



**KOLKATA PORT TRUST
HALDIA DOCK COMPLEX**

An ISO-9001: 2008 Organization

Office of P&E Divn.

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Dated: 13.09.2018

No.: DM(P&E) / 108 CM / 770

Dear Sir,

Sub: Budgetary offer for repair and maintenance of conveyor belts and conveyor structures at Coal Handling Plant of Haldia Dock Complex on biennial rate contract (on call) basis.

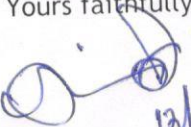
Haldia Dock Complex is operating mechanized coal handling plant for loading of thermal coal in vessels. We would like to carryout day to day repair and maintenance of conveyor belts and conveyor structures of the said mechanized handling system.

Indicative scope of work, special conditions and Bill of Quantities for the above activities have been enclosed herewith.

Based on above, you are requested to submit your budgetary offer within September 28, 2018, for the subject job.

Thanking you,

Yours faithfully,


(A.K.Maity),
Dy. Manager (P&E)
For Sr.Dy.Manager(P&E)
Haldia Dock Complex.

Encl: As above.

1. SPECIAL CONDITIONS OF CONTRACT

1.1. MODE OF INTIMATION :

The controlling officer / site engineer of Coal Handling Plant of HDC will intimate the contractor, regarding various jobs, over phone / e-mail / by issuing letter. The contractor should intimate the phone nos. of his concerned contact person(s) in this regard. On receipt of the intimation, they shall have to mobilize required manpower, machinery, consumables etc at HDC site, within 2 (two) hours, and complete the job expeditiously. The job allotted will have to be continued uninterruptedly till completion of the job, if necessary.

Ply cutting, edge cutting / dressing / replacement of idler/roller, bracket etc. as stated under the Scope of Work should be mobilized within 1 (one) hr. from the time of intimation.

The contractor should also carry out checking of conveyor belts and conveyor structures as per schedule provided by the controlling officer/site engineer.

1.2. TENDERERS MUST TAKE THE FOLLOWING POINTS INTO CONSIDERATION:

- 4.2.1 The successful Tenderer shall mobilize men, materials, machines, tools & tackles, etc. at site within **7 (seven)** days of receipt of the Work Order.
- 4.2.2 No transport, accommodation and canteen facility will be provided to the contractor and / or their staff.
- 4.2.3 The Tenderers shall indicate clearly in their tenders the estimated number of workmen, supervising personnel that they would deploy for successful execution of the job.
- 4.2.4 The Tenderers shall also furnish with the Tender a list of the details of machines, materials, tools and tackles that they would mobilize at site at their cost.
- 4.2.5 The successful Tenderer has to maintain all relevant records in the Daily Log Book and produce the same as and when required and the Daily Log Book should be duly certified by the representative of Sr. Dy. Manager (P&E) HDC.
- 4.2.6 A log book to be maintained at site for recording the actual time of deployment of equipment by HDC and the same would be jointly signed by the representative of Sr. Dy. Manager (P&E) HDC and the Contractor.

1.3. WORKING FACILITIES:

The following facilities will be provided to the contractor under the following terms and conditions:-

- i) A token License Fee of Rs.100/-per month will be applicable on the open space, to be provided for purpose of storage of materials at site, for the period of contract. However, in case of allotment of covered space, charges will be recovered as per the prevailing rates. The site store is to be dismantled immediately on completion of the job and cleared to the satisfaction of Sr. Dy. Manager (P&E) or his authorized representative.
- ii) Electrical power for site store will be supplied on chargeable basis as per the prevailing rates, which may be revised from time to time. However power supply related to vulcanizing, lagging, dressing etc of conveyor belt / cable and fabrication, grit blasting, painting etc. for repair of conveyor structures as

applicable, at site will be given free of cost. Necessary length of cable to the work place from energy meter / source and other accessories for the aforesaid purpose shall be arranged by the contractor.

- iii) Dock Permit for the contractor and their staff, materials, vehicles, etc. for movement inside the Dock Area, will be provided Free of Cost.
- iv) Drinking water may be supplied on chargeable basis. However all necessary arrangement like plumbing / installation of water meter etc. to be made by the contractor.

1.4. CONTRACT PERIOD:

The contract shall remain valid for a period of **2(Two) years**, counted from the date of placement of order by the Engineer upon the contractor or on and from 01.04.2019 whichever is later. However, if a Letter of Intent (LOI) is placed by the Engineer upon the contractor and the detailed order is placed subsequently, the period of contract shall be counted from the date of placement of the LOI by the Engineer upon the contractor or on and from 01.04.2018 whichever is later .

1.5. GUARANTEE PERIOD:

- a) 1 (One) Year from the date of commissioning, in case of Hot Vulcanizing Joint of Nylon - Nylon construction Conveyor Belts & 6 (Six) Months from the date of commissioning, in case of Cold Vulcanizing Joints of Nylon - Nylon construction Conveyor Belts.
- b) Drum Lagging: 6 (Six) Months from the date of commissioning.
- c) Longitudinal Cut Repairing (LCR) by Vulcanizing process- 6 (Six) Months from the date of acceptance at site stores after repair.
- d) For fabricated conveyor structures: 1 (One) year from the date of erection.
- e) The guarantee period will not be applicable for the following jobs. However, all work are to be carried out properly as per the Scope of Work:
 - i) Fastener Joints.
 - ii) Repairing of Conveyor Belts with Stray Fastener.
 - iii) Tension release and repositioning of Conveyor Belt by adjusting the Take-up during repair / replacement of Driving / Non-driving Drum.
 - iv) Laying of various sizes of Conveyor Belts.
 - v) Re-coiling of various sizes of Conveyor Belts and removal of various sizes of old Conveyor Belts.
 - vi) Sizing and cutting of Conveyor Belts for use as Skirt Guard Liners/ Conveyor of reduced width.
 - vii) Vulcanizing of Flexible Cables.
 - viii) Replacement of idler rollers, brackets.

