



COCHIN PORT AUTHORITY

Phone : 91 0484 2666639
: 91 0484 2582300/2582352
Fax : 91 0484-2666639
e-mail : cmc@cochinport.gov.in
dv.cmeele@cochinport.gov.in

OFFICE OF THE
CHIEF MECHANICAL ENGINEER
Willingdon Island
Cochin 682 009

Tender No: F1/T-6/40T-MHC/2025/M

Dt: 13/02/2026

CORRIGENDUM-2 CLARIFICATIONS TO PRE-BID QUERIES

Sub: Tender for "Retrofitting of Digital Control Systems and Connected Items of the 40T Mobile Harbor Crane at Cochin Port Authority, with PLC systems" on TURNKEY contract basis with 2 year Warranty" – Clarification to pre-bid queries – Reg.

Ref: Tender No: F1/T-6/40T-MHC/2025/M Dated 22/01/2026.

The replies to pre-bid queries/ addendum/ amendments to Tender Document are attached. For further details, please log on to e-tender portal www.tenderwizard.com/COPT or Cochin Port website www.cochinport.gov.in or Central Public Procurement Portal www.eprocure.gov.in. The bidders are requested to submit their bids after going through the Corrigendum/ Amendment and also upload copies of the corrigendum duly signed on all the pages to ensure that the bid is as per the corrigendum/ amendment.

Please note that the last date of submission & due date of opening of subject tender has been extended up to 24/02/2026 at 15.00 hrs & 15.30 hrs respectively.

This Corrigendum-2 will form the part of the Tender document.

CM
13/02/2026
CHIEF MECHANICAL ENGINEER (i/c)
COCHIN PORT AUTHORITY

[Signature]
18/2/26
[Signature]
18/02/2026

Bidder Name: BIDDER-I

Organisation: Cochin Port Authority (CoPA)

Tender Ref Number: F1/T-6/40T-MHC/2025/M dated Dated: 22/01/2026

Work : Retrofitting of Digital Control Systems with PLC systems" on TURNKEY contract basis with 2 years Warranty

LIST OF QUERIES

Sr No	Tender Clause	Tender Description	Queries/comments	CopA Comments
SECTION-I 1. NOTICE INVITING TENDER				
1	3. Minimum Qualification Criteria (MQC)	3.2.3 The contractor shall supply the MAF certificate for PLC modules & I/O modules. The OEM shall supply the spares for minimum five years, even if the contractor fails to supply the spares as per the requirement. Contractor shall produce the certificate duly signed by OEM as per Annexure-21.	Since we are Automation OEM company and 100% Subsidiary company , Hence please confirm this MAF certificate is applicable for us or not ?	MAF shall be submitted. Tender condition prevails
SECTION II INSTRUCTIONS TO TENDERERS				
2	2. General Instructions	2.9 The bidders need to obtain the one time User ID & password for log-in to in e-Tendering system from the service provider KEONICS by paying registration amount by online Payment using Credit/Debit Card/Net banking or DD in favour of "KSEDCL, Bangalore".	Need to clarify about the "service provider KEONICS" & How much registration amount ? Registration amount is same as tender document fee or its different one?	Ph. No. 9605557738/9731468874
3	12.2 Other Eligibility Considerations	In this regard the firm should submit a declaration that they have no record of poor performance, at the time of submitting the tender.	Kindly share the format to be used for "declaration"	Self declaration in their letter head with authorized signatory.
4	25. Evaluation and Comparison of Bids	25.1 Evaluation of Price Bid a) The tenderers shall quote their rates for the items as per schedule, excluding GST, in the E-tender portal www.tenderwizard.com/COPT on percentage basis.	Kindly clarify , What is mean by on percentage basis.	Pts. call Keonics , Ph. No. 9605557738/9731468874
5	30. Performance Security	30.2 If the performance security is provided by the successful Bidder in the form of a Bank Guarantee, the BG shall be issued in favor of Cochin Port Authority in the Format enclosed in Annexure-17. The BG furnished towards the Performance Security shall be valid for a period until a date, 60 days from the day of expiry of the defect liability period stipulated as per the terms of the contract.	BG validity can be given till completion of materials supply and if required its will be further extended.	Tender condition prevails
6	32. Retention Money	a. Retention Money shall be deducted at 5% of the gross amount of the bill from the first Running Account bill onwards till the recovered sum along with Performance Security amounts to 10% of the Contract value or the value of the work done whichever is higher at all times. Retention Money shall be refunded to the Contractor after One month after Defect liability/Guarantee period.	will issue 10 % of Basic contract value as a PBG with validity of till Defect liability period (2 years from date hand of the crane). will not accept any Retention Money deduction on Invoice payment.	10 % of Contract Value as a PBG - Acceptable.
7	33. Signing of Agreement	on Kerala State Stamp Paper of appropriate value in the prescribed form	Need to discuss with CoPA regarding State stamp Paper.	Tender condition prevails
SECTION III - GENERAL CONDITIONS OF CONTRACT (GCC)				

