

BRAITHWAITE & CO. LIMITED

(A Govt. of India Undertaking)

ANGUS WORKS

P. O. ANGUS – 712221, DIST. HOOGHLY (W.B.)

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Ref: PUR/ANG/SP-318/09/FOUNDRY/381

12 November 2009

Due on : 23.11.09

ENQUIRY

To

M/s.

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Dear Sirs,

Please submit your offer for the following articles in two bids –, **Techno-Commercial and Credential Bid in Part-I and Price Bid in Part-2**. Your quotation should reach us latest by 15:00 hours on 23.11.09 and must remain open for our acceptance for **90 days** from due date of submission of offer. The two bids of the offer to be submitted as per the following instructions.

Part – I

Techno-Commercial Bid & Credential Bid :

- (a) Techno-Commercial part consisting of Technical Specifications, Scope of work and General Terms & Conditions of the tender.
- (b) Credential Bid consist of furnishing the complete details supported by copies of relevant documentary evidences enable the Purchaser to assess the vendor as reliable and prospective contractor for the products for which the bidder is interested to go for contract with the Purchaser. Trade license, S.T and I.T. Clearance Certificate, Audited Balance Sheet of last 3 years to be enclosed in Credential Bid.

Part- II

Price Bid :

Price Bid should be indicted of the items as per given Price Schedule. Price Bid shall be submitted in a separately sealed envelope. Price should remain valid for at least 90 days from the date of opening of the Tender.

EMD - Rs.50,000/- in the form of DD/BG/Pay Order along with Part-1 i.e. Techno-Commercial and Credential Bid.

Description of items	Required Quantity
Execution of total Foundry activities viz. Moulding including Core Making, Box Closing, Box Knocking, Pattern Shop job, Core Box Repairing / rectification / maintenance, Operation & Maintenance of Arc Furnace, Fettling, Assembly of Bogie, Coupler and Draft Gear and also supply of daily labour for Shop Floor cleaning and miscellaneous activities of Foundry Shop.	For 3 months

Notes :

1. **Rate to be quoted as per our given rate schedule.**
2. Contract period may be increased / shortened as per discretion of BWT.
3. Price to remain firm till completion of contract.
4. Please quote your price both in words and figures on number basis.
5. Enquiry number should be clearly written on the top of sealed envelope. Part-I Bid i.e. Techno-Commercial and Credential Bid shall be submitted in a separately sealed envelope clearly indicating Tender No., job description, Due date & marked as 'Techno-Commercial and Credential Bid'. Part-II bid, i.e. Price Bid shall be submitted in a separately sealed envelope clearly indicating Tender No., Due date & marked as ' Price Bid'. Both Part-I and Part-II bids shall be placed in a 3rd envelope duly sealed and marked with tender number , job description and due date.
6. Offers will be opened on 24.11.09 at 2:00 PM at our Purchase Office. You may present during opening.
7. Overwriting in Price Figures of the quotation will be rejected.

Yours faithfully,
BRAITHWAITE & CO. LIMITED

SCOPE OF WORK :

For operation and maintenance of 5 MT Arc Furnace.

1. Operation with Laddle preparation.
 - a) Supply of Skilled/Unskilled manpower for operation of 5 MT Arc Furnace including Ladle side. The job includes supply of melter also. Tonnage of liquid metal will be considered on the basis of liquid metal put into moulds. Deduction will be made for rejected castings.
 - b) One Roof Set is to be made ready at all times so that quick changing of Roof is possible.
 - c) At least two numbers of Laddle is to be dismantled and relined per week as per requirement of the Shop.
 - d) Furnace is to be dismantled and relined as per requirement of the shop.
 - e) Day to day maintenance of furnace hearth, lining, launder, door roof etc.
 - f) Charging/D-charging of furnace and pouring of liquid metal into moulds with the help of EOT crane with electromagnet facility and pouring of liquid metal into moulds.
 - g) Collection of raw materials/ Ferro alloys from Store.
 - h) Changing/Addition of electrode as and when required.
 - i) Removal of Slag Pot/Placement of new one as and when required.
 - j) Preparation of metal as per composition with D/Slag practice. Any deviation in the composition resulting in heat rejection by RDSO will be liable for rejection.
 - k) Stopper rod preparation/healing.
 - l) At least 3 nos. of both sample and one final sample to be taken as per RDSO norms.
 - m) Log sheet of each heat has to be maintained as per R.D.S.O. norms.
 - n) Preparation of ladles after cleaning/heating/trying and pouring into moulds.
 - o) Management reserves the right to engage his own pouring group for improper and loss of liquid metal and the man hours involves will be deducted from Contractor's bill.
 - p) Rate to be quoted/Shift basis/ton put into mould.
 - q) All tools and tackles including hand gloves, blue glass, helmet, Boiler suit, ammunition boot for running Arc Furnace and pit side to be organized by the party and raw material for the purpose will be provided by BWT.

