



बामर लॉरी एण्ड कं. लिमिटेड  
(भारत सरकार का एक प्रतिष्ठान)  
**Balmer Lawrie & Co. Ltd.**  
(A Government of India Enterprise)  
www.balmerlawrie.com

P 43, Hide Road Extension, Kolkata – 700 088  
Phone: 033 – 24500124, E-mail – Srinivas.pcs@balmerlawrie.com

### **TENDER ENQUIRY**

**Tender No. : GLK/TE19/ 182 DT 14.10.19**

**Due Date : 29.10.19 Time: 5PM**

**Sub: Supply and installation/Commissioning of Sulphur determination Apparatus-1 no**

Offers are invited from manufacturers / authorized agents / dealers for the subject supply as per Specifications and General terms & conditions attached in Annexure - A & B respectively.

**Indigenous make Sulphur Determination Apparatus to be based on Quartz Tube combustion methodology**. The instrument design must be compact in size, easy to operate with power supply of 220V AC  $\pm 10\%$ , 50Hz frequency. The instrument can perform to meet standard Methods ASTM D1551, IS: 1448( Clause 6.12), IP-63.

**The instrument will be used for analysis of base fluids, lubricating oils, Sulphur Containing lubricating additives and lubricating greases of petroleum product .**

If the tenderer find any discrepancy, omission, ambiguity or conflict in or among the documents forwarded or be in doubt as to their meaning and interpretations, such matter shall be brought to the attention of us, at least four working days prior to the due date of the Tender. However no change in price/value shall be allowed after placement of the order or during the execution of work at site.

For any clarification, please contact

Mr. P.C.S.Srinivas  
Mob no-9445160082

OR Mr.Murali  
Mob No-9831678972

**The bidders are requested to submit their offer in a CLOSED ENVELOP clearly mentioning Tender Number and Description on or before the due date and time of the tender.**

Thanking you,

Yours faithfully,  
for **Balmer Lawrie & Co. Ltd.**

**(Arnab Ghatak)**  
Sr. Manager (SCM)



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Encl.: As above

## Annexure-A

### 1.0 Technical Specifications

#### Technical Specification for Sulphur Determination Apparatus :

The details of the technical specifications are given below:

1. **Model** details and requirements: Details of Dual Electrically heated model with all units to be quoted.

2. **Instrument Details** : A compact design bench top with corrosion resistant/ solvent resistant body. Design of the

Apparatus must be compact, easy to operate and parts can be dismantle for routine maintenance .

Sulphur Determination Apparatus is dual electrically heated type which consist of insulated dual oven, on the front panel provided with a digital indicator with change over switch, energy regulator for each furnace and control switches.

The dual oven assembly is mounted on a laminated plastic covered aluminium casting which is integrated with oxygen, gas, air and vacuum lines.

Thermocouples within the Alundum cores of each furnace are of type - Platinum-Platinum/Rhodium

The display indicator is calibrated accurately to show the temperature within the quartz tube under operating conditions with air flowing.

The double absorption system is an important feature of the apparatus permitting application of the method to materials having high sulphur content.

3. **Sample Introduction System** : The instrument should be provided with easy sample introduction system through

ceramic boat which can be easily placed inside the quartz combustion tube with ease. The design of sample furnace is inert , chemically resistant, made of ceramic suitable for wide applications. The quartz combustion

tube with ceramic boat can be inserted into inside the sample Furnace with ease. . The sample introduction should be at ease , efficient and consistent for producing reproducible results.

4. **Control unit** : The instrument can operate and measure between temperature range 20 deg C . to 900 Deg.C .