*Sub
By emelo*

*[Signature]
SE (K/6)*

8	13 Insurance	13.1 The Contractor shall provide in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractors risks. a) loss of or damage to the Works, Plant and Materials b) loss of or damage to Equipment; c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and d) personal injury or death.	Insurance cover from the Start Date to the end of the handover of the Crane with commissioning completion certificate. Defects-Liability-Period.	Tender condition prevails
9	17 The Works to Be Completed by the Intended Completion Date	17.3 The Contractor shall note that the site for installation will be made available in parts or in phases. It is the responsibility of the contractor to programme his work accordingly. No extra amount will be paid on account of site being made available in phases/parts.	Noted, However if the Site is not ready or any delay from CoPA for site activity, CoPA to release the Pending payment of Supply portion Invoice payment as per proposed payment terms.	Tender Condition prevails
10	26. Computerised Measurement Book		Since its Turnkey project, kindly clarify this clause is applicable for this tender?	Yes
11	B. TIME CONTROL 27 Program		Since its Turnkey project, kindly clarify this clause is applicable for this tender?	The work is under Turnkey project- The contractor is liable/responsible for the making the crane functional during the DLP and if any modification etc needed during the period will have to be done by contractor without any additional cost.
12	C. QUALITY CONTROL	35 Tests 35.1 If the Engineer or his nominee instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and if the test shows that it has defect, the Contractor shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.	Test certificate will be provided for all supplied items. If any tests to be carried out at site, it will be mutually discussed & agreed.	Tender condition prevails
13		36 Defect Liability 36.1 The Engineer or his nominee shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.	Defect Liability Period will be cover only till 2 years from date of completion of commissioning & Crane handover. Request CoPA to elaborate this statement " The Defects Liability Period shall be extended for as long as Defects remain to be corrected."	Yes , DLP will get extend to the period , considering the non-working period of crane due to defects during DLP.

P. J. M.
DYCM/14

SE (E)

14		<p>36.4 Defects Liability Certificate The Contract shall not be considered as completed until a Defects Liability Certificate shall have been signed by the Engineer and delivered to the Employer, with a copy to the Contractor, stating the date on which the Contractor shall have completed his obligations to execute and complete the Works and remedy any defects therein to the Engineer's satisfaction. The Defects Liability Certificate shall be given by the Engineer within 28 days after the expiration of the Defects Liability Period, or, if different defects liability periods shall become applicable to different Sections or parts of the Permanent Works, the expiration of the latest such period, or as soon thereafter as any works instructed, pursuant to Clauses 36, have been completed to the satisfaction of the Engineer</p>	Need to check this or CoPA has to clarify this point.	Yes, DLP will get extend to the period, considering the non-working period of crane due to defects during DLP.
15	43.3 Payment for Electrical and Mechanical works shall be regulated as detailed below:	<p>43.3.1 The Contractor shall be entitled upon certificates of the Engineer or his nominee to payments in accordance with the following provisions:</p> <p>I) For supply portion : i) 75% of the value, as certified by the Engineer or his nominee, of the materials from time to time delivered on the site. ii) Balance 25% after completing the work in all respects, commissioning and handing over the installation to the Employer to the satisfaction of the Engineer and his nominee and his certification.</p> <p>II) For erection portion : i) 85% of the value as certified by the Engineer or his nominee, of the installation portion on completion of the erection work under contract, for which payments are claimed. ii) Balance 15% along with other payments if any, after completing the work in all respects, commissioning and taking over the installation by the Employer to the satisfaction of the Engineer and his nominee and his certification.</p> <p>III) For SITC items: i. 75% of value of supply item as certified by the Engineer or his nominee. ii. Balance 25% of value as certified by the Engineer or his nominee, after successful installation, Testing & Commissioning of the entire items as per the work under contract.</p>	<p>I) For supply portion : 1. Advance of 20% of the supply cost will be released after submission of Advance bank guarantee (valid till completion of all materials supply). 2. 70% of the supply cost + 100% tax component will be released after receipt of complete material at CoPA within 07 working days. 3. 10% of supply cost will be released after successful completion of load trails (including erection, installation, testing and commissioning & load test), or 10 % of the supply cost shall be released in case of any delay exceeding 120 days from the completion of material supply whichever is earlier as applicable against along with submission of 10% total supply portion as PBG valid till Defect Liability Period (2 years additional 3 month for claim period).</p> <p>II) For erection portion : 1. 90 % of service cost will be released after successful completion of load trails (including erection, installation, testing and commissioning & load test). 2. 10% of service cost will be released against Site acceptance certification from CoPA Engineer in charge.</p>	Pls. find the payment schedule given in SCC (special conditions of contract.)
16		<p>III) For SITC items: i. 75% of value of supply item as certified by the Engineer or his nominee. ii. Balance 25% of value as certified by the Engineer or his nominee, after successful installation, Testing & Commissioning of the entire items as per the work under contract.</p>	Please elaborate this SITC items and terms.	SITC means - Supply, Installation, Testing & Commissioning
17		47 Price Adjustment	Not Applicable, Since no Civil activity in this tender Scope of work.	Not Applicable.

