate prevailing at the time of payment will be deducted from each running bill and final bill.
- 1.10.5 All statutory payments in connection with the employment of the workmen for this work will be borne by the Contractor.
- 1.10.6 The Contractor is the employer of all the worker's engaged for this work and should therefore take all required registrations, PF, ESI, insurance cover, etc. and pay amount due to labour welfare funds constituted by the Union Government and Government of Kerala from time to time, if applicable.
- 1.10.7 All statutory deductions at the rates applicable shall be made from the amount eligible to the Contractor in each part bill at current rates. Any tax omitted to be deducted in any part bill shall be deducted in the subsequent bills/final bill or from any amount due to the Contractor.
- 1.10.8 The contractor shall produce all necessary documents from the Goods and Service tax department.

### 1.11 Period of Validity

The tender shall remain valid for acceptance for a period of 90 days from the date of submission of the tenders. If any tenderer withdraws his tender before the said period or makes any modifications in terms and conditions of the tender, then the Client has the liberty to forfeit the said Earnest Money Deposit.

### 1.12 Quantum of Work

1.12.1 A schedule of approximate quantities for various items accompanies this tender. It shall be definitely understood that the Client / Consultants do not accept any responsibility for the correctness or completeness of this schedule in respect of items and quantities and this schedule is liable for alteration by deletions, deductions or additions at the discretion of the Consultants/Client without affecting the terms of the contract (Say maximum variations).

1.12.2 The Client/Consultants reserves the right to increase or decrease the quantum of work at site without assigning any reason. The Contractor shall carryout the works at the rates accepted.

1.12.3 Variations in the quantities put to tender will not be the basis for any claim or disputes. The rates agreed by the Contractor shall hold good for any amount of variation in the quantities and no claims whatsoever will be entertained on this amount. The Contractor shall carry out all works as directed by the Client / Consultants at the same agreed rates.

### 1.13 All Inclusive Rates

***The rate should be quoted only in the Proforma attached in Page No. 10 of the Tender document.***

The quoted rate of Contractor must be firm and shall be inclusive of cost of transportation of material to the site and all applicable taxes of State Government as well as Central Government except GST.

The rates quoted by the Contractor shall be firm throughout the Contract period and there shall be no upward revision of the rates quoted by the Contractor for any reasons whatsoever. It should be clearly understood that any claims for extra Goods and Service Tax, or any Additional tax, etc., shall not be entertained in any case whatsoever once the tenders are opened.

### 1.14 Interpreting Specifications

1.14.1 In interpreting the specifications, the following order of decreasing importance shall be followed:

- a. Specification mentioned in Schedule of Quantities,
- b. Special Conditions of Contract,
- c. Technical Specifications,
- d. Drawings.

- 1.14.2 Matters not covered by the specifications given in the contract as a whole shall be covered by the relevant Indian Standard Codes. If such codes on a particular subject have not been framed, the decision of the Consultants shall be final.
- 1.14.3 No alterations shall be made by the tenderer in the Notice Inviting Tender, Instructions to the Contractors, Contract form, Conditions of the contract, Drawings and Specifications, and if any such alterations are made or any conditions attached, the tender is liable to be rejected. Such alterations shall not be taken as a right of the contractor, if such alterations are gone unnoticed during the evaluation or scrutiny.
- 1.14.4 a) The acceptance of a tender rests with the Authorized Representative of the Client who does not bind himself to accept the lowest tender and reserves to himself the authority to reject any or all the tenders received without assigning any reason(s) whatsoever.
- b) The authorized representative of the Client reserves the right of accepting the whole or part of the tender received and the tenderer shall be bound to perform the same at the rates quoted.
- 1.14.5 The work shall be carried out under the direction and supervision of the Consultants/Client or their representative at site. On acceptance of the tender, the Contractor shall intimate the name of his accredited representative who would be supervising the construction and would be responsible for taking instructions for carrying out the work.
- 1.14.6 The Consultant/Client's decision with regard to the quality of the material and workmanship will be final and binding, any material or work, rejected on account of quality/workmanship shall be immediately removed by the Contractor and replaced by materials as per specifications and standards.

#### **1.15 Defects Liability Period**

Any defect developed within 'Defect Liability Period' of 12 months from the date of commissioning as certified by the Client /Consultants. Any defect noticed, the instrument has to be replaced by the Contractor at his own cost. If not rectified within allowed time, without affecting the progress of project, the Consultants / Client shall get the work done at the risk and cost of the Contractor. The Client shall recover all expenses incurred in this regard from any amount due to the Contractor.

#### **1.16 Delays in Commencement**

The Contractor shall not be entitled to any compensation and/or damages for any loss suffered by him on account of delays in commencing, whatever the cause for such delays may be. Similarly the Contractor shall not be entitled to claim any amount from Client for delays in completion of work (operating maximum limit).

#### **1.17 Occupation in Part**

- 1.17.1 If the Client wants to occupy areas in part, the Contractor shall complete the work of these areas in consultation with the Client and hand over the same to the Client without affecting any of the clause of contract agreement.

1.17.2 The Contractor should inspect the source of materials, their quality, quantity and availability. All materials must strictly comply with the relevant B.I.S. specifications.

1.17.3 The Contractor must co-operate and co-ordinate with other Contractors involved in other works at the site. The Contractor should also note that they shall have to clear the site before the commencement of the work and that no extra payment is permissible on this account.

**1.18 Period of Construction/ work**

Time is the essence of this contract. The construction/work period shall be **30** days. Commencement of the work shall be considered from the 15<sup>th</sup> day from the date of receipt of letter of award of work and handing over possession of the site whichever is earlier. The Contractor shall draw a detailed schedule of programme in the form of a Bar Chart on whole work, within one week of award of work and submit to the Consultants for their approval.

**1.19 Liquidated Damages**

If the Contractor fails to complete the work within the period of completion mentioned under clause 1.29, the Contractor shall pay or allow the Client to deduct the sum equivalent to 0.1% of the contract value per week or part thereof of delay subject to a maximum of 10% of contract value as liquidated and ascertained damages for the period from the date of stipulated completion or such extended time as the case may be during which the work shall remain unfinished. Such damages may be deducted by the Client from any money due or that may become due to the Contractor.

**1.20 Measurement and Billing**

1.20.01 Wherever mode of measurement is specified, the measurement will be taken at site as per the latest BIS code of practice for measurement.

1.20.02 The Contractor or his representative shall accompany the Consultants / Client or their representative in taking measurements and shall agree to the measurements taken on spot. Tapes shall be of steel and shall be supplied by the Contractor. The Contractor shall submit his bill based on the agreed and recorded measurements. On receipt of such bills the consultant will verify the measurements. If the Contractor fails to accompany the Consultants / Client for measurements, then he shall be bound by the measurements taken by the Consultants / Client.

1.20.03 Period of final measurement shall be three months from the date of completion of the works.

**1.21 Water and Power**

The water and power required for the work will be available free of cost. Water may be drawn from the source at site, if good quality water is available. Client/Consultants take no responsibility for the supply of either electricity or water.



Temporary wiring/cabbling shall not be routed across floors, around doors. It shall be properly routed as directed by the Engineer-in-Charge. Temporary wiring shall be protected from sharp edges, heat and sunlight to avoid breakdown of the insulation.

