

PART 1 H-SCOPE OF work for RHF

- 1) All the works to be carried out at SSTP site. This contract shall be operative for the period of two Year from the date award of contract. The rate quoted by the contractor shall be firm throughout the tenure of the contract.
- 2) All the work mentioned are to be done in RHF in space constrained area.
- 3) For replacement of water trough work mentioned in Sl. 1 and Sl. 5, leak test will be performed after completion of assembly. Work is considered complete only if there is no visible leakage noticed. Also draining of water through pipelines to be ensured after flushing.
- 4) For replacement of kerb casting, SS plate and dipper plate in Sl. 2, Sl. 3 and Sl. 4, hearth rotation will be checked for fouling and gap as per drawing is to be ensured after completing work.
- 5) During shutdown/ breakdown period, Contractor shall be informed about work needed to be carried out and exact number of water troughs, dippers plates, kerb castings and SS plates to be replaced will be informed. Also minimum notice period of 24 Hrs will be given for start- intimation of work and sufficient manpower to be mobilised to meet BHEL target.
- 6) Whenever the contractor is intimated about the work, all the jobs should be carried out in the specified time schedule as informed by Shop Engineer-in-charge. This work should be carried out either during Non-Production shifts / Sundays / Holidays or shut down days as instructed by shop in charge

Scope of work for MAJOR MAINTENANCE

- 1) The work consists of major maintenance and reconditioning activities like (1) Assembly replacement (2) Servicing / Repair of Mechanical Components / Equipment, (3) Associated greasing and oil filling (4) Simple machining work like drilling tapping and grinding, (5) Material handling / Movement
- 2) The above maintenance/ reconditioning work are to be carried out in Hot Mill equipment in AB bay, BC bay and IC bay including Furnace, cellar and Tool Room
- 3) The said works are to be executed on Sundays, Holidays, non-rolling shift and for any emergency work on other given days. between 08.00 to 16.30 (or) 06.00 to 14.00 (or) 14.00 to 22.00 or 22.00 to 06.00 hrs.(As and when the necessity arises with minimum intimation)
- 4) The scope of work for each work / each job is identified in advance and explained by the shop in charge. The contractor shall depute one of his supervisor to make all preparatory works such as collection of materials, any other tools for specific application etc., from main store / tool crib.

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ANNUAL MAINTENANCE CONTRACT FOR RHF ,MAJOR MAINTENANCE SUPPORT SERVICES
IN HOTMILL AT SSTP
GROUP WISE L1 BASIS.

- 5) Any failure in Contractors job carried out by the contractor concerned, in the preceding week, noticed during mill operation should be rectified free of cost or rectification cost to be reduced from his bills.
- 6) **Contractor's Scope:** Tools boxed containing standard hand tools like double end spanners, Allen keys, pipe wrenches, pliers, hammers, screw drivers etc., and tools kits containing double and ring spanners, box spanners, tubular boxes Torque wrenches, hydraulic jacks, pulleys, pullers etc., are to be arranged by the contractor at his cost.
- 7) **BHEL Scope:** Welding set with cable. Length with holder and gas cutting set with cutting torch, hose, required gas regulators, spark lighter and other tools for welding & gas cutting jobs will be supplied by BHEL / SSTP.

Scope of work for servicing

- 1) The work consists of service activities like (1) Assembly replacement (2) Servicing / Repair of Mechanical Components / Equipments, (3) Associated greasing and oil filling (4) Simple machining work like drilling tapping and grinding, welding (5) Material handling / Movement
- 2) The above service work are to be carried out in Hot Mill equipments in reconditioning are of HMM
- 3) The said works are to be executed on Sundays, Holidays, non-rolling shift and for any emergency work on other given days between 08.00 to 16.30 (or) 06.00 to 14.00 (or) 14.00 to 22.00 or 22.00 to 06.00 hrs. (As and when the necessity arises with minimum intimation)
- 4) The scope of work for each work / each job is identified in advance and explained by the shop in charge. The contractor shall depute one of his supervisor to make all preparatory works such as collection of materials, any other tools for specific application etc., from main store / tool crib.
- 5) Any failure in Contractors job carried out by the contractor concerned, in the proceeding week, noticed during mill operation should be rectified free of cost or rectification cost to be reduced from his bills.
- 6) **Contractor's Scope:** Tools boxed containing standard hand tools like double end spanners, Allen keys, pipe wrenches, pliers, hammers, screw drivers etc., and tools kits containing double and ring spanners, box spanners, tubular boxes Torque wrenches, hydraulic jacks, pulleys, pullers etc., are to be arranged by the contractor at his cost.