Club
Dy. C.M.E (E)

AK

18	48 Retention	48.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the Contract Data until Completion of the whole of the Works.	will provide BG , Hence No retention will be applicable.	If 10% BG is given by the contractor as PBG then no retention money will be deducted.
19	49 Liquidated Damages	49.1 In case of delay in completion of the contract, liquidated damages (L.D) may be levied at the rate of half per cent (½%) of the contract price per week of delay, subject to a maximum of 10 per cent of the contract price. the amount of liquidated damages can be adjusted or set-off against any sum payable to the contractor.	LD should start from 0.5% per week and maximum of 5% and its only for pending supplies.	Tender condition prevails
20	51 Advance payment	The Employer shall make the following advance payments (as admissible in the contract data) if requested by the Contractor in writing: 51.1 Mobilisation Advance shall be paid up to 5% of Contract price, payable in two equal installments. The first installment shall be paid after mobilisation has started and next installment shall be paid after satisfactory utilisation of earlier advance for which, the Contractor shall furnish proof of the satisfactory utilisation of the amount.	Please refer proposed Payment terms for advance payment request.	Tender condition prevails
21	52 Securities	52.2 Performance Security shall be as below: a) For civil works - 10% of the Contract value (5% SD & 5% Retention) b) For all Electrical and Mechanical works : 10% (5% SD & 5% Retention) of the Contract value.	will provide 10% of Total Basic order value as PBG with a valid till Defect Liability Period (2 years, additional 3 month for claim period).	Accepted- including the extended DLP if any.
22	66 Insurance of Works and Contractor's Equipment	The insurance shall be issued by any Insurance Company from its Branch at Cochin which has been determined by the Contractor to be acceptable to the Employer.	will mutually discuss with CoPA for this clause and will decide for the Insurance company.	Tender condition prevails
23	68 Royalties		Not Applicable , Since no Civil activity in this tender Scope of work.	Not applicable, since no civil work is envisaged
24	90 Indemnities		request this clause to be added * The liability of the Contractor is limited to the value of the product/part under defect*.	Tender condition prevails
SECTION IV - SPECIAL CONDITIONS OF CONTRACT				
25	3 PHASING OF WORKS	The work has to be carried out in phases as approved by COPA from time to time so that the total project work can progress smoothly with least obstruction to the operations and also works of other Contractors/ agencies.	will share Tentative Project schedule along with technical bid.	Tender condition prevails
26	4 PAYMENT	4.1 Payment will be regulated as per the Milestone payment / Payment schedule of work/item. The value for the supply, as certified by the Engineer or his nominee, of the materials from time to time delivered on the site, against 100% BG of supply part of invoice Amount raised.	Please refer proposed Payment terms as per Sr.No 15	Tender condition prevails
27	4 PAYMENT	4.2 Payment Schedule	Payment Schedule are ambiguity with Section -IV SCC and Section III GCC. Please refer proposed Payment terms as per Sr.No 15	SCC will supersedes GCC . Hence condition mentioned/changes done in SCC will only prevails.