1.6. PAYMENT TERMS:

The contractor shall have to submit progressive monthly bill(s) in triplicate. Bills will be passed within 30 days from the date of receipt, if found in order. 100% payment will be released against those items which are not covered under guarantee. 90% payment will be released against those items which are covered under guarantee and the balance 10% will be paid after successful expiry of guaranty period. The progressive monthly bill(s) must be accompanied by the following documents and other relevant documents, if any:

- a. A Joint Certification to be done by the authorized representative(s) of the Contractor and the authorized representative(s) of Sr. Dy. Manager (P&E), HDC, mentioning the Date & Time of placement of the requisition for work to the Contractor, brief description of the work, along with BoQ Sl. No. for the particular work, period of delay, if any, and reason(s) thereof.
- b. Monthly Checking Reports, containing condition / status of various Conveyor Belts, Idler/Roller, Bracket and Conveyor Structures installed at Coal Handling Plant, should be maintained by the Contractor. Such checking reports should be duly signed and stamped by the authorized representative(s) of Sr. Dy. Manager (P&E), HDC.
- c. Satisfactory Completion Certificate of the items of work, issued by the authorized representative(s) of Sr. Dy. Manager (P&E), HDC, as per the Scope of Work, mentioning Date & Time of completion of work, along with brief description of the work and the respective BoQ Sl. No.

Payment will be made in Indian Rupees through the banker of the successful contractor. The following information must be submitted by the contractor regarding their banker:

1. Name of the Banker :
2. Savings / Current Account No. :
3. Banker's Branch Code No. & Address :

1.7. GST:

GST as applicable will be paid extra.

1.8. INCOME TAX DEDUCTION:

Income Tax, if any, as per the relevant provisions of the Income Tax Act, shall be deducted at source from any payment payable to the contractor.

1.9. NO INTEREST ON ACCOUNT OF DELAYED PAYMENTS:

Any claim for interest will not be entertained by HDC, KoPT with respect to any payment or balance which may be in their hands owing to any disputes between themselves and the contractor or with respect to any delay on the part of HDC, KoPT in making payment.

1.10. LABOUR:

Contractor shall at all times comply fully with all existing Acts, Regulations and Bye-laws including all statutory amendments and re-enactment of State or Central Government and other Local Authorities and any other enactments and acts that may be passed in future either by the State or the Central Government or Local Authority, including Indian Workmen's Compensation Act, Labour Laws and Equal Remuneration Act, 1976, Factories Act, Minimum Wages Act, The Contract Labour (Regulation & Abolition) Act, 1970, Dock workers' (Safety, Health & Welfare) Act, 1986 etc. and also as per General Conditions of Contract.

The contractor shall make their own arrangements for the engagement of all labour for doing the work at site or in respect of or in connection with the execution of work as also for the transport, housing, feeding and payment thereof.

In the event of any **outbreak of illness** or **an epidemic nature**, the contractor shall comply with and carry out such regulations, orders and requirements as may be made by the **Government**, or the **local medical** or **sanitary authorities** for the purpose of dealing with and overcoming the same.

Contractor shall at all times take all reasonable precautions to prevent any **unlawful, riotous or disorderly conduct** by or amongst their employees and for the preservation of peace and protection of persons and property in the neighborhood of the works against the same.

Contractor shall at all times during the continuance of the contract comply fully with all existing **Acts, Regulations and Byelaws** including all statutory amendments and re-enactment of **State or Central Government** and other **Local Authorities** and any other enactments and acts that may be passed in future either by the **State** or the **Central Government** or **Local Authority**, including **Indian Workmen's Compensation Act, Labour Laws and Equal Remuneration Act, 1976, Factories Act, Minimum Wages Act, The Contract Labour (Regulation & Abolition) Act, 1970** etc.

If as a result of contractor's **failure, negligence, omission, default or non-observance** of any provisions of any laws, KoPT is called upon by any authority to pay or reimburse or required to pay or reimburse any amount, KoPT shall be entitled to deduct the same from any money due or that become due to the contractor under this contract or any other contract or other wise recover from the contractor any sum, which KoPT is required or called upon to pay or reimburse on behalf of the Contractor. All **Registration and Statutory Inspection Fees** in respect of their work, pursuant to this Contract shall have to be paid by the Contractor.

The contractor shall indemnify KoPT in the event of KoPT being held liable to pay compensation for injury to any contractor's servants or workmen under the **Indian Workmen's Compensation Act, 1923**, as amended from time to time, and shall take out an insurance policy covering all risks under the Act and shall keep the same renewed, from time to time as necessary, for the duration of the contract and produce the same to the Engineer.

The contractor should provide full **medical treatment** to their staff and labourers in case of **accident on duty** which will inter alia include their obligations under the **Workmen's Compensation Act, 1923** including all amendments thereof. KoPT shall in no manner be liable to the contractor or any person engaged/employed by them or any other person for injuries or death caused as a result of accidents either within or outside the site of work under the contract. The contractor shall be responsible for such contingencies and will make good all claims for compensation, claim by their personnel/workmen or the families of the sufferer(s), as the case may be, or as per the decision of the appropriate authority/tribunal or other involved persons.

The contractor shall pay the labourer engaged by them, on this work not less than a fair wage, under the **Minimum Wages Act** for corresponding workforce working in Haldia, West Bengal, India.

It is explicitly made clear that both before and after the completion of the work or termination of the contract, **KoPT shall have no liability, whatsoever, for the personnel to be engaged by the contractor for the work under this contract.**

1.11. LABOUR LICENCE:

Before commencement of the work at site (within Dock area), the Contractor shall have to apply for **Labour License** for the maximum number of workers proposed to be deployed for the work of **Condition Monitoring, Maintenance & Repair of Conveyor Belts & allied works**. In case of maximum number of worker required for Condition Monitoring, Maintenance & Repair of Conveyor Belts & allied works, is matching with the existing **Labour License**, the contractor shall have to keep the said License valid for the entire contract period for Condition Monitoring, Maintenance & Repair of Conveyor Belts & allied works. Otherwise, the Contractor shall have to apply for a Separate **Labour**

License for the maximum number of workers required for Condition Monitoring, Maintenance & Repair of Conveyor Belts & allied works. Necessary certificate shall be issued by the Engineer against a request from the contractor.

Photocopy of the application shall have to be furnished to the Engineer.

1.12. REPORT OF ACCIDENT:

The contractor shall, **within 24 hours** of the occurrence of any accident, at or near the site or in connection with the execution of the work under the contract, report the accident to the Engineer or his representative(s) and shall make every arrangement to render all possible assistance to the victim(s) of such accident. The contractor shall also report such accident to the competent authority whenever such a report is required by law. For any accident occurred within the entire operational area covered under the contract, the contractor shall ensure prompt investigation into the matter through recording of statement of the personnel witnessing the accident. The report containing the findings along with the statements so recorded will then be forwarded by the contractor to the Engineer at the earliest. At the first instance, an '**Accident Report**' shall be prepared (in triplicate) by the concerned **Supervisor / Engineer** on duty **engaged by the Contractor** and a copy of the same to be forwarded immediately to the Engineer.