Contd. P/2

- r) Day to day Log Book to be maintained by the party.
- s) The Furnace will be operated in 3 shifts i.e. round the clock. But the duty hours may be adjusted as per Production requirement and as per advice of Sr. Mgr. (Fdy.) and Sr. Mgr. (Maint.).
- t) You should be very much careful regarding utilization of Molten metal. Loss of Heat will not be accepted due to your fault. If it is found that the loss of Molten metal crosses the considerable limit, the deduction will be made from your monthly bill as per discretion of Sr. Mgr. (Fdy.) and Sr. Mgr. (Maint.).
- t) After completion of arc furnace operation the cooling system has to be energized for 4-6 hours for cooling the furnace if required in holidays also.

2. Maintenance of 5 MT Arc Furnace.

Electrical :

- i) Vacuum circuit breaker (3 nos.) for operation of Arc Furnace and related HT power supply system to be checked before charging of Arc Furnace. Tripping circuit for VCB to be checked for readiness of operation. If any problem is found the same has to be rectified immediately.
- ii) Furnace Transformer to be checked before charging in all respect and primary & secondary side also to be checked i.e. tightness of connections etc. Leakage of transformer oil if found to be rectified immediately. Water cooling system of the transformer also to be checked and to be set right in all respect so that cooling of transformer will be done as per specified limit.
- iii) Bus Bar of Transformer to be checked and related water cooled cables to be checked for avoiding loose connections.
- iv) Tap changer should be checked at least once in a fort -night or as and when required.
- v) Battery back-up system and protection relay to be checked and to be adjusted as per requirement. If any revised setting is required this has to be done instantly.
- vi) HT cable connection for transformer and related breakers are to be checked periodically for avoiding any tripping during operation of furnace. If any problem found in cable connection the same has to be repaired/reinstalled by the party. LT cable if found defective the same has to be replaced by the party. The cable will be supplied by us.
- vii) Thyristor regulator panel to be checked and all connections to be tightened properly for smooth operation of panel. During checking if any defective component is found this has to be replaced by the party for commissioning of the furnace and the payment will be made on submission of the actual bill of the components.
- viii) Control panel should be checked and to be set right in all respect. Tilting controlling system including drum controller & related drives and roof controlling system to be checked and set right in all respect.

Contd. P/3

- ix) DC motor to be checked such as carbon brushes, commutator, terminal connection etc. to be maintained properly.
- x) Electrode holder to be checked before charging of furnace and to be set right immediately. If any problem comes this has to be solved immediately.
- xi) Limit switch (electrode up and down limit switch, tilting limit switch, roof shifting limit switch) connections and operations to be checked and to be set right before charging of Arc Furnace.
- xii) All indication lights, controlling switch, key operating switch, push bottoms, potentiometer, change over switch etc. to be checked before charging of furnace. If any problem comes this has to be rectified immediately.
- xiii) HT Power Factor Improvement System to be maintained and to be set right in all respect.
- xiv) Earthing system to be checked at least once in a week. During checking if any problem comes this has to be rectified immediately.
- xv) Illumination system in the switch gear room/control room/arc furnace area to be maintained properly.
- xvi) During checking if any defective PCB is found, the same may be repaired by the party with outside agencies help and cost will be reimbursed on submission of actual bill.
- xvii) Register is to be maintained for Maintenance check up as per format advised by Maintenance Department with frequency of check.

Mechanical :

- i) Hydraulic Power Pack, Hydraulic Cylinder, Hydraulic Pipes etc. to be maintained properly. Leakage of Hydraulic oil to be prevented.
- ii) Electrode holding arrangement to be maintained properly during production. If electrode breakage found during normal time/production time the same has to be replaced immediately for continuing the production.
- iii) Defective roof if found to be repaired immediately.
- iv) Lubrication all mechanical parts have to be done periodically.
- v) Cooling system of furnace i.e. cooling motor, cooling tower, submersible pump and its related starters and switches etc. to be checked and to be operated before starting of furnace. If any problem found this has to be rectified immediately for charging of the furnace. During load shedding and power failure emergency cooling system has to be energized for protection of transformer, water cool cables and other related system.
- vi) Electric winch system (3 nos.) to be maintained properly if any defective wire rope is noticed the same has to be replaced immediately.