Handwritten signature
Sycm E (15)

Handwritten signature

28	23 COMPLETION CERTIFICATE	For all works completion certificate shall be submitted to COPA, after completion of work. It is the responsibility of the contractor to provide and make arrangement of Man Power, all spares including consumables for carrying out periodical/preventive maintenance during warranty / defect liability period without any cost to COPA. However, the tenderer should furnish a list of spares, they plan to make available at site, to take care of warranty period. These spares shall be supplied along with the equipment. In case, any spares are required other than the listed spares, contractor will provide the same without any cost to COPA including customs duty and other costs.	Need to discuss this point during Pre-Bid meeting.	Tender condition prevails
29	27 PRICES	The rate quoted for all Items (Imported and Indigenous) shall be in Indian Rupees only. Price shall be inclusive of all taxes & duties, labour, tools & plants, packing, freight/ transportation & insurance up to the site, loading-unloading , fee (s) for testing, inspection, documents etc. excluding GST. f) Receipt of equipment at site and safe custody till they are installed, tested and commissioned & taken over by CoPA.	Kindly confirm , Loading & Unloading at site in CopA scope.	Tender condition prevails
30	28 GUARANTEE / WARRANTY	After successful handing over of the crane the contractor shall post the technical expert personal at site for at least 5 Nos. vessels operations period of the crane in order to make sure that the crane PLC systems and other scope related works of the contract are working in good condition and operation of the crane is not effected with the newly installed system and timely rectification of the fault without delay and without any additional cost.	This conditions need to be mutually addressed , because after completion of Commissioning , there will be an 8 hours Endurance test will be performed.	Tender condition prevails
31		During the guarantee period, the contractor shall carry out all routine and special maintenance of the works executed by him and attend to any difficulties and defects that may arise in the day to day operation of the system within 24 hrs of complaint reported by COPA without any extra cost.	If required to carry out all routine and special maintenance of the works, then request to CoPA to place separate comprehensive AMC order for this activity.	Tender condition prevails- For Guarantee period/ DLP.
SECTION V TECHNICAL SPECIFICATION				
32	3) DETAILED SCOPE OF WORK	xi. Supply of Wired remote control Interface for the remote operation of the crane.	Being Mobile harbour crane operating over vessel operation, considering the safety the wired or wireless remote operation not recommended from us.	Tender condition prevails
33		xiii. Replacing the field devices for integrating with new control system, replacement of damaged junction boxes, control cables, LT switches etc.	Replacement of field devices limited to 2-Numbers of Main Hoist Absolute encoder, 1-Number of Luff angle sensor, 1-Number of encoders for slew angle measurement, 2-Numbers of operator cabin joysticks. If any additional field instruments need to change and the same will be provided by CoPA as free issue materials to FEI.	Tender condition prevails- Same is mentioned as an indicative items for tender reference , any additional items needed shall be supplied as per scope of work without any extra cost as per the New PLC control sytems proposed by the Contractor/ Bidder for succesfull functioning of the crane.

