



Oil India Limited  
(A Govt. of India Enterprise)  
P.O. Duliajan – 786602, Assam

Telephone No. (91-374) 2800491

Fax No: (91-374) 2800533

Email: [materials@oilindia.in](mailto:materials@oilindia.in) ; [erp\\_mm@oilindia.in](mailto:erp_mm@oilindia.in)

Tender No. & Date: SDG6230P15/07

Tender Fee : INR 4,500.00 OR USD 100.00  
Bid Security Amount : INR 1, 24, 400.00 OR USD 1925.00

Bidding Type : SINGLE STAGE TWO BID SYSTEM

Bid Closing on : 19.08.2015 (at 11.00 Hrs. IST)

Bid Opening on : 19.08.2015 (at 14.00 Hrs. IST)

Performance Guarantee : Applicable

OIL INDIA LIMITED invites Global Tenders for items detailed below:

Item No. / Mat. Code	Material Description	QTY.	UOM
1	Supply of Inductive Coupled Plasma Spectrometer as per the following:  a) Detailed specification – <b>Annexure - A</b>  b) Bid Rejection Criteria (BRC) and Bid Evaluation Criteria – <b>Annexure-B.</b>  c) Commercial Check list - Annexure - C	01	No.

**(A) GENERAL NOTES FOR E- TENDER:**

- 1.0 The tender will be governed by "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) including Amendments & Addendum to "General Terms & Conditions" for e-Procurement.
- 2.0 Commercial Check list is furnished vide Annexure – C. Please ensure that the check list is properly filled up and uploaded along with Technical bid.
- 3.0 Please note that all tender forms and supporting documents are to be submitted through OIL's e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with tender no. and due date to The Head Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender.
  - a) Original Bid Security.
  - b) Details Catalogue and any other document which have been specified to be submitted in original.

4.0 The tender is invited under SINGLE STAGE-TWO BID SYSTEM. The bidder has to submit both the "TECHNO-COMMERCIAL UNPRICED BID" and "PRICED BID" through electronic form in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender. The "Techno-commercial Unpriced Bid" shall contain all technical and commercial details except the prices which shall be kept blank. Details of prices as per Bid format / Commercial bid to be uploaded as attachment in the Attachment Tab "Notes and Attachments".

Any offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in the tender.

5.0 In Technical Bid opening, only Technical Rfx will be opened. Therefore, the bidder should ensure that "TECHNO-COMMERCIAL UNPRICED BID" should contain details as mentioned in the technical specifications as well as BEC/ BRC and upload the same in the Technical RFX Response-> User - > Technical Bid. **No price should be given in above Technical Rfx otherwise the offer will be rejected.** Please go through the help document in details before uploading the document and ensure uploading of technical bid in the Technical RFX Response-> User - > Technical Bid only. The "PRICE BID" must contain the price schedule and the bidder's commercial terms and conditions. Details of prices as per Bid format / Commercial bid can be uploaded as Attachment under the attachment option under "Notes & Attachments"

6.0 PRICED BIDS OF ONLY THOSE BIDDERS WILL BE OPENED WHOSE OFFERS ARE FOUND TO BE TECHNO-COMMERCIALLY ACCEPTABLE.

7.0 All the Bids must be Digitally Signed using "Class 3" digital certificate (*e-commerce application*) only as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. The bid signed using other than "Class 3" digital certificate, will be liable for rejection.

8.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the bid or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in the rejection of its offer without seeking any clarifications.

9.0 **The Integrity Pact is applicable against this tender.** OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure XII of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be returned by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid. **If any bidder refuses to sign Integrity Pact or declines to submit Integrity Pact with the offer, their bid shall be rejected straightway.**

OIL's Independent External Monitors at present are as under:

1. SHRI RAGHAW SHARAN PANDEY, IAS(Retd.),  
e-Mail ID : rspandey\_99@yahoo.com

2. SHRI RAJIV MATHUR, IPS(Retd.),  
e-Mail ID : rajivmathur23@gmail.com

## **(B) GENERAL NOTES FOR BIDDERS:**

1. The items shall be brand new, unused & of prime quality. Bidder shall warrant (in the event of an order) that the product supplied will be free from all defects & fault in material, workmanship & manufacture and shall be in full conformity with ordered specifications.

