

GENERAL CLAUSES

1. PERFORMANCE :
The equipment should be capable of operating at specific accuracy ;and performance with minimum maintenance.
2. APPEARANCE :
It should have nice appealing appearance with rust proof varnish and attractive colour finish.
3. SAFETY :
Suitable Electrical & Mechanical Interlocks should provided to prevent the equipment from damage and for safety of the operator. Necessary protection device (like : out put / load protection, short circuits and earth fault) should be provided.
Any other protection as recommended by the manufacturer.
4. ENVIRONMENTAL CONDITIONS :
All Electrics are to be suitably tropicalised to IS or BS Standards for operation under environmental conditions as specified below :
Ambient temperature = 5 deg. C (min.) & 50 Deg. C (max.)
Relative humidity = 20% (min.) & 95% (max.)
5. MAINTENANCE :
 - 5.1 All the parts of the equipment should have easy accessibility for maintenance, inspection and repair works without need for excessive dismantling. It will be preferred if one set of maintenance manual is sent alongwith the offer.
 - 5.2 Any special tool / equipment required for maintenance and repair work should be indicated and quoted separately with item wise price and details.
 - 5.3 Details of service facilities extended by the supplier to the buyer should be furnished.
 - 5.4 Service contract details after the guarantee period should also be furnished.
6. INSPECTION :
 - 6.1 The equipment will be inspected and tested by BHEL completely at the manufacturer's works prior to dispatch.
 - 6.2 Four copies of inspection test report should be furnished alongwith the equipment.
7. ACCESSORIES :
 - 7.1 The equipment should be complete with all standard accessories and tool kit.
 - 7.2 Optional accessories should be quoted separately with item wise price and details.
- 8 SPARES :
Recommended spares with item wise price and details for 2 years operations should be quoted separately.

9 ERECTION & COMMISSIONING :

- 9.1 Will be done by ;supplier. Charges for erection and commissioning to be quoted separately. Civil work if any will be done by BHEL as per supplier's Drawing.
- 9.2 The Commissioning Engineer should give full demonstration of the equipment on one or two actual jobs and prove the equipment accuracy.
- 9.3 TRAINING :
Supplier have to trained our Technicians / Engineers / Doctors for Operation and Maintenance of the equipment. Details & Place of training should be confirmed.

10 GUARANTEE :

- 10.1 The manufacturer's guarantee in 4 copies should furnished with respect to design material construction performance and against any manufacturing defects for a period of 18 months from the date of dispatch or 12 months from the date of commissioning whichever is later.
- 10.2 The manufacturer should also provide free after sales service and free replacement to defective parts during the guarantee period.

11 LITERATURE :

Manufacturer should supply the minimum 4 sets of following literature in English language.

- (i) General layout drawing showing dimensional details and location of various items.
- (ii) Operating, Servicing and Installation manuals containing full Electrical / Electronics Schematics and Wiring Diagram, Circuit Diagrams and PCB details.
- (iii) 8 copies of item wise packing list for each boxes should be furnished immediately after the dispatch.

12. MISCELLANEOUS :

The bidder should also furnish the following technical details in their technical bids.

- i. Point to Point clarification and details of our specification and clauses as specified in General Clauses above.
- ii. Full technical information supported with Drawings / Catalogues and Diagrams etc.
- iii. Overall space required and air conditioning facility if any.
- iv. Total requirement of power etc.
- v. Item wise details for complete scope of supply.
- vi. List of customers to whom identical / similar equipment have been supplied along with details like type and model No. date of supply and commissioning. Full address of customers and order value.
- vii. Any Facility / Service / Material required from BHEL for satisfactory Commissioning / Trials and Demonstration of all the parameters of the equipment should be mentioned specifically. Item not mentioned specifically in the quotation but required for satisfactory commissioning will have to be arranged by the supplier.