Contd. P/4

- vii) All pipe fittings for water cooling system and its related valves to be maintained for preventing water leakage. The pressure gauge also to be set right in all respect.
- viii) Fire extinguisher and sand bucket to be kept in the Arc Furnace switch gear room as well as in the arc furnace area.
- ix) Rubber mat to be laid in front of all electrical panel/switch gears.
- x) All safety rules and regulation to be followed by the party i.e. safety shoes, helmets, suitable hand gloves for HT switch gear maintenance, asbestos apron, face guard etc. to be arranged by the party.
- xi) All mechanical parts related to furnace maintenance job to be attended and maintained properly.
- xii) For charging scrap on arc furnace and for discharging of liquid metal from arc furnace the material handling equipment i.e. EOT crane over the Bay No. 5 to be maintained (electrical and mechanical) and to be operated during requirement.
- xiii) Routine and preventive maintenance job to be attended and documents to be recorded for ISO.
- xiv) Log Book to be maintained for day to day activities and to be shown to Maint.-in-charge for their checking.
- xv) Cleaning of arc furnace switch gear room, transformer room, PF compensation room, arc furnace area etc. to be cleaned properly and proper marking of equipment to be done by the party.

For Moulding :

I) Side Frame

- a) Moulding and related handling of Sand.
- b) Core Making and Core Shifting to mould preparation area.
- c) Core Setting and Box Closing and Clamping.

II) Bolster

- a) Core Making and Core shifting to mould preparation area.
- 1. Moulding, Core making, Core shifting to mould preparation area, Core setting and Box closing and Clamping activities for Casnub Bogie Side Frame shall be for a quantum of 12 nos. Side Frame per day or as per our requirement.
- 2. Core making and Core shifting to mould preparation area for Casnub Bogie Bolster for a quantum 6 nos. Bolster per day or as per our requirement.

Contd. P/5

3. A maximum quantum for casting of 5.7 MT per day i.e. of 150 MT (approx.) per month to be achieved. The quantity may increase or decrease depending upon Foundry production schedule/requirement of Braithwaite and as per sole discretion of Braithwaite.
4. Deployment of required high skilled, skilled, unskilled and supervisor required for the subject job for successful execution of the contract and for achieving targeted monthly schedule and for maintaining high quality standard as per quality requirement/QAP of BWT/RDSO shall be your responsibility.
5. You shall be required to deploy the required manpower for preparation of moulds, core setting and box closing and stated above in “A”, “G”, “B” or “C” shift as per requirement of Foundry Deptt. and as per sole discretion of BWT in order to meet Foundry production of closed moulds for all the heats taken per day.
6. You must be prepared to work in G/A/B/C shift as per Foundry’s requirement and as per sole discretion of Braithwaite.
7. You shall be required to apply Alcohol based paint on moulds for casnub bogie item Bolster as applicable for quality castings. You shall be required to arrange and provide the required brushes for painting. The required paint shall be provided by Braithwaite.
8. You shall be required to ensure production of good castings. In case of defects in castings arising out of mould preparation, mould closing etc. deduction against rejected castings to be made in full at the sole discretion of BWT.
9. You shall have to take proper care of all safety measures/precautions for your workmen and arrange and provide for all the necessary safety appliance where ever and when ever necessary for such kind of job to your employees/workmen to ensure proper protection of your employees at the working site and conform to the rules and regulations of the Company for any accident while working in Foundry, Braithwaite will not be responsible in any way.
10. You shall keep coverage at all times of your employees against all claims for compensation and Braithwaite shall not be responsible for any compensation in respect of any workmen employed by you in carrying out the contract.
11. You shall be required to arrange for a competent supervisor in each shift to guide and coordinate the entire activities and checking of mould boxes, patterns, sand etc. to ensure correct quality castings, supervisor to submit inspection report twice a week to Mgr.(Fdy.) for necessary remedial measures, if any.
12. Maintenance of your all paints and equipment and tools-tackles shall be your responsibility.
13. Cleaning of Sand from the moulding of repairing area will be in your scope.
14. The finished weight of casting for Side Frame and Bolster shall be as per the nominal weight mentioned in the drawing (subject to charge if required).

Side Frame - 430 kg.

Bolster - 565 kg.

Contd. P/6

15. You have provide **crane driver** for the said job and for Bolster, Moulding, Pouring of Liquid Metal for Side Frame and Bolster and Shifting of Pouring Mould Boxes by crane no. 5 in 'A' and 'B' shift.
16. Eye testing of Crane driver has to be carried out in regular internals.