1.13. EMPLOYEES' PROVIDENT FUND & EMPLOYEES' STATE INSURANCE:

The contractor should have their establishment registered with the concerned authorities under the provision of **Employees' Provident Fund & Miscellaneous Provision Act, 1952** and **Employees' State Insurance Act, 1948**. The contractor shall have to submit the proof of registration, as mentioned above, immediately after commencement of work.

As per the above mentioned Act, the contractor is liable for remittance of monthly subscription contribution in respect of **Employees' Provident Fund (EPF)** and **Employees' State Insurance (ESI)** for the workers engaged by them, wherever applicable. The contractor shall submit the authenticated copy of the challans with respect to subscription / contribution of **Employees' Provident Fund** and **Employees' State Insurance** (against their respective Code Numbers issued by the **Employees' Provident Fund** and **Employees' State Insurance Authorities**) by 7th day of every English Calendar Month (during the pendency of the contract) along with the list of labourers for whom such deposits have been made.

Payment will be held up if the Up-to-Date **Employees' Provident Fund** and **Employees' State Insurance** remittance challan is not submitted in time.

1.14. SAFETY:

The contractor shall have to ensure safety of all their working personnel to the fullest compliance of the provisions of **general safety rules/ regulations** including **Dock Workers' (Safety, Health & Welfare) Regulations, 1986**.

The Contractor shall be solely responsible for consequences arising out of non-compliance or violation of safety rules / regulation.

The contractor shall at his own expenses provide all required **Personal Protection Equipments (PPE) & Safety Gears** for all personnel & labours engaged during the work and in case of failure to do so, KoPT shall provide the same and recover the cost thereof from any amount due to which may become due to the contractor or from any amount lying with them or under their control.

1.15. INSPECTION AND TESTING:

The Engineer or his authorized representative(s) shall have, at all reasonable time, access to the contractor's premises or work site and shall have the power at all reasonable time to **inspect & examine** the **materials & workmanship** of the work viz. hot/cold vulcanizing, fabrication / painting etc. The contractor will have to maintain his register / record accordingly.

Notwithstanding the fact that the materials or part of the work or the whole work has passed the inspection, the contractor is not relieved from his obligations to conform to the quality, workmanship, guaranteeing the performance, etc. as per the contract.

1.16. INDEMNITY BOND:

For taking out damaged conveyor belts from the Plant for making LCR joint, Indemnity Bond, duly notarized, to be submitted by the contractor (pro-forma enclosed).

1.17. REMOVAL OF SCRAP:

Dismantled / damaged scrap materials generated due to repair / maintenance of conveyor belt, replacement of structures and idler/roller shall have to be shifted to a store/scrap yard within HDC boundary area by the contractor at their own cost and arrangement. The store / scrap yard would be shown by the site representative. The work-place shall be kept clean and free from such scrap materials by the contractor.

1.18. COMPLETION TIME:

The time of completion of each job is stipulated in the Table below. The time of completion of each job will be reckoned from the time of intimation/handing over of the requisition (whichever is later) for the said job by the Engineer or his authorized representative(s) to the contractor. The contractor will get mobilization time as per schedule, over and above the completion period.

Sl. No.	Description of Work.	Completion Time [Time to be reckoned from the time of intimation/handing over (whichever is later) of the requisition for the job to the contractor].
1.	Splicing & Vulcanizing joints of conveyor belt by hot process. As per clause no. 5.5 of the scope of work.	10 (Ten) Hours per act.
2.	Splicing & Vulcanizing joints of conveyor belt by cold process. As per clause no. 5.5 of the scope of work.	6 (Six) Hours per act.
3.	Splicing & Vulcanizing joints of conveyor belt by hot process at Ground. As per clause no. 5.5 of the scope of work.	10 (Ten) Hours per act.
4.	Splicing & Vulcanizing joints of conveyor belt by cold process at Ground. As per clause no. 5.5 of the scope of work.	6 (Six) Hours per act.
5.	Full Fastener jointing of conveyor belts. As per clause no. 5.5 of the scope of work.	3 (Three) Hours per act.

Sl. No.	Description of Work.	Completion Time [Time to be reckoned from the time of intimation/handing over (whichever is later) of the requisition for the job to the contractor].
6.	Complete lagging of conveyor drums /pulleys by plain and diamond grooved rubber sheet. Rubber thickness 10/12+10/8. As per clause no. 5.7 of the scope of work	12 (Twelve) Hours per act up to 1,000 mm diameter Drum & 14 (Fourteen) Hours per act above 1,000 mm diameter Drum.
7.	Laying of conveyor belts (all width). As per clause no. 5.3 of the scope of work.	6 (Six) Hours for each Drum Roll. 2½ Hours per 100 meters of Belt or part thereof.
8.	Re-Coiling of conveyor belts (all width). As per clause no. 5.22 of the scope of work.	12 (Twelve) Hours per 100 meters or part thereof proportionately.
9.	Repairing of conveyor belt with stray Fastener. As per clause no. 5.6 of the scope of work.	2 (Two) Hours for the first 20 Fasteners or part thereof. Thereafter, 5 (Five) Minutes for each additional Fastener.
10.	Spot repair of the surface of conveyor belts by vulcanizing process. As per clause no. 5.6 of the scope of work.	3 (Three) Hours per spot for the 1 st spot & 2 (Two) Hours each for subsequent spots on continuous basis.
11.	Repair of edges of conveyor belts by vulcanizing process. As per clause no. 5.6 of the scope of work.	4 (Four) Hours per length of 10 meters and on pro-rata basis thereafter.
12.	Repair of Longitudinal Cut of conveyor belts by hot vulcanizing process. As per clause no. 5.6 of the scope of work.	6 (Six) Weeks for the first 100 meters or part thereof proportionately & thereafter, 2 (Two) Weeks per subsequent 50 meters or part thereof proportionately.
13.	Sizing and Cutting of conveyor belt for use as Skirt guard liner/ Conveyor of reduced width etc. As per clause no. 5.23 of the scope of work.	3 (Three) Hours per 5 meters or part thereof Thereafter 20 (Twenty) minutes for each 1 (one) meter additional length
14.	Repair of the flexible power/control cable up to 40mm diameter. As per clause no. 5.24 of the scope of work.	4 (Four) Hours per act.
15.	Repair of flexible power/control cable above 40mm diameter and up to 80mm diameter. As per clause no. 5.24 of the scope of work.	8 (Eight) Hours per act.

