1. TENDER NOTICE (GLOBAL TENDER NOTICE) (Tender No: IPGL/MHC/2018)

Sealed tenders in two-bid system (Technical & Price Bids) are invited on behalf of **India Ports Global Limited** (IPGL), from reputed manufacturers fulfilling the Minimum Eligibility Criteria (MEC). The scope of works, details of time schedule and EMD to be submitted by Tenderers for participation in this tender are given below:

i)	Coope of words	Design Manufacture Cumby Installation Testing				
1)	Scope of work	Design, Manufacture, Supply, Installation, Testing,				
		Commissioning and Guaranteeing the performance of				
		Nos. of 100 Ton and 2 Nos. of 140 Ton capacity Mobile				
		Harbour Cranes at Shahid Beheshti Port, Chabahar,				
		Islamic Republic of Iran.				
ii)	Ernest Money Deposit	Euro 120,000/- (One Hundred Twenty Thousand only) or				
	(EMD)	INR 9500000/- (INR Ninety Five Lakhs Only) in favour				
		of IPGL in the form of Bank Guarantee, as per				
		Annex-II of Tender Document (Volume-I), from any				
		Nationalised or Scheduled Bank having its branch at				
		Mumbai OR Demand Draft (DD) of the said amount in				
		favour IPGL from any Nationalised or Scheduled Bank				
		having its branch at Mumbai and payable at Mumbai.				
iii)	Sale / downloading of	On all working days (10:00 hrs. to 17:00 hrs.)				
	the Tender Document	from 09.02.2018 during office hours at the office of				
		the Managing Director, India Ports Global Limited, 4th				
		Floor, Nirman Bhavan, M.P. Road, Mazgaon, Mumbai-				
		400010. Tender document will not be sent by				
		post/courier.				
iv)	Pre-Bid Meeting	On 26.02. 2018 at 15:30 Hrs at Conference Hall of India				
		Ports Global Limited, 4th Floor, Nirman Bhavan, M.P.				
		Road, Mazgaon, Mumbai - 400010.				
v)	Cost of Tender	Rs.10,000/- (Rupees Ten Thousand only) or Euro 140				
	Document (Set of	(one hundred forty only) in the form of Demand Draft				
	Two Copies)	(non-refundable) drawn on any scheduled bank having its				
		branch at Mumbai in favour of India Ports Global Limited.				
		Tender Document shall have to be collected by the				
		party through an authorised person/ Agent. The Tender				
		document detailing the terms & conditions and the				
		technical requirements can also be downloaded from the				
		web sites: http://ipa.nic.in, http://www.jnport.gov.in and				
		http://www.kandlaport.gov.in (Deendayal Port Trust)				
		from 09.02.2018 on wards, till the date of submission of				

		tender. The downloading of tender document shall be carried out strictly as provided on web site. In such case, the Cost of tender document can be deposited at the time of submission of the tender. Tender document will not be sent by post/courier.		
vi)	Due Date for	On or before 27.03.2018 up to 15:00 hrs. at the office		
	Submission of Tender	of the India Ports Global Limited, 4th Floor, Nirman		
	Document	Bhavan, M.P. Road, Mazgaon, Mumbai – 400010.		
vii)	Date of Opening of	On 27.03.2018 at 15:30 hrs. at Conference Hall, India		
	Technical Bid	Ports Global Limited, 4th Floor, Nirman Bhavan, M.P.		
		Road, Mazgaon, Mumbai-400010.		

Managing Director,

For India Ports Global Limited,

4th Floor, Nirman Bhavan,

M.P. Road, Mazgaon,

Mumbai-400010, India

Email:-md.india portsglobal@gmail.com

2.INSTRUCTIONS TO TENDERERS (ITT)

2.1 Sealed tenders in two-bid system (Technical & Price Bid), are invited on behalf of India Ports Global Limited (IPGL), for the following work: –

Name of the work: Design, Manufacture, Supply, Installation, Testing, Commissioning and Guaranteeing the performance of 04 Nos. of 100 Ton and 02 Nos. of 140 Ton capacity Mobile Harbour Cranes at Shahid Beheshti Port, Chabahar.

2.1. Minimum Eligibility Criteria (MEC)

a. Financial Standing:

The average annual financial turnover **OR** average annual value of permanent assets of the tenderer over the past three years shall be at leastEuro12,500,000.00 (Euro 12.5 million only) **OR** equivalent INR 980, 000,000.00(Indian Rupees 980 million only).(Audited and certified copies of annual financial reports from authorized Chartered Accountant to be submitted).

b. Experience:

The tenderer should be in the business of designing, manufacturing, Supplying and Commissioning of **MHCs**, **at least** for the last seven (07) years. Work order and completion certificate to be submitted for year 2011 or before.

c. Capacity and Capability:

1. For 100 Ton Capacity MHC:

The tenderer should have supplied at least Four (4) Nos. MHCs with minimum 100 ton Lifting Capacity under hook during the last seven (07) years, i.e, Work orders and completion certificates to be submitted for years 2011 onwards.

2. For 140 Ton Capacity MHC:

The tenderer should have supplied at least Two (2) Nos. MHCs with minimum 140 ton (+/-) 20 % Lifting Capacity under hook during the last seven (07) years. (Work orders and completion certificates to be submitted for years 2011 onwards).

d. Satisfactory Performance:

At least three (03) MHCs supplied in the last seven (07) years must have completed warranty period satisfactorily. (Clients signed / dated certificate to be submitted to support above mentioned clause).

Note: During last seven years means during last seven years ending last day of the month previous to the one in which the tender is published / uploaded on website

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e. Recent Business Activities:

The tenderer should have supplied or is in the process of manufacturing at least three (03) MHCs during the last two (02) years. (Work order or completion certificate to be submitted).

Note: If the Tenderer is a subsidiary Company, then for the purpose of meeting MEC criteria of clause 2.1.1, documents submitted by the tenderer of its holding Company and/or its sister company can be considered, provided the holding company certifies that the tenderer and/or its sister company is their subsidiary and the holding company is severally and jointly responsible for compliance of the contract terms and conditions.

All the tenderers participating in this tender shall be evaluated so as to meet the above requirements of MEC separately for 100 ton and 140 Ton capacity. It may be noted that the price—schedule for both 100 ton and 140 ton capacity MHCs shall be submitted in separate sealed envelope duly super scribed on it and they will be separately evaluated and the selected bidder for the same shall be separately announced. To clarify further, the parties for the award of both capacity MHCs may be separate.

2.2 LAST DATE FOR SUBMISSION OF TENDER

- **2.2.1** Tenders shall be received in the office of the Managing Director, India Ports Global Limited, 4th Floor, Nirman Bhavan, M.P. Road, Mazgaon, Mumbai-400010, up to **15:00 hrs on 27.03.2018**
- **2.2.2** IPGL, may at its own discretion, reserves the right to extend the date of receipt of tender. Tenders received after the aforesaid time and date or the extended time and date, if any, shall be returned unopened to the Tenderer. Tenderers to note that IPGL shall not be responsible for late receipt of any offer due to postal delays or any other delay for whatsoever reasons.

2.3 TENDERER TO INFORM HIMSELF FULLY

2.3.1 The Tenderer is expected to examine carefully the contents of the tender document like, Instructions to the Tenderers, General Conditions, scope of work, annexures and schedules, check-list of documents to be submitted along with the tender etc. Failure to comply with the

requirements of the tender will be at the Tenderer's own risk. It would be deemed that prior to the submission of the tender the Tenderer has made a complete and careful examination of requirements and other information set out in the tender document. The Tenderer shall be deemed to have, visited the site and surroundings and have obtained all necessary information in all the matters whatsoever that might influence while carrying out the works as per the conditions of the tender and to satisfy himself to sufficiency of his tender, etc.

- 2.3.2 The Tenderer is advised to get acquainted himself with the job involved at the site, like availability of labour, means of transport, communication facilities, local laws and bye laws in force. The tenderer is essentially required to be abreast of latest Rules and Regulations in force as regards to destination port and any other statutory bodies as well as security regulation for the permission to collect all information that may be necessary for preparing and submitting the tender and entering into Contract with IPGL.
- 2.3.3 Tenderer shall bear all costs associated with the preparation and submission of his tender and IPGL will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the tendering process.
- 2.3.4 The Tenderer and/or his representatives will be granted permits to visit the site for the purpose of inspection, on receipt of a formal written request.

The Tenderer will be fully responsible for any injury (whether fatal or otherwise) to himself or his representatives for any loss or damage to property or for any other loss, damage, costs and expenses whatsoever caused which but for the granting of such permission would not have arisen. The Tenderer will be liable to indemnify the Employer against any loss or damage to the property of the Employer or neighbouring property which may be caused due to any act of the Tenderer or his representatives.

2.4 EARNEST MONEY DEPOSIT (EMD)

2.4.1 The tender shall be accompanied by Earnest Money Deposit as stipulated in the tender notice. The tender not accompanied with EMD shall be treated invalid. The E.M.D. shall be submitted in the form of Bank Guarantee (BG) as per enclosed format at Annex-II (Volume I of the Tender Document) drawn in favour of India Ports Global Limited, Mumbai, from any Nationalised/Scheduled Bank (Nationalised / Scheduled Bank shall mean a bank defined under section 2 (e) of the Reserve Bank of India Act 1974) having its branch at Mumbai. Alternatively, Demand Draft (DD), in favour of IPGL, Mumbai, drawn on any Nationalised / scheduled bank

- enlisted under RBI, payable at Mumbai, for specified amount in the tender for EMD, is also acceptable.
- 2.4.2 In the event of tenderer withdrawing his tender before the expiry of tender validity period of 180 days from the date of opening of technical bid, the tender submitted by the tenderer shall be cancelled and EMD shall be forfeited.
- **2.4.3** The Earnest Money Deposit of unsuccessful Tenderers shall be returned onward of Contract to the successful Tenderer. No interest shall be payable on the amount of E.M.D in any case. The Earnest Money Deposit of the successful Tenderer shall be refunded only on receipt of Performance Guarantee as stipulated in the tender.
- 2.4.4 IPGL reserves the right to forfeit the Earnest Money Deposit in respect of successful Tenderer, if he fails to furnish the necessary Bank Guarantee towards performance within 45 days from the date letter of acceptance and enter into a Contract within 30 days from the date of receipt of Letter of Acceptance (LOA) as per clause 2.17.3 (d) of the tender and to furnish the necessary Bank Guarantee towards performance of the contract within 15 days of signing the contract.
- **2.4.5** EMD shall not be enclosed with the sealed covers containing technical offers, but shall be submitted separately in a properly sealed envelope so super scribed.

2.5 IPGL'S Right to Annul the Bidding Process:

- **2.5.1** Notwithstanding anything contained in this tender document, IPGL reserves the right to annul the bidding process at any time without any liability or any obligation for such annulment, without assigning any reason. It is clarified that in case the tender process is annulled by IPGL under the provision of Clause 2.5.1, the EMD of the Bidders shall be returned within 21 days from the date of notice of annulment.
- **2.5.2** IPGL reserves the right to invite revised Technical Tenders and / or revised Financial Tenders from Bidders with or without amendment of the tender document at any stage, without liability or any obligation for such invitation and without assigning any reason.
- **2.5.3** IPGL reserves the right to reject any Tender if at any time, a material misrepresentation is made or uncovered OR the Bidder does not respond promptly and thoroughly to requests for supplemental information required for the evaluation of the tender.

2.6 TENDER VALIDITY:

The tender shall remain valid for acceptance for a period of **180 days** from the date fixed for opening of Technical Bid. IPGL reserves their right to extend the period of validity for a specific

time. The request and the response, there to, shall be made in writing by post or by E-mail. However, in the event of the Tenderer agreeing to the request, he shall not be permitted to modify his tender. In the event of the Tenderer agreeing to the extension, the Tenderer shall correspondingly extend the validity of the tender suitably along with valid extension of the Bank Guarantee furnished towards EMD against this Tender. In case tenderer does not agree to extend the validity of their offer beyond the validity period, EMD of such tenderers shall be refunded on request.

2.7 AUTHORITY FOR SIGNING TENDER DOCUMENTS

- **2.7.1** The tender, if submitted on behalf of principals or a Partnership Firm should be signed either by all the partners or some of the partners or other person/s holding a valid "Power of Attorney" from other partners or all the partners constituting the firm or the Principals as the case may be.
- **2.7.2** In the event, the tender is signed by some of the partners or other persons, the tender should be accompanied by a valid Power of Attorney duly executed by partners/Principals specifying that the partners or person/s signing the tender has the authority to bind them or the firm as the case may be, in all matters pertaining to the tender.
- **2.7.3** In case of a Company, the tender should be signed by a person holding a valid Power of Attorney executed in his favour (document to be provided) in accordance with the constitution of the Company.

2.8 AMENDMENTS

- 2.8.1 At any time, prior to the last date for submission of tenders, IPGL reserves the right to amend and modify the tender document. The amendments so carried out shall be forwarded to all the prospective Tenderers prior to the last date for submission of the tender in writing either by post or by Fax and e mail including displaying the said amendment on IPGL nominated web sites. The prospective Tenderers shall immediately acknowledge receipt thereof either by post or by fax.
- **2.8.2** The amendment so carried out shall form part of the tender and shall be binding upon the Tenderers. IPGL may at their discretion, extend the last date for submission of the tender, to enable the Tenderers to have reasonable time to submit their tender after taking into consideration such amendments.

2.9 ERRORS IN THE TENDER DOCUMENT

- **2.9.1** Tender shall be prepared, signed and submitted only by that bidder in whose name the tender documents have been issued. The tender shall be typed or written in indelible ink and all pages of the tender shall be signed.
- 2.9.2 The Tenderer shall submit complete tender and the same shall be without alterations, interlineations or erasure except those to accord that instructions issued by the IPGL or as may be necessary to correct errors made by the Tenderers. Person or persons signing the tender shall initial all such cancellations, alterations or amendments. If any discrepancies found in figures and words while reading the rates in the Price Schedule the rate quoted in words shall supersede the figures. In the event of any difference between the unit rate and the total amount stated therein, the unit rate should be reckoned as the correct one.

2.10 MODIFICATION, SUBSTITUTION AND WITHDRAWAL OF PROPOSAL

2.10.1 The Tenderer may modify, substitute or withdraw his proposal after submission, provided that written notice of modification, substitution or withdrawal is received by the Employer before the closing time on due date of submission. No offer shall be modified, substituted or withdrawn by the Tenderer after the closing time on due date. The Tenderers modification, substitution or withdrawal notice shall be addressed to the Managing Director, India Ports Global Limited, 4th Floor, Nirman Bhavan, M.P. Road, Mazgaon, Mumbai- 400010, with outer envelope clearly marked as Modification, substitution or withdrawal of the tender.

Withdrawal of a proposal during the interval between closing time on proposed due date and expiry of the proposal validity period would result in forfeiture of EMD in accordance with clause 2.4.2 (volume-I of Tender Document).

2.10.2 STAMP DUTY & OTHER EXPENSES:

All costs, charges and expenses including any duty in connection with the Contract as well as preparations and completions of agreement including registration of same by the tenderer, **if he wishes to do so**, shall be payable by the Tenderer. Tenderer shall ascertain the taxes and duties to be paid on his own due diligence before the submission of the bid. All taxes duties, to be paid to any statutory bodies in places other than destination country shall be paid by the tenderer.

The Bidder shall quote their CIF prices (Incoterm 2010)with insurance till receipt of equipment at the port of destination, inclusive of all taxes and duties related to their country of export. The Bidder shall exclude from his price, the custom duty / related taxes (if any payable in destination country) for those items / equipments only which are appearing in the Price Schedule. These taxes / duties related to destination country, if payable, shall be borne by IPGL.

For avoidance of doubt,

- (i) It is further clarified that CIF value includes all dues at port of origin and vessel related charges at the disport, including insurance till receipt of equipment at the port of destination.
- (ii) Wharfage at disport (if applicable) will be reimbursed to the bidder against the documentary evidence.
- (iii) Taxes and duties for those items / equipments which are appearing in the Price schedule, the custom duty in destination country shall be borne by IPGL.

2.11 CONTRACT WORK AND CONTRACT PRICE:

- **2.11.1** The work to be carried out (hereinafter referred to as "the Contract Work") and the Price for the same (hereinafter called "the Contract Price") shall include the work described in the specifications, schedules, drawings, etc. annexed hereto.
- **2.11.2** Except where otherwise expressly provided, the Contractor shall provide all materials, labour and plant and things necessary in connection with the Contract work although everything may not be fully specified and although there may be errors and omissions in the specifications.
- 2.11.3 The Scope of Works, under this contract is as mentioned below;
 Design, Manufacture, Supply, Installation, Testing, Commissioning and Guaranteeing the performance of 04 Nos. of 100 Ton and 02 Nos. of 140 Ton capacity Mobile Harbour Cranes at ShahidBeheshti Port, Chabahar.
- 2.11.4 Contract Price: Price shall be inclusive of all charges for Design, Manufacture, Transportation including Transit / Marine Insurance, Handling, Supply and Delivery, Receipt of all Equipment / Items and handed over at Site, Installation, Trials, Testing, Commissioning of Equipment and Insurance at Site, Training of IPGL personnel, Cost of O & M Manuals and Training Manuals as per Contractual Conditions, cost of recommended maintenance tools supplied along with each equipments as per list of tools i.e. Schedule 10 B (Volume-I), Warranty support as per Contractual conditions and all other expenses towards installation / commissioning of the equipment will be borne by the Contractor.
- **2.11.5** Contractors shall arrange for training of 2 (two) Officers of the Employer fortraining on PLC, Drives and CMMS at Contractor's works as per **Schedule 4 A.** This training shall be conducted by the manufacturer's qualified and experienced personnel while carrying out the trial run of the cranes at contractor's works. Accommodation during the training stay of these 2 Officers at

contractor's site shall be arranged by the contractor. This training shall be conducted by the manufacturer's qualified and experienced personnel at contractor's works. The charges towards to and fro transportation from India / destination country to contractor's works, accommodation, including local transport during the training stay for these Officers at contractor's works, shall be arranged by the contractor and Cost towards the said training at contractor's works is deemed to be included in CIF Price of the equipment. In addition to above mentioned training, for Inspection & Testing of Work at Contactor's and Sub-Contractor's premises please refer Clause No. 3.24. The period of stay for Inspection & Testing shall depend on manufacturer's Schedule of such activities.