2. Vendor shall indicate in his bid, complete list of spares, consumables etc. in sufficient quantity required for trouble-free operation during warranty period. Consumables which would be used up during the warranty period should be supplied along with the equipment.

3. The system shall be supplied with all ancillaries and consumables necessary for trouble free operation during the warranty period. In case the shelf life of any consumable is shorter, then supplies to be done in suitable phases. Contractor shall give details of shelf life of the consumables in his bid.

4. The instrument shall be supplied with Operation and Maintenance / Service Manuals (in English Language) indicating details of installation, operation and calibration, preventive, routine & corrective maintenance.

5. Service Centre: Contractor's Service Centre shall be fully equipped with adequate number of qualified personnel, basic spare parts of the ICP.

6. All items mentioned under Sl. 19,20,21,22,23,24 and 25 of item no. 10 of the technical specification vide **Annexure -A** will be considered for bid evaluation and the bidder are to quote the prices of these items separately.

### **7. Annual Maintenance contract:**

a) Non-comprehensive AMC rate for 03(three) years, after the warranty period is over, should be quoted with year-wise breakup, which shall be considered for evaluation of the bids.

b) While quoting for AMC, the bidder should take into account two (02) numbers of preventive maintenance visits per year and any breakdown visits. In case of breakdown visit(s), the bidder must come to attend the equipment to make it operational within 15(fifteen) days after receiving the intimation.

c) The bidders must submit a written undertaking that they would be able to provide AMC service at the quoted rates after expiry of warranty.

8. The Bidder/Supplier should provide printed original literature with respect to the claimed capabilities for the supplied new system within the scope of our specifications.

9. Performance Guarantee: The Bidder/Supplier must enclose Factory Test Certificates with respect to various parameters, which cannot be demonstrated at site.

### **10. Installation & Commissioning:**

a) The successful bidder will be required to install and commission the supplied instruments at R&D Department, Oil India Ltd., Duliajan, Assam by their competent service engineer(s). The party should demonstrate all features of the system at the time of installation.

- b) The supplier should replace defective parts if found any, during installation and or during the warranty period. This replacement should be done within a month's time at supplier's cost.
- c) Installation and commissioning charges must be quoted separately on lump sum basis which shall be considered for evaluation of the offers.
- d) The Bidder/Supplier should provide pre installation requirements along with the offer.

## 11. Training

Two scientific staff personnel of R & D Department, two personnel from Instrumentation Department and one scientific personnel of Chemical Department of Oil India Ltd. should be trained in the operation of the software and the equipment, application and routine maintenance of the equipment at installation/supplier's site for 3 working days after the installation is over.

## 12. Warranty

The instrument ICPS and the accessories should be under warranty for minimum 18 months from the date of receipt or 12 months from the date of successful commissioning whichever is earlier. In case of breakdown during the warranty period, a competent service engineer of the supplier should make as many visits as are necessary to rectify the equipment. The supplier should provide any spares required for making the instrument operational.

13. If any other items or accessories or part that is required to install and commissioning the instrument and perform to deliver the results as compared with the use of multi element standards, the same should be quoted accordingly.

14. All vendors Agents must submit full details and requirements for Installation and Commissioning of the Equipment as per Technical Specifications submitted by them.

- (i) Water Supply (Filtered, Flow rate).
- (ii) Civil Works including Foundation, Flooring.
- (iii) Mechanical and Fabrication work required.
- (iv) Ambient Temperature Control (if required, as applicable).
- (v) Cooling requirement (if any).
- (vi) Electrical and Power requirements.
- (vii) Space and Dimensions for Installation of the equipment as per the Quotation of the Vendor.
- (viii) Requirements of Special Gases, if any.

