



ब्रेथवैट एण्ड कम्पनी लिमिटेड
(भारत सरकार का एक उपक्रम)

BRAITHWAITE & CO LIMITED

(A Government of India Undertaking)

MINISTRY OF RAILWAYS

HEAD OFF. & REGD. OFF. : 5, HIDE ROAD, Kolkata – 700 043

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CIN – 'U74210WB1976GO1030798'

Tender No.: BCL/PD/AMC/MIG & Hand Welding & CNC Plasma Cutting machine/2017/CW

Date:03.10.2017

To
M/s.....

Sealed Offers are invited in Two bid system for Annual Maintenance Contract(AMC) of MIG Welding Machine with Torch, Hand Welding machines and Air Plasma Cutting machines(CNC) along with supply of Spares on as & when required basis, at Clive Works.(Contract period will be for 24 calendar months), as per the detailed Scope of Work given in the tender.

1. The jobs are to be carried out at Clive Works of BCL. Bidders are requested to visit site and inspect the plants, facilities, concerned machines, specifications of spares etc. and understand the job to be performed before submitting offer. Bidders shall contact Manager(Maint.)-CW & VW, for this purpose. No claim shall be entertained afterwards.
2. Closing of tender Box : 14.30 hrs. on 16.10.2017
3. Opening of the tender along with Part-I bid : 15.00 hrs. on 16.10.2017

The offer should comprise of two parts as under:

Part-I : Techno-commercial bid & E.M.D

Part-II : Price bid

Both Part – I & Part – II bids of the quotation shall be inserted separately in two (2) envelopes, being sealed and super-scribed with our Tender No. and Part No. These two envelopes shall be put into a 3rd envelope which should also be sealed & super-scribed with **Tender No. Date, Due Date & Box No.**

Sealed Tender, addressed to **GM (Co-ordination)**, Braithwaite & Co. Ltd., 5, Hide Road, Kolkata – 700 043 may be dropped in our **Tender Box No. 2** (in case of hand delivery) or may be sent by Registered post but must reach us positively within **16.10.2017**(due date) by 14:30 hrs. No offer shall be accepted after closing of the Tender Box in whatsoever mode of receipt.

The techno commercial bid (Part-I) shall be opened **on 16.10.2017 at 15.00 hrs.** Bidders may depute their authorized representative to be present during opening of the tender. The price bid(s) (Part-II) shall be opened for techno - commercially acceptable bidders only, for which opening date and time will be intimated in due course.

Tender will be considered cancelled if the documents required for Part-I (Techno-commercial Bid) & Part-II (Price part) bids are not placed in respective / proper envelopes.

Tender documents can also be downloaded from our website www.braithwaiteindia.com and offer can be submitted after meeting tender requirements.

Bidders quoting from Website should submit the following documents:

- a) Experience documents such as P.O. copies, Completion certificate (if any), Performance Certificate, certified bills, etc for similar jobs executed by them.
- b) Audited/CA certified Balance Sheet and P & L Accounts for last 3 years, ending on 31.03.17.
- c) Copies of Trade License, PF, ESI & GST Registration documents.

"Similar job" as above means maintenance of industrial machinery, specially MIG Welding/Plasma cutting machines, etc. in Engineering Industry.

For Braithwaite & Co. Ltd.

Contd...P/2

Detailed Scope Of Work:

Description of the job: Annual Maintenance Contract (AMC) for preventive maintenance and break- down maintenance of **10(Ten) nos.** MIG Welding machine with Torch, **4(Four) nos.** Manual Hand Welding Machines and **2(Two) Nos.** Air Plasma cutting machine (CNC) as detailed below for 24 months period (i.e. for 2 years).

Type and quantity of CNC, MIG & Hand Welding Machines are as follows:

Sl. No.	Type	Quantity	Plant Numbers
1	400 MMR-IOL	05 Nos.	X-106, X-104, X-129, XD-108, VW-280,
2	Auto K 600 & K 400 ESAB	04 Nos.	EM0903334, EM0903331, EM0903332, EM/92C136,
3	MIG 5000i (ESAB – Aristo MIG)	01 Nos.	SE69581
4	Power Inverter	02 Nos.	INV 1, INV 2
5	Double Horse Welding Machines	02 Nos.	DH 1, DH 2
6	CNC Plasma Cutting Machine	02 Nos	Pro Arc Make 2 nos. CNC Plasma Cutting machine.
	TOTAL	16 nos.	

Note: Plant No. given here may change as per requirement.