2.11.6 Tenderer is required to quote in Price **Schedule 11** for all the spare parts as listed at **Schedule 10** of the tender. However, IPGL reserves the right to order same. Also refer Clause 3.32.2

2.11.6 LANGUAGE OF TENDER

The Tender submitted by the Tenderer and all correspondence and documents relating to the Tender exchanged by the Tenderer and the IPGL shall be written in the *English language*. Any printed literature, other than English language, shall be accompanied by an English translation, in which case, for purpose of interpretation of the tender, the English translation shall govern. Anything given in a language other than English shall not be taken into consideration for any purpose. For MEC of Financial Standing, the audited report in language other than English, translation in English duly certified by a Chartered Accountant or self certification of the translated version in English by an Authorised senior official of the Tendering Company is acceptable and shall be considered for evaluation.

2.12 CONVERSION OF SINGLE CURRENCY

The Tenderers shall be allowed to quote their offer as per Price schedule of the tender document, in Euro or in Indian rupees. To facilitate evaluation and comparison, IPGL shall convert all tender Prices, expressed in Euro into Indian Rupees, at the bill selling rate quoted by State Bank of India on the date of opening of tender i.e. date of opening of Technical Bid. If on this date, due to any reasons such exchange rates are not available (Forex Market may be closed) the latest available rates prior to the date of opening shall be considered. The due payment of the contract shall be paid in the same currency as quoted.

2.13 TENDER SUBMISSION

The tender submitted by Tenderer shall comprise the following:

- 2.13.1 A covering letter along with check list Schedule 13 (Volume I) giving details of the documents being submitted with tender confirming validity of bid for 180 days & submission of Earnest Money Deposit and the Tender Document fee, if not already paid **Envelope 1** so super scribed with the contents therein.
- **2.13.2** Earnest Money Deposit as per tender condition Envelope **2** so super scribed with the contents therein.
- 2.13.3 The tender document (downloaded from IPGL, IPGL, DPT, CPP web-site) to be submitted in two sets, one being marked as "ORIGINAL" and other as "DUPLICATE". (Technical Bid), with each page of it duly signed by the authorised person and stamped with company's seal in token of having been read and accepted the tender conditions along with Letter of application cum Tender form duly signed by the person / persons who is / are competent to sign as per format enclosed to this tender document and TECHNICAL BID. A scanned copy of the signed documents along with MS-WORD / EXCEL copy (as the case may be) of the technical bid shall also be submitted on a CD/pen drive. Envelope 3 so super scribed with the contents therein.
- **2.13.4 Price Bid Envelope 4** so super scribed with the contents therein. This Envelope 4 shall contain three sealed envelopes duly superscribing for 100 Ton, 140 Ton and for Accessories (for Grabs, C Hooks and Spreaders)
- **2.13.5** One Duplicate Copy of Technical Bid (clearly marked) of the offer shall be submitted along with the original offer, as stated 2.13.3.
- 2.13.6. Tenderers are required to put each of the elements viz., Covering letter, Earnest Money Deposit, Technical Bid with tender form and Tender Document, Price Bid and Duplicate Copy of Technical Bid in separate sealed envelopes. These Four envelopes shall be super scribed as "Tender No. IPGL/MHC/2018 "Design, Manufacture, Supply, Installation, Testing, Commissioning and Guaranteeing the performance of 4 Nos. of 100 Ton and 2 Nos. of 140 Ton capacity Mobile Harbour Cranes at Shahid Beheshti Port, Chabahar and shall be addressed to The Managing Director, India Ports Global Limited, 4th Floor, Nirman Bhavan, M.P. Road, Mazgaon, Mumbai- 400010, Maharashtra State, India.

2.14 TECHNICAL BID

Technical Bid should not contain Prices i.e. it should not contain Schedule 11 i.e. Schedule of price. "Disclosure/indication of Price in the Technical Bid shall render the tender disqualified and rejected".

- The Technical Bid shall comprise of the following information /documents which will be used in the evaluation of Tenders.
- **2.14.1** The Tenderer while submitting their offer for this Tender, shall also confirm in writing along with all relevant documents supporting to fact that they are meeting the MEC as specified at clause 2.1.1 of this tender document.
- **2.14.2** General Information / Particulars of the Tenderers as specified in the **Schedule 1 (Volume-I)** of this tender document.
- **2.14.3** Duly Audited Annual Financial Reports on financial standing of the Tenderer / holding Company, including annual turnover, for the last three years, as per **Schedule 2 (Volume-I)** of this tender document.
- **2.14.4** Documentary evidence related to business registration/commencement.
- **2.14.5** Lists and copies of work orders executed during the last seven years and documentary evidence of completion of work i.e. clients final acceptance certificates mentioning details of work- order with dated signature indicating supply of MHCs as per Clause 2.1.1.b.
- 2.14.6 Copy of certificate indicating supply of at least Four (4) Nos. of 100 Ton and/or at least Two (2) Nos. of 140 Ton (+/-) 20% lifting capacity under the hook MHCs supplied during last seven years as per Clause 2.1.1.c.
- **2.14.7** Copy of client's certificates for satisfactory performance certificate after completion of warranty period of at least three (3) Nos. of MHCs during the last seven (7) years as per Clause 2.1.1.d.
- **2.14.8** Copy of the work order for supply or in the process of manufacturing of at least Three (3) numbers of MHCs during last two (2) years as per Clause 2.1.1.e.
- **2.14.9** The bidder shall submit documentary evidence for having sea-front for assembly and roll-on facility.
- **2.14.10** Technical data of the crane as per Clause 16 (Volume-II) of this tender document.
- **2.14.11** Work Schedule showing as per **Schedule 3** (Volume-I) of this tender document:
- **2.14.12** Details of the training programme of various categories of port employees as per **Schedule 4** (**Volume-I**) of this tender document.

- 2.14.13 Quality Assurance Plan indicating all activities steps by step at various stage of project as per Schedule 5 (Volume-I) and details of instruments for Testing & quality control as per Schedule 6 (Volume-I) of this tender document.
- 2.14.14 Details of Sub Contractors involved in the various activities according to Schedule 7 (Volume-I) of this tender document.
- **2.14.15** Details of organisation showing hierarchy and key personnel i.e. Organisation chart.
- **2.14.16** Details of current commitments and details of work completed in past, period etc along with documentary evidence.
- **2.14.17** Experience in having executed similar Works along with and other related details.
- **2.14.18** Tentative drawings of various arrangements of the crane as per clause 3.26 (Volume-I) of this tender document.
- 2.14.19 Arrangement for importing spare parts, tie up with local firms for supply of spare parts, if any and arrangement for after sales service. Tenderer shall submit the information as per Schedule 8 (volume-I) of the Tender Document. Details of bought out items and its quality certification plan. The bidder is expected to provide the details of major bought out items in their submission and must provide QAP for all items except for those which are bought out items from various suppliers and the same may be provided at an appropriate stage.
- **2.14.20** Information regarding any current litigation.
- **2.14.21** Any other details, which shall establish the technical competency and any deviation from technical specification.
- 2.14.22 The deviations if any, shall be submitted as per Schedule 9 (volume-I) of the Tender Document along with Technical Bid without disclosure of the Price adjustments for withdrawal of deviations proposed by the Tenderer. However, the price adjustments proposed for withdrawal of Deviations if any, as specified by the tenderer in the Schedule 9, shall be submitted along with the PRICE SCHEDULE of the Tender. If Price adjustments are not given in the price schedule, it is deemed that particular deviation does not bear any financial implication for withdrawal of deviation. In case there are no deviations, Schedule 9 shall be stroked off by writing "NO DEVIATIONS" on it. The bidder is expected to comply with all terms of the tender and no deviations are envisaged. However, in case of any deviation considered by the bidder, the same shall need to be indicated in Schedule 9. The deviations not

- acceptable to IPGL should be withdrawn by the bidder. The bidder shall provide price implications, if any, for the deviated items, along with the price bid.
- 2.14.23 List of spare parts quoted as per Schedule 10 (Volume-I) without disclosure of the price. Schedule 10 A (Volume-I) is details of Operation and Maintenance Manual and Schedule 10 B (Volume-I) is List of the Tools to be supplied with each equipment, cost of which is included in CIF Price of the Equipment.
- **2.14.24** Schedule of Price i.e. Schedule 11 (Volume-I) Part I (A, B & C) and Part II to be submitted separately in sealed **Envelope 4**, superscribed as **Price Bid.** Price adjustment offered for each deviation should also be attached along with.
- 2.14.25 Undertaking to ensure Integrity: The tenderer shall comply with Integrity Pact (Schedule 12) stating therein that they have not made any payment or illegal gratification to any person /authority connected with the bid process so as to influence the bid process and have not committed any offence in connection with the bid. The bidder shall disclose any payments made or proposed to be made to any intermediaries (agent etc.) in connection with the bid.
- 2.14.26 Check List as per Schedule 13 (Volume-I).
- 2.14.27 Confidentiality and Non-Disclosure agreement Schedule 14 (Volume-I): Except with the written consent of IPGL, the successful tenderer and its personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the Project execution or the services rendered, this contract or IPGL's Business Operations nor shall the vendor/Consultant and its Personnel make public the recommendations formulated in the course of, or as a result of the services. However, in case of requirement of sharing of critical business/technical information with third party, a Non-disclosure agreement shall be signed between authorised official of the successful tenderer and IPGL.
- **2.14.28** Details of organisation showing hierarchy and key personnel **Schedule 15** (**Volume-I**) (Organisation Chart).
- 2.14.29 Current Commitments in hand as per Schedule 16 (Volume-I).
- **2.14.30** Details of works completed in past as per **Schedule 17** (**Volume-I**).
- **2.14.31** Experience in having executed similar Works along with and other related details as per **Schedule 18 (Volume-I)** of this tender document.
- **2.14.32** Tentative drawings of various arrangements of the crane as per clause 3.26 (Volume-I) of this tender document.

Note: Technical offer with counter condition shall be liable for rejection and disqualification.

2.15 PRICE BID (Envelope-IV):

- **2.15.1** The "Price Bid" as per the **Price Schedule 11** of Vol.-I of the tender document shall contain following;
 - i. CIF Price of the equipment (means as per Incoterm 2010, with insurance till receipt of equipment at the port of destination, inclusive of all taxes and duties related to their country of export).
 - ii. CIF Price of spare parts/tools.
 - iii. Price breakup of Spares and Tools as mentioned in Schedule 11- part II (Volume-I).
 - iv. Cost for imparting training to IPGL personnel at contractor's works (Clause 2.11.5 of (Volume-I) of the Tender Document) which shall deem to be included in the cost of the equipment.
 - v. Cost towards inspection of equipment at contractor's works (as per clause 3.24 (Volume-I) of the tender document) which shall deem to be included in the cost of the equipment.
 - vi. Cost towards Training of IPGL personnel at IPGL site, Operation and Maintenance manuals.
 - vii. Cost towards Warranty support.
 - viii. The expenses on the training and inspection at contractor's works for the officers deputed shall include to and fro travelling expenses from IPGL to contractor's works and vice-aversa, lodging & boarding, local transportation at Contractor's works.
- **2.15.2** Conditional Price Bid shall be liable for rejection.
- 2.15.3 The "Price Bid" shall contain rates of MHC's, as per the Price Schedule of Volume-I of the tender document i.e. Schedule11. The CIF Price Schedule shall contain all applicable taxes payable at country of origin, CIF Price of the equipment and spare parts / Tools as per relevant Schedule of (Volume-I) Price for Testing and Commissioning of the equipment, the cost for imparting training to IPGL personnel at work site i.e. Chabahar Port, the cost for imparting training to two IPGL officers at contractor's works on PLCs, Drives / CMMS (including cost for Transportation & Accommodation & lodging of two officials of IPGL during the period of testing of manufactured equipment at contractor's site / work. It may be noted that Custom Duty at Chabahar is likely to be exempted for IPGL on import of ONLY those items / equipment appearing in the Price Schedule of this tender document. Anything other than the subjected to the contract is liable for duties as applicable. The bidder shall quote their CIF prices inclusive of all taxes and duties related to their country of export, it is further

clarified that CIF value includes all dues at port of origin and vessel related charges at the disport, including insurance till receipt of equipment at disport. Wharfage at disport (if applicable) will be reimbursed to the bidder against the documentary evidence. **Taxes and duties for those items / equipments which are appearing in the Price Schedule, the custom duty in destination port shall be borne by IPGL.** The bidder shall exclude from his price the custom duty/related taxes if any, payable in destination port for the items / equipments appearing in the price schedule.

- **2.15.4** Tenderers shall quote the Total cost for the entire work as per Contract conditions and as per format given in the Price Schedule.
- **2.15.5** Tenderers shall quote for each and every item of the work of the Tender as per price schedule of the tender. Partial offer by any tenderer shall be liable for rejection and will not be considered by the IPGL.

2.16 PRE-BID CONFERENCE

IPGL shall hold a pre-bid meeting, in order to clarify and discuss issues with respect to the tender vis-à-vis terms and conditions or any other related issues. The meeting shall be held on 26.02.2018 at Conference Hall, 4th floor, Nirman Bhavan, M.P. Road, Mazgaon, Mumbai- 400010, and would start at 15:30 Hrs. Tenderers are advised to formulate their views and forward the same to The Managing Director, IPGL, on or before 23.02.2018 on e-mail: md.indiaportsglobal@gmail.com, OR mt.indiaportsglobal@gmail.com, indicating their intention to attend the pre-bid meeting. The prospective tenderers who intend to attend the pre-bid conference, are required to submit authorisation letter from the tenderer for the representative attending the pre-bid conference. During the pre-bid meeting, the queries received in advance would be clarified first, followed by those submitted in writing, during the meeting. No further queries shall be entertained after the Pre-Bid Conference. The changes, if any, proposed by the Tenderer would be discussed and the IPGL's response would be provided to all the Tenderers. The queries received from all the prospective Tenderers would be consolidated and IPGL's response to the same would be communicated to all the Tenderers in writing (through e-mail) well in advance to the last date of submission of tenders. The clarifications so issued would form part of the tender and remain binding on all the Tenderers which shall be accepted and submitted by all the Tenderers along with their offer, duly signed and stamped by the authorised signatory on each page.

Your queries, if any, in soft copy may be sent by **E-mail / CD / USB in MS - WORD** format in the following tabular form latest by **23.02.2018** as the Pre- Bid Meeting is Scheduled to be held at **15:30 Hrs.** on **26.02.2018**, at IPGL Office Mumbai.

Sr.	Volume-I & II	Page	Tenders Specification	Queries	Clarification
No.	Clause No.	No.	Requirements		From IPGL

2.17 TENDER OPENING AND EVALUATION

2.17.1 OPENING OF TECHNICAL BID:

Technical Bids of the tender, received up to closing time on stipulated date, shall be opened on the same day i.e.27.03.2018 at 15:30 Hrs at Conference Hall, IPGL, Nirman Bhavan M.P. Road, Mazgaon, Mumbai-400010 in presence of Tenderers' duly authorised representative, who may wish to be present. The Tenderer representatives who are present shall sign a register evidencing their attendance. Tenders shall be opened as per the following procedures:

- a) In the first instance the envelopes containing cost of tender document for the tenderers who have downloaded the tender document from web site will be checked and opened. Then the envelope containing covering letter and confirmation of submission of the tender as required (Envelope 1) and EMD (Envelope -2) shall be opened and checked.
- **b**) Thereafter the Letter of application cum Tender form and Technical Bids i.e. Volume I of the tender document (Envelope -3) of those tenderers whose tenders are accompanied by EMD shall be opened. At the time of opening only the contents of the covering letter and salient details of Technical Bids as considered appropriate by the tender opening Officers shall be read out.
- c) The envelopes containing the Price Bid i.e. Envelope 4, shall not be opened. All the sealed Price Bids of the Tenderers shall be put in separate cover and sealed in presence of the Tenderers representatives. The sealed cover containing Price Bids shall be kept in the safe custody of IPGL to be opened at subsequent date as per the procedure.

2.17.2 SCRUTINY AND EVALUATION OF THE TENDERS

a) In the first instance the documents submitted with the Technical Bid will be scrutinised to ascertain whether the Tenderer fulfils the requirements as stipulated in the Minimum

Eligibility Criteria Clause 2.1.1. The tenderer who do not fulfil the Minimum Eligibility Criteria shall not be considered for further evaluation.

