



DEENDAYAL PORT AUTHORITY

ELECTRICAL DIVISION



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No.EL/WK/2846

Date: 29/07/2024

To,

Subject: Operation & Maintenance Contract of 2 Nos. Liebherr make LHM 550 model Harbour Mobile Cranes along with 03 nos. Grabs inside cargo jetty area for a period of Two years - reg.

Sir,

Deendayal Port Authority, an autonomous body under Ministry of Ports, Shipping & Waterways, Govt. of India, intends to carry out the work for "Operation & Maintenance Contract of 2 Nos. Liebherr make LHM 550 model Harbour Mobile Cranes along with 03 nos. Grabs inside cargo jetty area for a period of Two years" as per the Scope of work, Technical specification, Terms & Conditions stipulated below.

Kindly submit your Expression of interest along with budgetary-offer for the subject work on the basis of the scope of work enclosed herewith. Expression of Interest should include profile of your firm, work experience in similar works, summary of turnover, (if any), on the above mentioned E-mail Ids.

The rates quoted must be inclusive of all costs such as tools, tackles, labour, transportation and other auxiliary charges for successful completion of the work excluding GST. The GST applicable shall be shown separately, which shall not be considered for evaluation purposes.

Your EOI with budgetary offers for the above work should reach this office via either courier or email mentioned above, till 12.08.2024 on or before 15:30 hours.

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**Superintending Engineer (E)
Deendayal Port Authority**

Scope of work, Technical Specification

Name of work: Operation & Maintenance Contract of 2 Nos. Liebherr make LHM 550 model Harbour Mobile Cranes along with 03 nos. Grabs inside cargo jetty area for a period of Two years

1. General:

Two nos. 124 Ton capacity Liebherr make LHM 550 model Harbour Mobile Cranes (HMCs) along with 03 nos. Grabs (of 37 CBM capacity) inside Cargo Jetty Area were installed & commissioned in the year 2019 after necessary repair works to handle the various cargo. Further, Operation and Maintenance work for the said cranes for the duration of two years was awarded in open market, which is expiring on 19.02.2025.

Now, Deendayal Port Authority again intends to outsource the Operation & Maintenance Contract of 2 Nos. LIEBHERR make Harbour Mobile Cranes of 124 T capacity along with Grabs for a period of Two years, to firms who are having sufficient expertise in this field and has back to back support of OEM. The main objectives of this work are:

1. To ensure efficient, safe and reliable operation & maintenance of the Cranes.
2. To maintain the Cranes in a healthy and efficient condition.
3. To ensure high availability of the Cranes in a consistent manner.

Commencement of AMC Work:

On issuance of Work Order, Contractor shall take over both the cranes and O&M work will commence from same. AMC Contractor shall arrange to mobilize the consumables, required manpower etc. from the issuance of work order and shall be ready in full fledge manner to commence the work from the award of Work Order.

On the next day of acceptance of Work Order, trial run will be undertaken by AMC Contractor, in presence of DPA officials & TPI (to be appointed by DPA) for basic operational checks i.e. hold, close, luff, slew and travelling.

In case of readiness of AMC Contractor for commencement of safe cargo handling operations, the Crane (s) will be declared traffic operation worthy.

- (a) In case Crane (s) is declared traffic operation worthy:

Full AMC cost will be applicable for respective no. of crane (s) commissioned for traffic operation.

- (b) In case Crane (s) is declared non-traffic operation worthy:

In case of crane (s) is not traffic operation worthy / breakdown reduced rate of 20 % of AMC Cost will be applicable, until the crane (s) are commissioned for traffic operation. However, it will be in scope of AMC Contractor to perform basic maintenance works to upkeep the cranes during non-traffic operation worthy condition of Crane (s).

In case of declaration of non-traffic operation worthy / breakdown condition of Crane(s), labour and manpower required to put proportionate man power HMCs into traffic operation will be in scope of AMC Contractor.

However, the spares (other than consumables is in scope of AMC Contractor) will be procured by DPA. The said spares shall be brought from OEM or authorized dealer of OPM on written confirmation of EIC only. In exigency the contractor has to procure the spares up to Rs 10 lakh, However, the cost will be reimbursed by DPA on actual basis.

