

BHARAT HEAVY ELECTRICALS LIMITED
HEAVY ELECTRICAL EQUIPMENT PLANT,
RANIPUR, HARDWAR – 249403

Notice No. WEX/NBS/OS/EOI/01.

Dt. 01.06.2010

Sub: Expression of Interest for Annual Break Down & Preventive Maintenance of Special purpose machine tools used for Turbine Blade Manufacturing.

Services from Interested Parties are required for Annual Maintenance contract (Breakdown & Preventive maintenance) of special purpose machine tools of New Blade Shop (Block-12) as per details given below:

1. No. of Special Machines: 24 Nos. & no. of conventional m/c : 06 nos. (Total = 30)
2. No. of Shifts: 03 plus Sundays and Holidays.
3. Proposed minimum period of contract : 60 Months

Interested parties may submit their proposals detailing (a) Management & Commercial Terms and conditions, (b) Budgetary offer. Technical suitability of the received offers shall be evaluated for further action. Parties may visit the plant in between 8 AM to 4 PM except Sundays & Holidays before submitting their expression of interest. Interested parties must submit their Expression of interest in sealed envelope to the under mentioned person on or before 4.00 PM , 10/ 07/ 2010. For any other clarification the same person may be contacted.

Contact Person:-

N. HALDER
SDGM (WEX/ MAINT. -NBS)
HEEP, BHEL,
RANIPUR , HARIDWAR- 249403.

Phone: 01334 284137 Fax: 01334 226460

Email: nh@bhelhwr.co.in

WEX/NBS/OS/ EOI / 01/Scope

Name of work : **Annual Break Down & Preventive Maintenance of Special purpose machine tools used for Turbine Blade Manufacturing in New Blade Shop at BHEL, Haridwar**

1.Scope of Work :

1.1 Annual Maintenance Contract (Break down and preventive maintenance) of CNC & conventional machine tools listed below to ensure its Annual Average Availability of more than 95% in trouble free running condition on three shifts basis:

SI No.	Equipment	Model	Qty
1.	CNC – 5 –Axis Machining Cell year of commissioning : 2006 Supplier : M/S Liechti Engg – AG , Switzerland.	Model : TURBOMILL – 1200	03 Nos.
2.	CNC – 5 –Axis- Machining Cell year of commissioning : 2008 Supplier : M/S Liechti Engg – AG , Switzerland	Model : g – mill – 550	02 Nos.
3.	CNC – 5 –Axis Machining Cell year of commissioning : 2002 Supplier : M/S Starrag heckert , Switzerland.	Model : HX – 151	02 Nos
4.	CNC – Horizontal Machining Center. year of commissioning : 2003 Supplier : M/S Starrag heckert , Switzerland	Model : CWK – 800	01 No.
5.	CNC Duplex Rhomboid Milling m/c Year of commissioning : 2003 Supplier : M/S EMAG, Germany.	Model : FK - 32.	02 Nos
6.	CNC Horizontal Milling machine Year of commissioning : 2003 Supplier : M/S EMAG, Germany.	Model : FK - 32 B.	01 No.
7.	CNC – Horizontal Machining Cell. year of commissioning : 2003 Supplier : M/S Heller , Germany	Model : MCH – 250	02 Nos.
8.	CNC – Horizontal Machining Centre. year of commissioning : 2006 Supplier : M/S Huller Hille , Germany.	Model : nbh– 290	01 No.