Plus
Dyeme to

JK

34		xiv. Integrating the existing CCTV image with the New HMI.	Please share the existing CCTV Architecture and CCTV make and also please confirm all existing CCTV cameras are in working conditions.	site may be visited for getting more information
35		xvii. For BOQ Item No.2: The contractor shall engage the expert of Hydraulic system, in case of hydraulic defects/failure noticed in the Crane during the initial check for the functioning of hydraulic system. If any hydraulic spares required, the same will be reimbursed as per actual by CoPA as per the OEM recommendation and OEM Invoice. (Any spares available with CoPA can also be made use of)	xvii. For BOQ Item No.2: The contractor shall engage the expert of Hydraulic system, in case of hydraulic defects/failure noticed in the Crane during the initial check for the functioning of hydraulic system. If any hydraulic spares required, the same will be procured by CoPA and free issue to Contractor at site. (Any spares available with CoPA can also be made use of)	Any spares available with COPA can be used by the contractor if needed. Other spares if needed has to be procured and fitted by the contractor for successful commissioning and operation of the crane and the actual cost as per the OEM invoice will be reimbursed by COPA as per tender conditions.
36	3 Scope of Supply (Documents reference: MHC purchase TD Technical spec)	3.2 Supply of ASI Master module which will communicate to existing AS-1 slave stations via existing Slip-ring arrangement	Please confirm weather ASI Module is available in Existing slipring? Also Please share the Inside Photos of Existing Gantry Slipring arrangement.	The contractor has to visit the site and confirm. As per the knowledge of employee no ASI Module is being used. Now the slipring is only used for transferring electrical signals and hydraulic oil passage.
37	4 Scope of work (Documents reference: MHC purchase TD Technical spec)	4.9 Replacement of damaged junction boxes, control cables, cable trays, light fittings, LT switches/ MCB etc.	Please provide the list & quantity of damaged junction boxes, control cables, cable trays, light fittings, LT switches/ MCB etc.	Replacement anticipated:- Outdoor Polycarbonate JB-5Nos, Control Cables - As required for the new PLC system & Field Devices, Light Fittings/Cable Trays - Not envisaged, Limit Switches - 5 Nos, MCB - 10Nos.
SECTION VI - 1. PREAMBLE TO BILL OF QUANTITIES				
38	2. BILL OF QUANTITIES	*Bidder shall not write/enter anything in the schedule given below in this page.	Need to discuss this BOQ and its Price break up.	Bidder shall quote the price in the price bid only, which is given separately in the tender.
39		BIDDER SHALL QUOTE ONLY IN THE PRICE BID ATTACHED SEPARATELY SCHEDULE B1	Kindly share the format of Price Bid Attachment.	Available in the tender site.
SECTION VII CONTRACT DATA				
40	SECTION VII CONTRACT DATA	15. The minimum insurance cover for physical property, injury and death is Rs.7 lakh (Rupees Seven Lakh) per occurrence with the number of occurrences unlimited. After each occurrence, Contractor will pay additional premium necessary to make insurance valid always.	Need to discuss this Point.	Tender condition prevails- This is a general clause for works contract.

Sub
DyCM (E)

JK

BIDDER -2

R.g.f. Tender No. F1/T-6/40T-MHC/2025/M - "Retrofitting of control systems and connected

Rec. Submission of Pre-bid queries

Dear Sir,

This refers subject tender, after going through the document, we have few below queries/ observations for consideration:

Sr. No.	Page no. of Bid Document	Section & Clause no. of Bid Document	Bid Clause	Bidder query	CoPA Reply
1.	2	Section-I 2 (M)	Estimated amount to Tender	Moreover, you are well aware about foreign exchange volatility in the last few months, so from the date of offer (September 2025) INR have depreciated against Euro by about 15%, so above price factors should be considered while arriving at tender estimation and are very important for bidding	Tender condition prevails. PAC prevails.
				Please revise the estimated cost Under.	Tender condition prevails
2.	3	Section-I 3.21	Bid clause MQC/ Technical Criteria	Bidder is a Channel partner/Authorised after sales and vice agency of OEM (Bidder-2) therefore, request to relax the Technical Criteria in respect of;	
				1. One Similar Work of not less than Rs. 1,80,80,000.00 to Rs. 1,70,00,000.00, because bidder had executed similar project for Port Authority in the year 2023-24 for the value mentioned. 2. Please remove "PLC". FYI, Bidder has been Operating and Maintaining Harbour Mobile Cranes for the past 15 years in various Ports in India as Channel Partner of OEM to consider relaxing the requested clause of Technical Criteria, to enable us to participate in the subject tender.	Please check debarment clause of the Tender. Tender conditions prevails
3.	7 & 8 54	Section-II 1.1 and Section-IV 6.2	Scope of work - i to iv Supply of PLC System Bill of Quantities	CoPA crane (C1519) is operated with CAN BUS technology and please note, same technology has been very successful for the cranes supplied to PORTS, therefore, we as an Authorised Channel Partner of OEM recommend & strongly propose to upgrade CAN BUS technology only for crane C1519, Though it is not require, but in case CoPA decide for conversion to PLC System, then shall have to increase its tender budget estimate which should be much more than what has been proposed now in the tender (please refer our observation at point 1 above for better understanding) and the machinery house of the crane need to be dismantled completely and all the cables of the crane need to be replaced.	Tender condition prevails