During execution of AMC work:

In case Crane (s) is taken for maintenance work / out of order during AMC period (more than 10 days) then reduced rate of 20 % of AMC Cost will be applicable, from the date of breakdown, until the crane (s) are commissioned for traffic operation. However, it will be in scope of AMC Contractor to perform basic maintenance works to upkeep the cranes during non-traffic operation worthy condition of Crane (s).

Detailed examination of Crane (s):

- (1) Immediate replacement:
After detailed examination, list of critical spares required for immediate replacement and un-interrupted operations shall be prepared keeping eye on OEM maintenance plan.

Detailed examination report along with necessary supporting documents, valid budgetary offer of OEM or authorized dealers of OPM etc. shall be provided within a period of 30 days from putting HMCs into traffic operation.

- (2) Monthly assessment:
On every 28th day of month, a detailed examination shall be carried out for actual assessment of condition of major parts of Cranes. The same shall be reported on very next day to EIC.

Keeping in view the healthy maintenance, AMC Contractor shall propose corrective actions for said monthly requirement of parts.

Apart from other obligations, AMC Contractor shall prioritize the actual requirement (s) and on written approval of EIC, supply the extra required spares / consumables through OEM or authorized dealer of OPM. The same which will be on reimbursable basis as per actual invoice amount.

Maximum amount of above monthly procurement shall be Rs. 02,00,000 (plus GST extra), which can be carried forward during the currency of contract.

For claiming the said expenditure, AMC Contractor shall provide:

- (A) Rate reasonability Certificate from OEM or authorized dealer of OPM,
- (B) Authorization certificate,

- (C) Copy of actual Tax Invoice paid to OEM or authorized dealer of OPM.
- (D) if any procurement / Service required other than OEM the rate will be decided by EIC on calling EOI / Sealed cover from Local market using DPA website.

(3) OEM Inspection:

On the written instruction of EIC, the contractor is required to engage authorized representative of OEM, at his own cost (incl. transportation, lodging, accommodation) for once during the entire contract period for overhauling of cranes which includes all necessary tests to determine healthiness and safe operation of HMCs as per OEM norms.

The contractor is required to ensure the site visit of the authorized representative of OEM within 10 days from the date of issue of written intimation by EIC.

2. (A) Deployment of Manpower for Maintenance.

The Contractor shall have to deploy the staff, leaded by Service engineer (over all In-Charge) to deal with DPA in all technical and administrative matters.

The contractor shall have to deploy the following staff as per pre-submitted Roaster Plan every month. However, for any breakdown / preventive maintenance, if Contractor feels then, he may deploy more man power as per site requirement:

Sr.	Designation	Experience required*	Qualifications required	Requirement in shift / general
1	Service engineer	07 Years in maintenance of Harbour Mobile Cranes	Degree Engineer (Mechanical)	1 in General Shift
2	Mechanical	06 / 04 Years in maintenance of Harbour Mobile Cranes	Diploma / Degree Engineer (Mechanical)	1 in General shift
3	Hydraulic Engineer	06 / 04 Years in hydraulic maintenance work	Diploma / Degree Engineer (Mechanical)	1 in General shift
4	Electrical / Electronics Engineer	06 / 04 Years in maintenance of Harbour Mobile Cranes	Diploma / Degree Engineer (Electrical / Electronics)	1 in General shift
5	Operation Coordinator	02 / 01 Years in maintenance of Harbour Mobile Cranes	Diploma / Degree Engineer (with computer proficiency)	1 in each shift
6	Clerk	01 Year experience in clerical / time office management works	HSC passed with Computer proficiency	1 in General Shift
7	Hydraulic Technician	04 Years in maintenance of Harbour Mobile Cranes	ITI Holder (with proficiency in hydraulics)	1 in each shift
8	Electrical / Electronic Technician	04 Years in maintenance of Harbour Mobile Cranes	ITI Holder (with proficiency in PLC automation)	1 in each shift
09	Welder cum Fitter	03 Years in welding works	ITI (Welder)	1 in general shift
10	Cleaner / Helper	04 Years in cleaning / helping job in heavy / hydraulic works	8 th Pass	3 in each shift
Total manpower required (in Nos.)				24 nos.

