



MSME

MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES
GOVERNMENT OF INDIA

www.dcmsme.gov.in

UDYAMI HELPLINE - 1800 180 6763



No: Pur/M&E/Chem/15-16/MSME-TC/ND

Date: 22.12.2015

MSME - TESTING CENTRE
GOVT. OF INDIA, MINISTRY OF MSME
Capt. Shaheed Gaur Marg, Okhla Phase-III,
New Delhi-110020

TENDER NOTICE

Tender for purchase of **Optical emission Spectrometer** for MSME-TC, New Delhi.

Sealed tenders in duplicate (Technical and financial in separate covers) are invited by the Director, MSME-TC, New Delhi from reputed manufacturers/suppliers for purchase of following instrument for Chemical Lab:-

S.No.	Name of instrument and Specification	Qty.
1.	Optical emission Spectrometer for Ferrous, Aluminium, Copper, Tin and its alloys, Charge couple device based, wave length range 130-800 nm, resolution of 0.012 nm per pixel, with computer along with original software	1 Set
2.	Disc polishing Machine	1 Set
3.	Dual stage Argon regulator (Stainless Steel)	1 No.
4.	Argon Cylinder	2 Nos.
5.	Air conditioner 1.5 Ton	1 No.
6.	3-KVA UPS	1 No.
7.	CRM Sample for calibration for all four bases	1 Set
8.	Small/wire sample adapter	1 Set

Schedule of Tenders:

Cost of Tender Document (In cash/DD)	Closing Date for receipt of Tenders	Date for Opening of Tenders
* Rs. 500-00	29.01.2016	01.02.2016

*Demand draft drawn in favor of "The Director, **MSME-Testing Centre, New Delhi**" OR by Cash in person on above address, from the effective date of issue.

Pre-tender Terms and Conditions

1. Detailed specification of instrument (OES) is available in the Tender Document.
2. The General Terms & Conditions for Tenderers are given at Annexure-I & Payment Terms & Conditions at Annexure-II are available in the Tender Document and could also be downloaded from our website * www.msme-tc-nr.gov.in
3. MSMEs registered with NSIC are exempted from the cost of Tender Documents. However, for availing such exemptions they must submit a valid Registration Certificate issued from the office of the National Small Industries Corporation.
4. In case of postal requests, the MSME-Testing Centre, New Delhi shall not be held responsible for postal delay in issue of tender documents/receipt of completed tenders.
5. Issue of this Tender document does not automatically imply that the Tenderer(s) is/are qualified for the subject tender. **The Director, MSME-Testing Centre, New Delhi, reserves the right to reject the Tender(s) in case it is found at a later date, even after receipt/opening or during evaluation of the tenders that** Tenderer (s) is/are not meeting the stated qualifying requirements.

DIRECTOR

SIZE : W - 14 * H -20

**MSME TESTING CENTRE,
OKHLA, NEW DELHI.**

S.NO. OF TENDER.....

NO. PUR/M&E/CHEM/15-16/MSME-TC/ND

Name of the party in whom favour the tender form has been issued.....

.....
The Director
MSME Testing Centre,
Okhla, New Delhi.

Dear Sir,

1. I/we hereby submit our tender for the
2. I/We, now enclosing herewith the DD No. dated..... for Rs.....(Rupees.....) drawn in favour of the Director, MSME Testing Centre, Okhla, New Delhi towards EMD/Bid security. (Tenders not accompanied with EMD/Bid security along-with Techno-commercial bid shall be summarily rejected.
3. I/We have gone through all the terms & conditions of the tender documents before submitted the same.
4. I/We hereby agree to all terms & conditions stipulated by MSME-TC, New Delhi including delivery /warranty/penalty etc. Quotations for each item are being submitted in separate envelope and shall be considered on their face value.
5. I/We have noted that overwritten entries shall be deleted unless duly cut and re-written and initialled.
6. Tenders are duly signed (No thumb impression should be affixed.)
7. I/We undertake to sign the contract/agreement if required within thirty days from the date of issue of the letter of the acceptance/failing which our/my security money deposited may be forfeited and our/my name may be removed from the list of suppliers at MSME-TC, New Delhi.