Sl. No.	Description of Work.	Completion Time [Time to be reckoned from the time of intimation/handling over (whichever is later) of the requisition for the job to the contractor].
16.	Tension release and re-positioning of conveyor belt by adjusting the take-up, during repair / replacement of driving / non-driving drum. As per clause no. 5.3, 5.5 & 5.7, of the scope of work.	2 (Two) Hours per act.
17.	Dismantling, removing and shifting of conveyor belt. As per clause no. 5.4 of the scope of work.	2½ hours per 100 meters length or part thereof.
18.	Ply cutting, dressing of conveyor belt, dressing of lagging etc. as per clause no. 5.2 of the scope of work in 3 shifts.	½ Hour (thirty minutes)
19.	Dismantling & fitting of Carrying roller(TR-1)	½ hour (thirty minutes) per TR-1 thereafter 15 (Fifteen) minutes for each additional roller.
20.	Dismantling & fitting of Return roller(BR-1)	1 (one) hour per BR-1.
21.	Dismantling & fitting of two part gardland type return roller with 'L' type hook	2½ hours per roller with 'L' type hook
22.	Dismantling & fitting of BKT-1 for carrying roller.	2 (two) hours per BKT-1
23.	Dismantling & fitting of Bracket for return roller.	2½ hours per act.
24.	Dismantling & fitting of Modified return roller bracket (3 part straight) along with roller etc.	2 (two) hours per act.
25.	Replacement of stringer including gusset plates & fastners.	5 (Five) hours per 6 meters length and thereafter 4 hours for opposite side per 6 meters.
26.	Replacement of stringer post including gusset plates & fastners.	4 (Four) hours per act.
27.	Replacement of tie angle (ISA 65 x 65 x6) in between stringer by welding/by use of fastner etc.	1 (one) hour per act.
28.	Spot repairing of conveyor structure supporting vertical column by welding MS plate of thick 8 mm/10 mm	3 (Three) hours per spot (1 Sq Ft) or part thereof.
29.	Painting of existing structure.	Time of completion of painting should be mutually agreed between the contractor and the representative of Sr. Dy. Manager (P&E) and should be recorded.

N.B.:

- i) Any delay, not attributable to the contractor, duly certified by the Site Engineer, will not be taken into account in the aforesaid time schedule and the same will be adjusted accordingly. In case of snapped belt with cargo, the actual time of start of the job shall be counted from the time of making the said belt ready for taking up the job i.e. after offloading the cargo by HDC as per requirement.
- ii) Any delay on account of inclement weather (incessant rain, fog, etc.), which may hamper the quality of Hot / Cold Vulcanizing Joint or may hamper the other works also, duly certified by the Site Engineer, will not be taken into account in the aforesaid time schedule and the same will be adjusted accordingly.
- iii) Date of each new Vulcanizing Joint (Cold / Hot) should be embossed / embossed by the contractor with stamping at least at 2 (two) convenient points of the said joint. Date of replacement of structural items to be marked on each of such items by painting.
- iv) Machines, accessories and manpower, along with supervisory staff, shall be arranged accordingly by the contractor. In case of belt replacement, shortening, condemnation, etc., the contractor will have to recoil the old belts as per specific advice in writing. The old, used and dismantled belt should be salvaged and re-coiled and the same to be sent to the stock yard within 96 (Ninety Six) Hours of replacement of the old, used belt.

1.19. COMPENSATION:

For delay in execution of any job (except item sl. no. 12 and 27 of the B.O.Q), beyond the above completion time, the contractor will have to pay compensation @ ½ % of the value of the job, for delay of every hour or part thereof, subject to a maximum of 10 % of the value of the job. For item sl. no. 12 of the B.O.Q (i.e. LCR joint), compensation will be applicable @ ½ % of the value of the job, for delay of every week or part thereof, subject to a maximum of 10% of the value of the job. For item sl. no. 27 of the B.O.Q (i.e. Painting), compensation will be applicable @ ½ % of the value of the job, for delay of every day or part thereof, subject to a maximum of 10% of the value of the job. The payment or deduction of such compensation/damage shall not relieve the contractor from his obligations/liabilities under the contract and in case of failure of the contractor and at the absolute discretion of the engineer, the work may be ordered to be completed by some other agency at the risk and expense of the contractor. Service Tax as per prevailing rate will be applicable on the amount of compensation deducted.

1.20. WORKMEN'S COMPENSATION:

The contractor shall indemnify HDC in the event of HDC being held liable to pay compensation for injury to any contractor's servants or workmen under the **Indian Workmen's Compensation Act, 1923**, as amended from time to time, and shall take out an insurance policy covering all risks under the Act. The contractor shall keep the insurance policy renewed, from time to time as necessary, for the duration of the contract and produce the same to the Engineer.

1.21. LABOUR LAWS:

The contractor shall comply with all the provisions of the Labour Laws and the rules and regulations made there under as amended from time to time and as applicable from time to time with regard to the employees to be deployed by the contractor for execution of the work.

1.22. APPLICABILITY OF LAWS ON THE CONTRACT:

The contract shall be governed by all relevant Indian Acts, as applicable, only within the jurisdiction of the Honorable High Court of Kolkata, India, including the following Acts:

- i) The Indian Contract Act, 1872.
- ii) The Major Port Trust Act, 1963.
- iii) The Workmen's Compensation Act, 1923.
- iv) The Minimum Wages Act, 1948.
- v) The Contract Labour (Regulation & Abolition) Act, 1970.
- vi) Dock Workers (Safety, Health & Welfare) Act 1987.
- vii) The Indian Arbitration Act (1940) (in the case of definite Arbitration Agreement only).
- viii) Indian Arbitration and Conciliation Act, 1996.

Unless otherwise specified, all the Laws/ Rules / Acts etc. mentioned in different clauses of this Tender Document, should be considered as Laws/ Rules / Acts etc. applicable in India.

2: SCOPE OF WORK

BRIEF DESCRIPTION: Coal Handling Plant under Haldia Dock Complex handles Thermal Coal through mechanized system. The cargo is conveyed from the wagon tipplers to the stack yards and/ or from the stack yard to Ship Loaders for loading into the ships hold through different conveyor system as follows.