2.(B) Deployment of Manpower for Operation.

Sr.	Designation	Experience required*	Qualifications required	Requirement in shift / general
1	Skilled Operator	05 Years Experience in operation of High Capacity (above 100MT) Harbour Mobile Cranes	Minimum qualification at least ITI	2 no's operator per Shift + I no Reliever.

The manpower shall be trained by AMC Contractor in advance to understand the working and trace the faults in terms of

- (1) Mechanical structures,
- (2) Hydraulic systems,
- (2) PLC Automation,
- (3) Electrical network,
- (4) Any other maintenance and operational requirement of HMCs.

Manpower shall be appraised with Weekly off, Holidays as per labor laws. In case of work requirement, above mentioned staff may be booked on Over time or called on Holidays or weekly offs as per prevailing labor & Overtime rules. AMC contractor may arrange extra manpower as reliever to the deployed staff on Weekly offs / Holiday subject to pre-approval of EIC for exigencies or to speed up the ongoing maintenance activity or operational requirements other than General shift staff.

AMC Contractor is sole responsible for timely payment / wages in accordance with the labor laws.

3. Operation:

The Cranes will be operated in round the clock in following 3 Shift basis (24 hrs a day) & 365 days a year (which is subject to changes):

1st Shift - 6:00 hrs. to 14:00 hrs.

2nd Shift - 14:00 hrs. to 22:00 hrs.

3rd Shift - 22:00 hrs. to 6:00 hrs.

Arrival & Departure of staff should be well-planned to up-keep the maintenance requirement in tact round the clock. Operational staff attendance & shift log Book should be daily checked & verified by Shift Engineer, DPA, hence contractor is sole responsible for day to day update & maintenance of register.

The contractor shall also install biometric attendance system for accurate attendance system, based on which salary / wages shall be disbursed.

4. Overall Scope of Work of Contractor during AMC period (after putting HMCs in traffic operation):

- a) overall supervision of both the Cranes - 141143 & 141169, their routine health check, advice & assistance in Spare parts planning / procurement, calibration

of spare parts wherever required, troubleshooting w.r.t. software / calibration etc. mechanical and other fault tracing, provision of 24 / 7 technical assistance / team at Deendayal Port site.

- b) Supply of diesel for operating the cranes is excluded from the scope of contractor. However, diesel transfer pump, pipe & necessary accessories (to cater the need of transfer of 12 KL Diesel in 2.5 Hours) will be in scope of Contractor. On completion of AMC, same will be returned back to Contractor.
- c) Details of minimum consumed items during last AMC work is detailed below.

Based on which, tentative list of Consumables, not limited to, in scope of contractor at his cost (to be arranged from OEM / OPM and top up every month) is listed below:

1. Hydraulic Oil	1000 Ltrs.
2. Gear Oil Hypoid 90 EP	210 Ltrs.
3. Engine Oil 10 W-40	500 Ltrs.
4. Cooling water (DA)	100 Ltrs.
5. Universal fett 990, Ball bearing Grease	200 kg
6. Open gear grease	25 kg
7. Rope grease	25 kg
8. Cortex VCI 369 for cylinder piston rode protection	10 nos.
9. Metal putty	01 kg
10. EPOXY Paints (Marine Grade) with thinner	20 Ltrs.
11. EPOXY Metal Red oxide	20 Ltrs.
12. Lead / Resin compound	02 kg
13. Engine Oil Filter (with element & filter insert) of all types	04 nos.
14. Fuel Filter (with element) of all types	04 nos.
15. Filter mat	
16. Cardium Compound	30 kg
17. Electrical / Electronic card cleaner	02 nos.
18. 2.5 sq. mm Copper cable 3 core	100 mtr.
19. Tyres with tubes, floppy & rims	02 nos.

