

Surat Municipal Institute of Medical Education and Research

Opp. Bombay Market, Umarwada, Surat – 395 010 (Guj.)-India.

Medical Superintendent-Extn.1600
SMIMER Hospital
Phone Nos. 2368040 to 43

FAX No.(0261) 2360306



SMIMER/Hosp/Out/ No.5372

Date: 08 / 11 /2023

To,
M/s _____

Sub : Quotation for brazing work with spare parts required for the Medical Gas Pipeline System of SMIMER Hospital.

Dear Sir,

Quotations are invited for brazing work with spare parts required for the Medical Gas Pipeline System of SMIMER Hospital and as per following terms & conditions.

1. The rates should be F.O.R. destination inclusive of all taxes & charges i.e. freight, GST, packing and insurance etc.
2. Rate should be quoted as per serial number of list.
3. Samples/demonstration will have to given. Items which are not found to our specifications will not be accepted. Catalogue should be provided with quotation.
4. The rejected items shall have to be removed by the supplier at their own cost.
5. Overwriting, erasures or correction in quotations shall not be considered.
6. **Quotations are to be sent in sealed cover as above.**
7. Quotations received after due date will not be considered.
8. Goods shall have to be supplied **within 15 days** or time limit allowed which will be mentioned in Purchase order/work order failing which penalty will be imposed @ 0.2% per day of order amount maximum up to 10%.
9. The successful awardee will be required to place Security Deposit (SD`) @ 5% (Five percent) of the consideration of the contract amount by demand draft or Banker's Cheque of any scheduled / nationalized bank payable at Surat drawn in favour of "Commissioner, Surat Municipal Corporation". Security deposit must be submitted within 15 days or time limit allowed in work order/Purchase order from the date of notice of award of contract, failing which a delay penalty @ 0.065% of the amount of security deposit will be imposed for each day.
10. On awarding the contract, the awardee agency will have to enter into a written agreement using Stamp Paper value of Rs.300/-.
11. The Security Deposit will be returned after the completion of defect liability period and after the fulfillment of obligation created under the contract awarded.
12. **Quotations sent by post or courier services is preferable.**
13. Guarantee/warranty should be mentioned in quotation.
14. Defective goods will not be accepted.
15. GST CLAUSE FOR CONSTRUCTION/ ERECTION/ COMMISSIONING/INSTALLATION/ REPAIRS/ MAINTENANCE/RENOVATION/ FABRICATION OF STRUCTURE INCLUDING BUILDING(MEANS ALL WORKS CONTRACT/TURN KEY PROJECTS/SUPPLY OF MATERIAL/GOODS)

GST (Goods & Service Tax) has come in existence from 1st July, 2017. Contractor/Successful Bidder is bound to pay any amount of GST prescribed by the Govt. of India as per the Terms of contract agreed upon during the course of execution of this Contract.

During the course of execution of contract, if there is any change in Rate of GST(Goods & Service Tax) by the Government, the same shall be reimbursed / recovered separately by SMC, subject to **the submission of original Receipt/Proof for the amounts actually remitted by** the successful Tenderer /Contractor to the Competent Authority along with a Certificate from Chartered Accountant of Contractor / Successful Bidder certifying that the amount of GST paid to the Government and the same shall be intimated / submitted/claimed within 30 (Thirty) Days from the date of payment. Remittance of GST within stipulated period shall be the sole responsibility of the Successful Bidder/Contractor, failing which, SMC may recover the amount due, from any other payable dues with SMC and decision of Municipal Commissioner shall be final and binding on the Contractor / Successful Bidder in this regard. Further, the non-payment of GST to the Government may lead to the termination of the contract and forfeiture of Security Deposit / Performance Guarantee Amount.

If imposition of any other new Taxes /Duties /Levies / Cess or any other incidentals etc. or any increase in the existing Taxes / Duties / Levies /Cess or any other incidentals etc.(Excluding GST) are imposed during the course of the contract, the same shall be borne by the Contractor / Successful Bidder only, in no case SMC shall be liable for the same.

The contractor will submit the invoice to the SMC having GSTIN of SMC mentioned therein and the taxes shall be shown separately on the face of the invoice so as to claim as ITC by SMC.