**1.22 Insurance, PF, etc.**

The successful Contractor shall take out Contractor's All Risk (CAR) insurance policy, jointly in the name of the Client and the Contractor, and the original policy shall be deposited with the Client. He also shall have all other statutory registrations as applicable for the labour employed, such as PF, ESI etc.

**1.23** This Notice Inviting Tender will form part of the tender document and the agreement executed by the successful tenderer.

**1.24** The format for information about the tenderer attached in special conditions of contract and tender form in NIT shall be duly filled by the tenderer and should upload the same as Pdf format.

**1.25** Any variations in the tender shall be indicated in separate sheet.



General Manager (Tech) i/c  
Travancore Titanium Products Ltd.  
Kochuveli.P.O, Thiruvananthapuram - 695 021.

**DECLARATION**

I / We hereby declare that I/we have read and understood the above instructions and the terms and conditions mentioned above are binding on me/us.

SIGNATURE OF THE TENDERER

Date :

### SUMMARY OF NOTICE INVITING TENDER

1. Defects liability period : Twelve months from the date of Completion
2. Period of final measurements and valuation : Three months from the date of Completion
3. Date of commencement of work : Immediately after receiving the Work Order.
4. Period of completion of work : As per NIT
5. Earnest money deposit : Rs. 3,261/-
6. Security deposit : As per NIT
7. Retention money : As per NIT
8. Firm period of tender : As per NIT
9. Escalation : No Escalation
10. Liquidated damages : As per General Conditions of Contract



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Kochuveli.P.O, Thiruvananthapuram - 695 021.

**PROFORMA**

(The Bidder should quote the rates on this Proforma only)

Name of work: Supply of Vortex Flowmeter (VFM) for Copperas Recovery Plant at TTPL

Sl. No.	DESCRIPTION	UNIT	Rate (Rs.)
1	Supply of Vortex Flow Meter (VFM) of 100 NB with steam, flow rate of 6 tons per hour, density of 5.638 Kg/m <sup>3</sup> , 12 bar pressure and 184 Degree Celsius temperature as service fluid. Flanged ends shall be drilled to ANSI 16.5, 150 lb rating, the Vortex Flow Meter shall be designed and tested as per relevant standard, complete as required for satisfactory functioning of the system as approved by Engineer-In-Charge. The quoted rate shall be inclusive of all cost such as transportation loading, unloading, insurance, taxes and duties, except GST etc. complete as required from origin to TTPL site. 100 NB	1 No.	
	GST extra @ 18%		
	TOTAL AMOUNT (Rs.)		

SIGNATURE OF THE TENDERER

Date :

## **2.0 SPECIAL CONDITIONS OF CONTRACT (SCC)**

### **2.1 General**

The following special conditions shall be read in conjunction with General Conditions of Contract (GCC) and amendments/ corrections thereto. Where any portion of the GCC are repugnant to or at variance with any provisions of the SCC, then, unless a different intention appears, the provision of the SCC shall be deemed to override the provisions of the GCC only to the extent that such repugnancy, or variations cannot be reconciled with the SCC and shall be to the extent of such repugnancy, or variations, prevail.

Wherever it is stated anywhere in this contract that such and such work is to be carried out, it shall be understood that same shall be effected/carried out by the Contractor at his own cost, unless a different intention is specifically and expressly stated herein or otherwise explicit from the context. The work in general shall be carried out as per the nomenclature of the individual items and in the particular specifications. For item of works, not covered above, the same shall be carried out as per instructions and specifications given by the Client/ Consultant.

For item of works, not covered above, the same shall be carried out as per CPWD specifications with up to date amendments.

For any other item of work, not covered in the above paragraph, the same shall be done as per latest relevant BIS codes of practice.

### **2.2 Works to be done by Contractor**

Unless and otherwise mentioned in the tender document, the following works shall be done by the contractor, and therefore their cost shall be deemed to be included in their tendered cost: -

- a) Fixing of danger notice boards and barricading the area wherever required.
- b) For any item of work not covered in particular specification, the same shall be done as per latest relevant BIS codes of practice /sound engineering practice as directed/ approved by Engineer-in-Charge.
- d) Supervision during installation, testing and commissioning as and when required on mutually agreed dates during installation, testing and commissioning of the items supplied as per this tender document.

### **2.3 Deleted**

### **2.4 General Requirements and Arrangement of Materials**

#### **Centre of gravity**

The centre of gravity of the assembled equipment shall be low and as near the vertical centre line as possible. If the centre of gravity is ex-centric relative to track, its location shall be shown on the outline drawing.

#### **Quality of materials**

All the materials and equipment supplied by the contractor for this work shall be new and should confirm to relevant BIS Specifications. They shall be of such design, size and material as to function satisfactorily under the rated

conditions of operation and to withstand the environmental conditions at site. The copies of purchase vouchers & gate passes should be produced along with the materials. The type test certificates, routine test certificates and acceptance test certificates are also to be submitted.

#### **Inspection of material and Equipment**

The materials should be inspected/tested by Purchaser/Consultant prior to the despatch and after delivery. The inspection call should be given at least ten days in advance so as to depute the officials of Purchaser/Consultant for the inspection.

Such inspection will be of the following categories:

1. Inspection of materials/equipment to be witnessed at the manufacturers' premises in accordance with relevant BIS/Agreement Inspection Procedure.
2. To receive materials at site with manufacturers' Test Certificate(s).
3. To receive materials after physical inspection at site.

Similarly, for fabricated equipment, the contractor will first submit dimensional detailed drawings for approval before fabrication is taken up in the factory. Suitable stage inspection at factory also will be made to ensure proper use of materials, workmanship and quality control.

#### **Rating of components**

All current carrying components in an installation shall be of appropriate rating of voltage, current and frequency as required at the respective sections of the electrical installation in which they are used, without their respective ratings being exceeded.

#### **Storage of materials**

The storeroom required will be provided by the Purchaser free of cost.

#### **Procurement of Materials**

Contractor shall make his own arrangements for the procurement of all materials required for the work.

### **2.5 Turnover Taxes**

“Deductions will be made from the bills towards GST and any other laws as per the existing provisions.”

The Contractor shall engage an employee experienced and qualified technical personnel for managing and supervising the work and shall see that all of them are always at the work spot during the delivery of items, personally checking all items of work. He shall take such orders as may be given to him by the Engineer-in-charge from time to time and shall be responsible to carry them out properly. In case contractor fails to provide an agent as per terms given above, CLIENT reserves the right to deduct a reasonable amount from the contractor's bill, subject to a maximum of Rs.25,000/- per month, for every month of absence.

**2.6 Deleted**

**2.7 Contract Documents**

The Contract document is confidential and must strictly be confined to the contractor's own use and to the purpose of the contract.

All tenderers shall sign a declaration under the Official Secrets Act for maintaining secrecy of the tender documents, drawings or other records connected with the work given to them. The unsuccessful tenderers shall return all drawings given to them.

**2.8 Bye-laws**

The Contractor shall comply with all bye-laws and regulations of local and statutory authorities having jurisdiction over the works and shall be responsible for obtaining prior approval, if any, and payment of all fees and other charges, giving and receiving of all necessary notices and keeping the Engineer-in-charge informed of the said compliance with the bye-laws payments made, notices issued and received.