Consumables to be arranged on 'as & when required' basis

- 1. Denso tape
- 2. PVC Tape
- 3. Teflon tape
- 4. Silicon spray
- 5. Blue molly for slew / hoist motor shaft lubricants
- 6. Diesel cleaning solvent
- 7. High tensile nuts & bolts, allen keys of all required sizes, washers
- 8. Cleaning cloth
- 9. Welding rode
- 10. Rubber beading & toughened glass
- 11. Cleaning brushes (soft hair / coir / nylon bristles)

12. PDM RUBBER BEEDING & TOUGHEND GLASS OF ALL SIZES.
 13. 'O' Rings / Sealing rings
 14. Hose pipes of all sizes and categories
 15. AC Cooling refrigerant
 16. LED (indoor / outdoor) with fixtures / accessories
 17. Push Bottom / Actuator / Contact Block / Coils / MPCB / SMPS / all types of switches
 18. Fuses
 19. crimping type lugs & ferrul
 20. Relays & thermistors (all sizes)
 21. 'V' Belt
 22. Solenoid valves
 23. Oxygen & DA Gas kit for welding / cutting purpose, welding glasses
 24. Cutting wheel
 25. Grinding wheel
 26. Ref-filling of Co₂ Fire extinguisher bottles – 08 nos.
 27. Batteries (of all types & sizes)
 28. Leather & Cotton Hand Gloves
 29. Radium night glow taps
 30. RCCBs, MCBs, Gland & Metal plug socket
 31. Cable sleeves
 32. WD 40 Spray – rust remover & thread locker
 33. Hydrometer
- And other Basic tools & tackles.

The above requirement is on minimal basis. However, replacement of all Lubricants (Hyd. oil, Gear oil, chassis oil, Engine oil, EP, EP2, wire rope compound and coolants etc.), all Filters & Hoses (of all sizes) in accordance with schedule replacement / top up as per maintenance / inspection plan of OEM manual & to cover the leakages, if any, are in scope of AMC Contractor. In view of the said requirement, all the consumables (required in routine maintenance / servicing) at 8 hrs, 40 hrs, 500 hrs. 1000 hrs. 2000 hrs etc. / indicated span of service in OEM manual, shall be in Contractor's scope.

- d) Assurance of back to back support by OEM with site maintenance team. These activities will be guaranteed for throughout the clock.
- e) Timely inspection & arrangement of Certifications (annual thorough inspection, load tests etc.) as per required Safety norms. necessary arrangements of dead load will be in scope of contractor.
- f) Compliance of safety guidelines and required norms without any compromise.
- g) Timely submission of throughput details after completion of every vessel, as per format provided by EIC.
- h) Fabrication work required for strengthening & safety of rusted out / corroded Mechanical Structures, ladders etc. & necessary painting work, on time to time.
- i) Overhauling of main stabilization jack and wheel cylinders (incl. chroming / replacement of piston rod) to arrest leakages (if any).
- j) DPA is pro-actively consideration of HMC operation with electricity. Proper electrification (from plug point of HMCs) will be in scope of AMC contractor.
- k) Touch up paints at rusted and exposed parts will be in scope of AMC Contractor.