- **b**) The Technical Bids of the tenderers who fulfil the Minimum Eligibility Criteria at Clause 2.1.1 shall be thereafter scrutinised for responsiveness. For this purpose, a tender shall be treated as substantially responsive which meets with all the requirements of the tender documents and is without any deviations or with deviations duly resolved.
- c) After the tender opening, the whole process involving scrutiny, clarifications, evaluation and comparison of tenders and recommendations regarding award of Contract shall be confidential. Any efforts on part of any Tenderer to influence the IPGL or any officials in any way in the process of scrutiny, evaluation, comparison of tenders and decision concerning award of Contract may result in rejection of the Tenderer's bid.
- d) To assess the scrutiny, evaluation and comparison of tenders, the IPGL may ask Tenderer individually for clarifications. Request for clarification and response thereto, shall be in writing or through FAX or e-mail followed by post or through speed post. No change in Price or substance of the tender shall be sought, offered or permitted nor is the Tenderer permitted to withdraw the tender before the expiry of the validity period of the tenders in the process of clarifications.

2.17.3 OPENING OF PRICE BID

- a) Tenders, which are found to be in conformity with IPGL's Tender requirement and are considered substantially responsive, shall be considered for opening of Price Bid.
- **b)** The Tenderers found to be responsive shall be informed about the date and time of opening of their Price Bids. On the stipulated date and time the Price Bids of such Tenderers who are found to be responsive, shall be opened in the presence of authorised representatives of such Tenderers who wish to remain present.
- c) The Comparison and Evaluation of Price Bid for the award of the contract will be based on the lowest of the total Landed cost of the Equipment quoted by the Tenderers covering CIF Price of the equipment (MHC's) for Design, Manufacture, Supply, including, transportation, transit / marine insurance, assembly, testing, commissioning and other cost involved for making the equipment/items available at site till it is handed over at site, including insurance as per tender, price quoted for imparting necessary operational & maintenance training to IPGL personnel as per conditions of the Contract, cost of O & M

Manuals and Training Manuals as per conditions of the Contract, warranty service during **2 years guarantee period and** cost of maintenance tools etc. as per **Schedule 10 B**, excluding cost of spare-parts and special tools (optional and not taken for evaluation) enlisted under **Schedule 10**.

- d) The Tenderer whose bid is accepted by the IPGL shall be duly informed in writing. Within 15 days of receipt of intimation, regarding acceptance of its bid i.e. Letter of Acceptance (LOA), the Tenderer shall submit draft Contract Agreement and draft Bank Guarantee in the format approved by the IPGL as in the ANNEX IV and V (Volume-I of Tender Document) and within 30 Days the Contract agreement shall be signed between the IPGL and the successful Tenderer. The successful tenderer shall submit performance bank guarantee as per Clause3.39 (Volume-I) of the tender document and Annexure V. Concurrent with signing of the contract.
- e) The Tenderer who's offers are found not in conformity with the conditions of the tender, will not be considered for opening of price bids and their un-opened price bids will be returned after award of work to the successful tenderer.

2.18NOTIFICATION AND AWARD OF CONTRACT:

Prior to the expiry of the prescribed period of tender validity or such extended time, the IPGL shall notify the successful Tenderer with Letter of Acceptance (L.O.A.), by a FAX, e mail followed by registered letter that his tender has been accepted. The notification of award shall constitute the formation of the Contract. The successful tenderer, at his cost shall prepare and submit to IPGL five bound sets containing their technical offer and the various documentary transactions taken place between the employer and tenderer till the finalisation and award of the Contract.

2.19 EXPORT APPROVAL

This contract will be subject to the respective export approval laws of the country of origin.

3. GENERAL CONDITIONS OF CONTRACT

3.1 **DEFINITION AND INTERPRETATIONS:**

- In the Contract, as hereinafter defined, the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires:
- 3.1.1 "IPGL" or "Employer" or "Company" means Board of Directors of India Ports Global Limited, a company incorporated on 22nd January, 2015, under Indian Company Act 2013.
- 3.1.2 "Contractor" means the firm, corporation or company whose tender has been accepted by the IPGL and includes the Contractor's servants, agents and workmen, personal representatives, successors and permitted assigns.
- 3.1.3 "Sub-Contractor" shall mean a person or persons to whom a part or full portion of the work has been assigned by the Contractor with information to IPGL in writing.
- 3.1.4 "Contract" means and includes Tender Documents, Instructions to Tenderers, General Conditions of Contract, special conditions, if any, drawings, specifications, Price Schedule and other annexure's and Schedules etc., any amendments/clarifications corrigendum thereto, Letter of Acceptance (LOA) and the Contract Agreement entered into between the IPGL and the Contractor as per format given in Annex- IV of the tender document.
- 3.1.5 "Contract Price" means the sum named in the Letter of Acceptance subject to such additions thereto, or deductions there from, as may be made under the provisions of the Contract.
- 3.1.6 "Specification" means the specification referred to in the Tender document and any modification thereof or addition thereto as may from time to time be furnished or approved in writing by the Employer.
- 3.1.7 "Site" means the land and other areas on, under, in or through which the Works are to be executed or carried, or any other places provided by the Employer for the purpose of the Contract.
- 3.1.8 "Works" means Design, Manufacture, supply, Installation, Testing, Commissioning & Guaranteeing the performance of 4 numbers of 100 Ton and 2 numbers of 140 Ton lifting capacity Mobile Harbour CRANES to be supplied at Multipurpose Terminal, India Ports Global Limited, ShahidBehesti Port, Chabahar.
- 3.1.9 "Approved/Approval" means the approval in writing.
- 3.1.10 "Engineer-In-Charge" means the Project Manager, IPGL, or any officer authorised.

- 3.1.11 "Drawings" means the drawings referred to in the Specification and any modification of such drawings approved in writing by the Engineer-In Charge and such other drawings as may from time to time be furnished or approved in writing by the Engineer-In-Charge.
- 3.1.12 "Schedule" shall mean the schedule annexed to the tenderers bid.
- 3.1.13 "Tests on completion" shall mean such tests as are prescribed by the applicable Design Standards (latest editions), codes and described in the tender document, to be made by the Contractor before the equipment/items are supplied, delivered and taken over by the Employer.
- 3.1.14 "Writing" shall include any manuscript, typewritten or printed statement under or over signature and seal as the case may be.
- 3.1.15 "Defect Liability Period" has the meaning assigned in the clause no. 3.29 of the tender document (Vol. I).
- 3.1.16 "Month" means calendar month.
- 3.1.17 "Day" means calendar day.
- 3.1.18 "Letter of Acceptance" means the formal acceptance, made by or on behalf of the Employer, of the tender including any adjustments or variation to the tender agreed between the Employer and the Contractor.
- 3.1.19 "Foreign currency" means the currency other than Indian Currency.
- 3.1.20 "Commissioning of Equipment" has the meaning assigned in clause no.3.37 of the tender document (Volume-I).

3.2 SINGULAR AND PLURAL:

Words implying the singular only also include the plural and vice versa where the context required.

3.3 HEADINGS OR NOTES:

The headings in these conditions of Contract and instructions to tenders shall not be taken to be part thereof, or be taken into consideration in the interpretation, or construction thereof, or of the Contract.

3.4 ENGINEER - IN - CHARGE AND HIS REPRESENTATIVE

- 3.4.1 The Engineer In charge shall carry out such duties in issuing decisions, certificates and orders as are specified in the Contract.
- 3.4.2 The Engineer In charge may from time to time, in writing delegate to his Representative any of the powers, discretion, function and/or authorities vested in him and he may at any time revoke any such delegation. Any written decision, instruction or approval given by the Engineer In Charge to the Contractor in accordance with such delegation shall bind the Contractor provided always that:
 - **a)** Any failure of the Engineer In Charge to disapprove any Plant / workmanship shall not prejudice the power of the Engineer in-Charge thereafter for such plant or workmanship and to order the rectification thereof in accordance with these conditions as per contract.
 - **b**) If the Contractor shall be dissatisfied by reason of any decision of the Engineer In Charge he shall be entitled to refer the matter to the officer above the rank of Engineer In Charge who will thereupon confirm, reverse or vary such decision.
- 3.4.3 Wherever by these conditions the Engineer In charge is required to exercise his discretion, by giving a decision, opinion, consent or to express satisfaction or approval, or to determine value or otherwise take action which may affect the rights and obligations of the Contractor, the Engineer In charge shall exercise such discretion fairly within the terms of the Contract and having regard to all the circumstances. If either party disagrees with the action taken by the Engineer In Charge he shall be at liberty to refer the matter to Appellate Authority with these conditions.

3.5 OBLIGATIONS OF THE CONTRACTOR

- 3.5.1 The Contractor shall exercise all reasonable care and diligence in the discharge of all technical, professional and Contractual duties to be performed by them under this Contract as specified in the Scope of Work within the Time for Completion and provide all labour, including the supervision and security thereof, Contractor's Equipment necessary thereof and for carrying out his obligation, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract. The Contractor shall be fully responsible to the IPGL for proper, efficient and effective discharge of their duties.
- 3.5.2 Contractor shall furnish bond in the form of Bank Guarantee towards the performance of the work as per clause 3.39 (Volume-I) of this tender document.

- 3.5.3 If the Employer shall consider himself entitled to any claim under the performance Guarantee he shall forthwith so inform the Contractor specifying the default of the Contractor upon which he relies. If the Contractor fails to remedy such default within 30 days after the receipt of such notice the Employer shall be entitled to forfeit to the extent of the loss or damage incurred by reason of the default.
- 3.5.4 The Contractor shall proceed with the Works in accordance with the decisions, instructions and orders given by the Engineer-In-Charge in accordance with the condition of the Contract.

3.6 ASSIGNMENT AND SUBLETTING

- 3.6.1 The Contractor may sub let the Works or any part thereof with prior intimation and approval from the Employer.
- 3.6.2 He shall neither assign his right and interest in these presents tender nor assume a fresh partner or partners, or dissolve the partnership existing between him in reference to this Contract without the written permission of the IPGL
- 3.6.3 In the event of any activity being sub-contracted, the total liability and responsibility for meeting obligations and performance under Contract agreement shall rest with the Contractor. In the event of the Contractor contravening this condition, the Port shall be entitled to terminate the Contract forthwith and award a fresh Contract to some other party at risk and cost of the Contractor who shall be liable for any loss or damage which the port may sustain in consequence arising out of such replacement of the Contractor. In such case the performance guarantee shall be forfeited.
- 3.6.4 Such consent, if any, shall not relieve the Contractor from any liability or obligations under the Contract and he shall be responsible for the acts, defaults and neglects of any Sub-Contractor or his servants, agents or workmen fully if they were the acts, defaults or neglects of the Contractor provided always that the provisions of labour or a piecework basis shall not be deemed to be subletting under this clause.

3.7 PATENT RIGHTS:

3.7.1 The Contractor shall fully indemnify the Employer against any action, claim or demand, costs or expenses arising from or incurred by reason of any infringement or alleged infringements of letters, patents, Design, trademark or name, copyright or other protected rights in respect of any machine, plant, work, materials or things, system or methods of using, fixing working or arrangement used for fixed or supplied by the Contractor in India, or elsewhere.

- 3.7.2 All payments, or otherwise shall be deemed to be included by the Contractor in the Prices named in the tender and shall be paid by him to whom they may be payable.
- 3.7.3 In the event of any claim being made or action brought against the Company in respect of any such matter as aforesaid, the Contractor shall be immediately notified thereof and he shall, with the assistance if he so requires of the Company, but at the sole expense of the Contractor, conduct all negotiations for the settlement of the same or any litigation that may arise there from, provided that the conduct of such negotiations or litigations shall be conditional upon the Contractor giving to the Employer such security as shall from time to time, reasonably required by the Employer to recover the ascertained or agreed amount as the case may be of any compensation, damages, expenses and cost which might be payable by IPGL in respect of or as result of any negotiation or litigation.
- 3.7.4 Intellectual property rights developed by seller shall remain with him and buyer shall not claim any right of business on the same.

3.8 GENERAL OBLIGATION OF THE EMPLOYER

In execution of the Works no person other than the Contractor, sub Contractors and his and their employees shall be allowed on the site except by the written permission of the Engineer In Charge or his authorised representative, but the Engineer in charge, his authorised representative, other authorities and officials of the Employer shall be afforded to inspect all facilities arranged by the Contractor at site.

3.9 CUSTOMS DUES, PORT DUES etc.

- 3.9.1 In case Contractor brings in any special tools or material for commissioning of the Cranes (as appearing in the price schedule), the Contractor shall pay all applicable duties in respect of any such materials to be imported / exported to / from destination port.
- 3.9.2 It shall be the responsibility of the successful Contractor to comply with all the required formalities for custom clearance for items stated in Cl 3.9.1, at destination port and pay the charges as applicable and take necessary clearance required from the customs department.
- 3.9.3 Custom clearance for items appearing in the price schedule of this tender document and associated custom duty (if any), shall be the responsibility of IPGL. However the Contractor will provide all support / documents, as required.

3.9.4 If available, Office space including electricity and water, as indicated by the tenderer shall be provided on chargeable basis.

For avoidance of doubt:

- (i) It is further clarified that CIF value includes all dues at port of origin and vessel related charges at the disport, including insurance till receipt of equipment at disport.
- (ii)Wharfage at disport (if applicable) will be reimbursed to the bidder against the documentary evidence.
- (iii)Taxes and duties for those items / equipments which are appearing in the Price Schedule, the custom duty at the destination port shall be borne by IPGL.

3.10 SHIPMENT:

- 3.10.1 In case of a foreign shipper, the shipment of the consignment shall be arranged by the Contractor, subject to applicable export approval laws of country of origin.
- 3.10.2 It is necessary that adequate notice have to be given to the authorised forwarding agent regarding readiness of the cargo for the shipment.
- 3.10.3 The Bill of Lading should be drawn so as to show:
- 3.10.4 Shippers: Tenderers Nominee
- 3.10.5 Consignee: India Ports Global Limited or its SPV.
- 3.10.6 The Contractor shall submit shipping list to the port for information.
- 3.10.7 The Bills of Lading (clean and shipped on board)should be made to order and bank endorsed. Copy of bill of lading should be sent to IPGL.
- 3.10.8 Import permission, if required, at the port of destination will be obtained by IPGL on request from the supplier prior to shipment/delivery.

3.11 PACKING AND MARKING FOR SHIPMENT:

3.11.1 All equipment/spare parts required under this Contract shall be packed, securely placed and protected by the Contractor during transportation to destination port. Packing cases shall be of a size convenient for shipment for cases containing easily damageable articles. The Contractor will be held responsible for the improper packing and protection of the parts.

- 3.11.2 The cases, crates and packages shall be permanently branded and painted with the shipping marks. The marking shall be carried out with a view to the mark remaining unobliterated, when the consignment reaches destination but as a further precaution, a reproduction of the shipping marks shall be placed inside each case, crate and packages.
- 3.11.3 Packages or bundles, which cannot be permanently branded, shall have metal label, with the above particulars stamped or attached to them by strong wire.
- 3.11.4 MHCs shall be supplied in fully erected and pre tested condition. However, the bidder shall have the option of on-site erection delivery method. The bidder should ensure that the most economical offer considering the overall timeline of supply of equipments shall be provided in the price offer. Alternate price offer is not allowed.

3.12 COMPLETION PERIOD OF WORK:

Under this tender IPGL intends to invite price offer for acquiring 4 Nos. of 100 Ton capacity and 2 Nos. of 140 Ton capacity MHCs. The period of completion for total Works, under this Contract shall be as given below:

Name of the work: Design, Manufacture, Supply, Installation, Testing, Commissioning and Guaranteeing the performance of "Design, Manufacture, Supply, Installation, Testing, Commissioning and Guaranteeing the performance of 4 Nos. of 100 Ton and 2 Nos. of 140 Ton capacity Mobile Harbour Cranes at Shahid Beheshti Port, Chabahar with a total completion period of 10 (Ten) months from the date of opening of Letter of Credit (LC), which is acceptable to both sides.

The bidder shall be required to follow either of the following schedules, clearly indicating the option 1 or option 2 in the technical bid and once opted in the technical bid, cannot be changed later.

Option 1:

Supply of All 6 cranes: within a period of **10** (**Ten**) months from the date of opening of Letter of Credit (LC), which is acceptable to both sides.

Option 2:

Supply of 2 Nos. of 100 Tons MHCs: within a period of **10** (**Ten**) months from the date of opening of Letter of Credit (LC), which is acceptable to both sides.

Supply of balance 4 Nos. (2 X 100 Tons and 2 X 140 Tons) of MHC: within a period of **12** (**Twelve**) months from the date of opening of Letter of Credit (LC), which is acceptable to both sides.

For both of above options, the period mentioned includes 60 days for transit from port of dispatch to port of destination (Chabahar Port). In case the transit period exceed 60 days for reason beyond supplier's control, then the exceeded period of transit time beyond 60 days shall be exempted from levies of penalty for delay(clause no 3.43) as stipulated for handing over/taking over of MHCs.

Penalty for delays as per the Clause 3.43 shall be applicable in both the options.

Note: Time from receipt of equipment at the destination port till custom clearance by IPGL, will not be counted in the completion period.