The Contractor shall indemnify Purchaser against all claims in respect of royalties, patent rights, design trade marks of name or other protected rights in respect of any plant, machine, work or materials used for or in connection with work or temporary work and from and against all claims, demands proceeding, cost, charges and expenses whatsoever in respect of or in relation thereto. The Contractor shall defend all actions arising from such claims and shall himself and any every sort that may be legally incurred in respect thereof.

The Electrical work shall be carried out as per State Electrical Inspectorate / Central Electrical Authority standards/ specifications/ guidelines and the Contractor shall get the approval and safety certificate from the Inspectorate after the completion of work and before energisation.

**2.9 Deleted**

**2.10 Co-ordination**

The Contractor shall co-operate with other agencies working in the same project, compare plans, specifications, material supply and the time schedules and so arrange his work that there will be no interference. The Contractor shall forward to the Engineer-in-charge all correspondence and drawings exchanged. Failure to check plans for conditions will render the Contractor responsible for bearing the cost of any subsequent change found necessary or damages done.

However, the Contractor shall afford necessary facilities to execute the work simultaneously with other agencies executing the works for the same project. The Purchaser shall entertain no claim on this account.

**2.11 Safety**

Only properly tested and marked material handling equipment shall be used.

All important connections/assembly of sound design related to pulley/guide etc., including the supporting arrangement and fixing details shall be checked periodically and necessary rectifying actions are to be taken in order to ensure safe handling of loads during different operations.

All plant and machinery of the contractor shall observe the safety regulations needed for working in a project where other contractors/sub-contractors/ agencies might also be working on the project, so as not to interfere with the work of the other contractors or foul with their constructions shall be taken by the contractor and nothing extra is payable on this account.

The Contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights, providing barriers, proper PPE, etc. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrances shall be caused to traffic during execution of work.

The rates quoted by the Contractor for all items except those where specific provisions indicated in the schedule of Requirements shall include all leads, lifts, and nothing extra shall be paid on this account.

The Contractor shall adjust his labour, staff, plant, machinery. etc., according to the requirement of work from time to time with particular regard to approved phases of work and no claim shall be entertained on account of idle labour, plant, machinery, etc., due to any reason whatsoever.

#### **2.12 Testing and Measuring Equipment**

Equipment for measurement of work and testing the installation shall be procured by the Contractor for his use at his own cost. The same shall also be made available to the Engineer-in-charge without any charges for use of this work.

#### **2.13 Water and Electric Supply**

The water and power required for the work will be available free of cost. Water may be drawn from the source at site.

#### **2.14 Tests**

The Contractor shall produce samples of all the materials well in advance so that there is sufficient time for testing of the materials and clearance of the same before incorporation in the work.

All the materials to be used in and on every part of the work shall be subjected, from time to time, to such tests as the Engineer-in-charge may direct. Such tests shall be performed at the expense of the Contractor. The samples for tests shall be in all cases selected by the Engineer-in-charge and supplied by the Contractor as part of the contract. If at any time, any material so tested, fails to meet the acceptance criteria, the same shall be removed from the site of works and other materials substituted therefore, but in the absence of any specified test/acceptance

criteria, the decision of the Engineer-in-charge shall be final and binding as to whether the said material or materials shall be used on the works, or removed forthwith and other suitable, approved material substituted.

The contractor shall produce on demand from the Engineer-in-charge, the necessary test certificates, Manufacturers' Authorization form certifying that the materials conform to the technical specifications. However, this clause will not apply to routine testing of materials at the site laboratory of the Contractor.

All tools, instruments, plants and labour/operating personnel for the test shall be provided by the Contractor at his own cost. For any tests as directed by the Engineer-in-charge, that has to be carried out at an outside laboratory, the same should be carried out by the Contractor without any extra cost.

**2.15 Site for Equipment, Stacking of Materials and Labour**

The Contractor shall stack materials at the site of work strictly as per instructions of Engineer-in-charge keeping in view the safety and smooth progress of the project.

Nothing extra shall be payable for any extra lead involved in stacking the materials at a reasonable distance away from the work place.

**2.16 Deleted**

**2.17 Insurance**

The Contractor shall arrange, secure and maintain insurance as may be necessary and for all such amounts to protect his risks as detailed herein. The form and the limit of such insurance as defined herein together with the under written thereof in such case shall be as acceptable to the Purchaser.

However, irrespective of such acceptance, the responsibility to maintain adequate insurance coverage on comprehensive all risks basis at all times during the period of contract shall be of the Contractor. The Contractor's failure in this regard shall not relieve him of any of his contractual responsibilities and obligations. Any loss or damage to the equipment or materials during handling, transporting, storage and erection, till such time as the work is certified by the Engineer-in-charge as having been completed in all respects & is taken over by the Purchaser: shall be to the account of the Contractor and his responsibility preferring all claims and make good for the damage or loss by way of repairs and/or replacement of the portion of the work damaged or lost. The completion of work shall not, in any, way relieve the Contractor of the above responsibilities during the period of the contract. The Contractor shall provide the Purchaser with a copy of all insurance policies and documents taken out by him in pursuance of this contract.

Such copies of documents shall be submitted to the Purchaser immediately after such insurance coverage. The Contractor shall also inform the Purchaser in writing at least twenty (20) days in advance regarding the expiry/cancellation and/or change in any of such documents and insurance revalidation/renewal, etc., well in time as may be necessary. The risks that are to be covered under the insurance shall include but not be limited



to the loss or damage in transit, theft, pilferage, riot, civil commotion, weather conditions, accidents of all kinds, fire, etc. The scope of such insurance shall cover the entire value of the work from time to time. All costs on account of insurance liabilities covered under the contract will be on the Contractor's account and will be included in contract price. However, the Purchaser, may from time to time during the pendency of the contract, ask the Contractor in writing to limit the insurance coverage risks and in such a case the parties to the contract will agree for a mutual settlement for reduction in contract price to the extent of reduced premium account.

**2.18 Insurance for Staff**

The Contractor shall insure all his staff working at site against injury, loss of life etc., and the Purchaser will entertain no claims of compensation in this regard. The Contractor shall indemnify the Purchaser against all such claims as above, by his staff.

**2.19 Compensation for Delay**

If the Contractor fails to complete the work and clear the site for any particular phase on or before the stipulated completion time of that respective stage or extended period of completion, he shall, without prejudice to any other right or remedy of the Purchaser on account of such breach, pay as agreed a compensation of the amount calculated on the basis of General Conditions of Contract.

The Contractor shall maintain in perfect condition all works executed till the completion of the entire works allotted to him. When, phased handing-over is contemplated, the provisions mentioned above will apply to each phase.

**2.20 Performance Guarantee Run**

The system shall be tested as per procedures for a period of 10 days the Client/Consultant to ensure trouble free operation during performance guarantee run. The continuous operation shall be done for a minimum of 8 hours per day. The supervision of the contractor as and when required on mutually agreed dates shall be made available during the performance guarantee run.