5. In addition to the above the Contractor has to carry out following site activities.

- (a) The contractor has to get approval of maintenance schedule (Daily / Weekly / Monthly / Half yearly / Yearly) and maintain the same & also includes Breakdown Maintenance and all other repairing works with all labour and materials under obligation / scope of Contractor such as tools & tackles, consumable, welding machine, electrodes etc.
- (b) Contractor have to procure and supply the required spares within a period of 6 weeks (max.) from OEM / Indigenous supplier / local supplier after getting written intimation of Engineer-in-Charge in exigencies. On delay, penalty at standard LD rate of ½ % per week of delayed procurement will be applicable on Contractor.
- (c) The cranes shall be secured, if any forecasting is there or directed by DPA.
- (d) All cranes shall be washed with sweet water once in a month by high pressure jet pump, sweet water will be supplied by DPA, but water tank of appropriate capacity & jet pump, Hose Pipes etc. shall be arranged by contractor at working site.
- (e) The record keeping shall be maintained as per ISO Norms, apart from same Site Order Book for instruction is to be maintained.
- (f) The contractor shall submit the monthly & yearly report of each crane regarding its availability, utilization to EIC.
- (g) In natural calamities such as cyclone, heavy rain, warning situations etc., the Contractor shall plan and make arrangements and during such eventuality, cranes shall have to be parked at parking yard at the Port well in advance with boom down / locked.
- (h) The Contractor must remove immediately the workmen in of indiscipline, misconduct, negligence in duty, suppression of facts, deliberate mishandling of machine & equipment, sabotage, professional in-competency etc.
- (i) If any damage caused by the workmen engaged by the Contractor, is noticed by DPA, to any machinery or equipment or installation of DPA due to negligence, ignorance or malafide intention shall be made good at the cost of the Contractor within a reasonable period of time acceptable to DPA, failing which the cost of the damages assessed by DPA shall be deducted from the bill of the Contractor.
- (j) All individuals engaged in the performance of the Contractor's obligations under this contract shall be the employees of the Contractor and their working hours, rates of compensation and all other matters relating to their employment shall be determined solely by the Contractor in accordance with the applicable labour laws & regulations The Contractor shall be solely responsible for employment policies that specify the requirements for staff working under him and such policies are to be consistent & in conjunction with the existing applicable labour laws.
- (k) During operation, if any abnormality, defect / fault is noticed, the same shall be promptly communicated and remedial steps must be taken under intimation to the Shift Engineer of DPA. The contractor shall place a suitable mechanism for rectification of problems so that delay in operation can be avoided.
- (l) The shift in charge / Engineers / Supervisors of the Contractor associated with maintenance shall plan & co-ordinate all the maintenance activities including

pre-operational checks, Also, necessary interaction for operational requirements should be done in close co-ordination with Shift-in Charge / Engineer-in- charge of DPA.

- (m) The Contractor shall keep and maintain the records of day to day maintenance activities, i. e. material consumption, work carried out, attendance of labour, labour Wages and submission of the same to Engineer-in-charge at the time of RA Bill.
- (n) Stoppages during operation, any type of abnormalities including adverse operating condition or characteristics, bypass of safety devices shall be recorded and same shall be intimated to Shift-in Charge / Engineer-in charge with follow- up action.
- (o) Vehicles required for transport of engaged manpower, shifting of materials along with fuel, driver, insurance, PUC and any other associated requirements shall be in scope of AMC Contractor.

6. Documentation:

Crane Equipment's parameters should be recorded in daily logbooks along with details of every crane operation in throughput records. Separate log books will be prepared for separate equipment's. Contractor should maintain individual History Records for all critical equipment's and other safety related items, this history record should have all the details of work carried out on day to day, monthly, quarterly, half yearly and yearly. Detailed inventory records like materials movement, material consumption, materials disposed etc. also should be maintained. In all documents, for each work, contractor should get signature from Engineer In-charge or his nominees.

7. Maintenance:

Maintenance of Harbour Mobile Cranes primarily aims at keeping the Cranes in efficient and reliable operating conditions, minimizing the downtime during operation so as to ensure their maximum availability and productivity.

The maintenance of Cranes shall be done by the Contractor in accordance with recommendation of Original Equipment Manufacturer and taking into account the current status of Cranes by following sound engineering practice and proper maintenance standards. Any small repair works, paint on corroded parts, batteries, safety belts and other required tools will be in scope of AMC Contractor.

The contractor shall carry out the maintenance activities to prevent failures and also execute improvement activities / repair activities for prolong Crane life; reduce maintenance hours in order to ensure maximum availability of the system. The contractor shall follow the maintenance practices / activities as under:

Generally, there are following types of maintenance in use:

8. Preventive Maintenance:

The care and servicing for the purpose of maintaining the systems and equipment in satisfactory operating conditions by providing systematic inspection, detection and correction of incipient failures either before they occur or before they develop into major defects.

Maintenance including tests, measurements, calibration and part / component replacement performed specially to prevent occurrence of faults / failures.