1. H 201 (EAST)	7. H 206
2. H 201 (WEST)	8. H 207
3. H 202	9. H 208
4. H 203	10. H 209
5 H 204	11. H 210
6 H 205	12. H 212

Besides above there are different Boom Conveyor and Tripper Car Belt Running Structure and accessories including different types of Bracket, Idler/Roller etc.

13. Coal Stacker cum Reclaimer No. - 1 installed on H-205 conveyor.

14. Coal Stacker cum Reclaimer No. - 2 installed on H-206 conveyor.

15. Coal Ship Loader No. - 1 installed on H-210 conveyor.

16. Coal Ship Loader No. - 2 installed on H-209 conveyor.

Conveyor routes are operated regularly as per requirement in three shifts i.e. 6AM to 2PM, 2 PM to 10 PM and 10 PM to 6 AM, through out the year to facilitate unloading of wagons and loading of vessel.

Specification of the existing Conveyor Belts is appended below:

- a) Width : 800 mm / 1,000 mm / 1,200 mm / 1,400 mm.
- b) Tensile Strength : 800 KN per meter width / 1,000 KN per meter width / 1,250 KN per meter width.
- c) No. of Ply : 4 / 5.
- d) Construction : Nylon - Nylon, Cut-edge Construction.
- e) Grade : M 24, Heavy Duty.
- f) Rubber Thickness :
 - i) Top : 5 / 8 mm.
 - ii) Bottom : 3 / 4 mm.
- g) Nominal Carcass Thickness : 6 / 7/ 8.5 mm.

JOB REQUIREMENT:

HDC, KoPT would like to carry out repair and maintenance of conveyor belts on regular basis. Also HDC, KoPT would like to carry out repair and maintenance of various conveyor structures. The above job includes vulcanizing of conveyors and flexible Power/Control cables, drum lagging, fabrication, surface preparation, painting and erection of various steel structures, replacement of Idlers /Rollers (Both Carrying and Returns) including different brackets etc. The above job also includes dismantling and removal of old items and scraps. Item wise job descriptions are given below:

2.1. CONVEYOR BELT AND CONVEYOR STRUCTURE MONITORING, CHECKING & PREPARATION OF DAILY CHECKING REPORTS:

Physical condition / status of all the conveyors to be monitored and checked by the persons of the contractor having similar experience as per schedule (on an average five nos. conv. per day to be checked). The Report of Conveyor Belt, Idler/Rollers, Structures etc. to be submitted by the contractor to the office of the Dy. Manager (P&E), Coal Handling Plant, HDC, as per schedule prepared by HDC.

Date of each new Vulcanizing Joint (Cold / Hot) should be embossed / emborred by the contractor with stamping at least at 2 (two) convenient points of the said joint.

2.2. PLY CUTTING, EDGE CUTTING/DRESSING OF CONVEYOR BELT AND LAGGING ETC:

The contractor will have to carry out cutting and dressing of ply/edge of conveyor and lagging of drum etc, in three shifts as per intimation from HDC. The mobilization time for cutting and dressing of ply of conveyor and lagging (of drum) will be one hour.

2.3. REPLACEMENT OF CONVEYOR BELTS :

This includes the following:

- a) Positioning of the belts suitably.
- b) Latching of Counter-weights for Gravity Take-up, with necessary adjustments of the Conveyors and releasing / tightening of Screw Take-up of the Boom and Trailer Conveyors.
- c) Cutting and removal of the old belts.
- d) Shifting, carrying, positioning and laying of the new belt to the work point.
- e) Laying the new belt or old and used belt, as the case may be.
- f) Release and adjustment of Counter-weights.
- g) Jointing the belt by Cold / Hot Vulcanizing or Fasteners, as the case may be.
- h) Dismantling and re-fixing of Idlers, Idler Brackets and Counter-weights / Screw Take-up adjustment, whenever necessary.
- i) Trial run for testing for successful operation.
- j) Re-coiling of old / new belts.

2.4. COMPLETE DISMANTLING, REMOVING AND SHIFTING OF CONVEYOR BELTS:

- a) Latching and/or de-latching of counter weight.
- b) Dismantling, removing and shifting of conveyor belt.
- c) Re-coiling.

2.5. VULCANIZING/FULL FASTENERING JOINT OF CONVEYOR BELT:

This includes the following:

- a) Positioning of the Belt.

- b) Cutting out the length to be shortened and removal to the Stock Yard in the Ore & Coal Handling Plant.
- c) Adding or taking out of Counter-weights.
- d) Joining the belt by vulcanizing or fasteners as the case may be.
- e) De-latching/Latching of Counter-weights for Gravity Take-up, with necessary adjustments of the Conveyors and releasing / tightening of Screw Take-up of the Boom and Trailer Conveyors.
- f) Dismantling & fitting of idler/roller/bracket for joining the belt.
- g) Trial run for successful operation.
- h) For Joint at ground only point no. (b) & (d) is applicable.

2.6. REPAIRING OF CONVEYOR BELTS :

This includes the following:

- a) Longitudinal cut repairing by Hot vulcanizing process.
- b) Edge repairing by cold vulcanizing process.
- c) Spot repairing by cold vulcanizing process.
- d) Replacement of damaged fasteners.
- e) Fastening of any damaged portion, including adjustment of Take-up and Counter-weight.
- f) Repairing of damaged portion of Conveyor Belt / Fastener Joint by a short piece of Conveyor Belt by fastening / cold vulcanizing.

2.7. DRUM LAGGING :

This includes the following:

- a) Removal of old laggings from the Drum.
- b) Latching of Counter-weights for Gravity Take-up, with necessary adjustments of the Conveyors and releasing / tightening of Screw Take-up of the Boom and Trailer Conveyors.
- c) Necessary scrapping to clean the surface of the Drum up to the bare metal stage for better cohesion between rubber and the Drum surface.
- d) Supply and fixing of new lagging as per specification, cited in the Bill of Quantities.
- e) Adjustment of Counter-weights, etc., as may be necessary.
- f) De-latching of Counter-weights for Gravity Take-up, with necessary adjustments of the Conveyors and releasing / tightening of Screw Take-up of the Boom and Trailer Conveyors.
- g) Trial run for successful operation.

2.8. REPLACEMENT OF BRACKET (BKT):

This includes the following:

Shifting, carrying, positioning the new BKT at work point with necessary tools & tackles, manila rope, gas cutting/welding accessories etc. or any other items as required for the aforesaid work.