3.13 RATES AND AMOUNTS INCLUDE ALL CHARGES:

The rates and amounts submitted by the Tenderer shall include all payments on account of taxes, levies, duties, royalties etc. as applicable and payable in the country of origin including all incidental charges that the tenderer may have to bear for the execution of works.

3.14 ADDITIONS AND ALTERNATIONS:

- 3.14.1 IPGL may give instructions and directions as may appear (necessary and proper) to the IPGL for the guidance of the Contractor and good and efficient execution of the Works under this contract without altering major conditions and scope of work of the Contract.
- 3.14.2 The Contractor shall receive, obey and be bound by the same according to the true intent and meaning thereof.

3.15 EXECUTION:

The Contractor shall, in consideration of payments to be made to him as hereinafter provided, execute and do the Works set forth as described in the scope of the work and specifications, including any amendments to tender clauses.

3.16 EXTRAS:

Any extra expenses incurred in connection to the Works by the IPGL in the performance of the Works owing to the neglect or omission on the part of the Contractor, in any of the case mentioned in this Contract shall be deducted from any sum due or which may thereafter become due to the Contractor or from any amount lying with them or under their control or he may be called upon to pay the amount of such extra expense to such person or persons as the IPGL may appoint to receive the same and in the event of the Contractor failing to make such payment, the said amount shall be recoverable from him in such manner as the IPGL may determine.

3.17 USE OF GROUND:

The Contractor shall be allowed to use such an area as in the opinion of the IPGL may be absolutely necessary for the proper and efficient execution of Works and on completion of Works or termination of his Contract, he shall clear away all his tools, plant, rubbish and other materials within a fortnight and hand over vacant and peaceful possession of the same to the IPGL in a tidy and clean condition. The Contractor shall not be allowed to erect any structures on any property of the IPGL.

3.18 CONTRACT DOCUMENT MUTUALLY EXPLANATORY:

- 3.18.1 The several documents forming the Contract are to be taken as mutually explanatory of one another and should anything appear in one that is not described in the other, no advantage shall be taken of any such omission.
- 3.18.2 In case of any discrepancies or inconsistencies however appear, or should any misunderstandings arise as to the meaning and of the specifications or drawings or as to the dimensions or the quality of the material or proper execution of the Works or as to the measurement or quality and valuation of the Works executed under this Contract or as extra thereupon, the same shall be explained by the Engineer-in-charge or his authorised representative.
- 3.18.3 The explanation of Engineer-in-charge or his authorised representative shall be final and binding upon the Contractor and the Contractor shall execute the Works according to such explanations, and without extra charge or deductions to/from the Prices specified in the bill of quantities and do all such Works and things as may be necessary for the proper completion of the work as implied by the specification and drawings, even though such work and things are not specifically shown and described therein.

3.19 ACCESS TO SITE:

The Contractor shall obtain prior permission of the IPGL before any person connected with the Works visits the site. The Contractor shall abide by the regulations and rules of India Ports Global

Limited /Security agency at destination port in respect of entry/exit and movement in the premises and any other directives issued by the Government / Statutory Agency from time to time during execution of the contract.

3.20 CONTRACTOR'S EQUIPMENT:

- 3.20.1 The Contractor shall be responsible for supply, use and maintenance of all the equipment and he shall ensure that they are suitable for the work and are maintained in such a manner as to ensure their efficient working.
- 3.20.2 IPGL may, if they deem fit, direct the Contractor to remove from site any equipment which are not efficient and/or prejudicial to the quality of the work to be replaced by equipment to their satisfaction. The Contractor shall immediately follow IPGL's directions/instructions.

3.21 EXISTING SERVICES:

- 3.21.1 Drains, pipes, cables, overhead wires and similar services whether above or below the ground which may be encountered in the course of the Works shall be saved and kept harmless from injury and/or loss or damages by the Contractor at his own costs and expenses so that they continue to be in full and uninterrupted use to the IPGL.
- 3.21.2 The Contractor shall not store any materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such or any services. The Contractor shall at his own costs and expenses and without any delay repair and make good to the satisfaction of the Employer, any injury and/or loss or damage caused by the Contractor to the same.

3.22 LABOUR:

- 3.22.1 The Contractor shall make his 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. Since time is the essence of this Contract, requisite number of labour force has to be kept, so as to complete the Installation, Testing and Commissioning of the equipment within the completion period as stipulated in the tender.
- 3.22.2 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.

- 3.22.3 The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst his employees and for the preservation of peace and protection of persons and property in the neighbourhood of the Works against the same.
- 3.22.4 The Contractor shall at all times during the continuance of the Contract comply fully with all existing Acts, Regulations and bye law as including all statutory amendments and re-enactment of State, Province, Central Government authorities and other local authorities and any other enactment and acts that may be passed in future either by the State or the Central Government or local authority, including Labour Laws, Factories Act, Minimum Wages Act etc.
- 3.22.5 If as a result of Contractor's failure, negligence, omission, default or non-observance of any provisions of any laws, the IPGL is called upon by any authority to pay or reimburse or required to pay or reimburse any amount, the IPGL shall be entitled to deduct the same from any moneys due or that they become due to the Contractor under this Contract or any other Contract or otherwise recover from the Contractor any sums which the IPGL is required or called upon to pay or reimburse on behalf of the Contractor. All registration and statutory inspection fees in respect of his work pursuant to the Contract shall be paid by the Contractor.
- 3.22.6 The Contractor shall pay the labourer engaged by him on the work not less than a fair wage, which expression shall mean, whether for time or piece work, rate of wages as may be fixed by the relevant statutory authority as fair wages for payable to the different categories of labourers or those notified under the Minimum Wages Act or applicable local laws of the respective country.
- 3.22.7 **Safety Gears Etc.**: The Contractor shall at his own expenses provide all safety gears for all labours engaged during the work and failing to do so, IPGL shall provide the same and recover the cost thereof from any amount due or which may become due to the Contractor or from any amount lying with them or under their control.

3.23 PLANT AND EQUIPMENT:

The Contractor shall at his own costs and expenses provide all labour, plant, haulage, transportation of plant and equipment to be used for executing the Contract, all materials, stores etc required for efficiently carrying out and completing the work to the satisfaction of the IPGL.

3.24 INSPECTION AND TESTING OF WORK AT CONTRACTOR'S AND SUBCONTRACTOR'S PREMISES:

- 3.24.1 The Engineer In-charge or his Representative shall have at all reasonable time access to the Contractor's and sub-contractors premises / work site and shall have the power at all reasonable time to inspect, examine and test the materials & workmanship of the work during its Manufacture. The employer shall depute two engineers for inspection & testing at contractor's works and sub-contractor's premises for which the necessary co-ordination & arrangements shall be made by the contractor at his cost. The contractor shall give at-least 30 (thirty) days' advance notice to the Engineer In Charge for each pre-shipment inspection. The duration of their stay for inspection and testing at contractor's and Sub-contractor's work-premises shall depend on the schedule of the manufacturer drawn during kick-off meeting.
- 3.24.2 The expenses of two engineers deputed for inspection of cranes to contractor's work shall be deemed to be included in the price of equipment. i.e. travelling from Mumbai to works and back, lodging & boarding, transportations at contractor's works etc. Only such works will be accepted for which the Engineer In charge or his authorised representative may certify to be in accordance with the Contract.
- 3.24.3 The Engineer In-charge or authorised representative on giving seven days' notice in writing to the Contractor setting out any ground of objections which may have in respect of the work, shall be at liberty to reject all or any materials of workmanship in the subject of any of the said grounds of objection which are not in accordance with the Contract.
- 3.24.4 In all cases where the Contract provides for tests whether at the premises of the Contractor or any sub-Contractor or elsewhere, the Contractor except where otherwise specified shall provide free of charges such labour, materials, electricity, fuel, water, stores, apparatus and instruments as may reasonably be demanded, to carry out sufficiently such tests of the work in accordance with the Contract and shall at all time facilitate the Engineer In-charge and his assistant to accomplish such Testing.
- 3.24.5 The cost of all tests and/or analysis effected at the Contractor's or sub- Contractor's work and on the installation site shall be borne by the Contractor. The cost of independent test and/or analysis which the Engineer In-charge or his authorised representative may cause to be made and which prove satisfactory shall be borne by the Contractor and also the Contractor will be called upon to pay all expenses incurred by the Employer in respect of any work found to be defective or of inferior quality, adulterated or otherwise unacceptable.
- 3.24.6 Third Party Inspecting Agency shall certify the MHCs before shipment at Contractor's site. The Contractor shall give the Engineer In-charge such reasonable notice of the progress of the work and shall intimate the tentative date of shipment & arrival at IPGL well in advance. The contractor

- shall furnish a certificate issued by Third Party Inspection Agency towards "Ready to ship" prior to transportation of MHCs from contractor's works.
- 3.24.7 The MHCs without inspection, examination and Testing shall not be prepared for shipment or transportation, as the case may be, without the consent of the Engineer In-charge, as being ready for shipment or transportation. Such passing or consent shall not relieve the Contractor from the liability to complete the Contract Works in accordance with the Contract.
- 3.24.8 a)IPGL shall appoint an Internationally reputed Third Party Inspection Agency (TPIA) like Lloyds, ABS, Bureau Veritas, IRS or any other reputed agency at his own cost for carrying out stage wise inspection like Design verification including Structural Material, Welding, Sub-assemblies, Painting, Erection, Testing, Commissioning etc. and TPIA shall submit the certificates to Engineer In-charge or authorised representative of IPGL at the time of shipment of the equipment or the parts of equipment and the same shall be submitted to the Employer before Commissioning of the equipment at site. The third party agency appointed shall also monitor the work progress reports at the contractor's works and report to the employer in addition to inspection reports.
 - **b**) The contractor shall provide following;
 - i) All necessary documents required for execution of the job by TPIA as specified in the Scope of work for TPIA at Annexure-VII of Volume-I of tender document. IPGL shall endeavour to get approval of TPIA within 2 weeks or as per schedule drawn during kick off meeting.
 - **ii**) Schedule for inspection during manufacturing, assembly, erection, testing and commissioning and requirement of inspectors from TPIA shall be communicated at least one month in advance.
 - c) In case, the scheduled inspection is cancelled due to the reasons attributable to the contractor, the fees of TPIA inspectors will be on contractor's account and same shall be deducted from the payment due to the contractor.
 - **d**) In case, the contract gets delayed due to the reasons attributable to the contractor, the fees of TPIA inspectors during the delayed period will be on contractor's account and same shall be deducted from the payment due to the contractor.
- 3.24.9 The scope of work of Third Party Inspection at Contractor's Works and Employer's site shall be as per the scope indicated at **Annexure-VII** of this tender.

A copy of tender document along with amendments & clarifications must be issued to the Third Party Inspection agency to understand the contract.

3.24.10 Third Party Inspection Agency shall submit fortnightly progress report to the Employer directly by e-mail.

3.25 TESTING OF EQUIPMENT AT CONTRACTOR'S AND EMPLOYER'S SITE

- 3.25.1 The tests at Contractor's site shall include operational and capacity tests. The capacity test for hoist motion shall be with an overload of 10% in excess of the rated working load. The date for operational and capacity test shall be set by the Contractor and shall be informed to Engineer-In-Charge in advance. The Contractor shall be responsible for any adjustments or corrections found necessary during the test. In case of any damage during transit, the overload test to be carried out in presence of TPIA at IPGL site at contractor's risk and cost.
- 3.25.2 The Contractor shall arrange to test the equipment for load test by a Competent Agency notified by competent authority at Employer's site and submit the certificate to this effect to the Engineer-In-Charge. The test load required shall be arranged by IPGL. The contractor shall produce the certificates issued by the competent authority for these test load / containers being used for load test at site.
- 3.25.3 Adequate strength of qualified & experienced engineers shall be deputed at work site to attend recurring faults on advice of the Engineer-In-Charge during the testing, commissioning & warranty period. The cost of the same shall be deemed to be included in the quoted price.

3.26 DRAWINGS:

The Tenderer shall submit along with the tender, minimum one copy of each of the following drawings for new MHC's.

- 3.26.1 General arrangement of the crane offered with principal details and leading dimensions etc.
- 3.26.2 Schematic electric, electronic and programmable controller details.
- 3.26.3 Schematic arrangement of hoist & boom hoist wire ropes, Electric room and Machinery house arrangement etc.
- 3.26.4 General arrangement of the operator's cabin, clearly indicating the location of various controls and indicators.
- 3.26.5 Any other special features, which the bidder wishes to highlight.

- 3.26.6 Diagram showing stage wise activities of the project.
- 3.26.7 All technical details of electrical infrastructure proposed for MHC Note: All dimensions of the drawings shall be in Metric units and all writings shall be in English.

3.27 TESTS ON COMPLETION AT EMPLOYER'S SITE

- 3.27.1 On completion of fabrication of all items at the Contractor's premises and also when Installation/final adjustments at site are completed in accordance with the Contract, the Contractor shall give the Engineer In-charge notice in writing thereof and before making the tests on completion of 7 days' notice in writing of the date on which he will be ready to make the said tests in accordance with and in the manner prescribed in the specifications.
- 3.27.2 The tests on completion shall be made on each item when final adjustments and tests are completed at the Contractor's premises in the presence of Engineer In charge or his authorised representative if desired necessary, in accordance with the Contract and also when erection/Installation is completed at IPGL site in accordance with the Contract.
- 3.27.3 If any portion of work fails under the tests to fulfil the Contract conditions, tests of the faulty portion shall, if required by the Engineer In-charge or by the Contractor, be repeated within reasonable time upon the same terms and conditions.
- 3.27.4 As per FEM, full load test has to be done at manufacturer's site in the presence of TPIA. In case the crane is be dismantled after full load test, then full load test shall also be carried out at the IPGL site. The test shall be carried out by the Contractor at the time fixed by the Engineer In-Charge for the commencement of commercial operations and if in opinion of the Engineer In-charge the tests are being unduly delayed, the Engineer In-charge may, in writing, call upon the Contractor under three days notice to make such tests. The Engineer In-charge may proceed to make such tests himself, at the Contractor's risk and expenses. If the crane is transported in fully erected condition, without dismantling, after the full load test according to FEM standards or other accepted international standards, is done at manufacturer's work, then the second load tests will not be required.
- 3.27.5 If the Contractor neglects to make the 'Performance test' (Acceptance Test) within the time stipulated by the Contractor, the Employer shall nevertheless have the right of using the MHCs at the Contractor's risk until the 'Performance test' is successfully carried out.

3.28 REJECTION OF DEFECTIVE WORK:

- 3.28.1 If the complete erection/Installation at site or any portion thereof before being taken over, under Clause 3.30 (Volume-I of Tender Document) is defective, or fail to fulfil the requirements of the Contract, the Engineer In-charge shall give notice to the Contractor setting forth particulars of such defects and the Contractor shall forthwith make the defective supply/plant/ Installation good, or alter the same to make it comply with the requirements of the Contract.
- 3.28.2 If Contractor fails to do so within a reasonable time, IPGL may reject and replace the same at the cost of Contractor, the whole, or any portion of the work, as the case may be, which is defective or fails to fulfil the requirements of the Contract. The Contractor's full and extreme liability under this clause shall be satisfied by the payment to IPGL, the extra cost, if any, of such replacement delivered and erected. Such extra cost being ascertained shall be deducted from the Contractor's bill.
- 3.28.3 If any supply of defective items shall have caused delay in the completion of the Contract so as to give rise to a claim for damage on the part of the IPGL nothing contained in this clause shall interfere with or prejudice any rights of the Employer with respect to such claim.

3.29 DEFECT LIABILITY PERIOD

In this condition the expression 'Defect liability period' shall mean a period of **24 months or 4000 hrs** of operation, calculated from the date of Final acceptance of the Crane, whichever is earlier.

3.30 DEFECTS AFTER TAKING OVER

- 3.30.1 The Contractor within 4 weeks from the date of communication by the Engineer In charge, shall be responsible for making good at his expense any defect in or damage to any portion of the Works which may appear or occur during the defect liability period and which arises either:
 - a) From any defective materials, workmanship or Design or
 - **b)** From any act or omission of the Contractor done or omitted during the said period.
- 3.30.2 If any such defects shall appear or damage occur the Engineer- In– Charge shall forthwith inform the Contractor thereof stating in writing the nature of defect or damage. The provision of this clause shall apply to all replacements or renewals carried out by the Contractor to remedy defects and damage as if the said replacements and renewals had been taken over on the date they were completed to the satisfaction of Engineer In Charge. During Defect Liability period, replacements or renewals of parts shall be warranted for a period of 24 months or 4000 hrs of operation from the date of final acceptance of the crane, whichever is earlier.

3.30.3 If any such defect or damages were not remedied within a reasonable time, IPGL may proceed to do the work at the Contractor's cost & risk.

3.31 TIME OF ACCEPTANCE:

The supply, delivery and Installation of the equipment/ items at site shall be deemed to have been accepted by IPGL when the same shall have been installed, tested & commissioned and the Engineer-In-charge shall have issued the final acceptance certificate as per clause 3.35.4.

3.32 TERMS OF PAYMENT:

The payment due under this Contract shall be effected as per following;

Mode of Payment: The payment to the contractor for acquisition of the equipments under the contract shall be effected by IPGL through irrevocable letter of credit (L/C), which is acceptable to both sides, against stage-wise payments. The charges towards opening of L/C within India shall be borne by the Employer (IPGL) and charges towards opening of L/C outside India shall be borne by the Contractor. Any charges against extension of L/C shall be borne by the Contractor, both in India and outside India if the extension is attributable to contractor.