9. Planned maintenance or Scheduled maintenance.

Maintenance Activities to be done as per Schedule or Plan (Preventive Maintenance Schedule) which may be related to Time like Daily / Weekly / Monthly /Half Yearly / Yearly basis and so on or equipment running hours or other parameters as per recommendation of OEM. Besides the Preventive Maintenance Schedule shall be reviewed and modified taking into account the aging of Cranes operational conditions (environment) and operational requirement, etc.

10. Breakdown maintenance:

Maintenance which is required when an item has failed or worn out to bring it back to working order.

During operation abnormalities / defects / faults are observed and in some cases failures of components occur resulting in breakdown of equipment. Corrective Maintenance is a maintenance activity to identify, isolate and rectify a fault so that the failed component/ equipment / machine or system can be restored to an operational condition within the tolerances or limits by repairing otherwise by replacement.

11. Based on maintenance practices as mentioned above, following are the gists of the maintenance to be adopted.

The contractor shall take up mechanical maintenance, electrical maintenance, and structural maintenance etc. of Cranes by using preventive maintenance techniques in addition to traditional preventive measures so as to maintain the Cranes in efficient and reliable manner.

The contractor shall strictly follow a routine maintenance plan and ensure timely maintenance of the Cranes the as per the Plan / Maintenance schedule. However, the schedule may be reviewed and amended from time to time, if necessary and in consultation with the Engineer-in-charge with a view to make it more appropriate to meet the site needs.

The contractor shall properly plan for execution of maintenance activities during non-operational time of Cranes.

12. Routine inspection and Condition monitoring:

Inspection of both the HM Cranes shall be carried out by the Contractor in accordance with maintenance manual of individual equipment / manufacturer's recommendation.

Before and after operation of Cranes, the Contractor shall carry-out careful and detailed inspection of all equipment and its components. An effective maintenance practice should include Condition Monitoring and assessment along with Visual inspection. Most of the tasks associated with Condition Monitoring are generally carried out while the equipment is in service or when

the equipment is shut down for some Action shall be taken on the other reason observations during inspection and condition monitoring.

**Seal & Signature
of Contractor**

**Superintending Engineer (E)
Deendayal Port Authority**

SPECIAL CONDITIONS

Name of Work: Operation & Maintenance Contract of 2 Nos. Liebherr make LHM 550 model Harbour Mobile Cranes along with 03 nos. Grabs inside cargo jetty area for a period of Three years

1. Payment Terms

All payments shall be made in Indian rupees only unless specifically mentioned

a. On successful completion of one month of Operation & Maintenance contract work for both the HM Cranes, the Contractor shall submit the bill along with following documents.

- Labour Report
- Maintenance schedule filled up and complete in all respect
- Attendance of staff
- Crane Availability Report for billing month
- Penalty calculation sheet
- TPI Compliance report if submitted.

b. Taxes:

GST Clause: The contractor shall quote the price exclusive of GST. The contractor shall quote prevailing GST rate separately, which shall be reimburse by DPA after ascertaining necessary compliance as per Goods & Service Tax Act, 2017.

All other duties, taxes, cesses applicable if any, shall be borne by the contractor.

Deduction of Income-Tax: Income-Tax deductions & surcharge and GST + TDS under GST Act as applicable thereon shall be made good while making payments due to the contractor for carrying out the work and only net amount shall be paid as directed by the Central Board of Direct Taxes, Ministry of Finance, Government of India.

Tax: The rates quoted by the contractor shall be deemed to be inclusive of the taxes, duties etc. (except GST) which the contractor will have to pay for the performance of this contract. The employer will perform such duties in regard to the deduction of such taxes at sources as per applicable law.

Deduction:

Deduction of taxes / income tax at source shall be made from the any bill of the Contractor in accordance with the prevailing rules of Govt.

While performing under the contract, the damages caused by the Contractor or his workers to any of the Port property shall be promptly made good by the Contractor at his own cost. In case the Contractor fails to repair/replace the damage, Deendayal Port Authority shall have the right to take steps to make good the damages and all the cost on this account shall be recovered

from the bills of the Contractor or any money due to the Contractor from this contract or any other contract or any other transaction. In determination of the damage, the opinion of the Engineer-In-charge (EIC) shall be conclusive.