➤ **Job to be carried out for all the machines under Scope of AMC:**

- a) The Contractor has to attend immediately any sort of defect reports / breakdown reports from the user of the machine, user department or from the maintenance department.
- b) The Contractor has to carry out routine, Preventive & annual maintenance of each machine. Apart from the machine, this includes maintenance of the incoming cables for power to the machine, outgoing wire feeders/welding cables, gas pipes & fitted accessories, (wire feeder unit as a whole) etc.
- c) The contractor has to maintain equipment-wise Daily, Weekly, Monthly and Annual check sheet. The check shall comprise with defects found, rectification work carried out, all mechanical/electrical test data and consumption of spares.
- d) It is desirable that the contractor will carry out the maintenance work with prior information to the maintenance department. However, in the event of any major breakdown or during weekly, monthly and annual repairing jobs of the machines involving replacement/repairing of spares, the rectification work and other jobs shall be carried out in presence of responsible persons of our maintenance department.
- e) Loading of all type of software, to any part of the machine, card, motherboard, RAM, ROM, EPROM, etc. for running, operation and maintenance of the machines, shall be done by the contractor. The contractor has to be equipped with necessary programming tools and software to do programming job for all the machines under AMC.

I. Contractor's Responsibilities regarding technical requirements and other terms & conditions for the job:

- a) The contractor has to keep all necessary tools & tackles, programming unit consumables (all low cost electronic components, solder, flux, heat sink compound, PVC tape, small fasteners etc) to carry out day to day maintenance work.
- b) The contractor shall have to provide at least **3 trained persons** (1 highly skilled, 1 skilled and 1 semi-skilled electrician) during the normal working hours i.e. from **8:00 AM to 9:00 PM** on all working days. The said personnel should be sufficiently qualified & trained Technician/ Engineer having experience on the repair & maintenance work of the machines under AMC.
- c) The contractor shall have to provide/keep at least **2 trained persons** (1 skilled and 1 semi-skilled electrician) beyond the normal working time, i.e. **after 9:00 PM to 8:00 AM** of next day as per the requirement of the Production department, to tackle the breakdown of machines, if any, which are engaged for the requirement of production department. **However, no extra payment** will be made thereof for working extra hours beyond normal time.
- d) In case of any major breakdown, the contractor has to & bound to work beyond normal working hours till rectification of the machine(s) under AMC. Though normal working hours is from 8 A.M. to 9 P.M. if any breakdown continues after 9 PM to 8 AM of the next day, the same shall be treated as continuous breakdown, & this non working hours (9 P.M. to 8 A.M. = 11 hrs) will come under breakdown hours during calculation of availability.
- e) All **fast moving spares**(marked as 'F' in the spare list) are under the scope of Contractor supply. The contractor has to keep sufficient fast moving spares in his stock so as to reduce breakdown time. BCL will reimburse the cost of spares on actual cost & monthly consumption basis.

- f) Machines under AMC are to be kept in tip-top condition with weekly / daily brushing and polishing with suitable cleaning chemicals inside and outside. All bolts, nuts and washers are to be kept in tightened condition. Once in a year, the Contractor has to paint the machine inside and outside with golden yellow, black paint and Red oxide.

II. **BCL Responsibility:**

Braithwaite will provide space for keeping tools & tackles, compressed air, electric power (CESC supply), drinking water, crane facility, Oxygen / CO₂ cylinders.

PREVENTIVE MAINTENANCE SCHEDULE OF THE MACHINES UNDER AMC (MIG MACHINES, MANUAL HAND WELDING MACHINES AND CNC MACHINES)

Maintenance Work for the above is to be carried out as per the following maintenance jobs and schedule.

Daily Check:

- Carry out visual checking of the whole machines before starting normal production work. If any unusual or abnormality found on the machine same to be attended immediately.
- Visual checking of the machine while it is in operation. Performance report of the machine is to be collected from the operator on the productive performance as well as operational performance. During such checking, if any deterioration of the machine or output from the machine is found or reported by operator of the machine, the same is to be rectified without hampering the production job.

All above checks, work done and replacement of spares are to be recorded in the logbook on daily basis and same shall be certified by the concerned engineer of Maintenance department.