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- 7) BHEL Scope: Welding set with cable. Length with holder and gas cutting set with cutting torch, hose, required gas regulators, spark lighter and other tools for welding & gas cutting jobs will be supplied by BHEL / SSTP.

Scope of work for MSS

- 1) The work consists of maintenance activities like (1) Fitting, (2) Servicing / Repair of Mechanical Components / Equipment, (3) Associated greasing and oil filling (4) Simple machining work like drilling tapping and grinding, (5) Material handling / Movement
- 2) The above maintenance work are to be carried out in Hot Mill at AB bay, BC bay and IC bay including Furnace and Tool Room
- 3) The said works are to be executed on Sundays, Holidays, non- rolling shifts and for any emergency work on other given days between 08.00 to 16.30 (or) 06.00 to 14.00 (or) 14.00 to 22.00 or 22.00 to 06.00 hrs with minimum notice.
- 4) The scope of work for each work / each job is identified in advance and explained by the shop in charge. The contractor shall depute one of his supervisor to make all preparatory works such as collection of materials, any other tools for specific application etc., from main store / tool crib. Sufficient man power based on nature of work and urgency to be mobilized.
- 5) Any failure in MSS job carried out by the contractor concerned, in the preceding week, noticed during mill operation should be rectified free of cost or rectification cost to be reduced from his bills.
- 6) **Contractor's Scope:** Tools box containing standard hand tools like double end spanners, Allen keys, pipe wrenches, pliers, hammers, screw drivers etc., and tools kits containing double and ring spanners, box spanners, tubular boxes Torque wrenches, hydraulic jacks, pulleys, pullers etc., are to be arranged by the contractor at his cost.
- 7) **BHEL Scope:** Welding set with cable, holder and gas cutting set with cutting torch, required gas regulators, spark lighter and other tools for welding & gas cutting jobs will be supplied by BHEL / SSTP.

common:

- 1) Remove all wastes / debris from the working spot and clean the surrounding make it neat. All generated scrapes to be removed from the work place and moved to Disposal Stores.
- 2) Contractor has to take adequate safety measures to their crew by providing required personal protective equipments
- 3) Contractor should make arrangements for provision of sufficient numbers of commander torches, cells etc., to their labourers for doing work continuously
- 4) From the contractor side, supervisor with shop working knowledge should be stationed for any coordination and communication with dept. For collection of consumables and other related materials required for the work.

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- 5) BHEL (SSTP) supply: EOT crane facility will be extended Spares, oxygen & acetylene gas cylinders, welding electrodes, gaskets, wooden packing materials, fasteners and cleaning consumables, welding machine with accessories, gas cutting set with accessories and consumables.
- 6) **BHEL - SSTP'S Scope** : All necessary spares and consumables like cotton waste, welding electrodes and cleaning agents will be provided.
- 7) The Contractor has to visit the site / location and inspect the place of work before submitting the offer for clarity of nature of work.
- 8) Considering this nature of work to be carried out at different conditions and various locations, work to be awarded covering all aspects on "itemwise L1 basis".
- 9) The quantum of work planned under preventive maintenance may be higher or lower depending upon the mill operation / shut down and review of maintenance schedule. **PERIOD OF CONTRACT: The contract is in force / operation for a period of two year from the date of release of work order.**

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03. SPECIAL CONDITIONS:

Hot mill mechanical mtce section is working in A, B, C & G shifts. To cater the needs of above activities a minimum of 4 persons per shift for A,B & C Shifts and 3 Person for General Shift per day for unskilled work, are required. The above per shift requirement is only tentative, it may be redistributed within shifts based on shop requirement.