15. All participating vendors are required to provide the approximate period required for the equipment to become operational from the date of the arrival.

## 16. Payment: Payment shall be released as follows

- i) 80% of the order value shall be paid against proof of dispatch/shipment of the goods.
- ii) Remaining 20% of the order value along with installation and commissioning charges (if any) shall be paid after successful installation and commissioning and acceptance of the unit by OIL.
- iii) OIL may also consider making 100 % payment towards supply of the units against proof of dispatch provided bidders agree to pay interest @ 1% above the prevailing Bank Rate (CC Rate ) of State Bank of India for 20% of the order value and also submit Bank Guarantee for the amount equivalent to 20% of the order value plus interest valid till successful commissioning at site.

- iv) Payment towards Installation/Commissioning/Training (if any) shall be released on successful completion of the Installation/Commissioning/Training.
  - v) Payment against AMC charges shall be made on quarterly basis against the invoice(s) to be submitted by the bidder at the end of each quarter.
- Any offer not complying with the above shall be loaded at one percent above the prevailing Bank Rate (CC rate) of State Bank of India for evaluation purpose.

**(C) SPECIAL NOTES:**

1. The items shall be brand new, unused & of prime quality. Bidder shall warrant (in the event of an order) that the product supplied will be free from all defects & fault in material, workmanship & manufacture and shall be in full conformity with ordered specifications. This clause shall be valid for 12 months from date of successful commissioning or 18 months from the date of receipt. The defective materials, if any, rejected by us shall be replaced by the supplier at their own expense on FOR Destination basis. Bidders must confirm the same while quoting.
2. The items covered under this enquiry shall be entitled for Customs/Central Excise duty exemption in terms of Govt. notification No. 24/2007-(Sr No. 2) Customs dated 01/03/2007 and central Excise duty Exemption in terms of Govt. notification No. 16/2007-(Sr No. 2) central Excise dated 01.03.2007 as amended from time to time.
3. To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.
4. Other terms and conditions of the tender shall be as per "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders). However, if any of the Clauses of the Bid Rejection Criteria (BRC) / Bid Evaluation Criteria (BEC) mentioned here contradict the Clauses in the "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) of the tender and/or elsewhere, those mentioned in this BEC / BRC shall prevail.

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BID REJECTION CRITERIA (BRC)/ BID EVALUATION CRITERIA (BEC)

**FOR INDUCTIVE COUPLED PLASMA SPECTROMETER WITH ACCESSORIES**

**(I) BID REJECTION CRITERIA (BRC)**

The bids must conform to the specifications, terms and conditions given in the NIT. Bids shall be rejected in case the items offered do not conform to the required minimum/ maximum parameters stipulated in the technical specifications and to the respective international/ national standards wherever stipulated. Notwithstanding the general conformity of the bids to the stipulated specifications and terms and conditions, the following requirements shall have to be particularly met by the bidders, without which the offer will be considered as non-responsive and rejected.

**(A) TECHNICAL:**

1. The ICPS with all its accessories (ICPS Item 10 and its indigenous items Item 20) to be offered should be from a single manufacturer only.
2. The bidder must have authorized servicing center with manufacturer's factory trained personnel for the instrument and accessories and software covered in the NIT in India.
3. The bidder must provide servicing of the instrument and software and other equipment covered in the NIT after expiry of one year warranty of the instrument under AMC.

**(B) COMMERCIAL:**

Commercial Bid Rejection Criteria will be as per Section D of General Terms & Conditions of Global Tender (MM/GLOBAL/E-01/2005) with following Special Bid Rejection Criteria.