Weekly Check:

- Checking of terminal connections at both power source & wire feeder end for rigidity.
- Checking of earthing for secure connection.
- Machines are to be kept in tip top condition with weekly cleaning.
- For CNC machines, checking and proper maintenance of the mechanical platform structure on which MS/SS sheets are to be kept for cutting, and of the mechanical structure on which cutting Torch moves.
- Brushing & cleaning with suitable chemicals inside & outside & all panel boards.
- Checking of all electrical wires.
- Checking of all electrical motors, drive current, voltage & speed. If necessary, the carbon brush of wire feeder mechanism shall be replaced.
- For MIG welding machines, checking / repairing of the indicator lamp.
- Checking / repairing of voltage / current measuring instrument.
- Checking & cleaning of all tips of all contactors.
- Checking the cleanliness of all PCB Boards along with checking the physical condition of all components fitted on PCB.
- Checking & testing the functionality of the complete machine & all connected accessories.

Above checking are to be carried out in presence of / with due intimation to the Engineers of the Maintenance Department. Any abnormality, if found during above checking should be rectified immediately. All above checks, work done & replacement of spares are to be recorded in the log book and the same shall be certified by the concerned engineer of Maintenance department.

Monthly Check:

- All jobs are to be carried out as per weekly maintenance schedule.
- Checking of all mechanical system of the machine.
- Checking & cleaning of all regulators & rubber hose.
- Use a supply of clean dry air & necessary tools to remove accumulation of dust and metallic dust that has been deposited within the cabinet.
- Ensure that all mechanical & electrical connections are firmly fitted at desired terminals.
- Thoroughly check all electrical & electronics components of all fitted PCB with the machine to ensure safe & good performance of that machine during production job.
- Test the performance of the machine (both productive & operational) thoroughly.

All CNC Plasma Cutting machines are operated by LPG / Oxygen and Electrical Plasma Arc. These machines are to be maintained for all the cutting systems.

All the above checks, work done & replacement of spares are to be recorded in the log book, and the same shall be certified by the concerned engineer of Maintenance department.

Annual Repair Work:

All the above mentioned jobs, including checking, etc. are to be carried out as per the Weekly & monthly maintenance schedule given above. Thorough overhauling & repairing of the whole machine and its accessories, of all the machines under AMC are to be done. Once in a year, the contractor has to paint the machines inside and outside with Golden Yellow, Black Paint and Red-Oxide, and write the plant number on it with clear lettering.

As for the CNC Air Plasma cutting machines, the contractor has to be equipped with programming tools for installation of software to the machines / EPROM etc. All above checks, work done & replacement of spares are to be recorded in the Log book, which will be certified by the In-charge(Maint) or his authorized representative. For all the machines under AMC, the contractor shall have to maintain Equipment wise Daily, Weekly, Monthly & Annual check sheet, describing the defects found, rectification work carried out, all mechanical /electrical parameters, test data & consumption of spares. **Status report of each machine under AMC are to be prepared on the basis of log book for daily, weekly or monthly checks and the same to be submitted with the monthly service bill along with percentage availability record.**

Following is the **machine wise list of Spares with quantity(tentative) required for 2(two) years** to be supplied on **As & When required basis** for **MIG Welding machines with Torch, Hand Welding Machines & Air Plasma Cutting Machines(CNC).**

SPARES FOR 400 MMR(MIG MACHINE)

Sl. No.	Description	Annual Qty Required
1	Diode for MIG machine(150A,N,P,400 PIV)	50 nos (F)
2	Ammeter (Range: 0-500A,75mv)	04 nos
3	Volt Meter (Range: 0-100V,DC)	04 nos
4	Coarse Control Switch (3P,6W,40A)	04 nos (F)
5	Fine Control Switch (3P,6W,40A)	04 nos (F)
6	A.C. Relay 230 V (3PH,440V)	04 nos (F)
7	Main Contactor (3 Ph. 440 V , 110/220V Coil)	06 nos
8	Fuse & Fuse Holder (5A, 8A)	12 nos (F)
9	Centrifugal Switch with Fitting	04 nos
10	Auxiliary Transformer	02 no
11	Knob for control panel switch	04 nos
12	On/Off switch 3Ph.440 volts	06 nos (F)
13	Burn off PCB	02 no
14	Motor Control card	02 no
15	Auxiliary PCB	04 nos
16	Auxiliary Contactor (110V AC, 3 NO, 3 NC)	04 nos
17	Fan Motor Assembly 220V AC	02 no
18	UJT 2H 2646	08 nos(F)
19	Thyristor 14 A	08 nos (F)
20	Cable shunt to out-put	04 nos
21	Cable IPL / DCL to main transformer	04 nos
22	Harness A (For Auto K 600)	02 no
23	Harness B (For Auto K 600)	02 no
24	Harness C (For Auto K 600)	02 no
25	Motor Control card for Interface unit (I/P220VAC,O/P24V.D.C)	02 no
26	Assly. Feed Roll Block	04 nos
27	Diverter Resistance (750 Hms)	04 nos
28	Potentiometer, wire speed (47 K)	08 nos (F)
29	Gas Purge Switch	04 nos
30	Worm wheel (for SPM 35)	12 nos
31	Carbon Bush (One pair)	12 nos (F)
32	Inch switch	04 nos (F)
33	Gas valve (24V,AC)	04 nos (F)
34	Feed Roll 1.2mm	16 nos (F)
35	Pressure roll	16 nos
36	Assly. Central connection	04 nos
37	Euro Adaptor	04 nos (F)
38	Hub with Nut	04 nos
39	Toggle Switch	04 nos (F)
40	Transistor for Motor control, Control card for interface unit	08 (nos) (F)
41	Control Transformer for interface (220/42V)	02 no
42	Wire feed motor with gear assembly (42V/24V,DC)	02 no
43	Inter connection unit complete 15 mtr long	02 no