For Fettling :

1. Oxy cutting or breaking of Runner and Risers as the case may be of or as applicable of all the castings for castings for casnub bogie items coupler items and wagon components with you labour, gas cutting sets and tools and tackles as per BWT's requirement.
2. Complete bumping, fettling, grinding and gauging and finishing of shot blasted or without shot blasted castings and repairing by respective electrodes as per BWT's requirement. Provision for bumping is to be considered in case of non-shot blasted of the casting if any, is given to you. Items include casnub bogie items, coupler items and wagon components.
3. The scope also include oxy cutting, fettling, grinding, repairing and finishing of steel castings for miscellaneous castings items of approximately 1.0 MT per month.

Party's Responsibility :

1. You shall have to arrange and deploy all the required skilled personnel, labour force, supervisor of required trade who will be fully acquainted to take for such type of work for oxy-cutting and complete fettling of the castings maintaining high quality standard as per quality requirement of BWT/RDSO.
2. You shall be required to arrange of your own pneumatic hand grinding machine, pneumatic chipping gun, gas cutting set with all accessories like regulators, torch, pipes, chisels etc. welding cable with holder, pneumatic air pipe, coupling, manifold, nozzles etc. and cutting wheels and tools and tackles and any other equipment to fulfill your contract.
3. You shall have to arrange of your own swing grinding machine and its maintenance shall be your responsibility. In case, you fail to arrange your swing grinding machine and if a swing grinding machine is required for the subject job, an amount of Rs.300/- per month shall be deducted from your bill for using Company's swing grinding machine.
4. You shall be required to increase or decrease manpower to cope up with production target allotted to your Foundry Deptt. from time to time.
5. You will have to carry out all related activities to complete the entire scope of work to the satisfaction of Inspecting Authority and Foundry.
6. You will have to keep runner and risers, test bars etc. in arranged manner in suitable place near his working area and to loaded in bins tube provided by Foundry.
7. You will have to arrange for casting for fettling, gas cutting from trolley or heap as directed by concerned authority.
8. You will have to help if required for loading and unloading of his own castings or shot blasting machine.

Contd. P/7

9. You shall have to arrange for cleaning of your working area every week. Passage for movement of personnel, material and forklift etc. must be kept free on daily basis and you shall have to plan and shift material accordingly. In case, this is not maintained, you shall be given three warnings and if situation does not improve, deduction of 2% from bill amount of may be made. Places of casting chips to be kept properly arranged in suitable place and passages must be kept cleared of such material.
10. Depending on priority of production, job allotted to you by Foundry to carried out without fail and as per Company's schedule.
11. You shall required to engage your workmen to suit working hours of the shop, otherwise, this has to be mutually discussed before hand with Foundry Authority. You shall have to engage a full time Supervisor to interact with different agencies in Angus.
12. You shall not stop work without any prior notice. In case of such happening, you shall be liable for cancellation of the order. However, because of any emergency, or any other reason beyond our control, in case, Company feels necessary, Company may suspend or stop fettling work for suitable period without any compensation.
13. If there be any rejection of castings by the Inspecting Authority/RDSO during any stage of gas cutting, fettling and finishing, you shall be required to accept the rejection without any cost.
14. During repairing of Castings, you have to fulfill minimum norms as mentioned in the STR.
15. The test piece (one casting) of each heat has to be sliced & grinded for R.D.S.O. stamping.
16. In case of any defect due to fettling and finishing is detected during assembly or in any other shop during processing, even though the same was earlier passed by the Inspecting Authority/RDSO, the rectification shall be the respective contractor's liability, such overlook/omission shall be a serious offence of your part. Fettling cost of that particular item shall be deducted from your bill. You must do the necessary rectification of the respective casting in that particular shop.
17. Acceptance of fettled and finished castings by RDSO shall be your responsibility. BWT/RDSO personnel's shall have right and access to check materials/stores at any time as required by them.

For Box Knocking and allied activities of Bogie Castings (Side Frame & Bolster) :

1. Box knocking of boxes for Casnub Bogie Castings i.e. Side Frame and Bolster.
2. Shifting of Mould Boxes of Side Frame and Bolster from pouring area of Shake out machine / any suitable areas for knocking to separate castings and sand. Sand to be shifted / transferred to hoppers through Shake out machine or manually (if required).