1. Bids are invited under **Single Stage Two Bid System**. Bidders shall quote accordingly under Single Stage Two Bid System. **Please note that no price details should be furnished in the Technical (i.e. Unpriced) bid.** The "Unpriced Bid" shall contain all techno-commercial details except the prices, which shall be kept blank. The "Price Bid" must contain the price schedule and the bidder's commercial terms and conditions.  
Bidder not complying with above submission procedure will be rejected.
2. **Bid Security of US \$ 1925.00 or INR.1,24,400.00** shall be furnished as a part of the TECHNICAL BID (refer Clause Nos.9.0 & 12.0 (Section A) of "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders)).**Any bid not accompanied by a proper bid security in ORIGINAL will be rejected without any further consideration.** A bid shall be rejected straightway if Original Bid Security is not received within the stipulated date & time mentioned in the Tender and/or if the Bid Security validity is shorter than the validity indicated in Tender and/or if the Bid Security amount is lesser than the amount indicated in the Tender.
  - 2.1 For exemption for submission of Bid Security, please refer Clause No. 9.8 (Section A) of "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders).
  - 2.2 The Bank Guarantee towards Bid Security shall be valid upto **18.08.2016**.

3. Validity of the bid shall be minimum 180 days from the date of Bid Closing Date. Bids with lesser validity will be rejected.
4. Bidders must confirm that Goods, materials or plant(s) to be supplied shall be new of recent make and of the best quality and workmanship and shall be guaranteed for a period of 12 months from date of successful commissioning or 18 months from the date of receipt against any defects arising from faulty materials, workmanship or design. Defective goods/materials or parts rejected by OIL shall be replaced immediately by the supplier at the supplier's expenses at no extra cost to OIL.
5. Successful bidder will be required to furnish a Performance Bank Guarantee @10% of the order value. The Performance Bank Guarantee must be valid for 01(one) year from the date of successful commissioning of the items. Bidder must confirm the same in their Technical Bid. Offers not complying with this clause will be rejected
6. Bidders are required to submit the summary of the prices in their price bids as per bid format (Summary), given below :

(i) Price Bid Format (SUMMARY) for Foreign Bidders :

- (A) **Total Material Cost**
- (B) **Packing & FOB Charges :**
- (C) **Total FOB Port of Shipment value, ( A+B ) above :**
- (D) **Overseas Freight Charges upto Kolkata, India :**
- (E) **Insurance Charges :**
- (F) **Total CIF Kolkata value, ( C+D+E) :**
- (G) **Installation/Commissioning Charges including Service Tax :**
- (H) **Training Charges including Service Tax :**
- (I) **Total Value,( F+G+H ) :**
- (J) **AMC Charges for 03(three)years after warranty including Service Tax:**
- (K) **Grand Total Value including (I+J) above :**
- (L) **Grand Total Value in words :**
- (M) **Gross Weight :**
- (N) **Gross Volume :**

(ii) Price Bid Format (SUMMARY) for Indigenous Bidders:

- (A) **Total Material Cost:**
- (B) **Packing and Forwarding Charges:**
- (C) **Total Ex-works value, ( A+B ) above :**
- (D) **Excise Duty,(Please indicate applicable rate of excise duty):**
- (E) **Sales Tax, (Please indicate applicable rate of Tax):**
- (F) **Total FOR Despatching station price, (C+D+E ) above:**
- (G) **Road Transportation charges to Duliajan:**
- (H) **Insurance Charges:**
- (I) **Assam Entry Tax:**
- (J) **Total FOR Duliajan value, ( F+G+H+I ) above:**
- (K) **Installation/Commissioning Charges including Service Tax :**
- (L) **Training Charges including Service Tax:**
- (M) **Total value, (J+K+L) above :**
- (N) **AMC Charges for 03(Three)years after warranty including Service Tax:**
- (O) **Grand Total Value including (M+N )above :**
- (P) **Grand Total Value in words :**