04.The manpower deployment schedule shall be as follows the contractor has to engage a minimum five workman per shift (A,B,C) & Three workman for G shift in all working days (300X15 = 4500 Man days) and eight workman for on Sundays and Holidays (60X8=480 Man days)(A shift -2 persons , B shift-2 persons, C shift -2 persons & G shift -2 persons) which means a minimum number of 4980 man days per year.

05. 15T/10T EOT crane can be availed from SSTP on request.

06. All generated scraps to be removed from the work place and moved to Disposal stores.

Remove all waste / debris from the working spot, clean the surrounding and make it neat.

07. The contractor should maintain separate attendance register of the deployed manpower availed for this job from start to end of work.

08. The contractor should maintain a 'Work Diary containing the details of work executed by him from time to time on Shift/Daily basis and obtain the signature from official concerned nominated for this purpose for having executed the work correctly and satisfactorily.

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PART – 2

1. Rates should be quoted for all the items in the price bid.
2. Rates shall be written in words and figures. In the event of difference, the rate in words shall be valid and binding. Unit rate shall be considered correct in the event of any discrepancy with regard to total rate.
3. The Rate quoted shall be firm throughout the currency of the Contract without any price variation Clause.

PRICE BID

The Rate quoted shall be firm throughout the currency of the Contract without any price variation Clause.

Group-1: RHF

| Sl.No. | Description Of Work | UNIT OF MEASUREMENT | QTY | RATE PER UNIT IN Rs. | |
|--------|---|---------------------|-----|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 1 | Replacement of outer and inner water troughs | Nos | 216 | | |
| 2 | Replacement of outer and inner kerb castings | Nos | 336 | | |
| 3 | Replacement of outer and inner dipper plates | Nos | 648 | | |
| 4 | Replacement of SS bend plates as for Hearth kerb castings | Nos | 500 | | |
| 5 | Flushing of trough water pipelines | Nos | 8 | | |

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GROUP-II:MAJOR MAINTENANCE

| Sl.No. | Description Of Work | UNIT OF MEASUREMENT | QTY | RATE PER UNIT IN Rs. | |
|--------|--|---------------------|-----|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 1 | RHF CHARGING/DISCHARGING BOOM ASSY REPLACEMENT | Nos | 4 | | |
| 2 | RHF CHARGING/DISCHARGING TORQUE REPLACEMENT | Nos | 4 | | |
| 3 | RHF CHARGING/DISCHARGING LIFTING CYLINDER REPLACEMENT | Nos | 2 | | |
| 4 | RHF CHARGING/DISCHARGING TROLLY REPLACEMENT | Nos | 2 | | |
| 5 | MTB ROPE CHANGING | Nos | 2 | | |
| 6 | MTB PULLEY DISMANTLING AND REASSEMBLY FOR MTCE WORK | Nos | 8 | | |
| 7 | CPE ROLL CHANGE | Nos | 8 | | |
| 8 | CHANGING PUSH BENCH WEAR STRIP | Nos | 48 | | |
| 9 | REELER GEARBOX CHANGING WITH 2 UJ SHAFT REMOVAL AND RE ASSY | Nos | 12 | | |
| 10 | SRM DRIVE SHAFT REPLACEMENT WITH UJ SHAFT | Nos | 56 | | |
| 11 | SRM GEAR COUPLING REPLACEMENT,REPLACING DAMAGED FASTENENERS | Nos | 2 | | |
| 12 | SRM STAND COOLING WATER COUPLING REPLACEMENT | Nos | 2 | | |
| 13 | SRM EXIR RC GROUP REMOVAL, SERVICING OF DAMAGED ROLLERS AND ASSY | Nos | 2 | | |
| 14 | HPWS REPLACEMENT OF NRV (COPPER WASHER TO BE CHANGED IN DELIVERY LINE FLANGE JOINT AFTER NRV IF REQUIRED | Nos | 2 | | |
| 15 | WBF LIFTING CYLINDER | Nos | 8 | | |