NOTE:- ALL TERMS & CONDITIONS SUCH AS TAXES ETC. HAS BEEN INDICATED IN QUOTATIONS FAILING WHICH IT WILL BE PRESUMED THAT THE RATES ARE INCLUSIVE OF ALL TAXES AND OTHER TERMS & CONDITIONS ARE ALSO AS PER YOUR REQUIREMENTS.

YOURS FAITHFULLY,

(SIGNATURE OF TENDERER (s))

Full Address:

1. Witness.
2. Witness.

CHECK LIST FOR TERMS & CONDITIONS

Check List for Terms and Conditions (To be filled by the bidder and submitted along-with the technical bid).

1. Certificate for being in business for more than 2 years _____
2. Certificate for sole ownership/partnership _____
3. Statement of financial standing from bankers _____
4. List of Organization supplied with the same equipment _____

5. Whether rates quoted included all taxes _____
6. Whether rates are quoted as per tenders specifications _____
7. Affidavit that the firm has not been black listed in the past by any Govt. organization/Department.
8. Affidavit that the firm has no vigilance case/CBI/FEMA case pending against him/supplier (principal)

9. Affidavit that the firm is not supplying the same item at the lower rate quoted in the tender to any Govt. organization or any other Institute (Fall Clause) _____
10. Statement of turnover/annual report for each of the last three years are attached. _____
11. Literature of original catalogue of the product is attached for reference _____
12. Details of Name of Beneficiary, Account No. of the beneficiary, IFSC Code of the bank/Branch (Mandate Form) enclosed at page No. _____
13. Comprehensive Guarantee/Warranty Period for _____ and thereafter comprehensive
AMC (including all spares & Labour) YES/NO (Tick the option YES/NO) for further years.
14. Compliance statement with relation to specification.
15. List of Govt. Offices to which supply is made including MSME Ministry.

(NAME OF THE BIDDER)
WITH SIGNATURE & SEAL

MSME - TESTING CENTRE (NR)
GOVT. OF INDIA, MINISTRY OF MSME
Capt. Shaheed Gaur Marg, Okhla Phase-III, New Delhi-110020

GENERAL TERMS & CONDITIONS for Tenderers:

1. Tenders/Quotations may be submitted for **Techno Commercial and Price bids separately in two sealed envelopes**, addressed to the Director, MSME-TC, New Delhi on above address. A single Tenders/Quotations containing Techno Commercial and Price bid together in one envelop shall not be accepted.
2. The offer should be F.O.R. MSME-TC, New Delhi in **Indian currency only**. No import license/L.O.C. shall be provided in any case.
3. The **cost should be inclusive of** all taxes, fixtures, foundation, electrification, installation & commissioning, training & demonstration charges wherever applicable.
4. Store's/Services will be treated as accepted only after successful installation & commissioning of the equipments/s with proper demonstration and training to the consignee's satisfaction at **MSME-TC, New Delhi**.
5. The rates quoted should be **valid up-to 31.03.2016**. All installation & commissioning works should be completed within the stipulated time period as mentioned in the supply order.
6. The **Guarantee and Warranty** period in respect of each Store's/ Services should be clearly spelt out. The **Guarantee** period of the instrument should be atleast for one year. Subsequently warranty period should be for a period of three years after the expiry of Guarantee period.
7. The Tender/Quotation should include the Technical catalog / drawing / foundation details /essential spares & accessories (if any). The Tender/Quotation should also include proof of purchase of tender document, PAN No. & TAN No., Valid authorized dealership certificate from the original manufacturer (in case of tenders are submitted by a dealer on behalf of original manufacturer), Tender/Quotation without these documents shall be considered as incomplete and shall be rejected.
8. Terms and conditions of **AMC/After Sales Service**, wherever applicable, after the expiry of guarantee/warranty period, with estimated cost, may be distinctly specified.
9. Equipments/Instruments wherever applicable should be supplied with a **Calibration Certificate** National traceability (from **National Physical Laboratory, New Delhi**) and **NABL** accredited laboratory.
10. A list containing name & address of the laboratory/organization, to which same/similar instrument has been supplied must be enclosed as a **proof of credentials**.
11. The manufacturers having **ISO-9001 Certification** as well those having efficient After Sales Service back-up in New Delhi **shall be preferred**.
12. The Tenderer/s shall give an undertaking by the authorized signatory to the effect that the Store's/Services shall be **delivered within the stipulated delivery period** or **by the mutually agreed date**, whichever is earlier, once the order is accepted. If the store/s is/are not supplied within the stipulated/ agreed period the order may be treated as cancelled.
13. All the Tenders received before the closing date and time shall be placed to the **Technical Purchase Committee constituted by the Director MSME-TC, New Delhi** and the decision of the committee shall be final. Over and above the **Director MSME-TC, New Delhi reserves the right to accept in full or part or reject any or all the tenders without assigning any reason thereof**. No arbitration / representation in this regard shall be entertained.

