

**M. S. E. TRANSMISSION CO. LTD.**  
**(CIN No. U40109MH2005SGC153646)**

**Office of the Superintending Engineer**

EHV O&M Circle,  
3<sup>rd</sup> Floor, Vidyut Bhawan , Ratanlal Plot , Akola - 444 005  
Ph: 0724- 2434474  
FAX: 0724- 2433299  
e-mail: [se1200@mahatransco.in](mailto:se1200@mahatransco.in)

**No.: SE/EHV/(O&M)/CRL/AKL/TECH/No. 0759**

**Date: 18/06/2019**

**E-Enquiry**

**Sub:- E-Enquiry** towards work of supply of SF<sub>6</sub> gas cylinder for R&M/Emergency work under EHV O&M Circle, Akola.

**Dear Sir,**

Sealed and super scribed quotations are invited towards work of supply of SF<sub>6</sub> gas cylinder for R&M/Emergency work under EHV O&M Circle Akola so as to reach this office on or before **26/06/2019 at 16.00 hrs** positively as per **Schedule "A"** enclosed herewith. The terms and conditions are as follows: -

**Terms & conditions: -**

1. The rates shall be offered as per **Schedule "A"**.
2. Validity period of offer should be not less than 90 days from the date of opening of offer.
3. **Time limit:** The total time limit allowed for supply of SF<sub>6</sub> gas cylinder is within 90 days from the date of receipt of work order.
4. **Penalty:** If the material is not supplied within prescribed time limit, penalty at the rate ½ % percent per week delayed or part thereof subject to max. upto 10% of work order values will be levied from your bill.
5. **Delivery:** - The SF<sub>6</sub> gas cylinder will be delivered at Sub-Station Maintenance Unit Akola. Time being the essence of this order, the delivery period shall be strictly adhered to. The Packing/ Handling & Transportation shall be to your account. The contractor shall be held responsible for all damages / losses during transportation of material.
6. **Qualifying Conditions –**
  - Proof of Pan Card & GST
  - Proof of valid registration of firm under Bombay shop & Establishment Act/SSI/ NSIC if applicable
  - Work Order copy of successfully completed work of supply of SF<sub>6</sub> gas.
7. **Scope of work –** Supply of SF<sub>6</sub> gas cylinder as per enclosed Schedule A & technical specifications. This specification governs the technical & statutory requirements of SF<sub>6</sub> gas filled & stored in cylinders.
8. **Compliance with standards: -**
  - SF<sub>6</sub> Gas: SF<sub>6</sub> (Sulphur Hexafluoride) gas shall conform to IEC: 376 and IS -13072.
  - Gas Cylinders: SF<sub>6</sub> gas cylinders shall conform to the relevant standard.
  - Cylinder Valves: The valves fitted to the cylinders shall conform to ANSI: B57.1 or BS: 341 Part I or IS: 3224.

- 9. Statutory requirements:**
- The Chief Controller of Explosives, Department of Explosives, and Government of India are the statutory authority regulating the importation and use of SF6 gas cylinders. A license has to be obtained by the users from this Authority for importation.
  - Filler's certificate indicating filling ratio at which each cylinder has been filled.
- 10. Conformity to Specifications:** The goods should be of the best quality and shall be conforming to Specification given as per scope of work.
- 11. Submission of Bill:** Bills in triplicate should be submitted to the office of the undersigned along with advance stamped receipt.
- 12. Taxes -** The taxes such as TDS, Labour cess & all other taxes as applicable will be deducted from your bills.
- 13. Payment:** 100% payment will be made against successfully supply of material. Payment will be made by EHV O&M Circle, Akola against receipt of supply in good conditions & against Good receipt, quality inspection of material in SAP.
- 14. Termination of order:** Failure to execute the order in time/ as per specification or any breach of the condition of contract, will result in termination of the contract.
- 15. Jurisdiction: -** The disputes if any against this contract, will be subject to the jurisdiction of Akola District Court only.
- 16. GUARANTEE:** Goods offered shall be guaranteed for a period of 12 months from the date of receipt at site in good conditions. The stores/materials found defective within the above guarantee period shall be replaced/repared by the supplier free of cost, within one month from receipt of intimation. If the defective stores/materials are not replaced / repaired within the specified period as above, the M.S.E.T.C.L. shall recover an equivalent amount from any of your bills.
- 17. Agreement -** An agreement is required to be executed by bidder with the company on stamp paper of Rs. 500/- as per enclosed format. The cost of the stamp paper should be borne by you.
- 18. Security Deposit -** The contractor will have to paid security deposit @ 10 % of value of the work order amount before commencement of contract in terms of DD/Check/BG/FDR and the DD/Check/ should be drawn in favour of The Superintending Engineer, EHV (O&M) Circle, Akola. The amount of SD will be refunded after satisfactory completion of contract period otherwise it will be forfeited without entertaining any objection/request thereof.
- 19.** While submitting the offer, the documents such as PAN card copy, GST registration certificate, work order copy & experience certificate towards supply of SF6 gas must be submitted.
- 20.** The Company's general terms and conditions of contract shall be applicable to this contract and will be bind on you.
- 21.** Right to reject any or all quotations without assigning any reasons is reserved by the undersigned.