- (a) First stage: Initial advance up to 10 % of CIF Price of equipment mentioned in the LOA against submission of a Bank Guarantee equivalent to 110 % of the advance amount and this initial advance will not carry interest. However, if the contract is terminated due to default of the contractor the initial advance would be deemed as interest bearing advance at an interest rate of base Prime Lending Rate of SBI + 2 % p.a. to be compounded quarterly.
- (b) Second stage: 60 % of CIF Price mentioned in LOA after shipment of the equipment and submission of shipment documents of satisfactory evidence of shipment of equipment.

Documents required for second stage payment:

- (i) Original clean and shipped onboard Bill of Lading, 3 copies
- (ii) Commercial invoice, (03) copies
- (iii) Certificate of origin, (03) copies
- (iv) Packing list for each Crane

Note: In case advance payment is not taken by the contractor, second stage payment after shipment of equipment as 70% can be claimed by the contactor.

(c) Third stage: 20 % of CIF Price mentioned in LOA against Completion of

commissioning of equipment and compliance of operation to endurance test activities and on verification and certification by Engineer-In-Charge against commissioning of equipment and handing over of the cranes for commercial operations.

(d) Fourth stage: 10 % of CIF Price mentioned in LOA after issuance of final acceptance certificate by the Engineer-In-charge for the Equipment.

Note: For the second, third and fourth stage payments, pro-rata payment shall be considered in case the contractor opts for staggered delivery schedule. (Option 2).

- 3.32.1 Training Charges: Charges for Training as mentioned in the LOA shall be paid after completion of Training of IPGL Personnel and issuance of certificate for completion of training by Engineer Incharge, as per terms of Contract.
- 3.32.2 **Payments** towards Spare Parts & Special Tools as listed out at **Schedule– 10 (volume I)** shall be made in two stages as mentioned below;

A	50 % of CIF Price mentioned in the LOA against delivery of Spare parts and Special Tools as per the list attached at Schedule – 10 (volume I) at Employers Main Stores duly certified by the Engineer –In -Charge for receipt of the same.
В	50 % of CIF Price mentioned in the LOA on commencement of commercial operation of the equipment.

Spare Parts as listed out at **Schedule– 10** (**volume I**) are optional and not to be considered for evaluation. However the bidder has to confirm that the prices quoted in the sealed price bid i.e. **Schedule 11Part II** for spares will remain valid for 2 years from the date of Final Acceptance.

3.32.3 Payment for rendering Warranty Support:

Charges for rendering Warranty Support as mentioned in the LOA shall be paid after satisfactory completion of Warranty period as per clause 3.58 of the tender and issuance of certificate by the Engineer-In-Charge.

IPGL will endeavor release of payment subject to compliance of required documents by the contractor, within 30 days.

3.32.4 Payment of Duties

It may be noted that Custom Duty at destination Port will be borne by IPGL on import of ONLY those items / equipment appearing in the Price Schedule of this tender document.

3.33 Payment of taxes and Levies

3.33.1 The Contractor shall pay all taxes and levies as applicable and payable in the country of origin including all incidental charges that the tenderer may have to bear for the execution of works.

3.34 NO INTEREST ON ACCOUNT OF DELAYED PAYMENTS:

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

3.35 CERTIFICATE AND PAYMENT

3.35.1 Certificate of payment

The Contractor may at the times and in the manner following apply for interim and final certificates as referred to in Clause 3.32 (Terms of Payment - Volume-I of Tender Document) for MHCs shipped to the site and for work executed on the site.

3.35.2 Certificate for receipt of Equipment at site

Application for Certificate for receipt of Equipment at site may be made to the Engineer In Charge against arrival and safe unloading of cranes and spares at site, accompanied by certificate for ready to shipment issued by Third Party Inspecting Agency, inspection release note, certificate for receipt of all parts of entire equipment in safe condition at site by Third Party Inspection Agency, certificates from Marine Insurance Company(s) which covers all risks and other documents as the Engineer In Charge may reasonably require. Application shall state the amount claimed and shall set forth in detail, in the order of the schedule of Prices, particulars of the equipment received at the site along with declaration of the contractor to this effect. The Engineer In Charge shall issue to the Contractor a Certificate for receipt of Equipment at site within 14 days after receiving an application thereof.

3.35.3 Issue of Provisional Certificate:

Application for Provisional Certificate for satisfactory commencement of commercial operations of Equipment may be made to the Engineer In-Charge against release of equipment for commercial operations accompanied by undertaking that the pending punch list items shall be attended within 6 weeks from the date of this application. The Engineer In-Charge shall issue to the Contractor the Provisional Certificate for Commercial Operations within 14 days after receiving an application thereof.

Subject to completion of requirements of clause 3.38.3 an application for Provisional Certificate for satisfactory commencement of commercial operations of Equipment may be made to the Engineer In-charge against release of equipment for commercial operations accompanied by undertaking that the pending punch list items shall be attended within 6 weeks from the date of this application. The Engineer In-charge shall issue to the Contractor the Provisional Certificate for Commercial Operations within 14 days after receiving an application thereof along with punch list. If any works related to safety of the equipment are balance to be attended then even though the cranes are in operation the same shall not be declared as commercial operation but under Trial operation and at the risk and cost of the contractor till issue of Provisional certificate by the Port for accepting the cranes for commercial operations. During such time of trial operations the Insurance risk of the cranes will be responsibility of the Contractor.

3.35.4 Issue of Final Acceptance Certificate

Application for Final Acceptance Certificate of Equipment may be made to the Engineer In Charge against satisfactorily attending of punch list items and after the Contractor has ceased to be under any obligation under Clause 3.5 provided that, if a Provisional Certificate has been issued in respect of any Section or Portion of the Works, the Contractor may apply for a separate final certificate at any time after the said obligation has ceased in relation to such Section or Portion. Where the Contractor has carried out replacements or renewals to the Works in compliance with Clause 3.30 the Contractor's obligations shall continue, but the right of the Contractor to apply for a final certificate other than for the replacements or renewals shall not be affected by that fact and after the Contractor has ceased to be under any obligation under Clause 3.30 in respect of the replacements or renewals he may apply for a final certificate in respect thereof.

If the punch list items are attended within 6 weeks from the date of issue of provisional certificate, then the Final Acceptance Certificate shall be issued with effect from the date of issue of Provisional Certificate and in case the punch list items are completed beyond 6 weeks from the date of issue of provisional certificate, then the Final Acceptance Certificate shall be issued with

effect from the date of Application for Final Acceptance Certificate after verification of completion of punch list items by Engineer In Charge. The Engineer In Charge shall issue to the Contractor the Final Acceptance Certificate within 28 days after receiving an application thereof.

3.35.5 Final Certificate conclusive

A final certificate shall, save in the case of fraud or dishonesty relating to or affecting any matter dealt with in the certificate, be conclusive evidence as to the sufficiency of the Works and of the value thereof unless any proceedings arising out of the Contract whether under Clause 3.50 to 3.52 (Arbitration Dispute Resolution- Volume-I of Tender Document) or otherwise shall have been commenced by either party before the final certificate has been issued or within three months thereafter.

3.35.6 Adjustment to Certificates

If any sum shall become payable to the Contractor under the Contract otherwise than for work executed or MHCs delivered, the amount thereof shall be included in the next certificate (interim or final) issued by the Engineer In charge, and if any sum shall become payable under the Contract by the Contractor to the Employer, prior to the issue of the final certificate, whether by deduction from the Contract Sum or otherwise, the amount thereof shall be deducted in the next certificate.

3.35.7 Corrections and with-holding certificates.

The Engineer In Charge may in any certificate give effect to any correction or modification that should properly be made in respect of any previous certificate. Engineer In Charge shall have power to withhold any certificate if the Works or any part thereof is not being carried out to his satisfaction.

3.36 GUARANTEE PERIOD FOR NEW MHCs:

3.36.1 The MHCs to be supplied under this Contract shall be guaranteed for a period of twenty four (24) months or 4000 Hrs. of Operation from the date of final acceptance of the cranes, whichever is earlier, towards satisfactory performance of each component. The steel structures and paint anti-corrosions application shall be guaranteed for a period of sixty (60)months and thirty six (36) months respectively and same shall be in force from the date of final acceptance of the cranes, under this Contract, by the Engineer-In-Charge. The Contractor shall be responsible for any defects that may develop under proper use arising from faulty materials, Designs, workmanship in the work but not otherwise and shall at his own cost remedy such defects when called upon to do so by the Engineer In-Charge who shall state in writing in what respect any portion is faulty.

- **Note:** Consumable items like lubricants, grease, filters for hydraulic system and for diesel engine are excluded under the guarantee period.
- 3.36.2 If it becomes necessary for the Contractor to replace or renew any defective portions of the supply of the items under this clause, the provisions of this clause shall apply to the portions of the supply so replaced or renewed component shall be under warranty till expiry of 24 Months or 4000 hrs of operation from the date of final acceptance of the crane whichever is earlier. If any defects are not remedied within a reasonable time, the Port may proceed to do the work at the Contractors' risk and expenses but without prejudice to any other rights, which IPGL may have against the Contractor in respect of such defects.
- 3.36.3 If the replacement or renewals are of such a character as may affect the efficiency of the items supplied, the Engineer In-charge shall have the right to give to the Contractor within one month of such replacement or renewal notice in writing the 'Test on Completion' be made in which case test shall be carried out as provided in Clause 3.27.4 (volume-I). Costs of all the tests shall be borne by the Contractor.
- 3.36.4 All inspection, adjustments, replacement or renewal carried out by the Contractor during the period referred in this clause shall be subject to the conditions of this Contract which shall be binding on the Contractor in all respects during the guarantee period and extended guarantee period if any.

3.37 COMMISSIONING OF NEW EQUIPMENT (4 Nos. 100 Ton and 2Nos. 140 Ton capacity MHCs):

- 3.37.1 Contractor shall complete the whole work such as Design, Manufacture, Supply, Installation, Testing and Commissioning of the cranes within a period stipulated in clause 3.12 (volume-I), from the date of Opening of letter of credit (LC), which is acceptable to both sides.
- 3.37.2 Contractor shall arrange to commission the equipment after due Testing and approval of the Engineer In-Charge within a minimum period from the date of Installation of the equipment at Employers' site and this period shall be considered within the total completion period stipulated in clause 3.12 (volume-I) of Tender Document). All necessary testing materials, tools, slings etc. required for the Testing of the equipment shall be arranged by the Contractor at his own cost & risk. Since time is the essence of this contract, contractor shall ensure that requisite number of labour force / resources are made available at site, so as to complete the installation, testing and commissioning of all equipment at IPGL site within the completion period of the contract

- 3.37.3 Commissioning of equipment shall mean handing over of equipment for regular operations after completion of performance test as per clause 27 of the tender (Vol-II), without compromising safety norms and satisfying all functional requirements without affecting the productivity of the equipment.
 - i. Any punch item which is not affecting safety norms and functional requirements without affecting the productivity of the equipment shall be closed within six weeks from the date of commissioning of equipment and put in regular commercial operations to consider the date of commencement of regular commercial operations as the date of acceptance of the equipment.
 - ii. In case punch items are not closed within six weeks from the date of commissioning of the equipment, the date of closure of punch item shall be considered as date of acceptance. Defect liability period shall commence from the date of final acceptance of the equipment to be done.

3.38 REMOVAL OF MATERIAL ON COMPLETION:

The Contractor shall, on completion of the Works or when directed by the Employer, remove all plant, equipment, tools, materials, temporary constructions etc. and rubbish which may have been accumulated during the execution of the work, other than those permanently used into the Works, at Employer's site.

3.39 PERFORMANCE GUARANTEES BOND TOWARDS PERFORMNACE OF CONTRACT:

- 3.39.1 Within 45 days of the receipt of the notification of the award of Contract from the Employer, i.e. LOA or 30 days from signing of contract between IPGL and contractor, whichever is earlier, the successful Tenderer shall furnish to the Employer, a bond in the form of a Bank Guarantee (B.G), from a Nationalised/ Scheduled Bank, having their branch in Mumbai, for an amount equivalent to 10% of the Contract Price (as indicated in LOA) guaranteeing the performance of the Contract, as per the draft Bank Guarantee form at Annex-V of this tender document. The validity of such bank guarantee issued, towards performance of the Contract, shall be up to handover/FAC of cranes after successful completing all due tests/tials.
- 3.39.2 Failure of the successful Tenderer to submit the required Performance Guarantee shall constitute sufficient grounds for termination of the Contract & forfeiting the Earnest Money Deposit. The BG submitted towards performance shall be returned after deploying the cranes for regular operations and after receipt of performance BG towards defect liability period and upon making application thereof by the contractor.

3.39.3 Performance Bond during Defect Liability period for new MHCs:

After successful completion of the work, final Testing &Commissioning of the crane and before handing over of the new MHCs supplied to IPGL under this contract, the Contractor shall submit a B.G, for an amount equivalent to 10% of the Contract Price towards guaranteeing the performance of the new cranes during defect liability period as per the draft Bank Guarantee form at Annex-V of this tender document. The validity of such bond issued shall be for a period of 24 months from the date of final acceptance certificate, with a claim period of 3 months thereafter. In this case, the Para 1 of the BG format at Annex - V may be suitably worded indicating the work of contract for each capacity of new MHCs only for this Guarantee.

3.39.4 Performance Bond after completion of Defect Liability period for new MHCs supplied:

The contractor shall submit a Performance Bond, in respect of new MHCs supplied under this contract in the form of B.G for an amount equivalent to 3% of the Contract Price, towards performance of steel structures and paint and anti-corrosion system, at least 30 days before the expiry of validity of bond mentioned under clause 3.39.3 (Volume-I of Tender Document) as per the draft Bank Guarantee form at Annex-V (Volume-I) of this tender document. The validity of this bond shall be for a period of 36 months, after defect liability period, with 3 months claim period thereafter 36 months towards performance of steel structure and for a period of 12 months for painting and anti-corrosion application. In this case, the Para 1 of the BG format at Annex-V may be suitably worded indicating the work of contract for 4 Nos. of 100 Ton and 2 Nos. of 140 Ton cap. MHCs, as applicable only for this Guarantee.

Note: The tenderer has the option to submit only one Bank Guarantee covering Performance Bank Guarantee as well as warranty period (defect liability period), with a claim period of three (03) months, after completion of warranty.

- 3.39.5 In the event of failure of Contractor to ensure the performance of the equipment, during the guarantee period and not responding to the requirement of the situation as indicated in clause 3.37 (volume-I of Tender Document), of this tender document and if the Employer is compelled to encash the B.G to meet the situation, the Contractor shall revalidate the said guarantee for the suitable period as agreed by the Employer.
- 3.39.6 The bond submitted by the Contractor towards the performance of the equipment during defect liability will be returned to the Contractor after successful completion of the defect liability period, to the satisfaction of the Employer and on making an application thereof and submission of Bank Guarantee as per clause 3.40.4.

3.40. SECURITY DEPOSIT TOWARDS ADVANCE PAYMENT FOR OF CONTRACT (i.e. NEW MHCs):

- 3.40.1.The successful Tenderer shall furnish to the Employer, a security deposit in the form of a Bank Guarantee (B.G) from a Nationalised/Scheduled/International Bank, having their branch in Mumbai for an amount equivalent to 110% of the advance amount to be made to the Contractor, for advance payment. Such B.G shall be as per the draft Bank Guarantee form at Annex-VI (volume-I) of this tender document, applicable for the first stage payment at clause 3.32.1 A.
- 3.40.2 The Employer shall release advance as indicated in clause 3.32 (volume-I), Terms of Payment, of this tender document to the Contractor against submission of Security deposit in the prescribed form.
- 3.40.3 The B.G issued, towards security deposit of advance payment, shall be valid till receipt of equipment at destination port. The B.G submitted by the Contractor under this clause will be returned to the Contractor on making an application thereof.
- 3.40.4 In the event of failure of Contractor to complete the work within stipulated period, the Contractor shall revalidate the B.Gs for an extended period as agreed by the Employer however this will not relieve the Contractor from the obligation of penalty for delays as indicated in clause 3.43 (volume-I) of this tender document.

3.41 FORFEITURE OF SECURITY DEPOSIT

IPGL shall be entitled to encash the Bank Guarantee deposited by the Contractor / Contractors with the Port in the following event.

- a) In case of failure on the part of the Contractor/ Contractors, at any time, during the continuance of this Contract, to comply with any of the conditions herein contained, or
- **b**) In case of any breach of any portion of this Contract.

3.42 INDEMNITY:

3.42.1 Notwithstanding that all reasonable and proper precautions may have been taken by the Contractor at all times during the progress of the work, the Contractor shall nevertheless be wholly responsible for all damages, whether to the Works themselves or to any other property of IPGL, or to the lives, persons, property of others during the progress of the work until handing over of the crane/final acceptance by IPGL.

3.42.2 In case any damage occurs to the existing structure due to the Contractor's operation, the same shall be made good by the Contractor at his own risk and cost. The areas, which are likely to be unsafe for use, shall be barricaded and all the necessary precautionary measures like displaying notices shall be taken by the Contractor, during Commissioning and Testing of equipment at site.

Further, it is clarified the Contractor shall not be liable for incidental, indirect or consequential damages to the extent such limitation of liability is valid under Indian Law.