14. The EMD amount for purchase of OPTICAL EMISSION SPECTROMETER is Rs. 2,02,475/- only payable in the form of Demand Draft in favour of THE DIRECTOR, MSME-TESTING CENTRE, NEW DELHI.

Annexure-II

**MSME - TESTING CENTRE (NR)
GOVT. OF INDIA, MINISTRY OF MSME
Shaheed Capt. Gaur Marg, Okhla Phase-III, New Delhi-110020**

PAYMENT TERMS AND CONDITIONS

1. The price **once quoted shall be final and no escalation**, if any, made after wards due to any reason what so ever it may be, shall be considered.
2. The **bills in triplicate** mentioning supply order number & date, quotation number and delivery challan numbers addressed to the “**Director, MSME-Testing Centre, New Delhi**” may be submitted to the DDO/Accounts Section.
3. The payment of bills are **subject to satisfactory inspection of the stores at MSME-Testing Centre, New Delhi and/or at supplier’s premises (wherever applicable) and successful installation/ commissioning and demonstration at MSME-TC, New Delhi**
4. As per Govt. of India payment terms **there is no provision of advance payment** to the private parties. However, full payment against the bills may be made through **Cheque/Demand Draft** (for out station parties) or **e-payment** possibly within 30 days of the submission of bills.
5. **Form “D”** under registration & Turnover Rules 1957 for exemption of Central sales tax may be issued against the Challan & Bill Nos. after successful delivery of the instruments and may be collected by the party, if still applicable.
6. The above payment terms and conditions may be altered/discarded subject to any unforeseen changes in central Govt. purchase rules/policies or any other situation/s beyond the control of the competent authority.
7. Any dispute will be subjected to Delhi Jurisdiction.

Pre-tender Terms and Conditions

1. Tender in sealed envelope addressed to the Director, MSME-TC, New Delhi superscribing Quotation for **OPTICAL EMISSION SPECTROMETER** and giving reference of this letter on the top of the envelope may be submitted to the address of this centre.
2. The offer should be F.O.R. MSME-TC, New Delhi in **Indian currency only.**
3. Issue of this Tender document do not automatically imply that the Tenderer(s) is/are qualified for the subject tender. The Director, **MSME-Testing Centre, New Delhi, reserves the right to reject the Tender(s) in case it is found at a later date, even after receipt/opening or during evaluation of the tenders,** that Tenderer (s) is/are not meeting the stated qualifying requirements.
4. The price **once quoted shall be final and no escalation** ,if any, made after wards due to any reason what so ever it may be , shall be considered.
5. The **bills in triplicate** mentioning supply order number & date, delivery challan numbers addressed to the Director, MSME-Testing Centre, New Delhi may be submitted to the DDO/Accounts Section.

Name of the Item: Optical emission Spectrometer for analysis of Ferrous, Aluminium, Copper, Tin and its alloys, Charge couple device based, wave length coverage of 130-800nm, resolution of 0.012nm per pixel, with computer along with proposed analytical programme.