Contd. P/8

3. After knocking of boxes castings to be shifted of Fettling shop.
4. Mould Boxes to shifted to moulding areas.
5. Shake out machine outside and inside pit to be cleaned as and when required.
6. Mould boxes to be stacked properly, castings to stacked on trolley and to be shifted to moulding area Trolley track to be kept clean.
7. Shake out machine, Shake out pit, Elevator Platform to be kept clean regularly to keep the machine operative.
8. Operation of EOT Crane for the subject job of production is your responsibility.
9. Job to be carried out as per instruction of Foundry in charge and as per our suitable time / shift. Tiffin and Lunch time of the Company will be your workers Tiffin time.
10. 8 nos. boxes of Side Frame and 4 nos. boxes of Bolster (5.7 MT approx.) to be broken per day and may be increased or decreased as per production requirement of Foundry.

For Machine Moulding items :

1. Core making and core shifting to moulding area for the following Coupler items (a) Coupler Body, (b) Yoke, (c) Striker, (d) Lock, (e) Miner Housing, (f) Lock and NLB Side Bearer (wt. 7 kgs.)
2. Core making and Core shifting to Moulding area for the above-mentioned Coupler items, 10 MT per month minimum.
3. You shall be required to prepare no-bake cores for coupler items and arrange to supply the cores in Mould Closing Bay as per direction of Foundry personnel.
4. You shall be required to apply Alcohol based paint on cores of Coupler items as applicable for quality castings. You shall be required to arrange and provide the required brushes for painting. The required paint shall be provided by BWT.
5. You shall be required to ensure production of good castings. In case of defects in castings arising out of mould preparation. Core making, Mould closing etc. deduction against rejected castings to be made in full at the sole discretion of BWT.
6. You shall have to take proper care of all safety measures/precautions for your workmen and arrange and provide for all the necessary safety appliances where ever and when ever necessary for such kind of job to your employees/workmen to ensure proper protection of your employees at the working site and conform to the rules and regulations of the Company for any accident while working in Foundry. BWT will not be responsible in any way.
7. You shall keep coverage at all times of your employees against all claims for compensation and Braithwaite shall not be responsible for any compensation in respect of any workmen employed by you in carrying out the contract.

Contd. P/9

8. You shall be required to arrange and provide to your workmen the requisite number of Hand Gloves, Shovels etc. and tools tackles and other requirements if any for carrying out the subject job.
9. You shall be required to arrange for a competent supervisor in each shift to guide and co-ordinate the entire activities and checking of Core Boxes to ensure correct quality castings. Supervisor to submit inspection report twice a week to Sr. Mgr.(Foundry) for necessary remedial measures, if any.
10. Maintenance of your all plants and equipment and tools and tackles shall be your responsibility.

For Scrap Cutting & Shifting of Machine Moulding :

1. Total job of Gas cutting of MS plates, sheets, channels, angles, fabricated structure, rejected Side Frame, Bolster, any foundry castings, coupler items, wheels blanks, risers to acceptable average dimension of 12” x 16” and weighing not more than 50 kg. per piece and shifting to Foundry Furnace of AW.
2. Shifting of scrap from anywhere inside Angus Works to Foundry Furnace for charging.
3. All scraps to be loaded in bins/vans transported, weighted and to be handed over to melting area as desired by concerned department.
4. Job is to be executed without hampering of any shop.
5. Weightment to be certified by Shop –in-charge on daily basis.

For Bogie Assly. along with Associated Works :

A) Gas cutting and minor welding :

- i) Cutting of extra metal.
- ii) Heating of sand sticking and cleaning.
- iii) Cutting of inside pins of Bolster/Side Frame for riveting.
- iv) Machine gas cutting of forged items, Blooms/Billets.
- v) Welding slag spoons and other items.
- vi) Any other related job. If required and advised by concerned department.

B) Grinding :

- i) Finishing of total bogie components and assly. with the help of suitable grinding wheel.
- ii) Any grinding required for Bogie fitting and finishing.
- iii) Grinding and fitting of stopper rod.

C) Chipping :

- i) Side chipping after plank fitting.
- ii) Fit bolt fitting.
- iii) Helping Driller in arranging job on drilling machine.

Over and above specified jobs under category A, B and C. Party will have to arrange for (a) collection of materials for Bogie Assly. from Stores to Department, (b) arranging and cleaning of materials etc. on shop floor as directed by Department, (c) any other related job, if required due to exigency of production in Bogie Assembly.

D) Shifting of castings with Fork Lift :

Engagement with Fork Lift Driver for shifting of casting between Foundry. Heat Treatment Shop, shot Blasting area. Fitting areas, different Assembly shops and Machine shop etc. castings to be arranged as directed by concerned department. Party is to engage workman to help our Fork Lift driver in executing complete job.