Lift the belts with the help of the chain pulley block/pipe etc. and secure it properly for holding up as per requirement.

Remove the damage BKT/Idler/roller etc. by dismantling the fixing bolts.

Place the new/repared BKT as the case may be in position and fixing up properly by bolt/nut/washer etc.

Re-fixing the Idler/roller into the bracket and ensure that those Idler/roller are moving freely by hand rotation.

Repositioning the belt by removing all tools & tackles, rope etc. for bringing the conveyor system to normal health at the earliest time.

Shifting the old bracket, idler/roller etc. as per clause no. 4.17.

2.9. REPLACEMENT OF STRINGER:

This includes the following:

Shifting, carrying, positioning the new stringer at work point with necessary tools & tackles, manila rope, gas cutting/welding accessories etc. or any other items as required for the aforesaid work.

Temporary support provided at both end of the stringer which are to be replaced.

Dismantling/removing the bracket fixing bolts at that points and holding up properly and then remove the damage stringer, tie angle etc.

Place the new stringer to its original position with proper alignment / secure it properly by bolting / welding as per requirement to either side of the stringer with stringer post.

Then fix up the tie angle between the stringer.

Remove all temporary support, tools & tackles etc. and bringing the conveyor system to normal health at the earliest time.

Shifting the old stringer, tie angle, Idler / roller etc. as per clause no. 4.17.

2.10. REPLACEMENT OF STRINGER POST:

This includes the following:

Shifting, carrying, positioning the new stringer post at work point with necessary tools & tackles, gas cutting/welding accessories etc. or any other items as required for the aforesaid work.

Temporary support to be provided at both end of stringer post which are to be replaced.

Stringer post to be removed by dismantling/grousing of fixing bolts/welding joints and remove the return roller base angle, bracket etc. wherever necessary.

Place the new stringer post to its original position with proper alignment / secure it properly by bolting / welding as per requirement with stringer and fixing the return roller by welding base angle& bracket by bolt, nut, washer etc.

Remove all temporary support, tools & tackles etc. and bringing the conveyor system to normal health at the earliest time.

Shifting the old stringer post, tie angle, Idler / roller etc. as per clause no. 4.17.

2.11. REPLACEMENT OF IDLER/ROLLER (TR-I/BR-I/GARLAND ROLLER):

This includes the following:

Shifting, carrying, positioning the new idler roller at work point with necessary tools & tackles, gas cutting/welding accessories etc. or any other items as required for the aforesaid work.

Lift the belt as per requirement.

Remove the damage idler/roller etc.

Place the new idler/roller to its original position with proper alignment / secure it properly by bolting as per requirement and ensure that those idlers/rollers are moving freely by hand rotation.

Remove all temporary support, tools & tackles etc. and bringing the conveyor system to normal health at the earliest time.

Shifting the old idler/roller as per clause no. 4.17.

2.12. REPLACEMENT OF RETURN ROLLER HOLDING BASE ANGLE, BRACKET:

This includes the following:

Shifting, carrying, positioning the return roller base angle, bracket etc. at work point with necessary tools & tackles, gas cutting/welding accessories etc.

Lift the belt as per requirement.

Remove the damage idler/roller.

Replace the damage base angle by welding then fixing up the bracket properly by bolt, nut, washer etc. as per requirement.

Place the new return roller to its original position with proper alignment / secure it properly by bolting as per requirement and ensure that those idlers/rollers are moving freely by hand rotation.

Remove all temporary support, tools & tackles etc. and bringing the conveyor system to normal health at the earliest time.

Shifting the old base angle, bracket, idler/roller as per clause no. 4.17.

2.13. FABRICATION OF STRINGER & STRINGER POST:

Fabrication of stringer & stringer post as per the standard dimension/drawing/as advised by the concerned officials.

Surface preparation, primer painting & finish painting as per the painting clause.

Replacement of angle/channel for Conveyor Supporting Structure including conveyor walk-way supporting angle, bracing angle etc. at different sizes:

ISA 150 X 150 X 10/12

ISA 150 X 130 X 10/12

ISA 110 X 110 X 10/12

ISA 90 X 90 X 8/10

ISA 75 X 75 X 8/10

Or any other structure as found at site.

2.14. FABRICATION & ERECTION OF TOE GUARD: Toe Guard to be fabricated from MS Plate. Size of Toe Guard - 150 mm width x 6/8 mm thick. Toe Guard is to be erected throughout the length of walkway at both sides of conveyor structure by welding.

2.15. FABRICATION & ERECTION OF HAND RAILING: Hand Railing to be fabricated from G.I. Pipe of 1.25" nominal dia. (42.20 mm OD) with schedule of pipe 60. Hand Railing is to be erected throughout the length of the walkway by welding.

2.16. REPLACEMENT OF TIE ANGLE:

Joint inspection with HDC officials of the angle to be replaced.

Surface preparation, primer painting & finish painting as per painting clause.

Shifting, carrying, positioning the new angle at work point with necessary tools & tackles, gas cutting/welding accessories etc.

Temporary support provided at both end of structures which are to be replaced.

Damage angle to be removed by dismantling/grousing of fixing bolts/welding joints etc. as per requirement.

Place the new angle to its original position secure it properly by bolting / welding (if any) with proper alignment as per requirement.

Remove all temporary support, tools & tackles etc. and bringing the conveyor system to normal health at the earliest time.

Shifting the damage angle/steel structure etc. to the scrap yard at coal handling plant.

2.17. REPLACEMENT OF DAMAGE WALK-WAY CHEQUER PLATE/MS PLATE:

This includes the following:

Fabrication of the walk-way plate as per existing etc.

Surface preparation, primer painting & finish painting as per the painting clause.

Shifting, carrying, positioning the new walk-way chequer plate etc. at work point with necessary tools & tackles, gas cutting/welding accessories etc.

Temporary support provided at both end of structures which are to be replaced.

Damage walk-way chequered plate to be removed by dismantling/grousing of fixing bolts/welding joints etc. as per requirement.

Place the new walk-way chequered plate to its original position with proper alignment/secure it properly by bolting / welding as per requirement.

Remove all temporary support, tools & tackles etc. and bringing the conveyor system to normal health at the earliest time.

Shifting the damage walk-way chequered plate/steel structures etc. to the scrap yard at ore and coal handling plant.