SPECIFICATION FOR OPTICAL EMISSION SPECTROMETER, CCD (CHARGE COUPLED DEVICE) & DISC POLISHING MACHINE: For testing of Ferrous, Aluminium, Copper, Tin and its alloys base with Nitrogen & proposed analytical programme.

The **OPTICAL EMISSION SPECTROMETER** should consist of:

- CCD-Detectors with clear spectrum technology
- Spark stand
- Vacuum system/Inert gas system
- 400mm Rowland circle optics
- 2400 Groves per mm grating
- Paschen range mounting
- Excitation system, spectro plasma generator
- Spectrometer control
- Readout system
- Spark analyser software
- Proposed analytical programme – (as Annex-A, B, C)
- Set of recalibration samples for Fe, Al, Cu and Sn Base.

DETAIL DESCRIPTION OF THE COMPONENTS

CCD (CHARGE COUPLED DEVICE) OPTIC:

- High resolution CCD multi detectors
- Effective wave length range: 165 – 800 nm
- Drift free and stabilized against fluctuations in temperature
- Automatic profiling
- Analysis modules
- Freely selectable analytical modules
- Expansion of additional modules

SPARK STAND:

- Optimized UV – light path
- Sample clamp
- Optimized Argon flow
- Integrated shutter system for optimum plasma viewing
- Easily exchangeable spark stand plate-rapid sample change facilities
- Argon save module for minimum consumption of Argon
- Suitable adaptors to hold samples of small size and thickness
- Exhaust system for flushing out of toxic vapours
- Ensure worker safety

- Open spark stand for high sample throughput and various kinds of sample geometrics
- Excitation system
- Plasma generator
- Fully digitized plasma generator with digital discharge definition, digital pulse generation and digital offline pulse control
- 32 MHz micro-controller
- Analytical time possibly less than 1 minute

SPECTROMETER CONTROL:

- Serial source interface
- 16 inputs for 16 CCDs
- High speed 12 bit ADC
- DSP-controller with 66 MHz

SPECTROMETER PC CONTROL:

- External computer system
- Dual Core processor
- 2GB DDR 2 RAM
- Working platform shall be Windows 7 minimum Min.
- 250 GB Hard disk
- One DVD RW
- Second network card for TCP/IP interface
- Set of SUS/recalibration samples for Fe, Al, Cu and Sn Base Keyboard and mouse
- 19 inch TFT colour monitor
- Colour Laser printer
- 3 USB Ports

ANALYTICAL SOFTWARE:

- User friendly system surface under windows.
- Function keys for routine operation and graphical display of spectra for qualitative analysis
- Global or partial recalibration of analytical program (using both single point standardization as well as multiple point standardization for each alloy.
- Reproducibility check during recalibration and analysis.
- Flagging of results beyond calibration range.
- Input of user defined sample identity codes.
- Automatic and /or user controlled printout of analytical results and statistical data free editable quality database.
- Quality check function.
- Quality identification function.
- Input and calculation of user defined formula.
- Output of intensities, intensity ratios, recalibrated and corrected intensity ratio.
- Matrix correction.
- Automatic switching of spectral lines.

- Calculation of average, standard deviation and variation coefficient for unlimited number of burns.
- Automatic hardware diagnostics.
- Storage of complete spectral information for future evaluation.
- Diagnostic including argon pressure watchdog, vacuum level watch dog, automated spectral drift control with log files, log files for standardization routine and error messages.

IMPORTANT ACCESSORIES:

- Ultra high pure argon gas cylinders -2Nos. with explosive certificates along with dual stage regulator and hose pipe of stainless steel body.
- 3KVA UPS with 30 minutes backup facility.
- Air conditioner of 1.5 ton to maintain room temperature $25\pm 3^{\circ}\text{C}$.
- Supplier should provide standard reference or certified materials for each calibration.
- Small wire sample adapters.

IMPORTANT NOTES:

- Spares and consumable for six months operation.
- Bidder has to declare servicing agents in India.
- The party has to extend the servicing/calibration, warranty of spares/faulty components for a period of 3 years.
- Necessary training is to be given after installation and commissioning at MSME-TC, New Delhi on the same machine.
- The bidder has to supply four sets of operating and service manuals.
- Spectrometer should be pre calibrated and setting of samples should be provided to standardize the spectrometer.