Any dues arising out of failure on the part of the Contractor to carry out any obligation under the contract shall be deducted from the bills of the Contractor or from any money due to the Contractor from this contract or any other contract.

- c. The Operation & Maintenance contract can be extended for a period up to one year from the date of completion with same terms and conditions and existing rates, with mutual consent.

2. Insurance

The contractor shall provide in the joint names of the employer and the contractor, insurance cover from the start date to the end of maintenance period for the following events which are due to the contractor risk:

- a) Personal injury or death.

3. Liquidated Damages (Penalty):

(I) The Contractor shall ensure that every Harbour Mobile Crane is always ready for operation on demand. Each Crane will be allowed for eight hours shift, per month for planned / preventive maintenance, Each Crane should be available minimum 90 % of total hour per month failing which penalty of Rs.1,000 per hour & part thereof and per crane will be imposed.

Note : The maximum amount of penalty (incl. LD) will be 100% of the contract value.

Availability calculation shall be computed as under.

Penalty calculation of Harbour Mobile cranes on monthly basis.

Period (Monthly)	Total hour in month	Number of hours the equipment's are available for work. A-(C+D)	Number of hours the equipment are under major overhaul or under scheduled (or periodic) maintenance or under preventive maintenance in a month	Number of hours the equipment are under break down maintenance in a month	Minimum availability of 90% (in hours) A * 90%	Hours for which penalty to be imposed in case (B) is less than (E) (E-B)
	A	B	C	D	E	F

A = Number of possible equipment hours in a month (24 hours may be taken if the port operate in three shifts. If the port is operating on in two shifts, 16 hours may be considered.

= Number of equipment in the fleet x number of equipment in the fleet x number of days in a month x 24

B = Number of hours the equipment are available for work.

C = Number of hours the equipment are under major overhaul or under scheduled (or periodic) maintenance or under preventive maintenance in a month.

D = Number of hours the equipment are under break down maintenance in a month

(II) SHORTFALL OF STAFF:

In case of any shortfall in deployment of maintenance staff as per Clause 2 of Scope of work, penalty at the following rate will be levied.

- a. Service Engineer at the rate of Rs. 2000 / day
- b. Mechanical / Hydraulic / Electrical / Electronics Engineer at the rate of Rs. 1500 / day
- c. Helper / Cleaner at the rate of Rs. 500 / day
- d. Remaining staff at the rate of Rs. 1000 / day

In the cases when the contractor is repeating the staff on overtime, the contractor is required to submit the documentary proof of payment of overtime at the rate single rate. In case the contractor fails to submit the documentary proof or it is noticed that payment of overtime is not at single rate, it will be considered that the contractor has not engaged any person on that particular shift and penalty will be imposed as per clause no. 3 (II) above.

(III) REDUCED RATE OF AMC AT COMMENCEMENT OR DURING AMC:

Payment conditions shall be considered as per cl. 1 of 'Scope of Work' above. In case of Reduced AMC rates, hourly penalty at 4.0 (I) & (VII) will not be applicable.

(IV) NON ENGAGEMENT OF OEM

If the contractor fails to bring the OEM on the site within the time period mentioned in clause no. 1 (3) of Section I, a penalty of Rs. 5,000 per day will be levied.

(V) NON COMPLETION OF ACTIVITY MENTIONED IN THE MAINTENANCE SCHEDULES

In a month for which monthly payment has been claimed by the contractor, for non- execution of activity mentioned in the maintenance schedule, a penalty of Rs. 20,000.00 will be levied per activity per month till the same is carried out by the contractor. The said penalty amount will be doubled every month and part thereof till fulfilment of the condition. The remedial action in case of failure of equipment(s) due to lack of maintenance shall be at risk & cost of Contractor and the decision of EIC shall be binding.

(VI) NON MAINTENANCE OF REQUIRED QUANTITY OF CONSUMABLES AND LUBRICATIONS

During the contract period, if it is noticed that the contractor is not maintaining the nos. and quantity of tools and tackles as per Annexure C, penalty of Rs. 10,000.00 per tool / tackle per month and part thereof will be levied till the same is brought or top up as per the requirement of tender condition. The said penalty amount will be doubled every month and part thereof till fulfilment of the condition.