Daily above 6 to 12 ton of castings required shipment depending on Foundry shop production. In case, shipment is not required any day the person will be engaged suitably by department.

E) Painting of Bogie

Bogie Painting to be done after Assembly of the Bogie as per RDSO norms.

For Coupler Assly. along with Miner Draft Gear :

Coupler Assembly :

1. Finishing & Painting of Coupler / Draft Gear Components.
2. Assembly of bought out components
3. Testing of Coupler in Tup Hammer
4. Painting of Draft Gear and Coupler.

Miner Draft Gear Assembly :

1. Checking of castings (Miner housing and Miner follower) and Bought Out items like Shoe, Wedge, Top follower, Shortner, insert and Rear wall plate as per Assly. requirement.
2. Collection of above materials from Shop and Store for assembly.
3. Operation of Hydraulic press for assembly.
4. Tup hammer testing and recording of data with our Inspection people/RDSO.
5. Any other minor work required for Assembly.
6. Final finishing and painting.
7. Welding of Rear wall plate as per RDSO norms.

Pattern Shop

All jobs related to pattern shop of the Foundry. Braithwaite will supply all consumable items (Fevicol, M. Seal, Screw & CP Teak Wood etc.).

The contractor will supply all tools and tackles for Pattern Shop.

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Core Box-Repairing/ Rectification / Maintenance

All jobs related to Core-Box Repairing / Rectification / Maintenance of the Foundry. Braithwaite will supply all consumable items (Welding Electrode, Oxygen and LPG etc.).

The contractor will supply all tools and tackles including Gas Cutting Set, Welding set etc.

Daily labour supply :

You have to supply the following daily labour for house keeping of Shop-floor area and other miscellaneous job.

(Unskilled Labour – 15, Slinger / Loader for HT Furnace – 2, Crane Driver - 5, Fork Lift Driver – 1, Fork Lift Helper – 2, Rammer & Moulder – 4, Pattern Maker (High Skilled) – 2, Pattern Maker (Skilled) – 1, Skilled Labour for Box Repairing & Maintenance – 2)

Note :

1. If any materials are not available at our stock the same has to be procured by the party by new one and replaced the defective components immediately and cost of the equipment will be reimbursed on submission of actual bill.
2. All tools and tackles and other equipments specified above will be provided by the party.
3. Services to be provided in all working days if required on weekly off days/holidays.
4. If any absenteeism noticed of maintenance of arc furnace the deduction will be made on pro-rata basis.
5. Safe starting and safe stopping of Arc Furnace and ancillary equipment at the beginning and closing of working shifts respectively will be responsibility of the contractor.
6. During rainy session/heavy shower/pipe leakage, the stagnant water to be drain out from the pit for the production, the pump set will be provided by us.

General Terms & conditions :

- a) Deployment of required high skilled, skilled, unskilled and supervisor required for the subject job for successful execution of the contract and for achieving targeted monthly schedule and for maintaining high quality standard as per quality requirement/GAP of BWT/RDSO shall be your responsibility.
- b) You shall be required to arrange safety appliance like Hand Gloves, Shovels, goggles, Helmets and Tools-Tackles. masks, welding screen with blue and white glass, shoes, ear plugs,/muffler etc. and other requirements if any for carrying out the subject job.
- c) Transportation, accommodation and food/loading of your employees shall have to be arranged by you.

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- d) You should have registered under ESI & PF. You shall have to comply with all statutory responsibilities in regard to the Contract Labour (Regulation & Abolition) Act, Employees Provident Fund Act, ESI Act & Bonus Act. You shall be required to pay your employees minimum wages as per provision/Act of Govt. of West Bengal.
- e) Gate passes with photo of your employees shall have to be arranged by you from our concerned department. Your employees shall be required to get gate passes revalidated beyond its expiry date as and when required.
- f) Company's authorized representative shall be at liberty to object the presence of any representative or other person employed by you on the ground of misconduct incompetence and negligence.
- g) You must possess the Licence under the Contract Labour Laws/Regulation Act 1970 and amendment thereof. You should abide by all labour laws, rules and regulations of Govt. of West Bengal/Central Govt.
- h) All outside and local problems shall have to be tackled by you and BWT shall not be concerned in any way.
- i) You shall be required to deploy the required manpower for preparation of cores as stated above in "A", "G", "B" or "C" shift as per requirement of Foundry Deptt. and as per sole discretion of BWT in order to meet foundry production of closed moulds for all the heats taken per day.
- j) You must be prepared to work in G/A/B/C shift as per Foundry's requirement and as per sole discretion of BWT.
- k) You shall be most careful in proper and optimum utilization of all consumables to be supplied to you by BWT free of cost.
- l) You shall store them properly ensuring that there will be no deterioration/damage of the same. You shall safeguard these materials against pilferage or misuse by deploying your own security.
- m) You shall keep proper records of all the consumables that shall be provided to you by BWT. Any misuse/excess consumption by you/pilferage shall be subject to deduction at double the rate from your bill.
- n) Payment – Within 30 days after due certification by Sr. Mgr. (Fdy.) and DGM (Maint.).
- o) Contract Period –3 months.
- p) Security Deposit – You have submit a Security Deposit of 5% of order value within 15 days from the date of order in the form of DD/ BG/Pay Order which will be valid till completion of the contract. The Security Deposit will be released after successful completion of the job.
- q) Proper care should be taken by you for avoiding any accident. If any accident occurs during maintenance of arc furnace. You have to take care of your employees for hospitalization and proper treatment.