Envelope should bear on top: "Quotation for brazing work with spare parts required for the Medical Gas Pipeline System of SMIMER Hospital of SMIMER Hospital"

Quotations are to be sent in sealed cover addressed to office of the Medical Superintendent, SMIMER Hospital by post/courier so as to reach on or before Dt. 30/11/2023 up to 5:00 P.M. Quotation received thereafter will not be accepted.

Medical Superintendent
SMIMER Hospital

Overview:

SMIMER Hospital invites sealed tenders from eligible and experienced contractors for the brazing work of copper pipes with fittings connected to various units of Medical Gas Pipeline System (MGPS). The successful bidder will be expected to provide round-the-clock availability, execute necessary brazing work with the utmost care to ensure patient and property safety, and take responsibility for oxygen cylinders, LPG gas cylinder & other safety throughout the project.

Scope Of Work:

The scope of work includes brazing work related to leakage, repair, replacement & addition of copper pipes with fittings in the existing Medical Gas Pipeline System at SMIMER i.e., all distribution piping and connecting terminal units for oxygen, nitrous oxide, vacuum and compressed air according to EN 13348 standards, ensuring leak-proof connections and efficient thermal performance. The distribution piping for Oxygen includes Copper pipes with accessories/fittings attached with Liquid Medical oxygen Pressure regulating Skid output, PSA Plants output, Oxygen manifolds & from MGPS plant room distributed to all Wards/ICUS/OT/Other areas connecting terminal outlets.

Brazing work includes any work where the copper pipes with fittings need brazing including brazing of terminal outlets (Air, Oxygen, Nitrous Oxide & Vacuum), isolation valves, copper fittings for connecting pressure regulators, fittings for medical gas alarm panel, Copper pipes with fittings connecting LMO & PSA plants to hospital MGPS, interconnecting copper pipelines with fittings in central medical air compressor system, in the central vacuum system & in the air dryer system, O₂ & N₂O manifold outputs.

All emergency calls must be attended immediately without any delay whenever the call is made by any of the MGPS committee members or their authorized representatives or by any concerned department staff.

Execution of brazing work should be done with precision & expertise.

Ensuring patient and property safety during all phases of work.

Compliance with all relevant regulations and codes.

Spares parts price list as per Annexure-1 must be quoted.

The bidder can visit the hospital to get a complete overview of the Medical Gas Pipeline system distribution setup before bidding.

Key Requirements:

1. The contractor must be available round the clock, throughout the year, to promptly respond to emergencies and scheduled work.
2. Brazing work must be carried out with the utmost care and adherence to quality standards.
3. Safety of patients, staff, and property is paramount throughout the project.
4. The contractor is responsible for safe handling and management of oxygen cylinders and LPG gas cylinders during the work.

Safety precautions to be followed while executing brazing in Oxygen line: -

Brazing in an oxygen copper pipeline requires strict adherence to safety precautions due to the potential risks associated with oxygen-rich environments. Precautions such as:

1. **Closing the O₂ valve:** Before starting any brazing work for leakages/repair/replacement/addition in the copper pipeline, the person must ensure that the oxygen supply to it is closed.
2. **Purging:** Ensure the pipeline is properly purged with an inert gas (like nitrogen) to remove any residual contaminants or flammable gases before introducing oxygen.
3. **Cleanliness:** Thoroughly clean the copper surfaces to be brazed to prevent the presence of flammable materials, oils, or contaminants that could react in an oxygen-rich environment.
4. **Flame Arrestors:** Install flame arrestors or flashback arrestors on the equipment to prevent the flame from traveling back into the oxygen supply.

5. **Avoid Grease and Oil:** Keep lubricants, greases, and oils away from the work area, as they can easily ignite in the presence of oxygen.
6. **Use Proper Tools:** Use appropriate tools and equipment designed for oxygen service to prevent the risk of ignition or combustion.
7. **Ventilation:** Ensure proper ventilation in the workspace to disperse any potential accumulation of oxygen.
8. **Personal Protective Equipment (PPE):** Wear appropriate PPE, including flame-resistant clothing, safety goggles, and gloves.
9. **No Smoking:** Strictly smoking is prohibited in the work area and the bidder must maintain a "no open flame" policy.
10. **Qualified Personnel:** Only a trained and qualified personnel should perform brazing in oxygen pipelines.
11. **Fire Watch:** After brazing, the bidder needs to maintain a fire watch for a certain period to ensure that no smouldering or ignition occurs.