**2.21 Defect Liability Period**

As per NIT 1.25

Further to the above, the Contractor shall hold himself fully responsible for reinstallation or replace free of cost to the Purchaser during the defect liability period as stipulated hereunder:

- a) Any defective material supplied by the Contractor or defective workmanship of the Contractor.
- b) Any material supplied by the Purchaser/owner, which is proved to be damaged or destroyed as a result of defective workmanship by the Contractor, if applicable

**2.22 Payment Terms**

i) **On Supply of Vortex flow meter:** Up to 90 % of the work order value on completion of supply of Vortex flowmeter

ii) **On Final Acceptance/ Taking Over:** 10% of the contract amount shall be paid after completion of Defect Liability Period and meeting the warranty/guarantee requirements or on submission of bank guarantee for an amount equal to 10% of the contract amount from a nationalized bank which will be released only after the defect liability period.

All the payments are made, after deducting there from the amounts already paid, income tax and other amounts as may be deductible or recoverable in terms of the contract.

### **2.23 Approval/Statutory Approval**

All works shall be carried out as per state department rules and regulations and approval/clearance certificate from the local department/other statutory bodies shall be taken by the contractor after successful completion of the work.

Contractor has to obtain necessary scheme approval, if any, from the statutory authorities concerned immediately after the award of work.

All testing/calibration etc., are to be carried out as per the requirements of statutory authorities concerned.

All costs incurred in obtaining such approval/certificates are to be borne by the contractor. Statutory fees paid shall be reimbursed on submission of original payment receipts.

All the electrical equipment to be supplied and works to be executed shall conform to the State Electrical Inspectorate / Central Electrical Authority Standards/Safety Authority including all protection and metering accessories. Nothing extra will be paid in this regard.

### **2.24 Deleted**

### **2.25 Phasing of Works**

The total period for completion of works under this contract is as given in the bid document. The work has to be carried out in phases as directed by the Engineer-in-charge from time to time so that the total project work can progress smoothly with least obstruction to the work of other Contractors/agencies.

### **2.26 Deleted**

### **2.27 Deleted**

### **2.28 Detailed Working Drawings**

Drawings provided by the Purchaser, if any, shall at all times be properly correlated before execution. In case of any discrepancy, the same should be brought to the notice of Engineer-in-charge immediately. However, the discrepancy in the item given in the Schedule of Requirements appended

with the tender drawings relating to the relevant item, the former shall prevail unless and otherwise given in writing by the Engineer-in-charge.

#### **2.29 BOQ/Tender Drawings**

BOQ and layout drawings are enclosed in the tender documents.

The tenderer shall go through the drawings and BOQ and quote the rates for the items accordingly.

#### **2.30 Progress of Supply**

Contractor shall regularly intimate progress of supply, in writing, to the purchaser/Engineer-in-Charge as under:

1. Quantity offered for inspection and date;
2. Quantity accepted/rejected by inspecting agency and date;
3. Quantity dispatched/delivered to consignees and date;
4. Quantity where incidental services have been satisfactorily completed with date
5. Quantity where rectification/ repair/ replacement effected/ completed on receipt of any communication from consignee/ purchaser with date;
6. Date of completion of entire contract including incidental services, if any; and
7. Date of receipt of entire payments under the contract (in case of stage-wise inspection, details required may also be specified).

#### **2.31 Schedule & Completion**

The proposed delivery and completion schedule shall be based on the projected completion and handing over of the entire work.

The bidders shall furnish detailed bar chart and schedule along with the bids and shall update the same duly co-ordinate with other contractors/agencies during the progress of construction.

#### **2.32 Virtual Completion**

The work shall not be considered as completed until the Engineer-in-charge has certified in writing that the work has been virtually completed and the Defects Liability period shall commence from the date of such certificate.

#### **2.33 As Built Drawings and Documents**

For all work completion report as given in the pro-forma for test results shall be submitted to the Engineer-in-charge, after completion of work.

On completion of work, the Contractor shall submit printed documents (three copies) and one set of CD/ DVD of the same to the Engineer-in-charge and two sets of all the software provided duly authorised to M/s TTPL before the submission of the final bill.

1. All drawings/ documents submitted to client/ consultant for approval/ information.

2. Equipment manufacturing drawings/ documents submitted for information to client / consultant.
3. Operation and maintenance manuals. Contractor shall submit one preliminary O&M manual to client/ consultant for approval. The final manual in bounded volumes shall be supplied before despatch of equipment.
4. Inspection Reports (Including IBR certificate), factory and site calibration test reports in bounded volumes.
5. Detailed erection, testing and commissioning manuals
6. List of spares

**2.34 Deleted**

**2.35 Deviations from Client's Requirement**

No deviations from client's requirements are allowed.

**2.36 Conformity to Rules and Standards**

The work shall be carried out in the best workmanlike manner in conformity with this specification, the relevant specification/codes of practice of the Bureau of Indian Standards or recommendations (Except where specified otherwise) and other relevant standards with latest amendments, approved drawings and the instructions issued by the Engineer-in-charge or his authorised representative, from time to time. Equipment meeting any other authoritative standard, which ensures an equal or better quality than the above standards, will also be acceptable.

In addition to the standards, all works shall also conform to the requirements of the followings:

- a) All Electrical works shall be carried out in accordance with the provisions of Indian Electricity Act- 2003, Indian Electricity Rules 1956 amended upto date (Date of call of tender unless specified otherwise)
- b) The works shall also conform to relevant Bureau of Indian Standards' Codes of practice (COP) for the type of work involved.
- c) Materials to be used in work shall be ISI marked wherever applicable.
- d) In all electrical installation works, relevant Safety codes of practices shall be followed.
- e) Insurance Regulations/Tariff Advisory Committee.
- f) Regulations laid down by the Chief Electrical Inspector of the State Electrical Inspectorate/State/Central Electricity Authority or any other agencies concerned.
- g) Regulations laid down by the Department of Factory and Boilers of the State.

- h) Any other regulations laid down by the local authorities.
- i) Installation & operating manuals of original manufacturers of equipment.

**2.37 Deleted**

**2.38 Deleted**

**2.39 Data/Drawings/Documents**

The bidder shall submit the following data/information/drawings/documents as indicated below:

- i) Descriptive literature of the various equipment offered with catalogues, if any.
- ii) Guaranteed technical particulars of the equipment and performance particulars
- iii) Approximate dimensions and weights and preliminary G.A drawings.
- iv) List of optional features.
- v) Make of various equipment and associated components/ accessories.  
Where applicable, preliminary schematic of the equipment/ system offered in the tender.

Brief write up on control scheme and features.

Within 4 weeks of order, Contractor shall submit 4 sets of following documents for purchaser/Consultant's approval.

- i) Guaranteed Technical and Performance particulars.
- ii) Where applicable, control scheme drawings with write-up and all terminal numbers for external hook up.  
Subsequently, 4 sets of the revised documents shall be submitted incorporating Consultants comments as Final Drawings for Purchaser's reference and records before the equipment is offered for inspection.
- ii) Total power requirement indicating load of each major item
- iii) Bill of materials indicating make, model and quantity of all the items
- iv) Installation, Operation and Maintenance Manuals for all the valves and field instruments
- v) Certificates( test/ calibration/ inspection/ statutory)
- vi) FAT procedure, Installation procedure and SAT procedure

**INFORMATION ABOUT THE TENDERER**  
(To be filled by the tenderer)

1	Name of Bidder		
2	Registered office with address for communication	Full postal address	
		Telephone No	
		Mobile No.	
		Fax.No.	
		Email Id	
3	Status of the bidder (individual / Partnership/Private Company/Public Limited Company)		
4.	Details of local office	Address	
		Contact Peron	
		Tele.No.	
		Mobile No.	
		Fax No.	
		Email Id	
5	Particulars of experience as Prime Contractor as per eligibility criteria mentioned in NIT		
6	Annual turnover for the last three year	2017-18	
		2018-19	
		2019-20	
		2020-21	
7	Permanent Account Number (PAN)		
8	GST Rate applicable to this particular job		
9	GST Tax Regn No.		
10	GST Category		
11	PF Reg.No		
12	ESI Reg No.		