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GROUP WISE L1 BASIS.**

| Sl.No. | Description Of Work | UNIT OF MEASUREMENT | QTY | RATE PER UNIT IN Rs. | |
|--------|--|---------------------|-----|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 16 | WBF traverse cylinder | Nos | 8 | | |
| 17 | WBF lifting lever & tie rod connecting pin replacement | Nos | 2 | | |
| 18 | Cold saw carriage replacement | Nos | 4 | | |
| 19 | Hanging Gearbox replacement | Nos | 8 | | |
| 20 | Pinch Roll Chain unit replacement | Nos | 6 | | |
| 21 | TRG unit replacement | Nos | 10 | | |
| 22 | Transport Roll unit Replacement | Nos | 10 | | |
| 23 | Crane rope changing | Nos | 10 | | |
| 24 | SRM Floating shaft changing | Nos | 60 | | |
| 25 | SRM Gearbox changing | Nos | 10 | | |

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GROUP-III SERVICING AND OVERHAULING

| Sl.No. | Description Of Work | UNIT OF MEASUREMENT | QTY | RATE PER UNIT IN Rs. | |
|--------|---|---------------------|-----|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 1 | Pinch Roll servicing | Nos | 8 | | |
| 2 | Roller conveyer billet saw to CPE Inlet and alignment conveyour | Nos | 80 | | |
| 3 | Roller conveyour push bench exit to heating grid and PRC | Nos | 120 | | |
| 4 | Roller conveyour WBF exit to Cooling bed exit | Nos | 40 | | |
| 5 | Roller conveyour cold saw | Nos | 20 | | |
| 6 | TRG Servicing | Nos | 10 | | |
| 7 | Transport roll servicing | Nos | 10 | | |
| 8 | Gear box small servicing | Nos | 80 | | |
| 9 | Gear box big servicing | Nos | 40 | | |
| 10 | Reeler Gearbox | Nos | 8 | | |
| 11 | Hydraulic cylinder servicing | Nos | 40 | | |
| 12 | Pneumatic cylinder servicing | Nos | 40 | | |

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|--------|-------------------------|---------------------|-----|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 13 | UJ shaft servicing | Nos | 40 | | |
| 14 | CRT/DRT servicing | Nos | 40 | | |
| 15 | RHF combustion blower | Nos | 4 | | |
| 16 | RHF atomising blower | Nos | 4 | | |
| 17 | RHF nose cooling blower | Nos | 4 | | |
| 18 | RDF Combustion blower | Nos | 4 | | |
| 19 | WBF combustion blower | Nos | 4 | | |
| 20 | WBF atomising blower | Nos | 4 | | |
| 21 | SRM ventillation blower | Nos | 2 | | |
| 22 | WBF ID fan | Nos | 2 | | |

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| Sl.No. | Description Of Work | UNIT OF MEASUREMENT | QTY | RATE PER UNIT IN Rs. | |
|--------|--|---------------------|-----|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 23 | RHF support roller/ centering roller servicing | Nos | 112 | | |
| 24 | SRM drive shaft servicing | Nos | 40 | | |
| 25 | Gear pump servicing | Nos | 20 | | |
| 26 | Hydraulic pump servicing | Nos | 20 | | |
| 27 | Scale pit pump servicing | Nos | 8 | | |

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GROUP-IV :MAINTENANCE SUPPORT SERVICE