2.18. PAINTING OF EXISTING STRUCTURES:

Steel structure to be cleaned by use of scrapper, wire brush & pig hammer etc. After that minimum 2 coats of red oxide zinc chromate primer to be applied and film thickness will be 60 micron $\pm 5\%$ and then 2 coats of epoxy finish paint to be applied and total DFT will be 200 micron. Wet thickness gauge (Elcometer) shall be used by the contractor during application to ensure the required dry film thickness. Colour of the finish paint should be gray/black.

All paint should be used from amongst the following make/brand: Berger Paint/Shalimer Paint/ICI/Jenson & Nicholson/Asian Paint.

2.19. SPECIFICATION OF THE CONVEYOR IDLER/ROLLER, STRUCTURE, GALLERY WALKWAY, WALKWAY FRAME, BRACINGS ETC.

Conveyor stringer: made from ISMC 150X75 (weight 14.4kg/ meter) of length 6 meters each and joined with G.I. Hex head (M16X50) bolt nut and washers etc. and supported with stringer posts or any splicing plate of thick 8mm / 10 mm as per requirement.

Conveyor Stringer Post : Made from ISMC 150X75 (weight 14.4kg/meter) of length 700mm to 720mm as per requirement and one end fitted with gusset plate (8mm/10mm thick) for supporting conveyor stringer with bolt nuts and washers etc. or welding.

Tie angle: Conveyor stringer supported from inside by tie angle of ISA 65X65X6 mm (5.8 Kg/m) or ISA 50X50X6 mm (4.5 Kg/m).

Conveyor gallery walkways: M.S. chequered plate of 8mm thick/8mm thick MS plate supported with ISA 150X150X12/10 mm thick or ISA 150X130X12 mm or ISA 90X90X10 mm or ISA 75X75X10 mm.

Toe Guard: 150 mm width X 6 mm/8 mm thick MS Plate welded with the both side bottom walk-way-estimated qty. = 500 m.

Hand railing: made from GI Pipe 1/4" nominal dia meter (42.20 mm OD) with schedule of pipe-60 - estimated qty. = 1000 m.

Return roller fixing base: Made from ISA 90X90X8/10 thick or ISA 75X75X8/10 mm thick welded with the stringer post as per require height.

Idler/ roller fixing bracket for 1400 mm conveyor belt width X 30° troughing angle with 2° offset towards belt motion: Made from ISMC 150X75X1820 mm length with holding side bracket, supporting plate, rib, right & left side middle bracket welded with base plate of size 65X8X310mm and slotted hole for fixing with stringer by G.I. bolt, nut and washer of size M20X50.

Idler/ roller fixing bracket for 1400mm conveyor belt width X 30° troughing angle without offset : Made from ISA 90X90X8/10 thick or ISA 75X75X8/10 mm thick welded with base plate of size 65X8X310 mm and slotted hole for fixing with stringer by G.I. bolt, nut and washer of size M20X50 or welded with conveyor deck.

Troughing idler/roller (TR-I): Made from ERW pipe of size 152.4mm dia.X490mm shell length and holding through a spindle and both end supported with life lubricated ball bearings.

Return roller (BR-I): Made from ERW pipe of size 152.4mm dia.X1600mm shell length and holding through a spindle and both end supported with life lubricated ball bearings.

Garland type return roller: 2(two) nos. roller linked with G.I. plate, pin, NY lock nut, bolt, D-Shackle etc. These rollers are made from ERW pipe of size 152.4mm dia.X735mm shell length and holding through a spindle and both end supported with life lubricated ball bearings. The complete set is to be welded with stringer by both end 'L' type hook at underneath return belt to avoid belt sway.

2.20. SUPPLY OF MATERIALS:

HDC will provide structural steel, G.I. Pipes, conveyor belts, idler/roller, bracket and equipment as per requirement. The contractor will have to provide at their cost and arrangement all labour, transportation of men and materials, tools and tackles, vulcanizing solutions, lagging materials, electrode, gas, paints & thinners, nuts, bolts & washers, other consumables, gas cutting accessories, welding accessories, vulcanizing Machines, measuring / testing instruments etc.

- 2.21.** Belt Vulcanizing should be done by hot / cold process depending on site requirement, by using consumables manufactured by Phoenix Yule / MRF / Thejo / DYNABOND / KRISHNA or by any reputed manufacturer subject to acceptance by Sr. Dy. Manager (P&E) or his authorized representative(s).

In case of Drum Lagging, the lagging should be done in 2 (two) layers, after proper cleaning of the surfaces. The first layer should be of either 8 mm or 10 mm thick plain rubber sheet and the second layer should be of either 12 mm or 10 mm thick diamond grooved (molded) rubber sheets, i.e. total thickness for rubber lagging should be 20mm.

- 2.22.** The finish weight / measurement of fabricated items will be finalized depending upon the theoretical weight per running meter or weight per sq. meters (in case of plates) as per relevant latest BIS specification.
- 2.23.** No transport, accommodation and canteen facility will be provided to the contractor and / or their staff.
- 2.24.** In case of belt replacement, shortening, condemnation, etc., the contractor has to recoil the old belts as per specific advice in writing from HDC and shift the same to the Stock Yard at the Ore & Coal Handling Plant.
- 2.25.** Sizing and cutting of old & used Conveyor Belts for use as Skirt guard liner/ Conveyor of reduced width etc.
- 2.26.** Repairing of flexible Power Cables and flexible Control Cables of various sizes, as mentioned in the Bill of Quantities, for various equipment, plants and machineries under various sections of Plant and Equipment Division, as and when required.
- 2.27.** It will be the responsibility and accountability of the Contractor with respect to the said repairing and maintenance work, safety and security of the equipment, plant & machineries and personnel, working within the Dock Area.
- 2.28.** Close and efficient supervision of all work under the contract and liaisoning with all associated with the condition monitoring, maintenance and repairing work would be under the scope of contractor.
- 2.29.** All work shall be attended to expeditiously without any delay. The Conveyor Routes, needing repair / replacement of the Conveyor Belt, shall be repaired / replaced (as per requisition placed by the site personnel) promptly for bringing the Conveying System back to normal health at the earliest time.