3.43 Penalty for delays in completion of work.

- a) The Contractor has to Design, Manufacture, Supply, Install, Test, Commission and hand over the new equipment within the completion period as stipulated in clause 3.12 (Volume-I of Tender Document) from the date of opening of LC (acceptable to both sides) or such extended period as granted by IPGL. Time from receipt of equipment at the destination port till custom clearance by IPGL, will not be counted in the completion period.
- b) In the event of failure on the part of the Contractor to commission the new equipment for any reason whatsoever within the stipulated period as mentioned above, an amount per week or part thereof shall be levied for delayed period as penalty as stipulated below in (e) for the work of Design, Manufacture, Supply, Install, Test, Commission and hand over the new MHCs at Shahid Beheshti Port, Chabahar.
- c) The completion period of the contract will count from the date of letter of Credit(LC) acceptable to both parties. The penalty for delays shall be levied for the delay beyond the scheduled date of delivery.
- **d)** Delay penalties shall be recovered in the currency of bid.
- e) Except as provided in the Cl. no. 3.53 of GCC (Force Majeure), if contractor fails to deliver any or all of the Goods by the Date(s) of delivery or perform the Related Services within the period specified in the Contract, the Employer may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as penalty for delays, a sum equivalent to 0.5 % per week or part thereof, of the delivered price of the delayed Goods for each week or part thereof of delay until actual delivery, up to a maximum deduction of the percentage of 5 % of Total Contract Price, However in case of part delivery or staggered delivery under Option 2 of Clause 3.12, penalty for delays of 0.5 % per week or part thereof, shall be calculated based on the delivered price of balance/ un- fulfilled portions of the contractual obligations i.e. not delivered/not performed related service to the Employer (IPGL). This does not absolve the contractor from his obligation of completion of whole of the work in an expeditious manner. Contract price shall be inclusive of CIF price plus all taxes and duties payable for not delivered/not performed related service in computing Penalty for delays

- penalty for delays. Further, in case of staggered delivery under Option 2 of Clause 3.12, the payment of penalty for delays in the first part of delivery shall not entitle the Contractor to extend the delivery schedule for the second part and the timeline for the second part shall remain unchanged.
- **f**) No claim will be made by the Employer for consequential losses due to delay in delivery and handover.
- g) Once the maximum penalty for delays is reached, the Employer may terminate the Contract pursuant to Clause no. 3.52. of the GCC. The maximum amount of penalty for delays shall be 5 % of total Contract Price. Even in case of the part taking over, maximum ceiling limit remain in reference to the total contract price.
- **h**) The necessary penalty for delays shall be recovered by the Employer from any stage payment due to the Contractor.

3.44 INSURANCE OF WORK AT MANUFACTURER'S SITE FOR NEW MHCs:

- 3.44.1 Unless the Employer shall have approved in writing other arrangements, the Contractor shall, insure, so far as reasonably practicable the Works and keep each part thereof insured as may be mutually agreed between the Employer and the Contractor against all loss or damage from whatever cause arising, until the MHC's are received at destination port, in good condition duly certified by the Third party inspection agency. The value of such shall be at least equal to 100% of the contract price of new MHCs excluding spare parts / tools cost.
- 3.44.2 Insurance during installation at employer's site: The Contractor shall so far as reasonably practicable insure against the Contractor's liability in respect of any loss or damage occurring whilst the Contractor is at EMPLOYER'S site for the purpose of making good a defect or carrying out the tests on completion during the installation & commissioning of the equipment at employer's site or for the purpose of completing any outstanding work and against any loss or damage arising during the defects liability period from a cause occurring prior to the taking over of new MHCs by the employer. For all practical purpose such insurance, during Defect Liability Period 24 month, shall be from any Insurance Company. The value of such insurance shall be at least equal to 100 % of contract price of the new MHCs excluding spare parts/tools cost.
- 3.44.3 The Contractor shall from time to time when so required by the Engineer-In-Charge, produce the policy and receipts for the premium or premiums or satisfactory evidence of insurance cover. All monies received under any such policy shall be applied in or towards the replacement and repair

of the Works lost, damaged or destroyed but this provision shall not affect the Contractor's liabilities under the Contract.

3.45 INSURANCE AGAINST THIRD PARTY LIABILITY (FOR NEW MHC)at Employer site:

- 3.45.1 Before commencing the execution of work, the Contractor shall insure in the joint names of the IPGL and the Contractor, covering Third Party Liability (TPL) against any damage or loss or injury which may occur to the equipment being installed or to any property or to any person (including property and employees of the Employer) by or arising out of the execution of the Works or temporary Works in carrying out of the Contract. The value of TPL policy shall be Minimum of Euro 29,000.00 (Euro Twenty nine thousand only) against occurrence of each incidence. The Contractor shall revalidate the insurance coverage after each incidence and keep the insurance coverage till certification of completion.
- 3.45.2 Such insurance shall be from a reputed Insurance company and should cover all risk and liabilities as stated in the tender document. The Tenderer shall submit the copy of policy of insurance to Engineer-In-Charge before commissioning of equipment at site and shall be valid till Final Acceptance Certificate.

3.46 COMPENSATION:

The Contractor shall indemnify IPGL in the event being held liable to pay compensation for injury to any Contractor's servants or workmen under the any act of country of destination or any other laws, acts or provisions as applicable and 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 before arrival of equipment to the Engineer-In-Charge and shall be valid till issuance of Final Acceptance Certificate (FAC) for the contract.

3.47 DEFAULT OF THE CONTRACTOR:

If the Contractor makes any default or on the happenings of anyone or more of the following events that is to say:

- **a)** If the Contractor without reasonable cause suspends / abandons the Contract of the Work for a reasonable time after receiving written notice without any lawful excuse or fails to make proper progress with Works after receiving written notice from IPGL.
- **b)** Fails to give the IPGL proper facilities for inspection of the Works at contractors premises for three days after receiving written notice by IPGL or

- c) The Contractor has become insolvent or
- d) The Contractor has gone into liquidation or passed the resolution for winding up or
- e) Upon the Contractor making an arrangement with or assignment in favour of his creditor or
- f) Upon his assigning this Contract or
- g) Upon an execution being levied upon the Contractor's good or
- **h**) Upon winding up order being passed by the court or a Receiver or manager is appointed in respect of any of the property of the Contractor or
- i) Possession is taken by or on behalf of any holder of any debentures secured by floating charges of any of the property of the Contractor or
- **j**) Fails to complete all or any part of the Works during the time specified for completion of the Contract or such extended time as may be granted by the IPGL.

IPGL shall have every right to terminate the Contract after issuing 60 days' notice to the Contractor, on his omission or negligence or neglect or default or failure to comply with any of the condition of the Contract.

3.48 IPGL'S LIEN

IPGL shall have a lien on over all or any money that may become due and payable to the Contractor under this Contract or from any amount lying with [IPGL] in respect of any debt or sum that may become due and payable by the IPGL to the Contractor under this Contract or other transaction of any nature whatsoever between the IPGL and the Contractor.

3.49 SETTLEMENT OF DISPUTES:

- 3.49.1 **ENGINEER IN CHARGE'S DECISION:** If disputes of any kind arises between the Employer and the Contractor in any connection with, or arising out of the Contract or the execution of the Works whether during the execution of the Works or after the completion and whether before or after repudiation or termination of the Contract, including any dispute as to any opinion, instruction, determination, certificate or valuation of Engineer, the matter in dispute shall in the first place, be referred in writing to the Engineer In Charge. Such reference shall state that it is made pursuant to this clause. No later than thirty days after the day on which he receives such reference, the Engineer In Charge shall give notice of his decision to the Contractor. Such decision shall state that it is made pursuant to this clause.
- 3.49.2 Unless the Contract has already been repudiated or terminated, the Contractor shall, in every case, continue to proceed with the Works with all due diligence and the Contractor and the Employer

shall give effect forthwith to every decision of the Engineer-In-Charge unless and until the same shall be revised, as hereinafter provided, in an amicable settlement or an arbitrate award.

- 3.49.3 If the Contractor is dissatisfied with any decision of the Engineer In Charge or if the Engineer In Charge fails to give notice of his decision on or before the thirtieth day after the day on which he received the reference, then the Contractor may, on or before the seventieth day after the day on which he received the notice of such decision, or on or before the seventieth day after the day on which the said period of 30 days expired, as the case may be, give notice to the Employer, of his intention to commence arbitration, as hereinafter provided as to the matter in dispute. Such notice shall establish the entitlement of the party to commence arbitration, as hereinafter provided, as to such dispute no arbitration in respect thereof may be commenced unless such notice is given.
- 3.49.4 If the Engineer-In-Charge has given notice of his decision to a matter in dispute to the Employer & the Contractor and no notification of intention to commence arbitration as to such dispute has been given by either the Employer or the Contractor on or before the seventieth day after the day on which the parties received notice as such decision from the Engineer-In-Charge, the said decision become final and binding upon the Employer and Contractor.

3.50 AMICABLE SETTLEMENT:

Where notice of intention to commence arbitration as to the dispute has been given in accordance with Clause 3.49 (Volume-I of Tender Document) arbitration of such dispute shall not be commenced unless an attempt has first been made by the parties to settle such dispute amicably.

Both the Parties shall first make attempt to settle the dispute amicably and may take assistance of a third party (cost of which will be jointly shared). Provided that, unless the parties otherwise, agree, arbitration may be commenced on or after the fifty-sixth day after the day on which notice of intention to commence arbitration of such dispute was given, whether or not any attempt at amicable settlement thereof has been made.

3.51 ARBITRATION

Disputes if any, between IPGL and the Contractor during the currency of the Contract or after the completion of the work or abandonment thereof shall be settled in accordance with Indian Arbitration & Conciliation Act, 1996 (Amended in 2015) or any statutory modification or reenactment thereof and rules made there under and for the time being in force shall apply to arbitration proceedings under this Contract. The disputes so raised shall be referred to a panel of two arbitrators, of which one to be appointed by the IPGL and other by the Contractor. The

arbitration proceeding shall take place in India or at Singapore, as mutually decided by IPGL and the Contractor. In case of litigation, the same shall be under jurisdiction of Indian Court /Laws.

3.52 TERMINATION OF CONTRACT:

If the Contractor does not perform the Contractual obligations satisfactorily, as far as Commissioning the equipment for commercial use within stipulated time frame, the Contract is liable to be terminated after issue of notice of 60 (Sixty) days to the Contractor.

3.53 FORCE MAJEAURE:

If the supply, Commissioning and Testing of equipment is hindered due to force majeure such as, war, riots, civil commotion, fire, epidemics, natural calamities, etc. such period shall be exempted from completion period as mentioned in clause 3.12 (Volume - I) of this tender document. It is clarified that a change in applicable international laws and regulations, if and to the extent such change results in major change in duties/obligations of the affected party and leads to undesirable impact on contractual obligations, the same would fall within the meaning of "Force Majeure" if it is beyond the control of the affected party and has a material and adverse effect as set out in the contract.

Further, it is clarified that (i) In case the duration of the force majeure is less than **365 days**, the contract will be suspended during this period and after extinction of the force majeure, the contract will continue. (ii) In case the duration of the force majeure is more than 365 days, the contract may be terminated upon mutual consent.

In case of change in applicable international laws and regulations leading to undesired impact in execution of the contract obligation, e.g. prohibiting delivery of equipments at agreed destination port and as per tender terms, then suitable alternative destination and cost implication thereof shall be decided by mutual agreement.

3.54 LABOUR LAWS:

The Contractor shall comply with all the provisions of the destination country or any other local authority or State regarding 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 erection, testing, Commissioning of equipment.

3.55 OUTBREAK OF WAR

If during the currency of the Contract, there shall be an outbreak of war (whether war is declared or not) in any part of the world which, whether financially or otherwise, materially affects the execution of the Works the Contractor shall, unless and until the Contract is terminated under the provision in this clause contained, use his best endeavours to complete the execution of the Works, provided always that either the Employer or the Contractor shall be entitled, at any time after such outbreak of war, to terminate this Contract by giving notice in writing to the other, and upon such notice being given this Contract shall terminate, but without prejudice to the rights of either party in respect of any antecedent breach.

3.56 MISTAKE IN CONTRACTOR'S DRAWING

The Contractor shall be responsible for and shall pay for any alterations of the work due to any discrepancies, errors or omissions in the drawings or other particulars supplied by him, whether such drawings or other particulars supplied by him, have been approved by the Engineer Incharge or not.

3.57 DEFAULT OF THE EMPLOYER

In the event of the Employer:

- a) Failing to pay Contractor the amount due under Contract as per stipulated condition or
- **b**) Interfering with or obstructing the written approval in this Contract, the Contractor shall be entitled without prejudice to any other rights or remedies to terminate his employment under the Contract by giving 90 (Ninety) days prior notice in writing to Employer.

3.58 WARRANTY

During the 24 months of the Defects Liability Period the contractor shall post at least one competent, experienced and responsible Technical person who has experience of Erection, Testing and Commissioning of the Equipment, to co-ordinate and execute all works to be attended by the Contractor as per Contractual obligations. The cost for the same shall deemed to be included in the services during guarantee period. The Contractor shall also authorize his technical representative to carry out monthly inspection and submit a monthly report before 10th day of succeeding month to the Engineer-In-Charge. The contractor shall quote for the cost of this service as per price schedule which shall be paid after satisfactory completion of 24 months of the Defects Liability Period as certified by the Engineer In charge.

Employer's responsibility during warranty period shall include:

- 1. Adherence to PMS program supplied by the Contractor with an adequate recording.
- 2. Exclusive use of original spare parts
- 3. Replaced parts shall be returned to the Contractor at his cost;
- 4. To undertake no modification other than by Contractor's authorised personnel;

Warranty shall exclude:

- (i) Operational damages due to mal-operation of crane by IPGL or its authorised representative.
- (ii) Use of improper fuel or auxiliary materials
- (iii) Parts subject to normal wear and tear
- (iv) Damages resultant of wilful and negligent acts (e.g use of improper tools)

3.59 WARRANTY SUPPORT

The Tenderer shall submit warranty support programme, in detail, covering the methodology and approach which shall be adopted to ensure minimum failures and maximum availability of the cranes. The Tenderer shall provide details of his warranty program and after sales service capability including an organization chart, guaranteed response times to requests for technical assistance and spare parts and a 24-hour help line.

3.60 REFERENCES

The Tenderer shall provide details of similar cranes that he has recently manufactured together with a list of customers who are willing to act as reference points as per **Schedule 18** Reference 1 & 2.

3.61 Limitation of Liability

(i) To the fullest extent permitted by the law, the total liability, in the aggregate, of the Contractor, Contractor's officers, directors, partners, employees, agents, and subcontractors, to Employer (IPGL), and anyone claiming by, through, or under Employer for any claims, losses, costs, or damages whatsoever arising out of, resulting From or in any way related to the Tender from any cause or causes, including but not limited to negligence, professional errors and omissions, strict liability, breach of contract, or breach of warranty, shall not exceed 100% of the Contract Price. Limitation of Liability during

- defect liability period shall exclude operational damages due to mal- operation of crane by IPGL or its authorised representative.
- (ii) As regards damages and indemnifications, the Contractor shall not be liable for incidental, indirect or consequential damages to the extent such limitation of liability is valid under Indian law.
- (iii) This clause is enforceable until expiry of entire defect-liability period.

SECTION - 4

4. ENVIRONMENTAL CONDITIONS AT CHABAHAR

4.1. GENERAL

The Port is in a sheltered location with natural deep-water close offshore outside the Persian Gulf to the East of the Straits of Hormuz.

The surrounding area is characterized by the sea, the atmosphere containing a lot of salt and small particles of sand. The humidity level in the region of the site is high. The region is regarded as one of the most humid one.

The following is the summary of environmental conditions prevailing at the Site:

Maximum temperature	50 °C
Average temperature	25 °C
Minimum temperature	5 °C
Average annual rainfall	108 mm
Maximum annual rainfall	244 mm
Average humidity	70%
Maximum humidity	99%
Climate description	sea-climate
Prevailing wind direction	south
Average wind	99% of the time < 15 m/s
Maximum gust wind	44 m/s

4.2. TIDES AND STORM SURGE

Tidal Levels with reference to Chart Datum

High Water springs (HWS)	+3.15 m
Mean High Water Springs (MHWS)	+ 2.53 m
Mean High Water Neaps (MHWN)	+ 1.93 m
Mean Sea Level	+ 1.63 m
Mean Low Water Springs (MLWS)	+ 1.28 m
Mean Low Water Neaps (MLWN)	+ 0.69 m
Low Water Neaps (LWN)	- 0.25 m

Land Datum at Chabahar Port is 1.61 m above Chart Datum.

Storm Surges

Return Period (Year)	Max Storm Surge (m)
2	0.15
10	0.24
25	0.35
50	0.64
100	1.11

4.3. WIND

Direction (Deg)	Speed (m/s) for R	Return Periods
	1 in 50 years	1 in 100 years
0	12	13
30	13	13
60	17	18
90	16	17
120	20	22
150	19	20
180	16	17
210	19	20
240	20	21
270	25	27
300	18	19

330	13	14

The maximum gust speed for design shall be taken as 44m/sec.

