

Indian Institute of Technology Kanpur

Center for Nano Technology

Enquiry No: SCDT/CNT- 07/2012

Date: 03/12/2012

Sealed quotations are invited for the given below items for the gas line Tubing “Sandvik” make with all the detail technical specifications, quote should reach latest by 5:00 PM on or before 10th December, 2012 to the under mentioned address.

SPECIFICATION OF GAS LINE MATERIALS:

1. Materials are required for Nitrogen, Compressor Air and Argon Lines:

Sl.No	Items Description with (Part No)	Qty
1	SSTubing 1--/2"ODx0.049"WT (SS-T8-S-049-6ME) (THT-3R60-12.71.24)	150mtrs
2.	SS Tubing-1/4"ODx0.035"WT(SS-T4-S-035-6ME) (THT-3R60-6.35-0.89)	500 mtrs

2. Materials are required for Oxygen (O2) Line:

Sl.No	Items Description with part No	Qty
01	SS Tubing 1/2"ODx0.049"WT (SS-T8-S-049-6ME) (THT-3R60-12.7-1.24)	45. mtrs
02	SS Tubing 1/4"OD x 0.035"WT (SS-T4-S-035-6ME) (THT-3R60-6.35-0.89)	150mtrs

SPECIFICATIONS FOR SS TUBING:

1. Tubing Manufacturer should have ISO 9001/9002 certification and as well as product approvals from TUV and JIS.
2. Quality System of the Tubing Manufacturer should have approval from ASME quality system certificate as material organization.
3. Tubing should be dual certified as TP 316/316L. Also, tubing should be clearly marked with heat code, lot code, outer diameter and wall thickness as in the inspection certificate.

4. Testing of the tubing should be in accordance with SS 219711, SS219713, DIN17458 TC1, NFA 49-117, ASTM A213, ASTM A269, ASTM A789 and ASTM B667.
5. Tubing sizes up to 1" OD should be bright annealed. Tubing with outside diameter larger than 1" OD should be supplied in annealed and pickled condition.
6. Tubing should have a minimum of 2.5% Molybdenum so as to ensure high resistance to corrosion.
7. Tubing should have carbon content $\leq 0.030\%$.
8. The tubing should be supplied with plugged ends.
9. Tubing hardness should be max. Of HRB 80.
10. Tolerance for 316/316L tubing from 6 to 42 mm OD as per DIN/2391/EN 10305-I and tolerance on wall thickness should be $\pm 10\%$.
11. Tubing manufacturer/ Authorized distributor should furnish an "INSPECTION CERTIFICATE" indicating:
 - a. Material description.
 - b. Steel making process
 - c. Heat Code
 - d. LOT code
 - e. Leak test: Eddy current test according to ASTM A-1016.
 - f. Tests results of chemical composition, tensile tests and hardness test should be clearly mentioned.
 - g. PMI test.
 - h. Flaring test.
 - i. Flattering test.
12. "INSPECTION TEST CERTIFICATE" should be as per acc to EN 10 204

Terms & conditions for supply of above mentioned articles

1. Prices should be FOR IIT Kanpur
2. IITK is exempted from excise/custom duty
3. Quotations should have a validity of a minimum of 60/90 days.
4. The delivery time should be clearly mentioned. Shorter delivery time may be given a preference.
5. Maximum educational discount, if any applicable, should be clearly mentioned
6. The terms of Warranty should be clearly mentioned, those providing longer warranty, better sales service and support, with written evidence will be given preference.
7. The rate quoted should be inclusive of sales tax and other taxes including freight charges
8. Terms and conditions for the payment, including the banker's name of the principal and the account number, if any, for electronic transfer.
9. Include proprietary item certificate if applicable
10. Technical literature and catalog to support your product

11. Indian agency commission if applicable (should be certified by the principal if no agency Commission is applicable).
12. **Only those supplying All of the items shall be considered**

Kindly send your quotation before respected date in the following address:

**Dr. Y.N Mohapatra
Samtel Center for Display Technologies
Indian Institute of Technology Kanpur
Kanpur, Uttar Pradesh, PIN 208 016
India
Tel.: +91 512 259 6626, 6675**