*Sub
BY (M/E)*

*AP
SE (E)*

		<p>vi Supply of damaged Junction boxes, Control cables, LT Switches etc.</p> <p>ix to xii Repairing & overhauling the existing Hydraulic system without any additional cost/same will be reimbursed as per actual</p>	<p>There is no point in spending huge money for PLC system considering the remaining life of DMC, so, hope you may consider upgradation of electronic system of CAN BUS system. The same upgradation had been followed by MPA in the year 2023-24.</p> <p>CoPA should specify the quantities of mentioned item to be replaced so, as to price accordingly! This is a MUST to have bids of bidders apart/comparable.</p> <p>This scope should be deleted from the "Retrofitting" because;</p> <ol style="list-style-type: none"> 1. It is not feasible for the bidder to investigate health of Hydraulic system before bidding and price it? 2. Scope of tender is ambiguous, because, in clause ix it has been said Repairing & Overhauling of existing Hydraulic system, Hydraulic Pumps/Motors etc. are to be arranged by the contractor without any additional cost? 3. However, in clause x it has been said, if any Hydraulic spare will require, the same will be reimbursed as per actual by CoPA? Like to submit that in case crane require repair/overhaul of Hydraulic system by supplying new spares etc. it will delay the entire project because, Rexroth the vendor for Hydraulic spares has very long delivery schedule, therefore, we do not expect project can be completed in 180 days. 4. By virtue of above, bidder's effort, time and money will be stuck in the project unless & until Hydraulic issues are resolved? 	<p>Tender condition prevails. The required spares for functioning of the Hydraulic System will be reimbursed as per actual against submission of OEM Invoice.</p>
			<p>Yours is a Hydraulic crane and Hydraulic system is heart of the machine, therefore, require deep inspection and not possible before bidding hence, please remove this scope from "Retrofitting" Or CoPA should specify what problems/issues they have had faced in the Hydraulic System to enable bidder to consider?</p>	<p>Tender condition prevails</p>

JUN
21/06/2024

JP
21/06/2024

4	52 & 53	Section- IV 4.1 & 4.2	Payment schedule	1.1 Bidder request 50% advance payment of Contract Value (excluding GST) for placing an order for spares for retrofitting. Bidder on receipt of LOA/Work Order, will submit the invoice for an advance and will be paid by CoPA within 15 days of submission, to enable bidder to place an order for spares for timely completion of project. 1.1 BG for supply spares parts should be released within 15 days (instead of 03 months) on successful commissioning of crane. 1.2 Service charges towards erection testing and commissioning of new software etc shall release within 15 days (instead of 03 months) on successful commissioning of crane.	Tender condition prevails
5	54	Section- IV 6.2	Bill of Quantities	iv Will replace the spares as per Retrofit scope however, aviation lights, hooters, flashing lights will not be part of our scope. vi Repairing & overhauling the existing Hydraulic System : Refer our reply in item 3 (clauses ix to xii) above.	IV - Refer CoPA Reply for Bidder -1, Item No.3
6	55	Section- IV 11	Inspection & testing	Entire Scope of Work will be performed at CoPA site hence, inspection & testing will also be performed accordingly.	Accepted
7	56	Section- IV 12.3	Inspection & Equipment of material	Inspection & Equipment of material if require shall only be performed at CoPA site. For issuing the dispatch clearance, bidder will submit a packing list for CoPA's review & to issue dispatch clearance.	Accepted
8	57	Section- IV 17	Test reports of equipment	The spares involve for Retrofitting are pre-tested at manufacturer's work, therefore, this clause should be deleted in order to meet timeline of the project.	OEM test certificate/ declaration shall be submitted for reference.
9	57	Section- IV 18	List of approved makes	We could not locate list of approved makes, therefore, please clarify?	Attached separately
10	58	Section- IV 20.1	Performance testing at manufacturer's work	None of the work will perform at manufacturer's site because after delivery of requisite spares at CoPA, erection, testing will be performed at CoPA site, hence, please delete this requirement.	OEM test certificate/ declaration shall be submitted for proper function/working condition for reference.
11	59	Section- IV 23	Spares for warranty/ defect liability period	Bidder will meet the warranty/defect liability period as per tender however, will not keep any spares at CoPA, but will bring the same from our common store.	If any spares needed, the contractor shall arrange and fit the same within the time frame mentioned in the tender for putting back the crane/ system in to operation. And other conditions as per tender.