- (Q) **Gross Weight :**  
(R) **Gross Volume:**

**NOTE:**

1. Cost of Individual Items must be quoted separately
  2. The items covered under this enquiry shall be entitled for Customs/Central Excise duty exemption in terms of Govt. notification No. 24/2007-(Sr No. 2) Customs dated 01/03/2007 and central Excise duty Exemption in terms of Govt. notification No. 16/2007-(Sr No. 2) central Excise dated 01.03.2007 as amended from time to time
  3. Banking charges in the country of the foreign bidder shall be borne by the bidder
  7. Installation/Commissioning/Training charges should be quoted separately on lumpsum basis which shall be considered for evaluation of the offers. These charges should include amongst others to and fro fares, boarding/lodging, local transport at Duliajan and other expenses of supplier's personnel during their stay at Duliajan, Assam (India).
- Bidders must categorically indicate the above charges in their Price Bid and must confirm the same in their Technical Bids.
8. The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.
  9. Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.
  10. Bids containing incorrect statement will be rejected.

**(II) BID EVALUATION CRITERIA (BEC) :**

Bids conforming to the specifications, terms and conditions stipulated in the tender and considered to be responsive after subjecting to the Bid Rejection Criteria will be considered for further evaluation as per the Bid Evaluation Criteria given below:

**(A) COMMERCIAL**

- 1) The evaluation of bids will be done as per the Priced Schedule (summary) detailed vide para (6) of BRC (Commercial).
  - 2) If there is any discrepancy between the unit price and total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.
  - 3) For conversion of foreign currency into Indian currency, B.C. selling (Market) rate declared by State Bank of India, one day prior to the date of price bid opening shall be considered. However, if the time lag between the opening of the bids and final decision exceed 3(three) months, then B.C. Selling(Market) rate of exchange declared by SBI on the date prior to the date of final decision shall be adopted for conversion and evaluation.
  - 4) To ascertain the inter-se-ranking, the comparison of the responsive bids will be made as under, subject to corrections / adjustments given herein.
- 4.1) **When only foreign bidders are involved:**  
Comparison of bids will be done on the basis of "Grand Total Value" which is estimated as under:



- (A) Total Material Value :
- (B) Packing & FOB Charges :
- (C) Total FOB Port of Shipment value, ( A + B ) above :
- (D) Overseas Freight Charges upto Kolkata, India :
- (E) Insurance Charges @1% of Total FOB Port of Shipment value vide (C) above
- (F) Banking Charges @ 0.5% of Total FOB Value ( C ) above in case of payment through Letter of Credit (If confirmed L/C at buyer's account is required, 1.5% of Total FOB Value will be loaded)
- (G) Total CIF Kolkata value, ( C + D + E + F ) :
- (H) Installation/Commissioning Charges including Service Tax, if any :
- (I) Training Charges including Service Tax, if any :
- (J) Total Value,( G + H+ I) :
- (K) AMC Charges for 03(Three) years after 01 year warranty including Service Tax:
- (L) Grand Total Value including above ( J + K ) :

**4.2) When only domestic bidders are involved or when more than one domestic bidders are in contention in case of mixed response:  
Comparison of bids will be done on the basis of "Grand Total Value" which is estimated as under:**

- (A) Total Material Value :
- (B) Packing and Forwarding Charges:
- (C) Total Ex-works value, ( A + B ) above :
- (D) Sales Tax, (Please indicate applicable rate of Tax)
- (E) Total FOR Despatching station price, ( C + D ) above
- (F) Road Transportation charges to Duliajan
- (G) Insurance Charges
- (H) Assam Entry Tax
- (I) Total FOR Duliajan value, ( E + F + G + H ) above
- (J) Installation/Commissioning Charges including Service Tax, if any :
- (K) Training Charges including Service Tax, if any :
- (L) Total value, (I+J+K) above :
- (M) AMC Charges for 03(three) years after 01 year warranty including Service Tax :
- (N) Grand Total Value including ( L+M )above :