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- The heating system does not involve any oil based but solid state- electrically heated elements heating unit arrangement .The Cooling should be rapid so that next measurement can be made available to user.
- A pair of transformers is provided inside the casing to supply the special heater elements with 24 volts, which ensures maximum heater life. To counteract the possibility of contamination of one side being carried on the rear manifold rack.
- 5.Display :** The instrument is provided with digital display unit LCD/LED type which can clearly display operating conditions.
- 6.Accessories :** All Necessary accessories- Glassware borosilicate make , Rubber tubes , gas burners ,rotameter, etc. required for the instrument to operate must be clearly provided .
- 7. Standard for Calibration of the Instrument :** Certified standards of Oil or Organic Compound with known Sulphur Content to be provided for calibrating the instrument.
- 8 .Standards Test methods :** The instrument can perform to meet standard Methods ASTM D1551,IS: 1448( Clause 6.12), IP-63.
- 9. Safety Aspect of the Instrument :** The instrument must be safe to operate.
- 10. Spares & Consumables :** The necessary spares & consumables including tools required for two years of smooth operation of the each of the units of the instrument must be provided.
- 12.Technical Literature Support:** The technical details of the instrument ( with all above units) offered along with the photograph , application notes and necessary manuals including service & operating manuals must be provided.
- 13 . Dimensions, Weight and Power** requirements of the instrument with all the units must be specified.



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**Annexure-B**

### **General Terms & Conditions**

#### **2.1 Submission of offer**

Bidder shall submit their offer in Closed envelop on or before due date and time of the tender without any deviation of technical specifications.

In case of offer, which are not found in line with our guidelines and Terms & Conditions, may subject to rejection.

#### **2.2 Warrantee /guarantee Certificate**

Bidder has to submit all Original Copies of Warrantee /Guarantee Certificate along with the Supply Invoice.

#### **2.3 Acceptance of offer & Placement of Order**

Balmer Lawrie & Co. Ltd. (BL) reserves the right to reject/accept all or any tender(s). A tenderer may quote all or either items/heads under supply for this tender. Purchase order will be placed to item wise L1 vendor subject to qualifying technical & commercial requirements in the tender.

#### **2.4 Delivery period**

ALL Items to be supplied within 4 to 6 weeks from the date of placement of PO/LOI whichever is earlier.

#### **2.5 Price schedule**

The price shall be quoted as per specified format.

#### **2.6 Payment terms**

- (i) 90% of basic order value with applicable taxes and duties for the entire contract value will be released within 30 days from the date of supply and commissioning.
- (ii) Balance 10 % of basic order value shall be kept as retention money & will be released after completion of guarantee period without any interest or against submission of Performance Bank Guarantee (on BL format) for equal amount.

#### **2.7 Performance Bank Guarantee (PBG)**

PBG may be furnished in lieu of retention money in specified format of BL and shall be valid for the entire guarantee period from the date of successful commissioning .



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#### 2.7.1 GST Compliance:

***"The vendor should compulsorily follow all the provisions of GST Law and in the event of any default of complying with any of the provisions of the GST Law, Balmer Lawrie would exercise the right for non-payment / withholding payment / black listing the vendor."***

#### 2.8 Guarantee/Warranty Period

12 (twelve) months from the date of successful commissioning

During this guarantee period the performance of the supplied & commissioned item has to be in line with the expected / agreed quality as per tender/PO and if not then vendor has to replace/rectify the same at no extra cost to BL to the satisfaction of BL.

#### 2.9 Validity of offer

The offers shall remain valid for a period of 45 days from the due date of the tender.

#### 2.10 Liquidated Damages

In case of failure to deliver the item (of acceptable quality) by the successful vendor, as per the completion period, a pre-determined liquidated damages @ ½ % per week of the basic order value subject to a maximum of 5% of the basic order value shall be deducted from the invoice.

#### 2.11 Jurisdiction

All disputes are subject to Kolkata jurisdiction.

for **Balmer Lawrie & Co. Ltd.**

**(Arnab Ghatak)**  
**Sr. Manager (SCM)**



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### **Price Bid**

SNO	Description	QT Y	Basic +GST per Number
1	Door Delivery price of Sulphur Determination Apparatus including installation and commissioning charges.  To specify :Make..... & Model:.....	1	

I here by agree to all Terms and conditions of the above Tender.

Name and Signature  
Contact nos

Address with Stamp

**Note: Acknowledgment copy of the Tender Form to be submitted along with Price Bid by endorsing on all pages.**