SPARES FOR AUTO K-400/K600(MIG MACHINE)

Sl. No.	Description	Qty Required
1	Resistance P 204	04 nos. (F)
2	On/Off switch	04 nos. (F)
3	Switch toggle	04 nos. (F)
4	Switch toggle	04 nos. (F)
5	Thyristor	08 nos. (F)
6	Transformer Control TR2	02 no
7	Transformer Control TR3	02 no
8	Transformer Control TR4	02 no
9	Fuse & fuse holder	20 nos. (F)
10	Assly. IPL / DCL	02 no
11	Remote control unit for MIG M/c.	02 no
12	Main P.C.E.	02 no
13	Crater PCB	04 nos.
14	Shunt	08 nos. (F)
15	Sus tube 1.2 mm	08 nos.
16	Roller V groove 1.2 mm/U Groove 1.2 mm	08 nos.
17	Pressure roll	12 nos.
18	Main Transformer Assy (25 KVA)	02 no.

SPARES FOR MIG TORCH :

Sl. No.	Description	Qty Required
1	Contact tip 1.2mm / 1.4mm	200 nos. (F)
2	Tip holder	100 nos. (F)
3	Swan Neck	20 nos. (F)
4	Nozzle conical	40 nos. (F)
5	Liner 1.2mm,3mtr	40 nos. (F)
6	Micro Switch	08 nos. (F)
7	Adaptor block	10 nos. (F)
8	Insulation tube	40 nos. (F)
9	Nozzle Insulator	20 nos. (F)

SPARES FOR MANUAL HAND WELDING MACHINE:

Sl. No.	Description	Qty required
1	Diode, 18A, PIV250V	80 Nos.
2	Diode, 25A, PIV400V	80 Nos.
3	Bridge Rectifier 25A 230V	20 Nos.
4	Regulator 7815 & 7915	20 Nos. each
5	220/12V Transformer, 6 – 10 A, 750 V A	04 Nos.
6	1 A fast Blow & 1 A pico Fuse	200 Nos. each
7	4N35 Opto Coupler	200 Nos.
8	MOV 30/10	200 Nos.
9	Welding machine terminal as sample	40 Nos.
10	NO/NC contact block (Siemens) 230V, 6 Amps	24 Nos.
11	24 V power Regulator SR40	12 Nos.
12	Power Transistor 30 A	12 Nos.
13	Electrolytic Capacitor 22 MFD 100 V(As per sample)	40 Nos.
14	Relay 230 V, 6 A(As per sample)	20 nos.
15	NO/NC contact block (L & T)	32 Nos.
16	ON/OFF Switch Rotary 4 way 230 V, 10 A (As per sample)	40 Nos.
17	Control Transformer(440/220 V/12/24 A)	02 Nos.
18	Cooling fan, 200 V Ac, 4 " size(As per Sample)	12 Nos.
19	MOSFET(MTW7N80E)	200 Nos.
20	Bridge Diode 120 A (As per sample)	20 nos.
21	Main Contact Relay, 40 A, Coil Vol. 200V (L & T)	08 Nos.
22	ON/OFF Toggle Switch 230 V, 6 A (as per sample)	12 Nos.

SPARES FOR MANUAL HAND WELDING MACHINE(..Contd)

Sl. No.	Description	Qty required
23	Carbon Film Resistor, 5K, 10K(5W)	60 Nos. each
24	Metal Film Resistor ¼ Watt	1000 Nos.
25	Disk capacitor	1000 Nos.
26	Polyester Capacitor 40 V	200 Nos
27	Potentiometer 5 W	40 Nos.