**NOTE: Excise Duty in case of the indigenous bidder is EXEMPTED**

**4.3) When both foreign and domestic bidders are involved:**

The Grand Total Value of domestic bidder (inclusive of customs duty on imported raw material and components etc, and applicable terminal excise duty on the finished products and Sales Tax) excluding inland transportation to destination & Assam entry tax and Insurance charges worked out as per Para 4.2 above and Grand Total Value of the foreign bidder worked out as per Para 4.1 above (with customs duty as applicable on the bid closing date) and excluding inland transportation to destination will be compared. No price preference will be allowed to indigenous bidders except that for capital goods, the domestic manufacturers would be accorded a price preference to offset CST to the extent of 4 % or actuals, whichever is less subject to 30 % local content norms as stipulated for World Bank Funded project to the satisfaction of OIL. When more than one domestic bidders fall within price preference range, inter-se-ranking will be done on Grand Total Value basis.

Note: If the Government of India revises these evaluation criteria the same as applicable on the bid closing date will be adopted for evaluation of the offers.

- 5) Other terms and conditions of the enquiry shall be as per General Terms and Conditions for Global Tender. However, if any of the Clauses of the Bid Rejection Criteria/Bid Evaluation Criteria (BEC/BRC) mentioned here contradict the clauses in the General Terms & Conditions of Global Tender of the tender and/or elsewhere, those mentioned in this BEC/BRC shall prevail.

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**COMMERCIAL CHECK-LIST**

Sl. No.	PARAMETERS/REQUIREMENTS	BIDDER RESPONSE	REMARKS IF ANY
1.	Whether Original Signed quotation submitted?	YES/NO	
2.	Whether quoted as manufacturer?	YES/NO	
3.	Whether quoted as authorized dealer? [To Specify]	YES/NO	
4.	If quoted as authorized dealer,		
5.	(a)Whether submitted valid and proper authorization letter from manufacturer IN ORIGINAL confirming that bidder is their authorized dealer for the product offered?	YES/NO	
6.	(b)Whether manufacturer's back-up Warranty/Guarantee certificate submitted?	YES/NO	
7.	Whether bid submitted under single stage Two-Bid System?	YES/NO	
8.	Whether ORIGINAL Bid Bond (not copy of Bid Bond) enclosed with the offer? If YES, provide details	YES/NO	
	(a) Amount :		
	(b) Name of issuing Bank :		
	(c) Validity of Bid Bond :		
9.	Whether offered firm prices?	YES/NO	
10.	Whether quoted offer validity of 180 days from the date of closing of tender?	YES/NO	
11.	Whether quoted a firm delivery period?	YES/NO	
12.	Whether quoted as per NIT (without any deviations)?	YES/NO	
13.	Whether any deviation is there in the offer?	YES/NO	
14.	Whether deviation separately highlighted?	YES/NO	
15.	Whether agreed to the NIT Warranty clause?	YES/NO	
16.	Whether Price Bid submitted as per Price Schedule?	YES/NO	
17.	Whether indicated the country of origin for the items quoted?	YES/NO	
18.	Whether all the items of tender quoted?	YES/NO	
19.	Whether technical literature/catalogue/drawings enclosed?	YES/NO	
20.	For Foreign Bidders - Whether offered FOB/FCA port of dispatch including sea/air worthy packing & forwarding?	YES/NO	
21.	For Foreign Bidders – Whether port of shipment indicated? [To specify]	YES/NO	
22.	For Foreign Bidders only - Whether indicated ocean freight up to C&F Kolkata port (Excluding marine insurance)?	YES/NO	
23.	Whether Indian Agent applicable?	YES/NO	
	If YES, whether following details of Indian Agent provided?		
	(a) Name & address of the agent in India – To indicate		
	(b) Amount of agency commission – To indicate		
	(c) Whether agency commission included in quoted material value?	YES/NO	
24.	Whether weight & volume of items offered indicated?	YES/NO	
25.	Whether confirmed to submit PBG as asked for in NIT?	YES/NO	
26.	Whether agreed to submit PBG within 30 days of placement of order?	YES/NO	
27.	For Indian bidders – Whether place of dispatch indicated in the offer? [To specify]	YES/NO	
28.	For Indian bidders – Whether road transportation charges up to Duliajan quoted?	YES/NO	
29.	For Indian Bidders only - Whether offered Ex-works price including packing/forwarding charges?	YES/NO	
30.	For Indian Bidders only - Whether offered Deemed Export prices?	YES/NO	
31.	Whether quoted prices are exclusive of Excise duty?	YES/NO	
32.	For Indian bidders only – whether import content indicated in the offer?	YES/NO	
33.	For Indian Bidders only - whether all Taxes have been indicated categorically?	YES/NO	
34.	Whether all BRC/BEC clauses accepted?	YES/NO	
35.	Whether confirm to accept all clauses of Integrity Pact?	YES/NO	
36.	Whether duly signed Integrity Pact enclosed?	YES/NO	