- r) Liquidated Damages : In the event of failure on the part of you to complete the job within the stipulated completion period Braithwaite reserve the right to recover a sum of 0.5% for every week or part thereof by way of L.D. subject to maximum limit of 10% of the order value.
- s) Any legal dispute that may arise will be settled within the jurisdiction of Court of Kolkata.
- t) Company reserves the right to cancel the order with 7 days notice at any point of time. Company also reserves the right to engage his own pouring man / pouring group for contractor's improper pouring of liquid metal into mould.
- u) Braithwaite will not pay any idle labour charges during execution of the job under any circumstances.
- v) In case of any damage done to materials of Braithwaite by yours people during execution of work, it will be binding to you to compensate Braithwaite for the damage done and the amount of compensation will be decided by Braithwaite.
- w) Risk Purchase : In the event of failure or delayed supplies within the reasonable period of time as decided by the purchaser. Company reserves the right to get the job done by other Agency / Agencies as per the order on Risk Purchase basis and shall recover the extra cost thereof, if incurred on you.
- x) Arbitration : Any dispute and difference, whatsoever arising between you out of or relating to the construction, meaning, scope, operation or effect of this contract or validity or the breach thereof shall be settled by arbitration in accordance with the Rules of Arbitration of the Indian Council of Arbitration and the award made in pursuance thereof shall be binding on the supplier.

BRAITHWAITE & CO. LTD.

PRICE SCHEDULE :

(I) For Operation and maintenance of 5 MT Arc Furnace : -

Description	<u>Rate</u>
1. Operation of Furnace and Pouring of Molten metal into the mould.	Rs. Per MT. Put into Mould.
2. Maintenance of 5 MT Arc Furnace	Rs. per month.

(II) Moulding :

Rate per MT

i) **Side Frame**

- a) Moulding and related job
- b) Core Making and Core Shifting
- c) Core Setting and Box Closing

ii) **Bolster**

- a) Core Making and Core Shifting

iii) **Machine Moulding items**

- a) Core making & Core Shifting.

(III) For Fettling : -

<u>Description of items</u>	<u>Rate per piece</u>
A. <u>Casub Bogie Castings</u>	
1. Side Frame	Rs.
2. Bolster	Rs.
3. Normal Side Bearer	Rs.
B. <u>Coupler Items</u>	
1. Coupler Body	Rs.

- | | |
|----------------------------|-----|
| 2. SK 62724 | |
| 3. Knuckle
W/D 870048/1 | Rs. |
| 4. Yoke
SK 62724 | Rs. |

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|-----------------------------------|-----|
| 5. Lock
BAR 38816 | Rs. |
| 6. Striker
A/BD 4460 | Rs. |
| 7. Yoke Pin Support
WA/BD 4462 | Rs. |
| 8. Miner Housing | Rs. |
| 9. Miner Follower | Rs. |
| 10. Back Stop | Rs. |

C. Wagon Components

- | | |
|--|-----|
| 1. Centre Pivot (Top) (Conventional / Modified) | Rs. |
| 2. Centre Pivot (Bottom) (Conventional / Modified) | Rs. |
| 3. Centre Pivot (Top & Bottom) for CLW | Rs. |

D. Miscellaneous castings Rs. (rate per kg)

(IV) Box knocking and allied activities :

- | | | |
|---|-----|---------|
| 1. Box Knocking and allied activities (Large Box) | Rs. | per MT. |
| 2. - Do - (Small Box) | Rs. | per MT. |

(V) Bogie Assembly (along with Painting) Rs. per Bogie Set

(VI) Coupler Assembly & Painting Rs. per Coupler

(VII) Tup Hammer Testing, Final finishing & Painting of Miner Draft Gear Rs. per Draft Gear

(VIII) Scrap cutting :

- | | | |
|---|-----|--------|
| (a) Scrap Cutting & Shifting | Rs. | per MT |
| (b) Scrap Shifting | Rs. | per MT |

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(IX) Daily Supply labour

Unskilled	Rs.	per head per day
Slinger	Rs.	per head per day
Crane Driver	Rs.	per head per day
Fork Lift Driver	Rs.	per head per day
Fork Lift Helper	Rs.	per head per day
Rammer & Moulder	Rs.	per head per day

Note : Rate to be quoted in figures and words.
Any overwriting in price figure will be rejected.