Signature & Seal of tenderer:  
Date:

Name of Tenderer:  
Address:

**4.0 FORMS**

**CONTRACT FORM**

(ON NON-JUDICIAL STAMP PAPER OF Rs.200/-)

THIS AGREEMENT made in ..... day of ..... 20... between .....  
(Name of Owner) of ..... (Address of Owner) (hereinafter called “the Owner”)  
of the one part and ..... (Name of Contractor) of .....  
(Address of Contractor) (hereinafter called “the Contractor”) of the other part:

WHEREAS the Owner invited bids for the execution of work viz., .....  
(Brief description of work) and had accepted a bid by the Contractor for the work in the sum of  
..... (Contract price in words and figures) (hereinafter called  
“the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this agreement, viz.:
  - a. the Tender Document No..... and the Price schedule submitted by the Contractor.
  - b. the Owner’s Letter of Acceptance.
3. In consideration of the payments to be made by the Owner to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Owner to complete the work and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Owner hereby covenants to pay the Contractor in consideration of the execution of the works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

TOTAL CONTRACT PRICE:

TIME OF COMPLETION: .....

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, Sealed and Delivered by the

said ..... (for the Owner)

in the presence of: .....

Signed, Sealed and Delivered by the

said ..... (for the Contractor)

in the presence of .....

**FORM OF PERFORMANCE GUARANTEE/BANK GUARANTEE BOND**  
(On Non-Judicial Stamp Paper)

To

General Manager Tech (i/c),  
Travancore Titanium Products Ltd.

In consideration of the.....(hereinafter called Travancore Titanium Products Ltd.) having offered to accept the terms and conditions of the proposed agreement between ..... and ..... (hereinafter called “the said contractor(s)” for the work.....(hereinafter called “the said agreement”) having agreed to production of an irrevocable bank guarantee for Rs..... (Rupees..... Only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said contract.

1. We.....(indicate the name of Bank)(hereinafter referred to as the “Bank”) hereby undertake to pay to the Travancore Titanium Products Ltd. an amount not exceeding Rs.....(Rupees..... only) on demand by the Travancore Titanium Products Ltd.

2. We.....(indicate the name of Bank) do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from the Travancore Titanium Products Ltd. stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs..... (Rupees..... only).

3. We, the said Bank, further undertake to pay the Travancore Titanium Products Ltd. any money so demanded notwithstanding any dispute or disputes raised by the contractors) in any suit or proceeding pending before any Court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the contractor(s) shall have not claim against us for making such payment.

4. We the said 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 it shall continue to be enforceable till all the dues of the Travancore Titanium Products Ltd. under or by virtue of the said agreement have been fully paid, and its claims satisfied or discharged, or till the Engineer-in-charge, on behalf of the Government, certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s), and accordingly discharges this guarantee.



5. We the said bank further agree with the Travancore Titanium Products Ltd. that the Travancore Titanium Products Ltd. shall have the fullest liberty without or consent, and without effecting 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 Travancore Titanium Products Ltd. 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 to the said contractor(s) or for any forbearance, act of omission on the part of the Travancore Titanium Products Ltd. any indulgence by the Travancore Titanium Products Ltd. 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.

6. The guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).

7. We the said bank lastly undertake not to revoke this guarantee except with the previous consent of the Travancore Titanium Products Ltd. in writing.

8. The guarantee shall be valid up to .....unless extended on demand by the Travancore Titanium Products Ltd. Notwithstanding anything mentioned above, our liability against this gurantee is restricted to Rs..... (Rupees..... Only), and unless a claim in writing is lodged with us within six months of the date of expiry or extended date of expiry of this guarantee all our liabilities under this Guarantee shall stand discharged.

Dated the..... Day of.....For.....;

In presence of:

WITNESS

1. For and on behalf of (The Bank)  
Signature.....  
Name & Designation.....  
.....
2. ....  
Authorisation No. ....  
Name & Place.....  
Bank's Seal.....

The above Guarantee is accepted by Travancore Titanium Products Ltd.

For and on behalf of Travancore Titanium Products Ltd.

Signature \_\_\_\_\_

Name \_\_\_\_\_

Designation \_\_\_\_\_

Dated \_\_\_\_\_

Note:

**\* For Proprietary Concerns**

Shri \_\_\_\_\_ son of \_\_\_\_\_ resident of \_\_\_\_\_ carrying on business under the name and style of \_\_\_\_\_ at \_\_\_\_\_ (hereinafter called "the said Contractor" which expression shall unless the context requires otherwise include his heirs, executors, administrators and legal representatives).

**\* For Partnership Concerns**

1. Shri \_\_\_\_\_ son of \_\_\_\_\_ resident of \_\_\_\_\_.
2. Shri \_\_\_\_\_ son of \_\_\_\_\_ resident of \_\_\_\_\_ carrying on business in co-partnership under the name and style of \_\_\_\_\_ at \_\_\_\_\_ (hereinafter collectively called "the said Contractor" which expression shall unless the context requires otherwise include each of them and their respective heirs, executors, administrators and legal representatives).

**\* For Companies**

M/s. \_\_\_\_\_ a company registered under the Companies Act, 1956 and having its registered office in the State of \_\_\_\_\_ (Hereinafter called "the said Contractor" which expression shall unless the context requires otherwise include its administrators, successors and assignees).

**FORM OF BANK GUARANTEE IN LIEU OF SECURITY DEPOSIT IN INDIVIDUAL CONTRACT**

(On Non-Judicial Stamp Paper)

To  
General Manager Tech (i/c),  
.....

In consideration of the Purchaser (Travancore Titanium Products Ltd.) having its head office at ..... (which expression shall unless repugnant to the subject or context includes its administrators, successors and assignees) having agreed under the terms and conditions of Contract Agreement No. \_\_\_\_\_ dated \_\_\_\_\_ made between \_\_\_\_\_ and .....(Travancore Titanium Products Ltd.) connection with the work of \_\_\_\_\_ (hereinafter called the said contract), to accept a Deed of Guarantee as herein provided for Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) from a Nationalized Bank in lieu of the security deposit to be made by the Contractor or in lieu of the deduction to be made from the Contractor's bills, for the due fulfillment by the said Contractor of the term and conditions contained in the said Contract, We the \_\_\_\_\_ Bank (hereinafter referred to as "the said Bank" and having our registered office at \_\_\_\_\_ do hereby undertake and agree to indemnify and keep indemnified .....(Travancore Titanium Products Ltd.) from time to time to the extent of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) against any loss or damage, cost, charges and expenses caused to or suffered by or that may be caused to or suffered by .....( Travancore Titanium Products Ltd.) by reason of any breach or breaches by the said Contractor of any of the terms and conditions contained in the said contract and to unconditionally pay the amount claimed by .....( Travancore Titanium Products Ltd.) on demand and without demur to the extent aforesaid.