| sl.No. | Description Of Work | UNIT OF MEASUREMENT | QTY | RATE PER UNIT IN Rs. | |
|--------|---|---------------------|------|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 1 | ALL KINDS OF FASTENERS TIGHTENING/REPLACEMENT | Nos | 8000 | | |
| 2 | FASTENERS TIGHTENING/REPLACEMENT AND TACK WELDING UPTO M24 | Nos | 1000 | | |
| 3 | FASTENERS TIGHTENING/REPLACEMENT AND TACK WELDING ABOVE M24 | Nos | 1000 | | |
| 4 | TIGHTENING /REPLACEMENT OF FOUNDATION BOLTS OF MOUNTING BASE FRAME M36 & ABOVE | Nos | 200 | | |
| 5 | MASS TIGHTENING/REPLACEMENT OF BOLTS ON STRUCTURE ,CROSS BARS ETC (MBHG BOLTS COOLING BED BOLTS,RAILING FACILITY BOLTS ,ETC | Nos | 1000 | | |
| 6 | REPLACEMENT OF FULL CHAIN SIZE ½" TO 5/8" PITCH | Nos | 20 | | |
| 7 | REPLACEMENT OF FULL CHAIN LINK SIZE 1" TO 1 1/4" PITCH | Nos | 20 | | |
| 8 | REPLACEMENT OF CHAIN SIZE ½" TO 5/8" PITCH | Nos | 20 | | |
| 9 | REPLACEMENT OF CHAIN LINK SIZE 1" TO 1 1/4" PITCH | Nos | 20 | | |
| 10 | REPLACEMENT/TENSION ADJUSTMENT OF V –BELT BELOW 800 MM LONG | Nos | 20 | | |
| 11 | REPLACEMENT/TENSION ADJUSTMENT OF V –BELT BELOW 800 MM TO 1600 MM LONG | Nos | 20 | | |
| 12 | REPLACEMENT/TENSION ADJUSTMENT OF V –BELT BELOW 1600 MM TO 2600 MM LONG | Nos | 20 | | |
| 13 | HIGH SPOT GRINDING OF ROLLERS | Nos | 100 | | |
| 14 | WELDING OF CAVITIES AND WORN OUT KG.PORTIONS OF ROLLERS AND GRINDING THE SAME(RATE/KG OF WELD METAL DEPOSITION TO BE GIVEN) | KG | 100 | | |
| 15 | SKID WELDING AND GRINDING OF MBE MBHG BEAMS.SRM EXIT FLAP.HOT NDT AREA.ETC. (RATE/KG OF WELD METAL DEPOSITION TO BE GIVEN) | KG | 20 | | |

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|--------|---|---------------------|-----|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 16 | Only surface grinding of the above (Rate per Sq. Meter. to be given) | Nos | 100 | | |
| 17 | RC foundation bolt locking with castle nut & split pin (Setting, Marking, Removing, drilling, Debarring, Fixing & Locking with split pin) | Nos | 200 | | |
| 18 | Replacement of Serviced roller assembly (Dismantling Erection, Alignment, Area cleaning, Movement of Roller from and to Hot mill reconditioning area) | Nos | 200 | | |
| 19 | RC Coupling insert changing without disturbing gear box | Nos | 80 | | |
| 20 | RC Coupling insert changing by disturbing gear box | Nos | 40 | | |
| 21 | Alignment of idle roller (including alignment respect to adjacent rollers & angle correction in case of swivel base roller) | Nos | 40 | | |
| 22 | Alignment of driven roller (including alignment with respect to adjacent rollers & angle correction in case of swivel base roller) | Nos | 80 | | |
| 23 | Gear box changing including coupling half of geared motor unit | Nos | 200 | | |
| 24 | Motor changing in geared motor unit | Nos | 50 | | |
| 25 | Changing of geared motor unit along with coupling half including oil topping) | Nos | 50 | | |
| 26 | Changing of coupling half | Nos | 50 | | |
| 27 | Changing of coupling | Nos | 100 | | |
| 28 | Providing Arresting pieces in roller bearing blocks (Preparation & Welding) | Nos | 100 | | |