Eligibility Criteria:

The bidder must meet the following criteria:

1. Proven experience in MGPS installations and brazing work.
2. Must have minimum 5 years' experience in MGPS related work in Hospitals.
3. Adequate resources to ensure 24/7 availability
4. Demonstrated commitment to safety and quality
5. Familiarity with relevant regulations and codes.
6. Strong track record in handling oxygen and gas cylinders

Copper Pipe Materials& relevant standards to be followed during the contract period: -

Copper pipes : Solid drawn, seamless, de-oxidized, non-arsenical, half-hard, tempered and de-greased copper pipe conforming to EN 13348 latest standards. All copper pipes shall be de-greased & delivered capped at both ends. The pipes shall be accompanied with manufacturers test certificate for the physical properties & chemical composition. Copper pipe shall also have third party inspection certificate from Lloyd's' Register Services. The Pipe Sizes to be used are from among as under: Copper fittings shall be made of copper and suitable for a steam working pressure of 17 bar and especially made for brazed socket type connections. All copper fittings shall be conforming to EN 1254-1, should be factory degreased, certified, and individually packed and identified for medical use. Fittings should be kite marked up to 54 mm size.

Isolation valves: The isolation valves shall be non-Lubricated, 900 turn level, Ball type, suitable for oxygen service. All valves shall be pneumatically tested for twice the working pressure and factory degreased for medical gas service before supply.

Installation, Testing& repair/replacement:

Installation of piping during any repair/replacement/addition work shall be carried out with utmost cleanliness. Only pipes, fittings and valves which have been de-greased and fittings brought in polythene sealed bags shall be used at site. Pipe fixing clamps shall be of nonferrous or non-deteriorating plastic suitable for the diameter of the pipe. All joints shall be made of copper to copper and brazed by silver brazing filler material without use of any flux. All brazing shall be done using a brazing rod CP 104 (5% silver copper phosphorous brazing alloy) and copper-to-brass or gunmetal shall only be joined using brazing rod AG 203 (43% Silver-copper-zinc-brazing alloy) manufactured to EN-1044. Inert gas welding technique should be used by oxygen-free Nitrogen gas inside copper pipes while brazing to avoid carbon deposition.

Adequate supports shall be provided while laying new pipelines to ensure that the pipes do not sag. Suitable sleeves shall be provided wherever pipes cross through walls / slabs. All pipe clamps shall be nonreactive to copper. After erection, the pipes shall be flushed and then pressure tested with dry air at

a pressure equal to 1.5 times of the working pressure or 150 psi, whichever is higher for a period of not less than 24 hours. All the piping system after brazing work shall be tested in the presence of the biomedical engineer or his authorized representative. All exposed pipes should be painted with two coats of synthetic enamel paint and colour codification should be as per IS: 2379 of 1963. A work completion certificate must be provided by the contractor at the end of each work carried out during the contract period.

The emergency calls and other brazing work related to repair/replacement/addition of copper pipes with fittings must be carried out within the required time, as specified by the biomedical engineer or MGPS Committee member at the time. A service report must be prepared by the contractor for all awarded work or emergency calls attended during the contract period. The same with bills must be put up to the MGPS committee for approval.

The contract can be terminated any time if there is any breach or delay in executing the above-mentioned work as per standards & terms and conditions.

Payment terms: -Payment will be made after receiving a satisfactory work report from the MGPS committee.

PRICE BID - A For Brazing work

Sr. No	Work Description	Rate (in Rs)	GST (In Rs)	Total Amount (in Rs)
	A	B	C	D
1	Brazing work Per joint (Emergency)			
2	Brazing work Per joint (Routine)			
Total-A				

Note:-

- (1) Brazing work as described above in the tender. The above rates will not be taken into consideration if the numbers of joints are more than 10 per order; for e.g., expansion/addition work, depending on the project, a labour charge based on the work must be quoted by the same L1 bidder.
- (2) The above rates will be fixed for one year.