SPARES FOR CNC MACHINES

Sl. No.	Description	Qty required
1	Power amplifier card	02 no.
2	Motor for up/down of torch	02 no.
3	Switch drive (on / off both way toggle switch)	02 no.
4	Speed potentiometer	02 no. (F)
5	Switch direction (8 way)	02 no. (F)
6	Pinion LT axis	02 no.
7	Pinion CT axis	02 no.
8	MH cutter (200 /300 mm)	02 no.
9	Motor mounted encoder	02 no.
10	Solenoid valves (200V AC)	12 nos.
11	Gas hose (10 mm)	200 Mtr (F)
12	Control transformer	02 no.
13	Drive motor assembly	02 no.
14	PCB auto ignitions	02 no.
15	On/Off switch (2.5 V AC)	02 no. (F)
16	Emergency stop switch (cut off switch)	02 no. (F)
17	Power supply PCB	02 no.
18	CCA interface PCB	02 no.
19	CCA torch station card	02 no.
20	CCA relay board	02 no.
21	Control unit assembly (32 bit EPROM)	04nos.
22	EPROM IC	08nos.
23	Switch mode (3 position mode switch)	02no. (F)
24	Actuator PCB	02 no.
25	Plasma Torch	04nos.
26	LPG Torch	04nos.

II. GENERAL TERMS & CONDITIONS:

- 1) The Bidder/Contractor must essentially be **registered with GST**. The bidder shall mention the SAC Code & its corresponding GST rate for the quoted maintenance job.
- 2) **Earnest Money Deposit (EMD)** :
 - a. Earnest Money Deposit of Rs. 5,000/- (Rupees Five Thousand Only) is required to be submitted by the bidder in the form of Demand Draft/Pay Order drawn in favour of "**Braithwaite & Co. Limited**", payable **at Kolkata**, or in the form of Bank Guarantee as per format to be provided on demand. In case of Bank Guarantee, the validity period should initially be 120 days from the date of opening of tender. The units registered with DGS&D, SSI units registered with NSIC, MSME Units and PSU units for the tendered job/item(s) may be exempted from submission of EMD. Necessary documentary evidence in support of availing above exemption shall have to be submitted along with the techno-commercial bid.
 - b. EMD is liable to be forfeited if the bidder withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
 - c. EMD shall be returned to unsuccessful bidder after finalization of the tender without any interest. For successful bidder, the same will be retained by BCL till completion of the job or till submission of Security Deposit.
- 3) **Security Deposit**
 - a. For due fulfillment of the contractual obligations, the successful bidder shall furnish Security Deposit in the form of Bank Guarantee / Demand Draft / Pay Order for a sum equal to **5% of the contract value** within 15 days from the date of issue of the Purchase Order. The Security Deposit shall remain valid till guarantee / warranty period.

- b. As and when an amendment is issued to the contract, the successful bidder / contractor, within 15 days of receipt of such an amendment, shall furnish to the purchaser an amendment to the Security Deposit and / or Bank Guarantee rendering the same validity for the contract as amended.
- c. In case of submission of Bank Guarantee, the same shall be verified by BCL from the concerned issuing bank. The Security Deposit shall remain valid till Warranty/Guarantee period. In case security deposit is not submitted within 15 days from the date of issue of P.O, the release of security deposit at the end of the contract will be after taking into account of the corresponding period of delay in submission of the same even though the warranty/guarantee period expires.
- d. Security Deposit may also be built up by deducting the amount proportionately from each bill of the successful bidder/contractor on their request. However, 50% of the total amount of the Security Deposit is to be deposited by the successful bidder on receipt of Purchase Order. Balance 50% may be recovered from running bill.
- e. The units registered with DGS&D, SSI units registered with NSIC, MSME Units and PSU units for the tendered job / item(s) may be exempted from submission of Security Deposit. Necessary documentary evidence in support of availing above exemption shall have to be submitted along with the techno-commercial bid.
- f. Security Deposit will be returned only on completion of contractor's obligations under the contract and against refund request along with copies of documents such as related P.O. (including amendments), acknowledgement for submission of S.D., job completion certificate (if any) etc.

4) **Performance Guarantee**

The successful bidder/contractor shall have to submit a Performance Bank Guarantee of 5% of Order value as per format to be provided by BCL after placement of order. In respect of bidders registered with DGS & D, NSIC for the tendered jobs, SSI unit or PSU unit though qualified for/availed exemption of submission of security deposit, Performance Guarantee of 5% of order value is to be submitted by them. The Performance Guarantee shall have to be submitted before receipt of first payment. This shall remain valid up to the guarantee / warranty period of the contract. PBG shall be returned / refunded only after successful completion of warranty period of the contract.