SPECIFICATION FOR DISC GRINDER:

- 3H.P., 2800 RPM, 3Phase motor for rotating disc and suction Blower, Rotating disc 300 mm diameter.
- Polishing papers of 60 grit with 350 mm dia and 40mm bore.
- Spare and consumables for 1 year.

Calibration range Fe base for

	Fe 100		Fe 300		Fe 400		Fe 000		Fe	
	low alloy steel		CrNi-steel		Tool-steel		Orientation		Overview	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
C	0.001	1.6	0.0005	2	0.002	2.6	0.005	4.5	0.001	4.5
Si	0.0005	2.3	0.001	5	0.0005	2	0.005	7	0.0005	7
Mn	0.001	2.5	0.001	20	0.001	2.2	0.005	20	0.001	20
P	0.0005	0.15	0.0005	0.15	0.0001	0.1	0.005	0.5	0.0002	0.8
S	0.0005	0.4	0.0005	0.4	0.0002	0.1	0.005	0.1	0.0005	0.42
Cr	0.001	5.5	0.001	35	0.001	20	0.005	35	0.001	35
Mo	0.001	1.5	0.001	6.5	0.001	11	0.005	10	0.001	11
Ni	0.001	5.8	0.001	50	0.001	5	0.005	50	0.001	50
Al	0.0005	1.4	0.0005	1.4	0.0005	0.4	0.005	1.5	0.0002	1.5
Co	0.0005	0.9	0.0005	13	0.0005	12	0.005	13	0.0005	13
Cu	0.0005	0.8	0.0005	6	0.0005	1	0.005	9	0.0005	8.5
Nb	0.001	1	0.001	3.3	0.001	1	0.005	3.5	0.001	3.3
Ti	0.001	0.5	0.001	2.3	0.0005	0.5	0.005	2.3	0.0005	2.3
V	0.001	1	0.001	1	0.001	11	0.005	11	0.001	10
W	0.001	2.5	0.002	3	0.003	22	0.01	22	0.001	22
Zr	0.001	0.5	-	-	-	-	-	-	0.001	0.24
As	0.0005	0.1	-	-	-	-	-	-	0.0005	0.1
Sn	0.0005	0.25	0.001	0.25	0.0005	0.1	-	-	0.0005	0.25
B	0.0001	0.025	0.0001	0.025	-	-	-	-	0.0001	0.11
Ca	0.0001	0.008	0.0001	0.007	-	-	-	-	0.0001	0.008
Pb	0.001	0.35	0.001	0.3	-	-	0.005	0.2	0.001	0.35
Mg	-	-	-	-	-	-	-	-	0.0001	0.1
Bi	0.0005	0.13	-	-	-	-	-	-	0.0005	0.21
Zn	0.0001	0.035	-	-	-	-	-	-	0.0001	0.03
N	0.003	0.2	0.003	1	-	-	-	-	0.003	1
Te	-	-	-	-	-	-	-	-	0.001	0.04
Sb	0.001	0.1	0.001	0.1	-	-	-	-	0.001	0.25
Ce	-	-	-	-	-	-	-	-	0.001	0.12
La	-	-	-	-	-	-	-	-	0.0005	0.025
Se	0.001	0.05	0.002	0.35	-	-	-	-	0.001	0.35
Ta	0.004	0.22	0.005	0.1	-	-	-	-	0.004	0.22
Fe	internal	Standard	internal	Standard	internal	Standard	internal	Standard	internal	Standard