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**TECHNICAL SPECIFICATIONS FOR INDUCTIVE COUPLED PLASMA SPECTROMETER**

The ICP spectrometer system should be able to determine trace, minor and major elements in diverse kind of samples like minerals, refractory, ores, metals, slags, ferro alloys and high solid samples.

In addition to above, the ICP should also be able to analyze the followings:

1. Trace level elemental analysis of airborne Particulate Matter in ambient air samples.
2. Multi element analysis of aqueous solution like water, waste water, disposal water, underground water etc.
3. Elemental analysis of soil, sludge and coal samples
4. Determination of trace elements in crude oil.
5. Determination wear metals and contamination in pipeline crude oil.
6. Analysis of corrosion products in crude oil transporting pipeline, crude oil transporting product pipeline and in production tubing.
7. Analysis of crude oil tank bottom sludge.
8. Elemental analysis of effluents from industries.

The system should be able to determine, major minor and trace elements in a single run measurement.

**ITEM NO.10: SPECIFICATIONS : INDUCTIVE COUPLED PLASMA SPECTROMETER**

1. The instrument must be a TRUE SIMULTANEOUS reading, bench top through DUAL VIEW ICP-AES/OES system.

2. The instrument must be equipped with an EchellePolychomator with Segmented-array Charge-coupled Device (SCD) detector/Charge Injection Device (CID) Detector/Composite Programmable Array Detector (C-PAD) / CMOS. The resolution of the system must be less than 0.009 nm at 200 nm. The detector must be hermetically sealed and require less/almost nil Nitrogen gas consumption for detector purging. The entire optical system must be thermo-stated.

3. The spectrometer must cover the Spectral Range of at least 167-800 nm or better.

4. The instrument must have facility to monitor gas pressures and flows, water flows, air pressure, exhaust air flow and plasma stability. The system must have interlocks around the plasma compartment door and also the torch loader and the Interlocks must be continuously monitored and if any interlock is interrupted the plasma is shutdown automatically.

5. The system includes complete Dual-Viewing optics under computer and software control. Any wavelength can be used in the radial, axial or mixed viewing modes in a single run.

6. Plasma ignition and shut down must be computer controlled and totally automated.

7. Free running solid state RF generator must run at a frequency of 27.12 or 40 MHz. The generator must have at least power output of 700 – 1500 watts or better, fully computer controlled adjustments. Power output stability must be < 0.1%.

8. All gas flows to control the plasma should have Mass Flow Controller on them. This includes the Plasma gas (coolant), auxiliary gas, nebulizer gas and make up gas. Plasma gas flows must be controlled through Mass Flow Controller (MFC) at flows ranging from 0-20 L / min and Auxiliary gas flows must also be controlled through Mass Flow Controller (MFC) at flows ranging from 0-2 L / min respectively. The nebulizer argon flow must also be controlled using a Mass Flow Controller (MFC).

9. (a) Acid resistive quartz concentric nebulizer with suitable spray chamber and torch should be quoted with equipment for low trace analysis ie two torches.

(b) Also acidic sample Soln., (nearly containing 20% HF) HF resistant nebulizer, spray chamber and suitable torch must be quoted additionally and separately.