The Security Deposit, if submitted, may be converted to Performance Guarantee. If the successful bidder/contractor submits Security Deposit, no separate performance Bank Guarantee is required to be submitted in such case.

- 5) Offer should remain valid for 90 days from the date of opening of this tender.
- 6) **Contract Period: 24 months.**
- 7) Ordered rate(s) should remain firm up to end of the contract and also up to subsequent delivery date extension for a reasonable period.
- 8) Quantity Variation: Order quantity/value/period may vary \pm 30% at the same rate, terms & conditions depending upon requirement.
- 9) Repeat Order: BCL also reserves the right to place repeat order for maximum 75% of original order quantity/value/period at the same rate & terms of original order for which acceptance of the same from the supplier shall be taken prior to placement of such repeat order.
- 10) **Liquidated Damages:** In the event of failure on the part of the supplier to complete the job within the stipulated completion period, Braithwaite reserves the right to recover a sum of 0.5 % for every week or part thereof, by way of L.D. subject to a maximum of 10 % of the ordered value.
- 11) **Risk Purchase:** In the event of failure on the part of the supplier to supply within the reasonable period of time as decided by the Purchaser. The purchaser reserves the right to procure the materials from other agency / agencies at your risk and cost as per the order on Risk Purchase basis and shall recover the extra cost thereof, if incurred on the supplier.
- 12) **Arbitration:** All questions, disputes or difference whatsoever shall arise between the Purchaser and the supplier upon or in relation to or in connection with the contract either may forthwith give to the other notice in writing of the existence of such question, dispute or difference and the same shall be referred to the adjudication of Sole Arbitrator who shall be the CMD shall have the right and authority to appoint any Officer of the Company as arbitrator not below the rank of a General Manager who is not directly connected with the purchase order. Such a reference submitted to the Arbitrator shall be deemed to be the submission to the Arbitrator within the meaning of the Arbitration and Conciliation Act, 1996 Statutory modification thereof. The proceedings of the arbitration shall be held in Kolkata.
- 13) Any legal dispute that may arise will be settled within the jurisdiction of Courts at Kolkata.
- 14) The entire job is to be carried out under the supervision and instruction of Manager (Maintenance)-CW & VW, who would be the final certifying authority.
- 15) Delivery: For Spares, free delivery to our Clive Works on as & when required basis.

- 16) **Payment Terms:** 100 % with 30 days credit, after submission of monthly AMC bill(s) supported by relevant documents, duly certified by Manager (Maint.)–CW&VW as per availability chart mentioned below. Payment for spares items will be made against Dummy order(s) to be issued separately based on Prior Written Permission(PWP) and Joint Inspection Report(JIR). The said PWP and JIR(standard formats available with maintenance department), along with recommendation of I/C(Maintenance)–CW, must be taken before supply of any spares(if any) for repair/maintenance work within the AMC period. Bills for spares specifying the corresponding HSN code should be submitted within 15 days from receipt of Dummy order(s).

Payment of AMC bill for each MIG Welding Machine with torch, Hand Welding Machine and Air Plasma Cutting Machine (CNC) will be made on the basis of % availability of each machine, the terms of which are mentioned below:

AMC Payment vis-à-vis Availability of the Machines

- a. Up to 90% availability of a machine is eligible to get 100 % payment
- b. Up to 80% availability of a machine is eligible to get 80% payment
- c. Up to 70% availability of a machine is eligible to get 60 % payment
- d. Up to 60% availability of a machine is eligible to get 40 % payment
- e. If availability falls below 60% of a machine there will be no payment for that machine for that month.

$$\% \text{ Availability} = (\text{Total available Hrs} - \text{Hrs of breakdown} / \text{Total available Hrs}) \times 100.$$

The Contractor has to maintain Log book to record all activities on above mentioned AMC on day to day basis as well as daily attendance of supervisors/technicians engaged for execution of AMC. The same shall be duly signed by the officer of user department or his authorized representative and submitted along with Monthly AMC bill.