BRAITHWAITE & CO. LTD.

PRICE SCHEDULE

Sl. no.	Description	Minimum Quantity per month (approx.)	Rate (Rs.)	Total price (Rs.)
(I)	For Operation and maintenance of 5 MT Arc Furnace			
1.	Operation of Furnace and Pouring of Molten metal into the mould	300 MT	Rs. per MT	Rs.
2.	Maintenance of 5 MT Arc Furnace	From ???? to ?????	Rs. per month	Rs.
(II)	Moulding		(per MT)	
(i)	Side Frame			
a)	Moulding and related job	250 Pcs.	Rs. each	Rs.
b)	Core making and Core Shifting	250 Pcs.	Rs. each	Rs.
c)	Core Setting and Box Closing	250 Pcs.	Rs. each	Rs.
(ii)	Bolster			
a)	Core Making and Core Shifting			
(iii)	Machine Moulding items			
a)	Core making & Core Shifting	20 MT	Rs. per MT	Rs.
(III)	For Fettling (Oxy-cutting, Finishing and also gauge checking)			
A.	Casub Bogie Castings			
1.	Side Frame	250 pcs.	Rs. each	Rs.
2.	Bolster	125 pcs.	Rs. each	Rs.
3.	Normal Side Bearer	40 pcs.	Rs. each	Rs.
B.	Coupler Items			
1.	Coupler Body	40 pcs.	Rs. each	Rs.
2.	Knuckle	40 pcs.	Rs. each	Rs.
3.	Yoke	40 pcs.	Rs. each	Rs.
4.	Lock	40 pcs.	Rs. each	Rs.
5.	Striker	40 pcs.	Rs. each	Rs.
6.	Yoke Pin Support	40 pcs.	Rs. each	Rs.
7.	Miner Housing	40 pcs.	Rs. each	Rs.
8.	Miner Follower	40 pcs.	Rs. each	Rs.
C.	Wagon Components			
1.	Back Stop	200 pcs.	Rs. each	Rs.
2.	Centre Pivot (Top) (Conventional / Modified)	150 pcs.	Rs. each	Rs.
3.	Centre Pivot (Bottom) (Conventional / Modified)	150 pcs.	Rs. each	Rs.
4.	Centre Pivot (Top & Bottom) for CLW	20 pcs	Rs. each	Rs.

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D.	Miscellaneous Castings			
(IV)	Box knocking and allied activities :			
1.	Box Knocking and allied Activities (Large Box)	200 MT	Rs. per MT	Rs.
	Box Knocking and allied Activities (Small Box)	40 MT	Rs. per MT	Rs.
(V)	Bogie Assembly with Painting	125 sets	Rs. per set	Rs.
(VI)	Coupler Assembly along with Painting	40 sets	Rs. per set	Rs.
(VII)	Draft Gear Assembly along with Painting	70 sets	Rs. per set	Rs.
(a)	Scrap Cutting & Shifting	300 MT	Rs. per MT	Rs.
(b)	Scrap Shifting	100 MT	Rs. per MT	Rs.
(IX)	Daily supply labour			Rs.
	Unskilled	15 nos. per day	Rs. per head / day	Rs.
	Slinger / Loader for HT Furnace	2 nos. per day	Rs. per head / day	Rs.
	EOT Crane Driver	5 nos. per day	Rs. per head / day	Rs.
	Fork Lift Driver	1 no. per day	Rs. per head / day	Rs.
	Fork Lift Helper	2 nos. per day	Rs. per head / day	Rs.
	Rammer / Moulder	4 nos. per day	Rs. per head / day	Rs.
	<u>Pattern Maker</u>			Rs.
	High Skilled	2 nos. per day	Rs. per head / day	Rs.
	Skilled	1 no. per day	Rs. per head / day	Rs.
	Box-Repairing / Maintenance			Rs.
	Skilled	2 nos. per day.	Rs. per head / day	Rs.