**Encl: 1. Schedule "A"**

**2. Technical Specification**

**SUPERINTENDING ENGINEER**

Copy to:-

- 1. The Manager (F&A), EHV O&M Circle, Akola.**
- 2. Mahatransco Website/Notice Board**

**Scope of Work**  
**Scope of supply and Technical Specification**

1. The scope includes supply of SF6 gas as per IEC-376 in cylinder having a capacity of 25KG.
2. Supply of SF6 gas includes the cost of cylinder, Packing, Forwarding, Loading & unloading.
3. The requisite clearances & License, if any from the component Govt. Authority in the name of MAHATRANSCO will be in the scope of contractor.
4. **Gas Cylinders & Valves:** SF6 gas shall be supplied in NEW cylinders. The valves fitted to the cylinder shall be NEW.
5. **Filling Ratio:** The filling ratio (The ratio of weight of liquefiable gas introduced in the cylinder to the weight of the water the cylinder will hold at 15oC) shall not exceed 1.20.
6. **Design & Test Pressures:**
  - The cylinders shall have a minimum designed working pressure of 130 kgf/cm<sup>2</sup> (gauge).
  - The test pressure for hydraulic stretch test shall be at least 210 kgf/cm<sup>2</sup> (gauge).
7. **MARKING :**

**Identification Marking:** Each cylinder shall be durably and legibly marked by stamping, engraving or similar process with the following, preferably at the valve end and off the cylindrical part.

**Other Markings:** Each cylinder shall be marked by stamping, engraving or similar process with the following details:

  - a) Manufacturer's mark.
  - b) Inspection agency's mark
  - c) Rotation No. (Serial No.)

Other specification details as prescribed in the relevant standard.

## Technical Data Sheet for SF6 gas Cylinder as per IEC-376

- a. Physical properties: - Colorless, odorless, nontoxic and non-Flammable
- b. Density at 20° C :- 6.16 g/l
- c. Electric Strength: - 2 & 1/2 times that of nitrogen.
- d. Compatibility: - Upto temperature of about 180° C its compatibility with material used in electrical construction shall be similar to that of nitrogen.
- e. Toxic Impurities: - SF6 gas shall comply with the requirements of the test as per clause 22 of IEC 487 1971.
- f. Impurities: - SF6 gas shall not contain more than the maximum allowable quantities of impurities given below.

### **Impurity or group of impurities & Maximum permitted concentration by mass**

- CF4 – 0.05%
- Oxygen (Air) + Nitrogen – 0.05%
- Water – 15 ppm
- Acidity expressed as ppm – 0.3 ppm
- Hydrolysable fluorides expressed as ppm – 1.0 ppm
- Oil Content - Substantially free from oil
- Purity – 99.9%
- Dew Point - -50oC
- g. Standard size of cylinder: - 25 Kg.
- h. Preferred size of cylinder: - 25 Kg.
- i. Test pressure of cylinder: - According to gas cylinder rules 1981 and company.
- j. Maximum filling ratio:- With IS7285/1974 tropical country.
- k. Tests:-
  - Toxicity test clause no.22 of IEC 376 1971
  - Water content and condensation Temperature B-1971:- Clause nos. 23,24,25 7 26 of IEC:376 Saturn
  - Carbon tetra fluoride oxygen and nitrogen Content 1971:- Clause Nos. 27,28,29,30 & 31 IEC 376
  - Hydrolysable Fluoride: - Clause Nos. 32, 33,34,35,36 & 42 IEC-Content 376 1971.
  - Acidity: - Clause Nos.:- 38,39,40,41 and 42 of IEC – 376 1971.
  - Oil content: - Section 13 of IEC 376 A-1971.

**Contractors Letter Head**

**Ref: -**

**Date:-**

**To,  
The Superintending Engineer,  
EHV O&M Circle,  
Akola**

**Sub: - Submission of quotation** towards work of supply of SF6 gas cylinder for R&M/Emergency work under EHV O&M Circle, Akola.

**Ref :** - Your office E-enquiry No..... Date.....

Respected Sir,

I am ready to supply of SF6 gas cylinder for R&M/Emergency work under EHV O&M Circle, Akola as per terms and condition of E-enquiry cited u/r and same are binding on me. I offered following rates for supply of SF6 gas as per Schedule "A".

**SCHEDULE "A"**

<b>Sr. No.</b>	<b>Particulars</b>	<b>Units</b>	<b>Total Qty to be supplied</b>	<b>Ex-works rates/ unit</b>	<b>Total Amount in Rs.</b>
1	Supply of 25 kg SF6 Gas Cylinder	No.	2		
				Add Taxes	
				<b>Grand Total</b>	

Thanking You.

**Encl: Copy of PAN, GST & relevant Work order.**

**Yours faithfully**

**Contractor's seal & Signature**