- 17) The following clauses regarding GST must be adhered to by the bidder/Contractor and acceptance of the same must be given in the techno commercial bid.
- The successful bidder/Contractor shall submit GST compliant invoice and challan, if any.
 - The successful bidder/Contractor shall give compliance regarding documentation/monthly returns to ensure availing Input Tax Credit(ITC) by BCL, failing which BCL will deduct the resultant amount.
 - During Submission of Bill, the Contractor shall mention the GSTIN No.
 - BCL reserves the right to keep the payment of GST amount on hold till the receipt of ITC by BCL is ensured.
- 18) All types of repairing shall be done by the contractor against AMC payment. In no case, payment will be made towards the labour cost of such repairing /running of the equipment except for the price of spares.
- 19) All supplied Spares shall be routed through BCL Stores and covered with guarantee for a period of 6 (Six) months from the date of commissioning/installation
- 20) The contractor has to ensure the safety of men deployed by him. BCL. in no case, will be held responsible for any accident/mishap caused to the contractor's men during execution of the contract. In no case, BCL will also be held responsible for PF & ESI liability. Contractor must abide by all statutory responsibilities like PF/ESI/GST etc.
- 21) Indemnity:- Bidder shall indemnify BCL against all claims in respect of their contractual obligations in the event of non-compliance of statutory rules / obligations / laws / taxes & duties etc.
- 22) Evaluation of Lowest bid shall be done on Grand Total amount (net of GST) for the entire AMC job. However, All inclusive rates (i.e landed rates) for spares to be quoted but these shall not come under evaluation. But price negotiation may be done with the L-1 bidder if required.
- 23) BCL reserves the right to postpone the due date of the tender / to cancel the tender at any stage.
- 24) The Bidder/Contractor shall submit an unquoted price bid along with the techno commercial bid.
- 25) Termination: BCL reserves the right to terminate the contract by giving 7 days notice (if required) due to Poor performance/negligence of obligation under the contract.
- 26) An **unconditional acceptance** of all notes, terms & conditions of the tender must be given along with the offer in Techno-Commercial Bid. ALTERNATELY, submission of tender form duly signed with stamp on all the pages shall also be considered as unconditional acceptance of the tender terms from the bidder.
- 27) Price Bid (Part-II) of the offers shall be opened only if Part –I(Techno-commercial bid) is qualified. Price bid is liable to be rejected if the price of spares is not quoted along with the price for AMC as per the Price Bid format.

PRICE BID:

- i. This part should be free from any condition.
- ii. Quoted rates against this tender shall remain Firm till completion of the order.
- iii. No correction, alteration, over writing etc. will be allowed.
- iv. Price Bid without signature shall be considered as cancelled.
- v. Rate(s) quoted must be written both in figures & words, in case of difference, the rate quoted in words shall be considered.
- vi. The bidder shall submit rates as per following formats.

Price Bid Format – A (AMC job):

SL. No	Job Description	Duration (months)	Qty (Nos.)	Rate per machine/month (excluding GST)-Rs.	Total amount for 24 months (excluding GST)-Rs.
1	Maintenance charges for MIG Welding Machine with Torch(Make: IOL, ESAB)	24	10		
2	Maintenance charges for Hand Welding Machines -2 Power Inverter(Make: ESAB) -2 Double Horse Welding M/c	24	4		
2	Maintenance Charges for CNC Air Plasma Cutting machine(Make:Pro Arc)	24	02		
GRAND TOTAL					

Price Bid Format – B (Spares Supply)::

SPARES FOR 400 MMR(MIG MACHINE)

Sl. No.	Description	Unit Rate (all inclu.)-Rs.
1	Diode for MIG machine 150A,N,P,400PIV	
2	Ammeter (Range: 0-500A,75mv)	
3	Volt Meter (Range: 0-100V,DC)	
4	Coarse Control Switch (3P,6W,40A)	
5	Fine Control Switch (3P,6W,40A)	
6	A.C. Relay 230 V (3PH,440V)	
7	Main Contactor (3 Ph. 440 V ,110/220V Coil)	
8	Fuse & Fuse Holder (5A, 8A)	
9	Centrifugal Switch with Fitting	
10	Auxiliary Transformer	
11	Knob for control panel switch	
12	On/Off switch 3Ph.440 volts	
13	Burn off PCB	
14	Motor Control card	
15	Auxiliary PCB	
16	Auxiliary Contactor (110V AC, 3 NO, 3 NC)	
17	Fan Motor Assembly 220V AC	
18	UJT 2H 2646	
19	Thyristor 14 A	
20	Cable shunt to out-put	
21	Cable IPL / DCL to main transformer	
22	Harness A (For Auto K 600)	
23	Harness B (For Auto K 600)	
24	Harness C (For Auto K 600)	
25	Motor Control card for Interface unit I/P220VAC,O/P24VD.C)	
26	Assly. Feed Roll Block	
27	Diverter Resistance (750 Hms)	
28	Potentiometer, wire speed (47 K)	
29	Gas Purge Switch	

SPARES FOR 400 MMR(MIG MACHINE)-Contd.