(VII) DELAY IN ATTENDING BREAKDOWN DURING TRAFFIC OPERATION OF CRANE:

For any breakdown during operation of the crane, Staff has to instantly attend and rectify the breakdown within 2 hours, exceeding which, an amount of Rs. 1,000 will be charged or levied as penalty for every hour or part thereof for the first 2 hours. After which, the penalty will be levied at double the rate per hour or part thereof up to the 10 % hours duration of total monthly hours.

However, in any case of pending maintenance work or supply of required consumables (in scope of AMC Contractor) or timely submission of throughputs in accordance with the requirement of tender and exceeding the timeline accepted by EIC; monthly bill will be withheld until the completion of job, with written intimation.

The intention behind withholding such bill is to ascertain timely commissioning of heavy asset and better maintenance of HMCs.

4. Employer's Obligation:

The site office will be provided by DPA, if available inside Cargo Jetty Area (along with water & electricity), on chargeable basis. If required by the contractor, two quarters will be allotted, if available at DPA Kandla Colony, on chargeable bases as per prevailing rate & rent as per DPA Norms during the tenure of contract and the same shall be handed over by contractor on completion of contract to DPA, failing which standard rent as per prevailing DPA norms will be deducted & stern action will be initiated. Last month's payment towards AMC charges will be released after deduction of all kind of dues arise out of anything and subject to handing over the Quarter / Quarters, Office Rooms allotted to the contractor..

Any additional requirement for office space / store, if available, will be allotted on chargeable bases and its electricity bill is also to be borne by contractor as per DPA Norms.

DPA is considering to award the berths on PPP basis. In case of requirement, the contract may be transferred to PPP operator along with the crane assets, on mutual agreement and same terms and conditions, with one month's prior notice. Failure to which, contract may be terminated pre-maturely with one month's advance notice.

Further, on commencement or any time during the currency of contract, DPA may opt for maintenance part only with capping the operation work, by one month's advance notice. During the said duration, obligations along with payment terms for maintenance work shall be applicable only.

5. Third Party Inspection:

DPA shall appoint the TPIA for monitoring the AMC work, if any observations/queries are made by Third Party Inspection Agency; the same shall be complied by Contractor before the next schedule visit. The TPIA will check and certify the same. Payment for subsequent month may withhold if any queries raised by TPIA are not complied by AMC Contractor (under the scope of AMC works). The charges incurred for Third Party Inspection Agency will be borne by DPA.

6. Subcontracts:

The Contractor shall not be allowed to engage any sub-contract for all or any part of this contract.

7. Idle Charges:

All efforts shall be made for timely supply of materials and / or equipment where it is included in the scope of Deendayal Port. However, the Contractor shall not be entitled to any idle charges for delay in supply of materials and / or equipment by the Port Authority. Further, in case of any delay due to stoppage of work ordered by the Port Authority to avoid interruption in other important activities of Port Authority or any other reason, the Contractor shall not claim any idle charges.

**Seal & Signature of
Contractor**

**Superintending Engineer (E)
Deendayal Port Authority**

PRICE SCHEDULE

Name of Work: Operation & Maintenance Contract of 2 Nos. Liebherr make LHM 550 model Harbour Mobile Cranes along with 03 nos. Grabs inside cargo jetty area for a period of Two years - reg.

Sr.	Description	Unit	Qty.	Monthly Rate (for 02 nos. HMCs)	Amount for the Qty.	
					in figures	in words
A	Maintenance Contract of 2 Nos. Liebherr make Harbour Mobile Cranes of 124 T capacity along with Grabs for a period of Two years in line with the scope listed					
1	First Year	Month	12			
2	Second Year	Month	12			
B	Operation of above 2 Nos. Liebherr make Harbour Mobile Cranes of 124 T capacity in line with the scope of work					
1	First Year	Month	12			
2	Second Year	Month	12			

[Total Amount (in Rupees) _____ Only]

GST Charges shall be extra.

Signature of Firm with seal

**Superintending Engineer (E)
Deendayal Port Authority**

Place : _____

Date: _____