(c) For high TDS samples (> 15%) etc. V grooves / Cross flow nebulizer or better with suitable spray chamber and torch must be quoted additionally and separately.

(d) For organic samples suitable nebulizer spray chamber and tubes and torches must be quoted additionally.

10. Argon Saturation / Humidifier accessories must be integrated with equipment.

11. The system must include a four channel or better, variable speed, computer controlled peristaltic pump.

12. Line library should be provided for minimizing the interference during operation of equipment.

13. There should be facility to use standard less / qualitative analysis.

14. The instrument controlling software must be running under Latest Microsoft Windows base operating system having ability to perform simultaneous operation and easy of Data storage and retrieval.

15. The system must be able to read and apply manual or automatic spectral interference correction in addition to background correction. The software must provide automated background correction, whereby the user does not need to decide upon suitable background points for background correction.

16. Optionally application note / relative papers for multi elemental analysis of airborne particulate matter in ambient air samples; in soil, water, sludge, coal, crude oil etc samples, and analysis of Steel, Iron Ore, Ferro-alloy should also be provided with equipment (which includes dissolution process, calibration profile and interference correction).

17. Operation and maintenance manuals should be provided in both hard and soft copies.

18. Warranty for 01 year for instrument should be mentioned in quotation.

19. Necessary consumables those which are not covered under warranty like torches, tubes and O ring etc. for two years uninterrupted operation of the instrument should be quoted as optional with detail name and part no. and unit price for each sample introduction kit.

20. Vendor should supply Imported Chiller re-circulator of appropriate capacity (if required) along with the system should be quoted separately.

21. Other imported related accessories like noiseless Air Compressor should also be quoted separately.

22. Hydride Generator kit should also be quoted separately.

23. Relative standard deviation (R.S.D) of 10 consecutive measurement (Raw, un-ratoned signal) of elements having concentration 1 mg / liter in an acidified aqueous soln. with no strong interferences, should be less than 2.0% for elements Cu, Mn, Ph, Al and Ca.

24. NIST traceable Multi element standard solutions for elements Pb, Hg, Cu, Cd, Fe, Ta, Ga, Te, Cr, Si, Ti, Mg, Mn, V, W, Zn, Nb, Zr, Al, Co, Sb, Sn, Bi, Ge, Y, Ca, Pt, P, S in  $\mu\text{g}/\text{m}^3$  and Ni, As in  $\text{ng}/\text{m}^3$  minimum 100 ml and ICP Tuning Solutions should be quoted separately.

25. Suitable branded computer workstation and Laserjet printer for efficient operation of the instrument along with licensed instrument controlling software should be the part of equipment. The workstation should be preloaded with the licensed instrument controlling software.

#### **ITEM NO 20: Indigenous supplies for ICPS :**

1. Filled Argon Gas Cylinder (Minimum 99.99% pure)  
47 liter water capacity with dual stage SS gas regulator 2 No.
2. Filled Nitrogen Gas Cylinder (Minimum 99.99% pure)  
47 liter water capacity with dual stage SS gas regulator 2 No.

Note: The cylinders should be high pressure as per IS 7285 and valve as per IS 3224 specification. The cylinders should be provided with manufacturer test certificate & CCE Nagpur certificate. The gases should be supplied with purity certificate.

3. Fume Exhaust system (fume hood) 1 No.

4. 10 KVA UPS with 30 minute back up and isolation transformer 1 No.

**SPECIFICATION:**

Power: 10 KVA  
Input voltage: 100-280 volt.  
Output voltage: 220 volt. 10%  
Frequency: 50 Hz  
Insulation: Greater than 6 M Ohms  
Mode of operation: Automatic  
Duty cycle: Continuous  
Type of cooling: Air cooled  
Efficiency: Better than 98%  
Operating temperature: ambient degree C to 55 deg.  
Transformer: All copper wound on CRGO laminations, as per ISO specification for high efficiency and low loss.  
Back up: 30 minutes  
Salient features: Input / Output voltage shown by voltmeter on front panel.