Calibration range Cu base

M	Cu 200		Cu 350		Cu 000	
	Min	Max	Min	Max	Min	Max
Ag	0.0001	1	0.0001	0.1	0.0001	2
Al	0.0005	3	0.0005	0.5	0.0005	14
As	0.0002	0.5	0.0002	0.25	0.0002	0.5
B	-	-	-	0.1	0.0001	0.1
Be	-	-	-	-	0.0001	2.8
Bi	0.0002	6	0.0002	6	0.0002	8
Cd	0.0001	0.1	0.0001	0.1	0.0001	1.5
Co	0.001	1.5	0.001	0.7	0.001	3.6
Cr	0.0003	0.5	0.0003	0.1	0.0003	2.5
Fe	0.0005	7	0.0005	0.75	0.0005	8
Mg	0.0005	0.2	0.0005	-	0.0005	0.25
Mn	0.0002	5	0.0002	0.5	0.0002	16
Ni	0.0005	5	0.0005	3	0.0005	45
P	0.0001	0.8	0.0001	0.3	0.0001	1
Pb	0.0005	5	0.0005	10	0.0005	22
S	0.0001	0.2	0.0001	-	0.0001	0.2
Sb	0.0005	0.6	0.0005	0.6	0.0005	0.8
Se	-	-	-	1	0.0001	1.25
Si	0.0003	7.5	0.0003	0.1	0.0003	10
Sn	0.0005	5	0.0005	11	0.0005	22
Te	-	-	-	-	0.0005	1
Zn	0.0001	45	0.0001	15	0.0001	45
Zr	0.0001	0.12	-	-	0.0001	0.15
Cu	internal	Standard	internal	Standard	internal	Standard

Calibration range Al base

M	Al 450		Al 500		Al 000	
	Al-Si-Cu	Al-Zn	Al-Si-Cu	Al-Zn	Orientation	Orientation
	Min	Max	Min	Max	Min	Max
Ag Silver	0.0001	1.1	0.0001	1.1	0.0001	1.1
As Arsenic	0.003	0.03	0.003	0.03	0.003	0.03
B Boron	0.0001	0.025	0.0001	0.025	0.0001	0.025
Be Beryllium	0.0001	0.015	0.0001	0.015	0.0001	0.015
Bi Bismuth	0.0005	0.7	0.0005	0.7	0.0005	0.7
Ca Calcium	0.0001	0.02	0.0001	0.02	0.0001	0.02
Cd Cadmium	0.0001	0.35	0.0001	0.35	0.0001	0.35
Ce Cerium	0.0002	0.05	0.0002	0.05	0.0002	0.05
Co Cobalt	0.001	0.5	0.001	0.5	0.001	0.5
Cr Chromium	0.0001	0.7	0.0001	0.7	0.0001	0.7
Cu Copper	0.0002	8.5	0.0002	4	0.0002	9.5
Fe Iron	0.0001	2.2	0.0001	2.2	0.0001	2.2
Ga Gallium	0.0005	0.1	0.0005	0.1	0.0005	0.1
Hg Mercury	0.0005	0.08	0.0005	0.08	0.0005	0.08
In Indium	0.001	0.15	0.001	0.15	0.001	0.1
La Lanthanum	0.0002	0.04	0.0002	0.04	0.0002	0.04
Li Lithium	0.0001	0.035	0.0001	0.035	0.0001	0.035
Mg Magnesium	0.0001	3	0.0001	4	0.0001	12
Mn Manganese	0.0002	1.8	0.0002	1.8	0.0002	1.8
Na Sodium	0.0001	0.035	0.0001	0.035	0.0001	0.035
Ni Nickel	0.0001	3.5	0.0001	3.5	0.0001	3.5
P Phosphorus	0.002	0.07	0.002	0.07	0.002	0.07
Pb Lead	0.0002	1.6	0.0002	1.6	0.0002	1.6
Sb Antimony	0.005	0.6	0.005	0.6	0.005	0.6
Si Silicon	0.0002	25	0.0002	1.6	0.0002	25
Sn Tin	0.0005	0.5	0.0005	0.5	0.0005	0.5
Sr Strontium	0.0001	0.15	0.0001	0.15	0.0001	0.15
Ti Titanium	0.0002	0.3	0.0002	0.3	0.0002	0.3
V Vanadium	0.0005	0.18	0.0005	0.18	0.0005	0.2
Zn Zinc	0.0005	2	0.0005	12	0.0005	12
Zr Zirconium	0.0003	0.25	0.0003	0.25	0.0003	0.25
Al Aluminum	internal	Standard	internal	Standard	internal	Standard