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|--------|---|---------------------|------|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 29 | Oil topping in RC Gear box | Nos | 2000 | | |
| 30 | Removal, Servicing & Re-fixing of damper in Hot mill furnaces above Dia.500mm | Nos | 2 | | |
| 31 | Removal, Servicing & Re-fixing of damper in Hot mill furnaces Dia.500mm up to 1500mm | Nos | 2 | | |
| 32 | Servicing & Replacement of valves in Hot mill furnaces up to 2 ½" NB | Nos | 10 | | |
| 33 | Servicing & Replacement of valves in Hot mill furnaces above 2 ½" NB up to 6" NB | Nos | 10 | | |
| 34 | Servicing & Replacement of valves in Hot mill furnaces above 6" NB up to 10" NB | Nos | 10 | | |
| 35 | Servicing & Replacement of valve in Hot mill furnaces above 10" NB up to 16"NB | Nos | 30 | | |
| 36 | Servicing & Replacement of valves in Hot mill furnaces above 16" NB up to 22" NB | Nos | 10 | | |
| 37 | Servicing & Replacement of Burner in Hot mill furnaces | Nos | 20 | | |
| 38 | Replacement of Burner in Hot mill furnaces | Nos | 20 | | |
| 39 | RHF: Replacement of Centering roller Assy. | Nos | 20 | | |
| 40 | RHF: Adjustment of Centering roller Assy. | Nos | 20 | | |
| 41 | RHF: Dimension checking of Centering roller Assy.(Eight roller assemblies dimensions to be checked at time) | Nos | 24 | | |
| 42 | RHF: Replacement & Tack welding of Hearth shim | Nos | 40 | | |
| 43 | RHF: Positioning & Tack welding of Hearth shim | Nos | 40 | | |

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|--------|--|---------------------|------|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 44 | RHF: Dismantling of Hearth rack segment | Nos | 10 | | |
| 45 | RHF: Replacement of Hearth rack segment | Nos | 10 | | |
| 46 | RHF: Replacement of SS sputs (Pin) in charging./discharging. M/c | Nos | 20 | | |
| 47 | RHF: Replacement of Rack segment (with corner piece welding) in charging M/c | Nos | 20 | | |
| 48 | RHF: Replacement & Alignment of Pinion in charging./discharging .M/c | Nos | 4 | | |
| 49 | RHF: Alignment of Pinion in charging./discharging. M/c | Nos | 4 | | |
| 50 | RHF: Tightening / Replacement of Hearth rack bolt (while furnace in operation) | Nos | 1000 | | |
| 51 | RHF: Tightening / Replacement of Water trough bolt (While furnace in operation) | Nos | 200 | | |
| 52 | RHF: Water leakage arresting by welding in (front portion with SS rod) charging./discharging. M/c. | Nos | 10 | | |
| 53 | RHF: Water hose changing in charging./discharging. M/c below 3mtrs. Long | Nos | 30 | | |
| 54 | RHF: Water hose changing in charging./discharging. M/c above 3mtrs. Long | Nos | 30 | | |
| 55 | RHF: Fuel oil hose changing in Inner zone. | Nos | 40 | | |
| 56 | RHF: Fuel oil hose changing in outer zone. | Nos | 40 | | |
| 57 | RHF: Replacement of serviced supporting roller assy. | Nos | 10 | | |
| 58 | RHF & WBF: Servicing & Replacement of zonal valve. | Nos | 2 | | |
| 59 | RHF & WBF: Replacement of zonal valve. | Nos | 2 | | |

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|--------|---|---------------------|------|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 60 | De-scalar: Replacement of Nozzle | Nos | 24 | | |
| 61 | RDF: Alignment / Replacement of Sprocket in charging discharging roller assy. | Nos | 10 | | |
| 62 | RDF: Changing of full chain for the above | Nos | 10 | | |
| 63 | RHF: Changing Pneumatic cylinder Pin in heating area | Nos | 10 | | |
| 64 | Changing Pneumatic cylinder Pin in heating grid area | Nos | 10 | | |
| 65 | Changing Pneumatic cylinder Tie Rod in heating grid area (Kick in HG) | Nos | 10 | | |
| 66 | Changing of eye for Pneumatic cylinder in heating grid area | Nos | 10 | | |
| 67 | WBF: Tightening / Replacement of bolt in cellar (while Furnace in operation) | Nos | 1000 | | |
| 68 | WBF: Servicing / Replacement of micro Valve. | Nos | 20 | | |
| 69 | WBF: Replacement of micro valve in burner assy. | Nos | 20 | | |
| 70 | WBF: Changing of Water hose in charging./discharging. Area | Nos | 10 | | |
| 71 | WBF: Changing of Water hose in CRT & DRT | Nos | 20 | | |
| 72 | WBF: Fabrication & Replacement of cooling line in CRT & DRT | Nos | 20 | | |
| 73 | WBF: Replacement / Flushing of cooling line in CRT & DRT | Nos | 20 | | |
| 74 | Oil topping in Main Gear box | Nos | 4000 | | |