4.4. WAVES

Based on hydrodynamic and sedimentation studies report, the design wave heights (H_s) and periods (T_p) are as follows :

(a) Waves Generated within Chabahar Bay

Return Period	1 in 10 Years			n 25 ars	1 in		1 in 100 years		
Direction ⁰ N	H_s	Tp	H_s	Tp	H_s	Tp	H_s	Tp	
Direction 'N	(m)	(Sec)	(m)	(Sec)	(m)	(Sec)	(m)	(Sec)	
270	1.4	4.0	1.5	4.1	1.5	4.2	1.6	4.3	
300	1.1	3.6	1.2	3.8	1.3	3.8	1.3	3.9	
330	1.0	3.5	1.1	3.6	1.2	3.7	1.2	3.8	

Source: Consultant's Analysis.

(b) Deep Water Waves

	1 iı	n 1	1	in 10	1 iı	n 25	1 in	50	1 in	100
Return Period										
	ye	ar	y	ears	ye	ars	yea	ars	ye	ars
	H_s	T_p	H_s	T_p	H_{s}	T_p	H_s	T_p	H_s	T_p
Direction ⁰ N										
	(m)	(sec)	(m)	(sec)	(m)	(sec)	(m)	(sec)	(m)	(sec)
		- 1-								
120	2.33	6.17	4.1	6.8	4.6	7.3	5.0	7.6	5.3	7.8
1.70	1.00				1.0	0.7	0.0	0.1	10.5	
150	1.09	5.22	5.1	7.7	6.8	8.5	8.3	9.1	10.5	9.7
120										
180	3.24	7.94	4.6	7.3	5.1	7.7	5.5	8.0	5.8	8.2
210	•	- 0-	~~			0.4	- 10	0.7		0.0
210	3.05	7.35	5.0	7.6	5.8	8.2	6.3	8.5	6.8	8.9
2.0								<u> </u>		
240	2.73	7.06	4.1	6.9	4.6	7.3	4.9	7.5	5.2	7.7

Source: Analysis of British Meteorological Office data

(c) Shallow Water Waves

			1 in	1 in	1 in	1 in
Return	1 in	1 in 5				
			10	25	50	100
period	1year	years				
			years	years	years	years
				-	-	-
$\mathbf{H}_{s}\left(\mathbf{m}\right)$	1.39	2.00	2.25	2.50	2.70	2.90
H _s (III)	1.39	2.00	2.23	2.30	2.70	2.90
Direction ⁰ N	141	145	145	146	147	148
H _s (m)	0.96	2.70	3.40	4.60	5.10	5.30
Direction ⁰ N	156	163	164	166	167	168
H _s (m)	2.69	3.50	3.80	4.20	4.50	4.80
Direction ⁰ N	183	182	182	182	182	182
H _s (m)	2.5	3.50	4.00	4.60	4.90	5.20
Direction ⁰ N	203	201	200	200	199	199
H _s (m)	2.02	2.70	2.90	3.20	3.40	3.60
Direction ⁰ N	223	220	219	218	217	216
H _s (m)	1.25	2.10	2.50	2.80	3.10	3.40
Direction ⁰ N	248	242	239	235	233	231

Source : Consultant's analysis

4.5. CURRENTS

Tidal current speed is in the range $0.1 \sim 0.3$ m/s.

4.6.RAINFALL

	Rainfall (mm)
Maximum annual rainfall	244.4
Mean annual rainfall	108.2

4.7.TEMPERATURE

Month													
Item	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Ave.													
	19.20	20.44	23.53	26.57	29.57	31.50	30.80	29.68	27.55	27.43	24.09	21.20	25.98
(°C)													
Ave.													
Max	24.32	24.90	27.92	30.81	33.76	34.77	33.52	32.30	30.78	32.32	29.46	26.25	30.04
(°C)													
Ave.													
Min	15.10	16.09	19.14	22.32	25.40	27.92	28.08	27.11	24.31	22.56	18.74	16.17	21.91
(°C)													
Abs.													
Max	31.00	33.00	38.00	42.00	46.00	47.00	46.00	42.00	42.00	41.00	37.00	32.00	47.00

(°C)													
Abs Min (°C)	7.00	7.00	9.60	14.00	19.20	22.00	21.00	23.00	19.00	13.20	9.20	7.00	7.00

The maximum ambient temperature for design shall be taken as 50°C The Minimum ambient temperature for design shall be taken as 5° C.

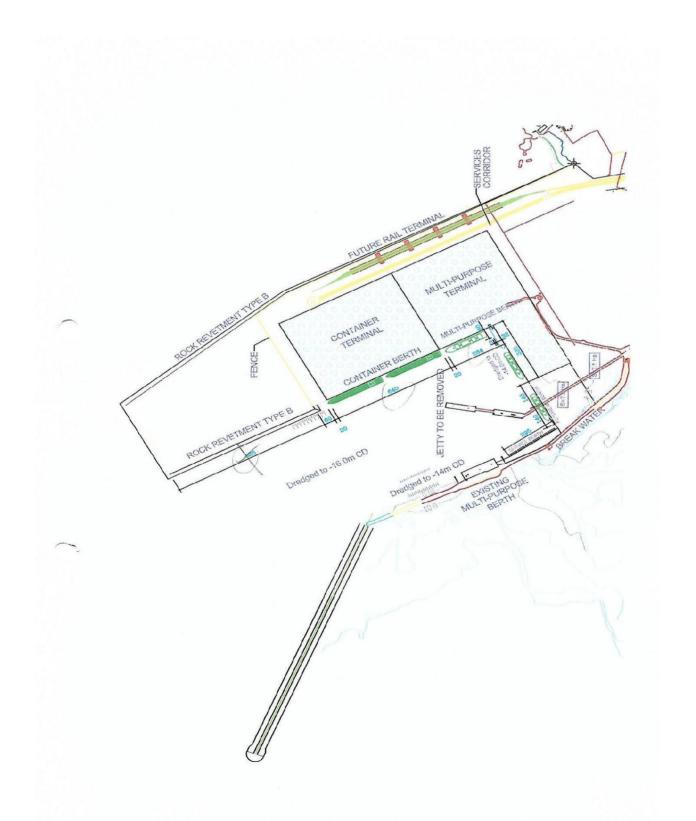
4.8. HUMIDITY

As a percentage:

Months Time	Jan	Feb	Mar	Apr.	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
of													
Reading													
06:30	68.96	72.13	76.46	79.29	81.96	84.3	82.83	83.17	79.42	81.92	77.48	74.78	78.46
12:30	52.92	56.21	58	60.88	64.13	67.8	70.71	70.46	63.46	60.42	55.3	52.13	61.07

The maximum relative humidity for design shall be taken as 99%

ANNEX –I LAYOUT MAP OF CHABAHAR PORT



ANNEX - II

BANK GUARANTEE FORMAT FOR EMD

KN(OW ALL BY THESE PRESENT THAT (Name of the Bank), a Banking
corpor	ation carrying on banking business including Guarantees at Mumbai and other places and having
its offi	ce at Mumbai (hereinafter called 'The Bank' which expression shall
unless	excluded by or repugnant to the context or meaning thereof be deemed to include its successors
and as	signs) SEND GREETINGS:
	WHEREAS The Board of Directors, of INDIA PORTS GLOBAL LIMITED constituted under the
COMF	ANY Act, 2013 (hereinafter called 'The Board' which expression shall unless repugnant to the
contex	t or meaning thereof be deemed to include its successors and assigns) had invited tenders for the
work	of Design, Manufacture, Supply, Installation, Testing, Commissioning and Guaranteeing the
perfor	nance of 4 Nos. of 100 Ton and 2 Nos. of 140 Ton capacity Mobile Harbour Cranes (hereinafter
called	Tender) as per Instruction to the Tenderers, General conditions of the Contract, scope of work
specifi	cations and Price schedule covered under 'Tender No. – IPGL / MHC / 2018
	AND WHEREAS M/s (hereinafter called the 'Tenderer') has offered
to carr	y out the work under the said Tender.
	AND WHEREAS under the conditions of the Contract, the Tenderer is required to give a Earnes
Money	Deposit in the form of Bank Guarantee from a Scheduled Bank having its branch in Mumbai for
the sur	n of Rs (Rupees) / Euro(Euro)
_	AND WHEREAS M/s have requested the Bank to furnish a Guarantee to the
	for the sum of Rs (Rupees) /
	(Euro) which the Bank has agreed to do in the manner
herein:	ofter appearing

NOW THIS INDENTURE WITNESSETH that the said Bank doth hereby stand	l surety for the
said sum of Rs (Rupees	·····) /
Euro(Euro)	
AND DOTH HEREBY GUARANTEE TO AND COVENANT WITH AND irrevo	ocably agree to
pay to the Board upon demand in writing without referring to M/s (N	Name of the
Tenderer) and without questioning the right of the Board to make such demand or the prop	riety or legality
of such demand, such sum or sums not exceeding in the whole a sum of Rs	(Rupees
/ Euro	ble to the
Board by the Tenderer by reason of withdrawing his Tender before the expiry of the same to	from the last
date of the submission of the Tender or such time as may be extended by the Board to which	ch M/s
have agreed in writing, or in the event of the tender being accepted by the Board ar	nd fails to enter
into a Contract or to furnish Performance Guarantee as per the terms of the Contract, in respectively.	pect of which
the decision of the Board shall be final and legally binding and the said Bank doth further c	covenant and
declare that this security is irrevocable and shall remain in force up to and inclusive of the	(date)
and if the Contract is not awarded by the Board before the expiry of the aforesaid date, the	said Banker
undertakes to renew this Guarantee from month to month until 6 months after the aforesaid	I date i.e. up to
(date) and the said Bank doth hereby further covenant and declare that if the sa	aid M/s
do not obtain and furnish renewals of this Guarantee for a further period	od of six
months to the Board not less than 30 days prior to the expiry of the period of this Bank Gua	arantee or
renewals thereof as to keep the same valid and subsisting till the Contract is awarded by the	e Board and for
6 months thereafter i.e. up to the entire amount of this Bank Guarantee in defau	ult of obtaining
and furnishing the renewals of this Bank Guarantee in the manner and within the time afore	esaid shall
become forthwith due and payable to the Board notwithstanding:	
. ,	
1. that the period of the Guarantee of the renewal or renewals thereof has not expired or,	
2. that the period of Guarantee of the renewal or renewals thereof has already expired	
AND THE BANK further declares that notwithstanding anything to the contrary contained	d hereinabove,
the Bank's liabilities under the Guarantee is restricted to Rs (Rs	
) / Euro(Euro) and unless a demand in writing	g under the
Guarantee is made with the Bank within the 3 months from the date of expiry i.e. by	, all the
rights of Board under this Guarantee shall be forfeited and the Bank shall be relieved and d	lischarged from
all liability there under: Not withstanding anything to the contrary contained herein:	

Our liability	under this Bar	nk Guarantee sh	all not exceed Rs		(Rupees
) / Euro	0	_(Euro)This Ba	ank Guarantee	shall be valid up to
; and					
We are liab	ole to pay the g	uaranteed amou	nt or any part there	eof under this	Bank Guarantee only
and only if you serv	ve upon us a wr	itten claim or de	emand on or before		
IN WITNE	SS WHEREOF	, the duly const	tuted attorneys of the	he Bank has h	ere upto set his / their
hands and seals on	the of		2018.		
SIGNED, SEALEI	O AND DELIVI	ERED			
By the within name	ed	- -			
•					
Through it's duly					
Constituted Attorne	ey Mr				
&	in the prese	nce of			

ANNEX -III

LETTER OF APPLICATION CUM TENDER FORM

To be submitted on company Letter Head by the Tenderer indicating full postal address, telephone number/s, fax number/s, email id, etc.

To,	
Date:	
India Ports Global Limited,	
4 th Floor, Nirman Bhavan,	
M.P. Road, Mazgaon,	
Mumbai-400010 – INDIA.	
 Sub: Design, Manufacture, Supply, Installation, Testing, Commissioning and Guarant the performance of 4 Nos. of 100 Ton and 2 Nos. of 140 Ton capacity Mobile Harbour C at Shahid Beheshti Port, Chabahar. REF: Tender No: IPGL/MHC/2018 Sir, Being duly authorised and represent and act on behalf of 	•
M/s hereinafter called the `Tenderer' and having fully	
understood Instructions to Tenderer/s, General Conditions of Contract, Scope of Volument and Specifications as given in the Tender Document and after visiting the Site undersigned hereby submits the Offer for the subject Works. 2. IPGL and its representatives are hereby authorised to conduct any enquiry of the subject Works.	e, the
2. If the and its representatives are hereby authorised to conduct any enquiry (ΟI

investigations to verify the statements, documents & information submitted in connection

with this Tender and to seek clarifications from our bankers & Clients regarding any

financial, commercial & technical aspects. This letter of application will also serve as

authorization to any individual or representatives of any institution referred to in the supporting information, to provide such information deemed necessary and requested by yourself to verify statements and information provided in this Tender, or with regard to the resources, experience, and competence of the Tenderer.

3. Tenderer's representatives may contact following IPGL persons for further information:

For General & Managerial inquiries		
Name of Contact Person	Mr Arun Kumar Gupta	
Telephone number/s	022 69000430, 9833880764	
Fax number/s	022 66566336	
E-mail Id	md.indiaportsglobal@gmail.com	

For Technical inquiries	
Name of Contact Person	Mr Ashok Gadkari
Telephone number/s	022 69000432, 9004762185
Fax number/s	022 66566336
E-mail Id	mt.indiaportsglobal@gmail.com,

For Financial inquiries	
Name of Contact Person	Mr Nitin Shah
Telephone number/s	022 69000433, 9769036703
Fax number/s	022 66566336
E-mail Id	cs.indiaportsglobal@gmail.com,

4. This application is made in the full understanding that:

- i. Tenders received from Tenderers will be subject to verification of all submitted information.
- We agree to abide by this Tender for the period of 180 days from the last date fixed for receiving the same and it shall remain binding upon us and may be extended at any time, if requested by IPGL, before the expiry of the validity period as given in this Tender.
- iii Not withstanding anything contained in this tender document, IPGL reserves the right to annul the bidding process at any time without any liability or any obligation for such annulment, without assigning any reason.
- iv If our Tender is accepted, we confirm to commence work from the date of issue of 'Letter of Acceptance' and to complete all Works in good condition within the completion period as stipulated in this Tender.

- v. If our Tender is accepted, we will furnish the Security Deposit and Performance Guarantee Bond for the due Performance of the Contract. The amount and format of such Guarantee will be in accordance with the subject Tender and Conditions of Contract.
- vi. We have independently considered the amount/rate shown as Penalty for delays in completion of works and agree that the same represent a fair estimate of the damages/losses likely to be suffered by IPGL in the event of delay in overall completion of the Work.
- vii. We have downloaded the tender form from web site and we hereby certify that we have not made any changes to the Tender Document either in words or in sentences or deleted or added any word or sentences from/to the tender document.
- 5. The undersigned declares that the statements made & the information provided in the duly filled Forms are complete, true & correct in every detail.

Witness

	Signatu	ire		
	Name	and	Designation	with
	Compa	ny seal		
	7			
Signature				

Name and Designation with

Company seal

6.

For & on behalf of (name of the Tenderer)

Witness

Signature	
Name and Designation with Company seal	Signature
Name and Designation with Company seal	

For & on behalf of (name of the Tenderer)

ANNEX - IV

FORM OF AGREEMENT

THIS	AGRE	MENT made at Mumbai this day of	
BETWE	EN	(hereinafter called "the Contractor") which expression	'n
shall unl	ess exclı	led by or repugnant to the context or meaning thereof be deemed to include the part	у
named a	nd his he	rs, executors and administrators or its successors and permitted assigns) of the one par	rt
and IND	OIA POF	TS GLOBAL LIMITED, Mumbai incorporated by Companies Act 2013 being the	ie
successo	rs (herei	after called "The Employer") which expression shall unless excluded by or repugnar	nt
to the c	ontext o	meaning hereof, be deemed to include their successors and assigns) of other pa	rt
WHERE	AS the	oard have accepted a tender by the Contractor for Design, Manufacture, Supply	y,
Installati	on, Test	g, Commissioning and Guaranteeing the performance of 4 Nos. of 100 Ton and 2 No	s.
of 140 T	on capac	y Mobile Harbour Cranes.	
	NOU		
	NOW	THIS AGREEMENT WITNESSESTH AS FOLLOWS:	
	1		
	1.	In this agreement words and expressions shall have the same meaning as ar	e
		respectively assigned to them in the conditions of Contract hereinafter referred to.	
	2.	The following documents shall be deemed to form and be read and construed as part	
		of this Agreement, viz -	
		a) The said tender	
		a) The said tender	
		b) The acceptance of tender	
		c) The conditions of Contract	
		d) The specification	
		e) The Price, schedule and all other schedules	

The Contractor's specification and all correspondence, by which the Contract

is added, amended, varied or modified in any way by mutual consent.

f)

3.	In consideration of the payments to be made to the Contractor as hereinafter
	mentioned the Contractor HEREBY CONVENANT with the Employer to Design,
	Manufacture, Supply, Installation, Testing, Commissioning and Guaranteeing the
	performance of 4 Nos. of 100 Ton and 2 Nos. of 140 Ton capacity
	Mobile Harbour Cranes in conformity in all respects with the provision of the
	Contract.