- 2.30.** All the jobs executed will be certified by the authorized representative of Sr. Dy. Manager (P&E), HDC, posted at O&CHP.
- 2.31.** Components / Conveyor Belts / Assemblies / Sub-assemblies, which require replacement due to the damage caused by improper repair or negligence in repairing / maintenance by the contractor shall have to be replaced by the contractor at his own cost and no compensation whatsoever will be paid by HDC, KoPT for the same.
- 2.32.** The contractor shall undertake and execute the work under the contract as per directions of Sr. Dy. Manager (P&E) or his authorized representative, with prior intimation.
- 2.33.** The contractor shall be responsible for the damage(s)/loss(es) arising out of or in consequence of any act and negligence on the part of the contractor or his any employee/workman/agent/official to any part or whole of the part / property belonging to HDC, KoPT and / or the vessel and / or any other third party and in such case, the contractor shall be bound to make good the damages caused either in materials terms or in monetary terms as per the assessment of the concerned body affected.
- 2.34.** No claim for any detention / idle charges for labour and materials organized by the contractor in connection with the works under the contract, shall be payable by HDC, KoPT to the contractor under any circumstances whatsoever.
- 2.35.** Maximum 2 (two) nos. major work viz. Hot / Cold Vulcanizing, Drum Lagging, Edge Repair and Spot Repair/Structural replacement will be given in a single shift.
- 2.36.** Minimum 200 pieces of Electro-plated Belt Fasteners, minimum 4 (four) sets of Component(s) / Kit(s) for Vulcanizing Joint and minimum 1 (one) set of Component(s) / Kit(s) for Drum Lagging should be kept ready at stock. The stock position of Electro-plated Fasteners, Component(s) / Kit(s) for Vulcanizing Joint and drum lagging should be displayed at the site office of the Contractor.
- 2.37.** If any job is given during the morning / evening shift is likely to continue till night shift, the contractor should continue the same till finishing.

BILL OF QUANTITIES (BoQ)

Preamble :

1. Prices to be quoted, should include all taxes and duties in full except GST. GST will be payable extra as applicable.
2. All rates quoted by the contractor should remain firm during the validity period of the tender, including any / all extension thereof, agreed by the contractor. In case, of finalization of order in favour of the contractor, the above rates should remain firm for **two (2) years** from the date of placement of order or on and from 01.04.2019 whichever is later i.e. no variation towards materials, labours, etc. shall be payable.
3. The estimated quantity of yearly job involvement against different items of the Bill of Quantities are indicative only. This may vary as per actual site requirements.

SL. No.	Description	Unit	Estimated quantity for 24 months	Unit rate	Amount
1.	Splicing & Vulcanizing joints of conveyor belt by hot process. As per clause no. 5.5 of the scope of work.	mm	2000	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
2.	Splicing & Vulcanizing joints of conveyor belt by cold process. As per clause no. 5.5 of the scope of work.	mm	600000	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
3.	Splicing & Vulcanizing joints of conveyor belt by hot process at Ground. As per clause no. 5.5 of the scope of work.	mm	3500	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
4.	Splicing & Vulcanizing joints of conveyor belt by cold process at Ground. As per clause no. 5.5 of the scope of work.	mm	15000	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
5.	Full Fastener jointing of conveyor belts. As per clause no. 5.5 of the scope of work.	mm	2500	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
6.	Complete lagging of conveyor drums /pulleys by plain and diamond grooved	Sq. inch	150000	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)

SL. No.	Description	Unit	Estimated quantity for 24 months	Unit rate	Amount
	rubber sheet. Rubber thickness 10/12+10/8. As per clause no. 5.7 of the scope of work				
7.	Laying of conveyor belts (all width). As per clause no. 5.3 of the scope of work.	meter	7000	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
8.	Re-Coiling of conveyor belts (all width). As per clause no. 5.22 of the scope of work.	meter	3500	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
9.	Repairing of conveyor belt with stray Fastener. As per clause no. 5.6 of the scope of work.	Nos.	3000	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
10.	Spot repair of the surface of conveyor belts by vulcanizing process. As per clause no. 5.6 of the scope of work.	100 Sq. inch	1500	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
11.	Repair of edges of conveyor belts by vulcanizing process. As per clause no. 5.6 of the scope of work.	meter	200	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
12.	Repair of Longitudinal Cut of conveyor belts by hot vulcanizing process. As per clause no. 5.6 of the scope of work.	meter	300	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
13.	Sizing and Cutting of conveyor belt for use as Skirt guard liner/ Conveyor of reduced width etc. As per clause no. 5.23 of the scope of work.	meter	200	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
14.	Repair of the flexible power/control cable up to 40mm diameter. As per clause no. 5.24 of the scope of work.	meter	30	Rs..... (In word) Rs.....	Rs..... (In word) Rs.....

SL. No.	Description	Unit	Estimated quantity for 24 months	Unit rate	Amount
				(In figure)	(In figure)
15.	Repair of flexible power/control cable above 40mm diameter and up to 80mm diameter. As per clause no. 5.24 of the scope of work.	meter	30	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
16.	Tension release and re-positioning of conveyor belt by adjusting the take-up, during repair / replacement of driving / non-driving drum. As per clause no. 5.3, 5.5 & 5.7, of the scope of work	Occasion	40	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
17.	Dismantling, removing and shifting of conveyor belt. As per clause no. 5.4 of the scope of work.	meter	4000	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
18.	Ply cutting, dressing of conveyor belt, dressing of lagging etc. as per clause no. 5.2 of the scope of work in 3 shifts.	Occasion.	200	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
19.	Conveyor belt and conveyor structures monitoring, checking & Preparation of Daily Checking Reports as per clause no 5.1 of the scope of work.	Monthly (lump sum)	24 month	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
20.	Dismantling & fitting of Carrying roller(TR-1)	Nos.	3300	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
21.	Dismantling & fitting of Return roller(BR-1)	Nos.	400	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)

SL. No.	Description	Unit	Estimated quantity for 24 months	Unit rate	Amount
22.	Dismantling & fitting of two part gardland type return roller with 'L' type hook	Nos.	200	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
23.	Dismantling & fitting of BKT-1 for carrying roller.	Nos.	400	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
24.	Dismantling & fitting of Bracket for return roller.	Nos.	120	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
25.	Dismantling & fitting of Modified return roller bracket (3 part straight) along with roller etc.	Nos.	200	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
26.	Replacement of structural items including fabrication, surface preparation, painting and erection as per scope of work.	MT	50	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
27.	Painting of existing steel structures as per clause no. 5.16 of the scope of work.	Sq. m	1500	Rs..... (In word) Rs..... (In figure)	Rs..... (In word) Rs..... (In figure)
Total amount :					

**Signature of the witness
with date**

**Full signature of the Contractor
with date and Office Seal**