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|--------|---|---------------------|------|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 75 | Oil topping in Layer transfer device | Nos | 1540 | | |
| 76 | Replacement of coupling bolt in Gear motor & assembly | Nos | 60 | | |
| 77 | Replacement of coupling bolt in Cold saw RCS & RCS behind Cold saw | Nos | 10 | | |
| 78 | Tie Rod Adjustment in Cold saw II exit Rc | Nos | 10 | | |
| 79 | Replacement of Turn Buckle in Cold saw II exit Rc (including alignment) | Nos | 10 | | |
| 80 | Replacement of Tie Rod in Cold saw II exit Rc (including alignment) | Nos | 10 | | |
| 81 | Changing of Pneumatic Cylinder in Cold saw I & II guide rollers | Nos | 2 | | |
| 82 | Cold saw I & II: Servicing & Replacement of guide rollers | Nos | 10 | | |
| 83 | Cold saw I & II: Replacement of guide rollers | Nos | 10 | | |
| 84 | Cold saw I & II: Changing of Hydraulic Cylinder in Tilting Table | Nos | 2 | | |
| 85 | KR150: changing of coupling bolt in inlet RC. | Nos | 20 | | |
| 86 | KR150: changing of eye in Kick in Cylinder | Nos | 4 | | |
| 87 | KR150: Changing of Kick in Cylinder | Nos | 2 | | |
| 88 | Hot NDT Area: Changing of Pneumatic Cylinder for Cylinder bore 3"/5" | Nos | 2 | | |
| 89 | Hot NDT Area: Changing of Pneumatic Cylinder for Cylinder bore 6"/8" | Nos | 2 | | |

Place:
Date:

Signature of the Tenderer
with seal & full address...

ANNUAL MAINTENANCE CONTRACT FOR RHF ,MAJOR MAINTENANCE SUPPORT SERVICES
IN HOTMILL AT SSTP
GROUP WISE L1 BASIS.

| Sl.No. | Description Of Work | UNIT OF MEASUREMENT | QTY | RATE PER UNIT IN Rs. | |
|--------|--|---------------------|------|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 90 | Replacement of Platform grill (Erection only) | Nos | 30 | | |
| 91 | Dismantling: Storage skid in IC bay, VDI Table WBF charging side, Cold saw area, etc. | KG | 2000 | | |
| 92 | Fabrication: Storage skid in IC bay, VDI Table WBF charging side, Cold saw area, etc. | KG | 2000 | | |
| 93 | Erection: Storage skid in IC bay, VDI Table WBF charging side, Cold saw area, etc. | KG | 2000 | | |
| 94 | RHF Charging/ Discharging -Front axle assembly replacement | Nos | 8 | | |
| 95 | RHF Charging/ Discharging lifting cylinder replacement | Nos | 4 | | |
| 96 | RHF Charging/ Discharging pinion assembly replacement | Nos | 4 | | |
| 97 | RHF clamping hyd. Cylinder replacement | Nos | 8 | | |
| 98 | RDF Kick out cylinder replacement | Nos | 4 | | |
| 99 | RDF CRT/DRT Replacement | Nos | 20 | | |
| 100 | RDF Stopper alignment | Nos | 24 | | |
| 101 | RDF kick out arm alignment | Nos | 24 | | |
| 102 | RDF kick-in shaft flange bolts replacement | Nos | 24 | | |
| 103 | CPE - Entry pusher assembly replacement | Nos | 8 | | |