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SMIMER Hospital

Price Bid - B						
<u>Spares required for Medical Gas Pipeline System in SMIMER Hospital & DCHC SMIMER plus</u>						
Sr. No	Description Of Spares	Qty Unit	Warranty	Unit Rate in Rs	GST in Rs.	Net Unit Rate in Rs Including GST
A	B	C	D	E	F	G
1	British standards Oxygen Terminal Outlet point (SMIMER)	1 No.				
2	Swedish standards Oxygen Terminal Outlet point DIN type (DCHC)	1 No.				
3	British standards Nitrous Terminal Outlet point	1 No.				
4	British standards Air Terminal Outlet point	1 No.				
5	British standards Vacuum Terminal Outlet point	1 No.				
6	Saddle 12 mm non deteriorating plastic	1 No.				
7	Saddle 15 mm non deteriorating plastic	1 No.				
8	Saddle 22 mm non deteriorating plastic	1 No.				
9	Saddle 28 mm non deteriorating plastic	1 No.				
10	Saddle 35 mm non deteriorating plastic	1 No.				
11	Saddle 42 mm non deteriorating plastic	1 No.				
12	Saddle 12 mm M.S. nonreactive to copper	1 No.				
13	Saddle 15 mm M.S. nonreactive to copper	1 No.				
14	Saddle 22 mm M.S. nonreactive to copper	1 No.				
15	Saddle 28 mm M.S. nonreactive to copper	1 No.				
16	Saddle 35 mm M.S. nonreactive to copper	1 No.				
17	Saddle 42 mm M.S. nonreactive to copper	1 No.				
18	High Pressure Tubing White-O2, Blue-N2O, Yellow-Vacuum, Black -Air for Surgeon Pendant	1 Mtr.				
19	Isolation ball valves 12mm Brass	1 No.				
20	Isolation ball valves 15mm Brass	1 No.				
21	Isolation ball valves 22mm Brass	1 No.				
22	Isolation valves 28 mm brass	1 No.				
23	Isolation ball valves 35mm brass	1 No.				
24	Isolation ball valves 42mm Brass	1 No.				
25	Copper pipe 12mm O.D & 0.7mm thick EN 13348 latest standards	1 Mtr				
26	Copper pipe 15mm & 0.9mm thick EN 13348 latest standards	1 Mtr				

Sr. No	Description Of Spares	Qty Unit	Warranty	Unit Rate in Rs	GST in Rs.	Net Unit Rate in Rs Including GST
A	B	C	D	E	F	G
27	Copper pipe 22mm & 0.9 mm thick EN 13348 latest standards	1 Mtr				
28	Copper pipe 28mm & 0.9mm thick EN 13348 latest standards	1 Mtr				
29	Copper pipe 35mm & 1.2mm thick EN 13348 latest standards	1 Mtr				
30	Copper pipe 42mm O.D. & 1.2 mm thick EN 13348 latest standards	1 Mtr				
31	Adjustable pressure regulators with black knob ,input pressure upto 15 bar & output pressure of 5 bar , flow rate of 4000 LPM	1 No.				
32	Adjustable pressure regulators for high flow rate of 100Nm3/hr input pressure upto 15 bar & output pressure of 4.2 to 5 bar Body:- Aluminum, Diaphragm: Synthetic Rubber, Trim Parts : Brass	1 No.				
33	Ceiling Thread Hanger rod with nuts & accessories	1 set				
34	Elbow Connection variable size	1 No.				
35	Tee Connection variable size	1 No.				
36	O rings for (O2, N2O, Vacuum, Air)	1 set of 50 piece				
	Total-B					
Note:-						
The above spare price rates will be fixed for one year. All the above spares must have necessary quality certificates as mentioned in the quotation.						
The bidder can visit the hospital to get a complete overview of the Medical Gas Pipeline system distribution setup before bidding.						
Price evaluation will be done by combining Price bid-A & Price Bid-B i.e. grand total = Total A + Total B.						

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