2. We, the \_\_\_\_\_ Bank, further agree that .....( Travancore Titanium Products Ltd.) shall be the sole judge of and as to whether the said contractor has committed any breach or breaches of any of the terms and conditions of the said contract and the extent of loss, damage, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by ....( Travancore Titanium Products Ltd.) on account thereof and the decision of .....( Travancore Titanium Products Ltd.) that the said Contractor has committed such breach or breaches and as to the amount or amounts of loss, damage, costs, charges and expenses caused to or suffered to or suffered by or that may be caused to or suffered by .....(Travancore Titanium Products Ltd.) from time to time shall be final and binding on us.
3. We, the said 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 Contract and till at the dues of .....(Travancore Titanium Products Ltd.) under, the said Contract or by virtue of any of the terms and conditions governing the said Contract have been fully paid and its claimed satisfied or discharge and till the Travancore Titanium Products Ltd. of the contract certifies that the terms and conditions of the said Contract have been fully and properly carried out by the said Contractor and accordingly discharges this Guaranty subject, however, that .....( Travancore Titanium Products Ltd. ) shall have no

claim under this Guarantee after 90 (Ninety) days from the date of expiry of the defects Liability period as provided in the said Contract. ie. \_\_\_\_\_ (date) or from the date of cancellation of the said Contract, as the case may be unless a notice of the claim under this Guaranty has been served on the Bank before the expiry of the said period in which case the same shall be enforceable against the Bank notwithstanding the fact that the same is enforced after the expiry of the said period.

4. ....( Travancore Titanium Products Ltd. ) shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee or Indemnity from time to time to vary any of the terms and conditions of the said contract or to extended time of performance by the said Contractor or to postpone for any time and from time to time any of the powers exercisable by it against the said Contractor and either to enforcing or forbear from enforcing any of terms and conditions governing the said Contract or securities available to ....( Travancore Titanium Products Ltd. ) and the said Bank shall not be released from its liability under these presents by any exercise by ....( Travancore Titanium Products Ltd.) if any liberty with reference to the matters aforesaid or by reason of time being given to the said Contractor or any other forbearance, act or omission on the part of ....( Travancore Titanium Products Ltd.) or any indulgence by ....( Travancore Titanium Products Ltd.) to the said Contractor or any other ....( Travancore Titanium Products Ltd.) matter or thing whatsoever which under the law relating so sureties would but for this provision have the effect of so releasing the Bank from its such liability.
5. It shall not be necessary for ....( Travancore Titanium Products Ltd.) to proceed against the Contractor before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank, not withstanding any security which ....( Travancore Titanium Products Ltd.) may have obtained or obtain from the Contractor at the time when proceedings are taken against the Bank hereunder be outstanding or unrealised.
6. We, the said bank, lastly undertake not to revoke this Guarantee during its currency except with the previous consent of ....( Travancore Titanium Products Ltd.) in writing and agree that any change in the Constitution of the said Contractor or the said Bank shall not discharge our liability hereunder.

Dated this..... Day of .....

In presence of:

WITNESS

1. For and on behalf of (The Bank)  
  
Signature .....  
  
Name & Designation .....  
.  
.....  
.....
2. Authorisation No. ....

Name & Place .....

Bank's Seal .....

The above Guarantee is accepted by .....(Travancore Titanium Products Ltd.)

For and on behalf of .....(Travancore Titanium Products Ltd.)

Signature \_\_\_\_\_  
Name \_\_\_\_\_  
Designation \_\_\_\_\_  
Dated \_\_\_\_\_

Note:

**\* For Proprietary Concerns**

Shri \_\_\_\_\_ son of \_\_\_\_\_ resident of \_\_\_\_\_  
carrying on business under the name and style of \_\_\_\_\_ at \_\_\_\_\_  
(hereinafter called "the said Contractor" which expression shall unless the context requires  
otherwise include his heirs, executors, administrators and legal representatives).

**\* For Partnership Concerns**

1. Shri \_\_\_\_\_ son of \_\_\_\_\_ resident of \_\_\_\_\_.
2. Shri \_\_\_\_\_ son of \_\_\_\_\_ resident of \_\_\_\_\_  
\_\_\_\_\_ carrying on business in co-partnership under the name  
and style of \_\_\_\_\_ at \_\_\_\_\_ (hereinafter collectively called  
"the said Contractor" which expression shall unless the context requires  
otherwise include each of them and their respective heirs, executors,  
administrators and legal representatives).

**\* For Companies**

M/s. \_\_\_\_\_ a company registered under the Companies Act, 1956 and having its  
registered office in the State of \_\_\_\_\_ (Hereinafter called "the said Contractor"  
which expression shall unless the context requires otherwise include its administrators,  
successors and assignees).

**SPECIFICATION FOR VORTEX FLOW METER**

1.	Make / Model	:	As per Approved vendor's list /Vendor to specify
2.	Area Classification	:	Hazardous, Corrosive
3.	Type	:	Vortex flow meter
4.	Service	:	Steam
5.	Line size	:	125NB
6.	Temperature	:	184 deg celcius
7.	Operating pressure	:	12 bar
8.	Flow	:	6 ton/hr
9.	Density	:	5.638 kg/m3
10.	Accuracy	:	±0.2%
11.	Enclosure material	:	Polyurethane Aluminum
12.	Enclosure as per IEC 529	:	IP65
13.	Cable entry	:	½" NPT (F)
15.	Power supply	:	24V DC loop powered
16.	Transmitter type & Output	:	SMART, 4-20mA + HART
17.	Local indication	:	Required
19.	Response time	:	Vendor to specify
20.	Calibration certificate	:	Required
23.	Quantity	:	1
24.	Certificate required		IBR

## **6.0 APPROVED VENDOR'S LIST**

### **1. Vortex Flow Meter**

- a. Emerson, Endress + Hauser or equivalent as approved by the engineer in charge.

### **3.0 SAFETY REGULATIONS**

3.1 In respect of all labor, directly or indirectly employed in work for the performance of Contractors part of this agreement, contractor shall at his own expense arrange for all the safety provisions as per safety codes of C.P.W.D, Indian Standards Institutions, TheElectricity Act, The Mines Act and such other acts as applicable.

3.2 Contractor shall also observe and abide by all safety regulations of the company.

3.2.1 Carrying Match Boxes and Lighters/smoking Smoking is strictly prohibited anywhere inside the Factory premises. Carrying of matchboxes and lighters within the plant premises are also not permitted.

#### 3.2.2 Safety Clearance Procedure

1. Any work carried out within the plant must be covered by a work permit issued by supervisor of area involved. In addition, a safety permit must be obtained from the safety department prior to commencement of the following types of work.

- a. Any work involving open flames and sparks such as welding, gas cutting, soldering, grinding, use of hurricane lamps, petromax.
- b. Use of gasoline, diesel or electric power driven engines and tools.
- c. Entry of vehicles inside the battery limits of process area.
- d. Entry of personnel into any process or storage facilities that has been in service.
- e. Entry into hazardous and potentially hazardous areas.