Plus
Dyem (12)

AI

APPROVED MAKES- MHC		
1	PLC / SLAVE MODULE AND RELATED ITEMS	ABB/ SIEMENS/GE/FUJI/SCHNEIDER
2	CONTROL TRANSFORMER -	C&G / UNIPOWER / RAYCHEM/ SCHNEIDER / TELWANE/ ABB/ SIEMENS / UNIPOWER / RESITECH
3	1.1 KV XLPE CABLE	CCI / INCAB/ UNIVERSAL/ RPG/ NICCO/ TORRENT / POLYCAB / PARAMOUNT/ KEI / HAVELLS / FINOLEX / V-GUARD/ L&T / PRIMECAB / RR KABEL / GLOSTER
4	CABLE TERMINATION KIT	RAYCHEM /MAHINDRA / DENSON/3M/CCI / CABSEAL
5	ENERGY METER / AMMETER / VOLTMETER	SIMCO / MECO/ L&T/ HPL/ AE / RISHAB / SCHNEIDER / SECURE /SOCOMEK / CONZERVE /SIEMENS/ABB/C&S
6	RELAYS	ABB/ L&T/ SIEMENS / RISHAB / GE /SCHNEIDER / ALSTOM / EASUN REYROLLE / C&S
7	CURRENT / POTENTIAL TRANSFORMER	INTRANS/ KAPPA/ INDUS/ CG/ CYRO/ABB/BHEL/CG/ MEGAWIN/TRANSDELTA / KEL
8	MCCB / MCB / CONTACTOR / TIMER	LEGRAND / MERLIN GERIN / MK / ABB/ INDOASIAN / L & T / SIEMENS /SCHNEIDER / HPL
9	LT ACB	LEGRAND / ABB/ L & T /SIEMENS /SCHNEIDER
10	INDUSTRIAL PLUG WITH MCB	ABB / HAGER / HAVELLS / INDOASIAN / CROMPTON / LEGRAND / SCHNEIDER / L & T / HPL
11	PLUG SOCKETS -IP66	MENNEKES / HENSEL / MERLIN GERIN / L&T / ABB / WALTHER / CAPE
12	BATTERY	EXIDE / AMARON / PRESTOLITE / AMCO / STANDARD FURUKAWA
13	BATTERY CHARGER	WAVES ELECTRONICS / DUBAS / AMAR RAJA / TATA LIEBERT / NUMERIC /SAFE POWER /APC / GE / DELTA / ELNIX / DB POWER
14	PVC CONDUIT PIPES / CASING & CAPPING	BALCO/ ATUL/ GEO/ CLIPSAL/ PRECISION/ AVONPLAST/ KONSEAL
15	HDPE PIPE/ FLEXIBLE HOSE	KONDOOR or any other make with BIS
16	WIRING CABLE	FINOLEX/ QFLEX/ RR KABEL/ RPG CABLES/ LAPP KABEL/ V-GUARD/ HAVELLS/ L&T/ RALLISON
17	INSTRUMENTATION / COMMUNICATION/TELEPHONE CABLES	TRACO / HINDUSTAN CABLES / DELTON / FINOLEX / USHA BELTRON / PRIMECAB / VIDYA
18	MODULAR SWITCHES/ PLUG SOCKETS/ CEILING ROSE	ANCHOR/ MK/ LEADER / CRABTREE/SIEMENS/ FINOLEX/LEGRAND/ABB / INDOASIAN
19	MV PANEL / DISTRIBUTION BOARD	ABB/ INTRANS/ MEGAWIN/HESSEL/ WAVES/POWER CONTORLS / ABB /L&T/ SIEMENS/SCHNEIDER /HENSEL/MENNEKAS/HAGGER/ IMPERIAL
20	CEILING/ WALL MOUNTED / EXHAUST FAN	CROMPTON / BAJAJ / USHA / KHAITAN / HAVELLS / ORIENT / ALMONARD
21	UPS	DB POWER/ TATA LIEBERT / NUMERIC/ SAFE POWER/ APC/ GE / DELTA/ SOCOMEK / VGUARD / EMERSON
22	AIR-CONDITIONER	VOLTAS / BLUE STAR / CARRIER / LG / HITACHI / DAIKIN

Handwritten signature
Dy. Comm. E. O.

Handwritten signature
Dy. Comm. E. O.

23	PROXIMITY SWITCH	OMRON/SCHNEIDER/PEPPER+FUCHS/IFM
24	LIMIT SWITCHES	SCHNEIDER/BCH/OMRON/HONEYWELL/SIEMENS
25	POLYCARBONATE JUNCTION BOXES	HENSEL/CAPE/MENNEKES

Note: If any make is not specified in the above list, the contractor shall get prior approval from Engineer in charge before procurement of the same

Handwritten signature
D/engr(S)

Handwritten signature