बीरबल साहनी पुरावनस्पतिविज्ञान संस्थान, लखनऊ
BIRBAL SAHNI INSTITUTE OF PALAEOBOTANY, LUCKNOW
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बी सा पु सं /III/भंडार एवं क्रय/ ८-५८7

Date: 18.07.2014

SPEED POST

Convener, Website Committee
BSIP, Lucknow

High Pressure Seamless Steel Gas Cylinder with gas (Specification Attached)
Attach Authorization or ISO Certificate alongwith quote separately for each item.

Subject: ----------

Dear Sirs,

This Institute intend to purchase item mentioned above. Sealed quotations are invited so as to reach this office on or before 5:00 P.M. on 04.08.2014 duly superscribed by **"High Pressure Seamless Steel Gas Cylinder with gas"** due to open in presence of vendors at a later date to be notified.

While submitting quotation please note that:

1. The material may either of indigenous manufacturer or of foreign make, available from ready stock. Any offer to supply on forward Delivery Basis under suppliers own quota license will also be considered.
2. The price quoted should be F.O.R. Destination.
3. Your rates should include packing, insurance and forwarding charges.
4. The rates of Sales Tax should be clearly indicated wherever chargeable. The tendered should also indicate Central/Sales Tax Registration Number and date in this quotation.
5. Specific mention should be made whether the offer is for supplies available ex-stock. In case the officer is on Forward Delivery basis, firm delivery period must be indicated.
6. The cover should be sealed and superscribed "Quotation for **"High Pressure Seamless Steel Gas Cylinder with gas"** must be written on envelope. The quotations not complying the procedure will be rejected.
7. Payments will be made by crossed cheque on The Indian Overseas Bank, Lucknow only after receipt and acceptance of supply and installation/ if required satisfactory.
8. The acceptance of the quotation will rest with the Director who does not bind himself to accept the lowest quotation and reserves the right to himself to reject or partially accept any or all the quotation received without assigning any reasons.
9. The quotations are liable to be cancelled if any of the above mentioned conditions are not complied with.

Yours faithfully,

Mazumdar

(Swapna Mazumdar)
Section Officer
Store & Purchase Section

Shri Pawan Kotiyar
Shri Y P Singh
Shri Vijay Govind

for a-c.

23/7/14

Specifications for He, CO2, O2, N2, H2, CO, Ar, SO2, He + H2 And He + CO2 Gas Cylinders

New High Pressure Seamless Steel Gas Cylinder with gas, Flat type, Concave Bottom, Cylinder as per IS: 7285 [Part II], Complete with Valve, Valve as per IS; 3224, Painted as per specified under Gas Cylinder Rules, 2004 and supported with manufacturer's test certificate and approval from Chief Controller of Explosive, Govt. of India, Nagpur.

Material	Seamless Steel, Carbon steel, Aluminium
Water capacity	46.7 Ltrs.
Gas Capacity	7.0 Cu.m.
Hydrostatic Test Pressure	250 Kgf/cm^2
Max. Working Pressure	150 Kgf/ cm^2 at 15^0 C
Standard	IS:7285 [PartII] 2004
Outer Dia	232.0mm
Min. Wall Thickness	5.2 mm
Length (approx.)	1365 mm

Specification for the Gases

Sr. No.	DESCRIPTION OF GOODS
1.	Carbon Steel new cylinder of 47 Ltr. water capacity filled with High Purity Helium Gas with Manufacturing and Explosive Certificate. **(No. of Cylinders with Gas: 6)** Filling of High Purity Helium Gas (99.999%) with Test Certificate with Maximum Impurity Levels:- O2<2ppm; H20<2ppm; CO+CO2<0.5ppm; THC<0.5ppm; N2<5ppm
2.	Carbon Steel Cylinder of 47 Ltr. water capacity filling with High Purity Argon Gas with Manufacturing and Explosive Certificate. **(No. of Cylinders with Gas: 16)** Filling of High Purity Argon Gas (99.999%) with Test Certificate with Maximum Impurity Levels:- O2<2ppm; H2O<2ppm; CO2<0.5ppm; CO<0.5ppm; N2<5ppm; THC<0.5ppm
3.	Carbon Steel Cylinder of 47 Ltr. water capacity filling with High Purity Nitrogen Gas with Manufacturing and Explosive Certificate. **(No. of Cylinders with Gas: 2)** Filling of High Purity Nitrogen Gas (99.999%) with Test Certificate with Maximum Impurity Levels:- O2<2ppm; H2O<2ppm; THC<0.5ppm; CO+CO2<0.2ppm
4.	Aluminum Cylinder capacity of 47 Ltr. water capacity filling with 99.98% SO_2 and Manufacturing and Explosive Certificate. **(No. of Cylinders with Gas: 1)** Filling of Calibration SO_2 Gas in New 47 Ltr. water Capacity Aluminum Cylinder. Impurity Levels: H2O<100ppm H2SO4<25ppm

	Non volatile residue<50ppm
5.	Aluminum Cylinder of 47 Ltr. water capacity filling with99.99% CO and with Manufacturing and Explosive Certificate. **(No. of Cylinders with Gas: 1)** Filling of CO Calibration Gas in New 47 Ltr. water Capacity Aluminum Cylinder. Impurity Levels: CO2<30ppm H2O<10ppm N2<40ppm O2<10ppm THC<10ppm
6.	Carbon Steel Cylinder of 47 Ltr. water capacity filling with High Purity Hydrogen Gas with Manufacturing and Explosive Certificate. **(No. of Cylinders with Gas: 2)** Filling of High Purity Hydrogen Gas (99.999%) with Test Certificate with Maximum Impurity Levels:- O_2<2ppm; H_20<2ppm, THC<1ppm; $CO+CO_2$ <0.2ppm
7.	Carbon Steel Cylinder of 47 Ltr. water capacity filling with High Purity Oxygen Gas with Manufacturing and Explosive Certificate. **(No. of Cylinders with Gas: 2)** Filling of High Purity Oxygen Gas (99.999%) with Test Certificate with Maximum Impurity Levels:- H20<5ppm; CO<1ppm; THC<1ppm; N2<15ppm
8.	Carbon Steel Cylinder of 47 Ltr. water capacity filling of 0.4% CO_2 and Balance Helium with Manufacturing and Explosive Certificate. **(No. of Cylinders with Gas: 2)** Filling of Calibration Gas Mixture in New 47 Ltr. water Capacity Carbon Steel Cylinder. **Description** **Ratio** **Unit** **Type** CO_2 00.4 % Vol/Vol Helium Balance **Preparation Tolerance** : ± 20% **Certificate Accuracy** : ± 2% **Stability** : 12 Months
9.	Carbon Steel Cylinder of 47 Ltr. water capacity filling of 3% Hydrogen and Balance Helium with Manufacturing and Explosive Certificate. **(No. of Cylinders with Gas: 2)** Filling of Calibration Gas Mixture in New 47 Ltr. water Capacity Carbon Steel Cylinder. **Description** **Ratio** **Unit** **Type** Hydrogen 3.00 % Vol/Vol Helium Balance **Preparation Tolerance** : ± 20% **Certificate Accuracy** : ± 2% **Stability** : 12 Months
10.	Carbon Steel Cylinder of 47 Ltr. water capacity filling of CO2 with Manufacturing and Explosive Certificate. **(No. of Cylinders with Gas: 4)** Filling of Calibration CO2 Gas in New 47 Ltr. water Capacity Carbon Steel Cylinder, with Maximum Impurity Levels:- CH4 < 0.5 ppm CO < 1 ppm H2O < 2 ppm N2 < 8 ppm O2 < 2 ppm