

TECHNICAL SPECIFICATION & SCOPE OF SUPPLY

FOR LPG BASED METAL CUTTING GAS

1.0 Requirement and details of LPG based metal cutting gas:-

- 1.1 Supply of LPG based metal cutting gas "Nanocut" of M/s IOCL or "Razorcut" of M/s HPCL.
- 1.2 The gas after natural vaporization shall conform to IS:4576 and having distinct mercaptan odour as per OISD norms. The vapour pressure shall be as per table-1 column 4 of above IS.
- 1.3 Quantity : 60 MT ($\pm 20\%$) to be delivered in 2 year period, whichever is earlier.
- 1.4 Consumption per day : 100 to 200 kgs as per requirement with max flow rate of 40 kgs/hr in morning hours.
- 1.5 Gas supply : The gas shall be supplied in lot of 20 Nos commercial gas cylinders, each of 47.5 kgs (min.) content weight.
- 1.6 Storage/gas supply system : BHEL has vapour outlet type (VOT) cylinder bank storage and gas supply system as per technical and statutory requirements of IS 6044 (part-1). The total volumetric storage capacity of the system is 1.9 MT (i.e. 40 Nos. x 47.5 kgs).
- 1.7 Approval & certification : The necessary approval and certification of the above storage/gas supply system from concerned authorities/statutory bodies for intended use as per IS 6044 (part-I) shall be in the scope of gas supplier as and when required, for which no charges will be paid by BHEL. BHEL will do necessary modification as suggested/recommended, if required.

2.0 Inspection & quality

- 2.1 Inspection of material will be done at BHEL works and the same shall be acceptable to supplier, however BHEL may inspect material at source also.
- 2.2 The product compliance certificate shall be submitted by supplier whenever required.

3.0 Transportation

- 3.1 The transportation of LPG based metal cutting gas in cylinders, unloading and loading of filled and empty cylinders respectively, at BHEL site shall be in supplier's scope.
- 3.2 Vehicle carrying LPG based metal cutting gas inside BHEL should have spark arrestor.
- 3.3 Supplier shall ensure compliance of the requirements as per Motor Vehicles Act 1988.

4.0 Delivery

- 4.1 The supplier may have to supply maximum 40 cylinders of 47.5 kgs each in first lot within 15 days of intimation, if required.
- 4.2 Further delivery will vary as per requirement (approx 3 MT $\pm 20\%$ per month). After first lot, each lot shall be of 20 cylinders of 47.5 kgs each. An advance intimation of 7 days will be given by BHEL for supply of cylinders in lot.
- 4.3 The delivery period is 7 days excluding the date of intimation from BHEL, after which LD will be applicable.

5.0 Price variation clause

- 5.1 Price variation clause will be applicable for metal cutting gas as per change in retail selling price (RSP) of packed commercial LPG cylinders of 47.5 kg for Bhopal location as given below (no other factor will be considered) :-

$$P_n = P_i + (L_n - L_i)$$

P_i & P_n = Initial & new price of LPG based metal cutting gas (Rs/kg)

L_i & L_n = Initial & new RSP (Rs/kg) of commercial LPG cylinders of 47.5 kg at Bhopal

- 5.2 (a) The PVC shall be applicable from start of supply. The base RSP of packed commercial LPG cylinders of 47.5 kg at Bhopal must be given in offer.
- (b) The RSP of packed commercial LPG cylinders of 47.5 kg at Bhopal location on the date of dispatch endorsed by OEM on their letter head is to be submitted along with the invoice for applicability of the PVC clause.

6.0 Security Deposit

No security deposit will be submitted by BHEL against gas cylinders.

7.0 PO/Contract closure

The PO/contract may be short closed by BHEL any time if required, by giving notice of 3 months to vendor.

Note:- Vendor should submit the confirmation and acceptance of the above points (from 1 to 7) by submitting the signed & sealed copy of above specification sheet along with technical bid. If required separate sheet may be attached for further detailing/deviation.