9.	CNC – Horizontal Machining Centre. year of commissioning : 2008 Supplier : M/S Huller Hille , Germany	Model : nbh– 170	03 Nos
10.	CNC Horizontal Milling machine Year of commissioning : 2003 Supplier : M/S Bharat Fritz Warner, Bangalore, India..	Model : BFW - BHEL- 425-427.	04 Nos.
11.	CNC Creep Feed Grinder. Year of commissioning : 2003 Supplier : M/S BLOHM, Germany.	Model : Profimat - 1000.	01 No
12.	5 – Axis CNC Tool & Cutter Grinder. Year of commissioning : 2003 Supplier : M/S WALTER – AG, Germany.	Model : Helitronic Power Production.	01 No.
13.	5 – Axis CNC Tool & Cutter Grinder. Year of commissioning : 2008 Supplier : M/S ANCA Pty. Ltd. Australia.	Model : RX-7	01 No.
	<u>CONVENTIONAL MACHINES</u>		
14.	High Speed Band Saw Yr. of commissioning : 2002 Supplier : ITL Industries , Indore	Model : IT 300DC PRO	03 Nos
15.	High Speed Band Saw Yr. of commissioning : 2008 Supplier : M/S LAXMAN (Lalita), Gujarat	Model : LX – 260 DCA	01 No.
16.	High Speed Band Saw Yr. of commissioning : 2008 Supplier : Multicut Machine ,Tools, Vadodra	Model : BDC 300A	01 No.
17.	Horizontal Milling m/c Yr. of commissioning : 2002 Supplier :Bharat , Fritz warner , Bangalore	Model : BFW – HF 3.5	01 No.

NOTE :

- a). Machines from SI.No. 1 to 11 are equipped with Siemens Control, SINUMERIK 840D
- b). Machine at SI No. 12 equipped with WALTER control , HMC -500.
- c). Machine at SI No. 13 equipped with Control ANCA – 5 DX.
- d). Machines at SI No. 1 to 9 are equipped with Auto Tool Changer, Mist Extractor, Vacuum filtration unit , chiller unit.
- e). Machines at SI. No. 10 to 13 are equipped with Vacuum Filtration & Chiller unit.

- 2 Machine Tools are installed in New Blade Shop (Block - 12) in the plant. Minimum one work center shall be ensured to provide efficient service.
- 3 Each work center shall be supervised by one competent supervisor and the total work shall be supervised by an engineer.
- 4 The work center shall operate in three shifts with adequate workforce.
- 5 Preventive maintenance of machine tools are to be carried out as per schedule and preventive maintenance check list. Party shall fill up the relevant formats and check lists during the course of preventive maintenance.

- 6 Breakdown maintenance of the machine tools is to be carried out in three shifts.
- 7 Party shall have adequate experience of manpower including Engineer, Supervisor & Artisan for attending CNC/ Electronic , Hydraulic, Electrical & Mechanical problems.

B. Terms and conditions:

1. Annual average breakdown must be less 5% of total available hours of these machines on three shift basis.
2. All tools and tackles required for maintenance works shall be arranged by party.
3. BHEL shall supply, free of cost, all consumables like grease, lubricating oil, cotton waste, welding rod, washing/cleaning liquid etc.
4. Repair and overhauling of all electric motor shall be undertaken by BHEL. Party shall arrange to deliver damaged motor and collect repaired motor from BHEL's electrical repair shop.
5. All spare parts shall be provided by BHEL free of cost. Repair/rebuilding/manufacturing of mechanical spares/assemblies shall be done by BHEL free of cost. Preparation of drawings/sketches for the same shall be done by BHEL. However dismantling of spares/assemblies, delivering the same in CMWS for Repair/rebuilding/manufacturing, collecting the same after repair, reassembly on machine etc. shall be done by party.
6. Following records shall be maintained and kept ready for inspection by BHEL engineer incharge, at all times.
 - (a) Preventive maintenance records and relevant forms (Forms shall be supplied by BHEL free of cost).
 - (b) Daily log book for reporting of breakdowns, repair and handing over history.
 - (c) Machine wise list of replacement of spares.
 - (d) Any other report desired by BHEL regarding the contract.
7. Period of contract shall be for five years duration in two parts. Initial award of contract shall be for one year. Contract may be renewed for four more years at the discretion of BHEL on the basis of performance, response etc. of party.
8. All works have to be carried out in BHEL premises.
9. No accommodation facility shall be provided by BHEL.
10. Office at site with relevant facility in BHEL shall be provided free of cost.
11. Vender has to abide by all labour law applicable like PF , ESI etc.
12. Parties has to deposit Earnest Money & Security Deposit based on tender value.

Format for Expression of Interest:

1. Name of Party:

2. Address for communication:

3. Company profile:

4. Engineering capability:

5. Financial Capability:

6. Business turnover in PSU's:

7. Proposed manpower deployment:

8. Engineering and Technical Capability for proposed work:

Name, Signature & Contact Details of Authorized Signatory