2. All points stipulated in the safety permit be strictly complied with.

3. The company reserves the right to cancel a work or safety permit without assigning reasons. When called upon to stop the work by any company personnel, Contractor shall immediately cease to continue work. Before recommencement, fresh work and safety permits must be obtained.

3.2.3 Under no condition shall any Contractor's personnel tamper with or use any property belonging to the Company without obtaining prior sanction from the supervisor of area concerned.

3.2.4 Contractor's personnel shall stop their work and proceed to a safe area in the event an emergency arises in the area they are working like in case of fire, leakage of toxic gases, oil spillage, power failure, etc. They should not crowd round and create confusion in the area where the emergency was occurred. Before recommencement of the work they should obtain clearance of supervisor of area involved.

3.2.5 Before erecting temporary shelters like tents anywhere within the Company premises, written permission of safety department must be obtained.

1. Temporary fixtures like sheds, tents, etc., shall be erected in conformity with normal safety standards.
2. Temporary piping, hose connections and electrical wiring must be laid in such a manner that they will not cause tripping or hitting hazards.



3. All precautions should be taken to ensure that any temporary electric wiring used within the plant will not emit sparks.
- 3.2.6 Good housekeeping must be practiced by Contractor's personnel at all times while within the plant. During and after completion of the work, they are to ensure that their work area is kept clean and tidy. Left over materials and equipment should be moved to a safe area and stored in an orderly manner. These materials should not block exits to roads, buildings, passages and approach to firefighting equipment such as fire hydrants, fire hoses and fire extinguisher or areas where emergency safety shower, electrical switch panels and switch rooms are located.
- 3.2.7 It is entirely the contractor's responsibility to provide all the safety equipment wherever required to their personnel as stipulated in the safety manual of the company. The company is in no way responsible for any injury, disability or death of any of the contractor's workmen due to non-compliance of the safety regulations. However, in certain cases, personal protective equipment can be made available to the contractor on payment to the Company.

#### Accident or injury to workmen

The Company shall not be liable for or in respect of any damages or compensation payable by law in respect or in consequence of any accident or injury to any

workmen or other persons in the employment of the contractor or any subcontractor and the contractor shall indemnify and keep indemnified the company against all such damages and compensation and against all claims, demands, proceedings, costs charges and expenses whatsoever in respect or in relation thereto.

The contractor shall at all times indemnify the company against all claims for compensation under the provisions of the workmen's compensation act or any other law for the time being in force.

3.2.8 Contractors personnel shall not wear loose clothing while working around moving or rotating machinery and equipment.

3.2.9 Any unsafe practices or disregard of normal safe working practices by contractor's personnel when pointed out by company personnel shall be immediately corrected.

#### 3.2.10 Personal conduct

- a. Entering Company premises while under the influence of alcohol/narcotics is strictly forbidden.
  - b. Fooling on the work, mock fighting or fighting within the plant premises will not be tolerated.
  - c. Gambling within the plant premises is strictly forbidden.
  - d. Entering the plant premises while in possession of weapons such as knives, etc., is prohibited.
  - e. Contractor's personnel shall not pick up quarrel or get involved in any such act.
- 3.2.11 Contractor shall ensure that all State Traffic Rules and regulations are complied with while motor vehicles are driven inside the plant premises. In additions the following points are also outlined for compliance.
1. Speed Limit: - Speed limit within the plant is 16 Km/h. In any case, vehicle drivers should take connivance of road; weather and vehicle drivers should condition and adjust their driving accordingly.

2. Parking: - Park vehicles only in approved areas. Vehicles must be parked in such a manner that they will not move while unattached. As a general rule, vehicles should not be parked at road bands, in front of fire Equipment sheds and firefighting equipment thereby blocking access to them.
3. Vehicles driven inside the plant premises should have effective brakes, horns, lights, mufflers, etc.
4. Vehicles shall carry only the number of passengers or weight of load it is authorized to carry as per law. Loads carried in trucks shall properly be secured so that they will not accidentally fall off while vehicle is in motion.
5. Vehicle drivers shall always check overhead and side clearance while driving vehicles.

#### 3.2.12 Fire protection Equipment

1. A work permit must be obtained prior to Contractor's personnel drawing water from the plant firewater loop.
2. All efforts should be made by contractor's personnel to prevent occurrence of any unwanted fire. Gasoline driven engines, trucks tractors, etc. shall not be filled with fuel while the motor is still running.

#### 3.2.13 Report on accident

1. All injuries sustained by Contractor's personnel and damages to vehicle and property, no matter how slight they are, shall be promptly reported to the Safety department during normal working hours and to the Plant Manager, other than normal working hours and to the prescribed statutory authorities.
2. The contractor shall also make adequate arrangements for rendering all possible aids to the victims of the accidents.
3. Medical treatment for injured contractor's personnel will be entirely the responsibility of contractor. However, if required, emergency first aid treatment may be given by Company's Medical Centre.
- 4.

Any question or doubts on the Safety Regulations enumerated above or the generally accepted safe working practices may be clarified with the Safety Department.

**Date:**

**Name of Tenderer or Contractor:**

**Address of the Tenderer or Contractor      Signature of Tenderer or Contractor**

## GENERAL SITE DATA

Plant Location	Kochuveli Village, Approximately 10 km from Thiruvananthapuram, Kerala, India
Latitude	8° 31' N
Longitude	76° 57' N
Altitude	Approximately 4.255 m above MSL
Climatic condition	Location characterized by tropical coastal climate being a coastal area. Witness high humidity through out the year and characterized by aggressive summer, mild winter, and good seasonal rainfall.
Rainfall	Annual average rainfall recorded at Thiruvananthapuram IMD observatory is 150 cm. Southwest monsoon, which lasts from the first week of June to the end of September. October and November constitute the post monsoon period or "retreating monsoon period".
Temperature	Maximum 34.3°C Minimum 25.1°C
Humidity	Maximum 92.7% Minimum 58.6%
Atmospheric Pressure	Maximum 754 mm Hg Minimum 749 mm Hg
Wind data	Predominant wind directions are MNW and NW during day and night time. The wind speed is mostly in the range of 0.44 – 2.0 m/s
Transportation	<b>Railway:</b> Railway siding is not available for TiO <sub>2</sub> Plant. The nearest railway station is Thiruvananthapuram which is approximately 8 kms away from site. The track gauge of southern railway is 1676 mm. <b>Surface transportation:</b> NH-47 By pass is about 3-4 km from site. <b>Seaport :</b> The nearest seaport is Kochi, which is approximately 210 kms from the site <b>Airport:</b> Nearest International airport is Thiruvananthapuram, which is approximately 3-4 kms away from site.
Communication	Postal, telegraph, courier service and well established Telephone network, cellular network and internet connectivities are available at site.

**LETTER OF TRANSMITTAL**

From

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.....

To

General Manager Tech (i/c)  
Travancore Titanium Products Limited  
Kochuveli, Thiruvananthapuram,  
Kerala - 695 021.

Sir,

Sub: SUPPLY OF VORTEX FLOWMETER (VFM) FOR THE COPPERAS RECOVERY PLANT AT TRAVANCORE TITANIUM PRODUCTS LTD.