Sl. No.	Description	Unit Rate (all inclu.)-Rs.
30	Worm wheel (for SPM 35)	
31	Carbon Bush (One pair)	
32	Inch switch	
33	Gas valve (24V,AC)	
34	Feed Roll 1.2mm	
35	Pressure roll	
36	Assly. Central connection	
37	Euro Adaptor	
38	Hub with Nut	
39	Toggle Switch	
40	Transistor for Motor control, Control card for interface unit	
41	Control Transformer for interface (220/42V)	
42	Wire feed motor with gear assembly (42V/24V,DC)	
43	Inter connection unit complete 15 mtr long	

SPARES FOR AUTO K-400/K600(MIG MACHINE)

Sl. No.	Description	Unit Rate (all inclu.)-Rs.
1	Resistance P 204	
2	On/Off switch	
3	Switch toggle	
4	Switch toggle	
5	Thyristor	
6	Transformer Control TR2	
7	Transformer Control TR3	
8	Transformer Control TR4	
9	Fuse & fuse holder	
10	Assly. IPL / DCL	
11	Remote control unit for MIG M/c.	
12	Main P.C.E.	
13	Crater PCB	
14	Shunt	
15	Sus tube 1.2 mm	
16	Roller V groove 1.2 mm/U Grove 1.2 mm	
17	Pressure roll	
18	Main Transformer Assy (25 KVA)	

SPARES FOR MIG TORCH

Sl. No.	Description	Unit Rate (all inclu.)-Rs.
1	Contact tip 1.2mm / 1.4mm	
2	Tip holder	
3	Swan Neck	
4	Nozzle conical	
5	Liner 1.2mm,3mtr	
6	Micro Switch	
7	Adaptor block	
8	Insulation tube	
9	Nozzle Insulator	

SPARES FOR MANUAL HAND WELDING MACHINE:

Sl. No.	Description	Unit Rate(all inclu.)-Rs.
1	Diode, 18A, PIV250V	
2	Diode, 25A, PIV400V	
3	Bridge Rectifier 25A 230V	
4	Regulator 7815 & 7915	
5	220/12V Transformer, 6 – 10 A, 750 V A	
6	1 A fast Blow & 1 A pico Fuse	
7	4N35 Opto Coupler	
8	MOV 30/10	
9	Welding machine terminal as sample	
10	NO/NC contact block (Siemens) 230V, 6 Amps	
11	24 V power Regulator SR40	
12	Power Transistor 30 A	
13	Electrolytic Capacitor 22 MFD 100 V(As per sample)	
14	Relay 230 V, 6 A(As per sample)	
15	NO/NC contact block (L & T)	
16	ON/OFF Switch Rotary 4 way 230 V, 10 A (As per sample)	
17	Control Transformer(440/220 V/12/24 A)	
18	Cooling fan, 200 V Ac, 4 " size(As per Sample)	
19	MOSFET(MTW7N80E)	
20	Bridge Diode 120 A (As per sample)	
21	Main Contact Relay, 40 A, Coil Vol. 200V (L & T)	
22	ON/OFF Toggle Switch 230 V, 6 A (as per sample)	
23	Carbon Film Resistor, 5K, 10K(5W)	
24	Metal Film Resistor ¼ Watt	
25	Disk capacitor	
26	Polyester Capacitor 40 V	
27	Potentiometer 5 W	

SPARES FOR CNC MACHINES

Sl. No.	Description	Unit Rate(all inclu.)-Rs.
1	Power amplifier card	
2	Motor for up/down of torch	
3	Switch drive (on / off both way toggle switch)	
4	Speed potentiometer	
5	Switch direction (8 way)	
6	Pinion LT axis	
7	Pinion CT axis	
8	MH cutter (200 /300 mm)	
9	Motor mounted encoder	
10	Solenoid valves (200V AC)	
11	Gas hose (10 mm)	
12	Control transformer	
13	Drive motor assembly	
14	PCB auto ignitions	
15	On/Off switch (2.5 V AC)	
16	Emergency stop switch (cut off switch)	
17	Power supply PCB	
18	CCA interface PCB	
19	CCA torch station card	
20	CCA relay board	
21	Control unit assembly (32 bit EPROM)	
22	EPROM IC	
23	Switch mode (3 position mode switch)	
24	Actuator PCB	
25	Plasma Torch	
26	LPG Torch	