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| Sl.No. | Description Of Work | UNIT OF MEASUREMENT | QTY | RATE PER UNIT IN Rs. | |
|--------|--|---------------------|-----|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 104 | CPE - Entry pusher trough wear strip replacement | Nos | 8 | | |
| 105 | CPE - Entry pusher wear strip replacement | Nos | 4 | | |
| 106 | CPE - Entry pusher hydraulic cylinder replacement | Nos | 2 | | |
| 107 | CPE - Swivel arm cylinder replacement | Nos | 8 | | |
| 108 | MTB wheel changing | Nos | 8 | | |
| 109 | MTB cooling line replacement | Nos | 8 | | |
| 110 | Manipulator gripper link changing | Nos | 8 | | |
| 111 | Crimping stopper/ buffer replacement | Nos | 8 | | |
| 112 | Push bench bottle/mandrel clamp pneumatic cylinder replacement | Nos | 32 | | |
| 113 | Hanging gear box gear coupling replacement | Nos | 8 | | |
| 114 | Push bench cover fasteners replacement | Nos | 12 | | |
| 115 | Reeler UJ shaft replacement | Nos | 32 | | |
| 116 | Extractor UJ shaft replacement | Nos | 8 | | |
| 117 | HOT saw CT chain assembly replacement | Nos | 10 | | |
| 118 | Hot saw Chain alignment | Nos | 12 | | |

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| sl.No. | Description Of Work | UNIT OF MEASUREMENT | QTY | RATE PER UNIT IN Rs. | |
|--------|---|---------------------|-----|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 119 | WBF CRT/DRT replacement | Nos | 40 | | |
| 120 | WBF kick-off arm replacement | Nos | 60 | | |
| 121 | Push Bench Ring bed Fasteners tightening | Nos | 12 | | |
| 122 | Hotsaw rotary arm replacement | Nos | 4 | | |
| 123 | WBF kick-in cylinder replacement | Nos | 4 | | |
| 124 | Door rope pulley changing RHF, RDF, WBF | Nos | 12 | | |
| 125 | SRM clamping cylinder replacement | Nos | 10 | | |
| 126 | Cooling bed Rotary arm bucket replacement | Nos | 8 | | |
| 127 | RHF Charging/Discharging drive coupling flange fasteners replacement | Nos | 24 | | |
| 128 | Reeler UJ shaft fasteners and key replacement | Nos | 24 | | |
| 129 | CPE outlet side wedge bolts replacement | Nos | 24 | | |
| 130 | CPE - Manipulator pinion drive replacement | Nos | 4 | | |
| 131 | CPE - Swivel arm hydraulic hose replacement | Nos | 64 | | |
| 132 | Oil leak arresting by replacement of o-ring, dowty seal and copper washer | Nos | 100 | | |
| 133 | WBF structure all fasteners replacement | Nos | 8 | | |

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| Sl.No. | Description Of Work | UNIT OF MEASUREMENT | QTY | RATE PER UNIT IN Rs. | |
|--------|---|---------------------|-----|----------------------|----------|
| | | | | IN FIGURES | IN WORDS |
| 134 | WBF - Intermediate flange fasteners replacement | Nos | 8 | | |
| 135 | Cold saw horizontal clamping cylinder replacement | Nos | 4 | | |
| 136 | Cold saw vertical clamping cylinder replacement | Nos | 4 | | |
| 137 | SRM extractor cylinder replacement | Nos | 16 | | |
| 138 | SRM stand gear coupling replacement | Nos | 56 | | |
| 139 | SRM exit screw jack replacement | Nos | 6 | | |
| 140 | Replacement of tie rod in cold saw | Nos | 8 | | |
| 141 | SRM stand changing car rope replacement | Nos | 4 | | |
| 142 | Pneumatic cylinder replacement at extractor, Push bench call mandrel, reeler, hotsaw and heating grid | Nos | 40 | | |
| 143 | Replacement of heat exchangers at CPE and Crimping power pack | Nos | 12 | | |

GST.....%

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