Ref: **Re-Tender No. TTPL/PROJ/FLOWMETER/RT/20-21 dated:31.05.2021**

1. I have carefully studied the drawings and the term of the tender issued to me vide your **Re-Tender No. TTPL/PROJ/FLOWMETER/RT/20-21 dated:31.05.2021**
2. I have also studied the details of work to be undertaken and obtained all clarifications and information regarding the nature and scope of work. After taking into consideration all the above aspects, I hereby submit my offer for completing the work in all respects within the time specified in the Tender conditions.
3. I hereby agree with the company that I shall complete the entire work according to the terms and conditions of the tender. I hereby confirm that I have also studied the site conditions and the conditions prevailing at work site.
4. The rate quoted shall remain firm, fixed and not subject to any escalation and/or variations on any account till completion of the entire work in all respects.
5. I also hereby confirm that the work shall be done in a phased manner with the Company's other contractors, if any.
6. If the work is awarded to me, I also undertake to remit the Security Deposit and commence the work as directed by you.
7. I shall undertake and abide by the instructions of the company in carrying out the work envisaged under the above tender.

Yours faithfully,

Signature and Address of the Contractor

**SECRECY AGREEMENT**

This AGREEMENT executed on this ----day of -----(-----).

BETWEEN

TRAVANCORE TITANIUM PRODUCTS LIMITED, a Company incorporated under the Companies Act 1956 and having its Registered Office at Kochuveli, Thiruvananthapuram-695 021, in the State of Kerala represented by its Managing Director (hereinafter referred to as the OWNER/TTPL which expression unless repugnant to the context shall mean and include its successors-in-interest assigns, etc.) of the first PART

AND

----- in the -----  
----- which expression unless repugnant to the context shall mean and include its heirs, legal representatives, executors, successors-in-interest permitted assigns, etc.) of the SECONDPART

WHEREAS

The OWNER/TTPL by their e-tender No.----- dated ----- has invited tenders for Design, manufacture, inspection, supply, transportation, handling, storage at site with all accessories and assistance for commissioning of Instrumentation System at Travancore Titanium Products Ltd.

The Contractor/-----in response to the above mentioned tender notice no. ----- dated ----- has submitted an offer. The OWNER/TTPL after due consideration of the tenders received in response to the tender notice has decided to accept the tender submitted by the Contractor/-----and to award the work order to the Contractor/-----subject to the condition that the Contractor/-----shall execute a Secrecy Agreement with OWNER/TTPL.

Now, in consideration of TTPL's awarding the work to the Contractor/-----, the Contractor/-----undertakes the following:

1. To receive the Confidential Information in confidence from the party of the FIRST PART and to use the same solely for the purpose of undertaking its functions as Contractor to TTPL in connection with the Project.
2. Not to divulge any Confidential Information received from the party of the FIRST PART to third parties except in so far as may be necessary in connection with the procurement and construction of the plant.
3. To use its best endeavors to ensure that its employees do not make unauthorized disclosures or use of the Confidential Information to third party/parties.

The Contractor/-----shall maintain strict confidentiality of all documents, drawings, designs and technical information in respect of the Copperas Recovery Plant project and shall not pass on any information to any organization/agency except to those who are directly connected with the execution of the project.

- (a) Contractor/-----shall keep the secrecy of all information and not divulge to third parties any data and information made available to it in respect of the plant and its process without the prior written approval of OWNER/TTPL

in so far as it may be necessary for the design, procurement and construction of the plant.

The above obligation of Contractor/-----shall not apply to data and information which:

- is already in the public domain at the time of disclosure.
- becomes part of the public domain through no fault of Contractor/-----  
-----
- is acquired by Contractor/-----from a third party who is legally entitled to disclose it.

- (b) Contractor/-----shall not use the know-how made available to it under this Agreement for any other purpose than the design, construction and operation of the plant, being set up by OWNER/TTPL.
- (c) Before disclosing any data or information if any, with respect of the plant and its process to Contractor/-----'s chosen engineering contractor, it shall ensure that such contractor gives OWNER/TTPL a written secrecy undertaking with regard to such data or information.
- (d) No drawings, documents or information on this project will be used/ lent for any purpose other than this project.
- (e) All plans drawings and specifications obtained by Contractor/-----from the Contractor/-----or prepared for in connection with or relating to the works shall be held in confidence by the Contractor/-----and shall not be used by the Contractor/-----for any purpose other than for the performance of the Project or as authorized in writing by the OWNER/TTPL. All documents which were furnished by the OWNER/TTPL with a qualified note to the Contractor/-----shall remain the property of the OWNER/TTPL and upon completion of the works the Contractor/-----shall return to the OWNER/TTPL all such documents including copies thereof.
- (f) Contractor/-----shall not make any announcement or release any information or photographs concerning the contract works, or any part of it to any member of the public or to the press or any official body unless prior written consent is obtained from the OWNER/TTPL.
- (g) The Contractor/-----shall take all steps, which may be necessary or appropriate, in order that his employees and engineering contractor, if any, adhere to the provisions of this clause. Appropriate clause to carry out the purpose and intent thereof shall be included in engineering contractor's purchase orders and consulting agreements entered into by the OWNER/TTPL in the execution of the Project.
- (h) To keep confidential any and all technical data and information (including drawings, specifications, sketches, manuals and all written materials containing the Process and designs) furnished by OWNER/TTPL hereunder, and shall not reveal or disclose any such data and information to others without prior written approval of OWNER/TTPL except for construction and operation of the Project.
- (i) To restrain its employees, from making disclosure of any or all technical data and information furnished by OWNER/TTPL hereunder; and

- (j) Neither transfers, nor sell, nor use any and all technical data and information furnished by TTPL hereunder for purpose other than provided herein.

If the Contractor/-----commits any breach of contract under this secrecy agreement the OWNER/TTPL can realize suitable losses and for damages from the CONSULTANT/KITCO. This breach shall not apply to data/information which:

- is already in the public domain at the time of disclosure.
- becomes part of the public domain through no fault of Contractor/-----  
-----.
- is acquired by Contractor/-----from a third party who is legally entitled to disclose it.

In case of any dispute or difference arising between the parties hereto as to the construction of Secrecy Agreement or rights, duties or obligations of either party hereunder or any matter arising out of or concerning the secrecy agreement, the matter shall be settled amicably through mutual discussions and failing which the dispute shall be settled under the Arbitration and conciliation Act 1996 and award thereon shall be binding on the parties. The venue of the arbitration shall be Thiruvananthapuram alone.

The Secrecy Agreement shall be read and construed in accordance with the Law of India and Indian Copyright Act 1957, as amended from time to time. All legal proceedings in connection with this Secrecy Agreement shall be brought in the Courts of India within the jurisdiction of which the parties hereto hereby agree to submit.

Jurisdiction: The Courts in Thiruvananthapuram shall have the jurisdiction in this regard.

IN WITNESS WHEREOF the parties hereto have caused their authorized representative to put their signature and affix the seal in the presence of the following witnesses on the day and year first above written.

Signed and delivered by/for and on behalf of M/s -----,

Signed and delivered by/for and on behalf of M/s Travancore Titanium Products Ltd.,

By its Managing Director

By its Managing Director

In the presence of:

In the presence of:

Witnesses

Witnesses

1.

1.

2.

2.