- 4. The Employer HEREBY CONVENANT to pay to the Contractor in consideration of the Design, Manufacture, Supply, Installation, Testing, Commissioning and handing over the 4 Nos. of 100 Ton and 2 Nos. of 140 Ton capacity MHCs, as per the Contract Price at the time and in the manner prescribed by the Contract.
- 5. IN WITNESS WHEREOF the Contractor that hereunto set his hand and seal and the Managing Director, India Ports Global PVT. Limited for an on behalf of the Board has set his hand and seal and the common seal of the Employer has been hereunto affixed the day and year first above written.

Signed, sealed and delivered

by	for and on behalf of the said
	_ in pursuance of a resolution of
the Board of Directors of the	
passed at a meeting held on	
Managing Director	
the	CONSTITUTED ATTORNEY

or
The Common Seal of the Contractor was hereto affixed in the presence of
SIGNED, SEALED AND DELIVERED
by The Managing Director,
for and on behalf of the Board of Directors of
India Ports Global Limited
with the Common Seal of the Board
of Directors

ANNEX -V

FORMAT OF BANK GUARANTEE to be used FOR (i) PERFORMANCE of the Contract (ii) Performance of equipment during defect liability period and (iii) after completion of defect liability period for the contract.

In consideration of the India Ports Global Limited incorporated under Companies Act, 2013 (hereinafter
called "The Employer" which expression shall unless excluded by or repugnant to the context or meaning
thereof be deemed to include the Board of Directors of India Ports Global Limited, its successors and
assigns) has awarded the Contract for Design, Manufacture, Supply, Installation, Testing, Commissioning
and Guaranteeing the performance of 4 Nos. of 100 Ton and 2 Nos. of 140 Ton capacity Mobile Harbour
Cranes , vide Managing Director, IPGL's letter No, dated (hereinafter
called 'the said Contract') to (Name of the Contractor) (hereinafter called the
'Contractor'). Under the terms and conditions of the Contract, made between the Contractors and the
Employer, the Contractor is bound to submit a performance Guarantee of Rs (in words
Indian Rupees) / Euro(Euro) to Employer, we the
(Name of the Bank and address) (hereinafter referred to as 'the Bank' at the
request of the Contractors do hereby undertake to pay to the Employer an amount not exceeding Rs
(in words Indian Rupees) / Euro(Euro) against
(in words Indian Rupees) / Euro (Euro
any loss or damage caused to or suffered or which would be caused to or suffered by the Employer by
any loss or damage caused to or suffered or which would be caused to or suffered by the Employer by
any loss or damage caused to or suffered or which would be caused to or suffered by the Employer by reason of any breach by the Contractors of any of the terms and conditions of the said Contract.
any loss or damage caused to or suffered or which would be caused to or suffered by the Employer by reason of any breach by the Contractors of any of the terms and conditions of the said Contract. 1. WeBank do hereby undertake to pay the amounts due and payable
any loss or damage caused to or suffered or which would be caused to or suffered by the Employer by reason of any breach by the Contractors of any of the terms and conditions of the said Contract. 1. WeBank do hereby undertake to pay the amounts due and payable under this guarantee without any demur merely on a demand from the Employer stating that the amount
any loss or damage caused to or suffered or which would be caused to or suffered by the Employer by reason of any breach by the Contractors of any of the terms and conditions of the said Contract. 1. WeBank do hereby undertake to pay the amounts due and payable under this guarantee without any demur merely on a demand from the Employer stating that the amount claimed is due by way of loss or damage caused to or which would be caused to or suffered by the
any loss or damage caused to or suffered or which would be caused to or suffered by the Employer by reason of any breach by the Contractors of any of the terms and conditions of the said Contract. 1. WeBank do hereby undertake to pay the amounts due and payable under this guarantee without any demur merely on a demand from the Employer stating that the amount claimed is due by way of loss or damage caused to or which would be caused to or suffered by the Employer by reason of the Contractor's failure to perform the said Contract. Any such demand made on
any loss or damage caused to or suffered or which would be caused to or suffered by the Employer by reason of any breach by the Contractors of any of the terms and conditions of the said Contract. 1. WeBank do hereby undertake to pay the amounts due and payable under this guarantee without any demur merely on a demand from the Employer stating that the amount claimed is due by way of loss or damage caused to or which would be caused to or suffered by the Employer by reason of the Contractor's failure to perform the said Contract. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee.

We, ----- (Name of the Bank) undertake to pay to the

Employer any money so demanded notwithstanding any dispute or disputes raised by the

Contractor in any suit or proceeding before any court of Tribunal relating thereto our liability

under this present being absolute and unequivocal. The payment so made by us under this bond

2.

shall be a valid discharge of our liability for payment there under and the Contractor shall have no claim against us for making such payment.

- 5. This Guarantee will remain valid for the entire period as agreed, even though there happens to be change in the constitution of the bank or that of the Contractor.

It is also hereby agreed that the applicable Court in India shall have exclusive jurisdiction in respect of claims, if any, under this Guarantee.

We,	Bank lastly	undertake no	ot to revoke	this guarantee	during its
currency except with the previous	consent of th	e Employer in	n writing.		
Dated day of	2018				
any or	2010				
For (Name of the Bank)					
Tor (Name of the Bank)					
(Name with Designation)					
				Signature	
				C	
			Se	eal of The Bank	

ANNEX -VI

FORM OF BANK GUARANTEE (SECURITY DEPOSIT)

(For Advance payment)

1.	In consideration of India Ports Global Limited incorporated under Companies Act, 2013				
	(hereinafter called "The Employer" which expression shall unless excluded by or repugnant to the				
	context or meaning thereof be deemed to include the Board of Directors of India Ports Global				
	Limited, its successors and assigns) has awarded the Contract for Design, Manufacture, Supply,				
	Installation, Testing, Commissioning and Guaranteeing the performance of 4 Nos. of 100 Ton and				
	2 Nos. of 140 Ton capacity Mobile Harbour Cranes vide Board's Managing Director's letter No				
	, dated (hereinafter called 'the said Contract') to				
	(Name of the Contractor) (hereinafter called the 'Contractor'). Under the terms and				
	conditions of the Contract, made between the Contractors and the Employer, the Contractor is				
	bound to submit a Bank Guarantee towards security deposit, (against advance payment as per				
	terms of contract) for Rs (Rupees)				
	Euro(Euro) to Employer, we the (Name				
	of the Bank and address) (hereinafter referred to as 'the Bank' at the request of the Contractors do				
	hereby undertake to pay to the Employer an amount not exceeding Rs (Rupees				
) against any loss or damage caused to or suffered or which would be caused to or suffered by				
	the Employer by reason of any breach by the Contractors of any of the terms and conditions of the				
	said Contract.				
2					
2.	We Bank do hereby undertake to pay the amounts due and payable under this				
	guarantee without any demur merely on a demand from the Employer stating that the amount				
	claimed is due by way of loss or damage caused to or which would be caused to or suffered by the				
	Employer by reason of the Contractor's failure to perform the said Contract. Any such demand				
	made on the Bank shall be conclusive as regards the amount due and payable by the Bank under				
	this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not				
	exceeding Rs(Rupees) / Euro(Euro) We,				
	(Name of the Bank) undertake to pay to the Employer any money so demanded				
	notwithstanding any dispute or disputes raised by the Contractor in any suit or proceeding before				
	any court of Tribunal relating thereto our liability under this present being absolute and				
	unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability				

for payment there under and the Contractor shall have no claim against us for making such payment.

- 5. This Guarantee will remain valid for the entire period as agreed, even though there happens to be change in the constitution of the bank or that of the Contractor.

It is also hereby agreed that applicable Court in India shall have exclusive jurisdiction in respect of claims, if any, under this Guarantee.

We, Bank lastly undertake not to revoke this guarantee
during its currency except with the previous consent of the Employer in writing.
Dated day of2018
For (Name of the Bank) (Name with Designation)
Signature/ Seal of The Bank

ANNEX -VII

SCOPE OF WORK FOR THIRD PARTY INSPECTION AGENCY TO BEAPPOINTED BY IPGL

- 1. Approval of Main Structure Analysis Results
 - a. Check for Design Criteria
 - b. Check for Stress Results
 - c. Check for Fatigue Stress
 - d. Check for Main Structure Drawings of: Girder, Boom, Girder Support Beam, Leg, Portal Beam, Sill Beam, Top Leg, Top Beam, Fore-Stay & Back-Stay, Leg Diagonal, Top Leg Brace, Boom Hinge, Boom Stop Girder.
 - e. Check the results and conformity with the technical specification of performance test
- 2. Documents Review:
 - a. Technical Specification
 - b. Approved Construction drawings
 - c. Inspection and Test Plan
 - d. WPS/PQR-WPQR
 - e. NDE Procedures & NDE Personnel Certificates
 - f. DE Procedures & DE Personnel Certificates
 - g. Painting Procedure
 - h. Commissioning Procedure etc.
 - i. Review of raw material test certificate for compliance with code/specifications and identification of material with manufacturer's test certificate.
 - j. Review of heat treatment records carried out where applicable.

- k. Examination of radiographs including review of radiographic technique and monitoring of other NDT requirements such as Ultrasonic, Magnetic particle and Liquid Penetrant testing are met with as per the relevant code/drawings/ QAP.
- 1. Review of test certificate for all critical items but no limited to for:
- m. Bogies, Portal, Main girder and boom girder beam, Trolley & Loading devices
- n. Long travel, Trolley traversing, Main Hoist, Boom Hoist.
- o. Motors, Controller, Main Cables, Other bought out components any other like anemometer, rail clamps, hold down devices, rail sweeper, all safety devices, wire ropes etc.

3. Material Verification:

- a. Review Mill Certificate
- b. Verify the material traceability records
- c. Witness material test as per submitted QAP

4. Witness & Verification

- a. Witness Welder Qualification Test and certification by TPI
- b. Fit-up: witness on critical parts and randomly spot witness for the others
- c. Welding Process: monitoring/patrol inspection
- d. Non Destructive Test: review NDT results, spot check on the calibration of equipment & verify the qualification of personnel
- e. Final Inspection: witness on the final welds and dimensional/straightness
- f. Sub-assembly: witness on the final welds, alignment, dimension.
- g. Erection: witness on the final welds, final dimensional, bolt torque, levelling/straightness.

h. Painting: witness on the surface preparation (after sand blasting), painting procedure and randomly spot check on the final DFT.

i. Testing:-

- Electrical: review continuity check & megger test; verify electrical equipment installation etc.
- ii) Mechanical: witness alignment/installation, bolt torque, greasing/lubricating, idle running test, etc.
- j. Commissioning: witness on all testing as per approved commissioning procedures, including load test.
- k. Witness assembly of all the primary structural with the machinery and electrical equipment, spreader and safety devices at site.

5. Documentation & Certification

- a. Submit FORTNIGHTLY inspection report to IPGL
- b. Certification of parts of the crane before shipment to berth as per tender.
- c. Certification of completion of installation & erection activities as per tender.
- d. Certification of the crane for meeting the FEM classification and requirements as per TPIA.
- e. Certification of the crane for "Ready to ship" prior to shipment from contractor's site indicating that all the tests are successfully carried out as detailed in the tender document as per clause 27 (Volume II).
- f. Certification of completion of commissioning & testing as per contract.
- g. Stamping and issue of certificates.

GENERAL INFORMATION

Page1/2: Schedule -1

All individual firms submitting the tender must complete the information in this form.

1.	Full name of the Firm:
2.	Head Office address:
3.	Contact person name at Head office:
4.	Telephone number/s:
5.	Fax number/s:
6	E-mail Id
7.	Branch Office address, if any:
8.	Contact person name at Branch office:
9.	Telephone number/s:
10.	Fax number/s:
11.	E-mail Id
	83

12.	Works address:	
13.	Contact person name at	
	Works:	
14.	Telephone	
	number/s:	
15.	Fax number/s:	

16. E-mail Id

Page 2/2: Schedule -1

17.	Place Of
	Registration/Incorporation:
18.	Year of Registration/
	Incorporation
19.	Details of Mainlines of Business:
I	

i.	Since
ii.	Since
Iii.	Since
iv.	Since
v.	Since

FINANCIAL DATA

Page: 1/2 Schedule 2

	Page: 1/2 Schedule 2
A: Banker's Details:	
Name of the Banker	
In Full	
	Telephone No:
Address of Banker	
	Fax No:
	Contact Person name:
	D 2/2 C. l . l . l . 2
	Page 2/2 Schedule 2
C. Income Assessed Color Assessed	4-11
C: Income tax and Sales tax det	taus:
1. Permanent Income-Ta	x Account
Number (PAN) or EQ	UIVALENT
2. Sales tax registration nu	ımber
Or EQUIVALENT	I I

(Kindly enclose copies of supporting documents for above information)

D: The Tenderer must submit following document:

1. Copy of Latest sales tax clearance certificate

WORK SCHEDULE

Supply of 4 Nos. 100 Ton and 2 Nos. 140 Ton MHCs.

- 3.1 Work schedule for design and manufacturing of the cranes at work. (A bar chart/CPM/pert for the entire completion period)
- 3.2 Shipment Schedule.
- 3.3 Unloading Schedule.
- 3.4 The time required for mobilizing the equipment at Chabahar Port including details of transportation, Installation, Commissioning & Testing of equipment
- 3.5 Manpower deployment during Installation, Testing and commissioning phase
- 3.6 Tenderer can indicate the minimum length of berth and period that will be required for Installation, Commissioning & Testing of the new MHCs at site, Chabahar Port.
- 3.7 Requirement for office space and other facilities if any to be provided by the Port during Installation, Testing and Commissioning period.

TRAINING SCHEME

The Tenderer shall describe in detail the training scheme that he is proposing for technicians, operators and supervisory personals of the Employer for efficient functioning and maintenance of the equipment to be supplied by him. The scheme shall indicate the nature and duration of training required for various categories of personnel. The following particulars shall be furnished in the format given below: -

Sl no.	Designation of each	Name and	Recommended	Duration of
	personnel and area of	short resume	no. of person to	training for
	Training assignment.	showing	be trained in	each category
		experience of	each category	
		persons		

SCHEDULE 4 - A

TRAINING SCHEDULE

• TRAINING OF CRANE OPERATORS AND MAINTENANCE PERSONNEL:

1.1 GENERAL:

The contractor can assign qualified mechanical and electrical specialists to instruct the employers Terminal operations personnel in the operating and maintenance on all equipment installed under this contract. The training session by OEM for Drives, PLC &CMMS will be performed at the site of the work. The contractor shall submit his fully structured and detailed proposed training programme under this contract.

1.2 TRAINING SESSIONS:

.1 The training sessions shall include operations, maintenance and servicing of all mechanical / hydraulic and electrical / electronic components of the crane. The detailed training programme will be finalized by the Contractor in consultation with the employer well in advance. The training shall be in sufficient depth to enable IPGL to use and maintain the crane in a safe and proper manner. Contractor shall impart operational & maintenance training to employer's personnel as per the following;

Location	Details	Total Training Days
At the works of Contractor.	A) Drive, PLC & CMMS (02 Engineers)	(Maximum 10 days)
At employer's site after arrival equipment, in	Mechanical / Hydraulic	4
classroom.	Electrical / Electronics	4
	Crane Operations	4
On site in crane at IPGL	Mechanical / Hydraulic	2

Electrical / Electronics	2
	_
Crane Operations	5

- .2 The session shall also include hand-on-trouble shooting where the contractor inserts known faults into the system to demonstrate the fault diagnostic capabilities of the fault diagnostic.
- .3 The contractor shall furnish detailed Training manual to employer 15 days before commencement of training.
- .4 The contractor shall provide a full time engineer on the contractor's permanent payroll, on site who shall oversee the Erection / Commissioning works. He shall have authorization to make reasonable changes and modifications as required by the employer.
- .5 A commissioning engineer with PLC knowledge shall remain at site for the first two weeks of the performance test period of each equipment.

QUALITY ASSURANCE PLAN (QAP)

All stages of execution of the work shall be governed by Quality Assurance Procedures that shall comply with or better requirements of ISO standards. Tenderer shall submit in substantial detail a quality assurance plan indicating all activities step by step at various manufacturing/fabrication/construction premises including site to carry out to meet the requirement of this specification and International standards/regulations/practices to enable comprehensive assessment of its merit and reliability. This shall also indicate tentatively at what stages of manufacturing/ fabrication/construction of all items he proposes the customer control points according to which the inspection by the Employer and Engineer-In Charge could be planned.

QAP shall incorporate monitoring, inspection, Testing and Review as per the scope of Third Party Inspection Agency (TPIA) as given in the Annex VII of tender document.

DETAILS OF INSTRUMENTS

FOR TESTING & QUALITY CONTROL

Tenderers are advised to furnish details regarding instruments that he will be using for 'Testing & Quality Control' till completion of the subject Work. The information in this regard should be submitted in below mentioned format and separate sheets may be used to furnish necessary details, if required.

Sl.	Brief Description & specifications of	Qty	Year of
	Testing & Quality Control Instruments		Installation
No.			
1.			
1.			
2.			
3.			
4.			
7.			
5.			
6.			
7.			
'.			

8.		
9.		
10.		

SUB-CONTRACTORS

The Tenderer shall submit the name, address of persons, firms or companies, proposed by him as sub Contractors for carrying out the work under the Contract together with particulars of work to be carried out by each party. Written confirmation from sub Contractor shall be submitted along with the tender.

Sl.	Section of Works	Name	and	Name & Location
No.		address of	the	of the Organisation
		proposed		previously
		Supplier/sub-		supplied/worked
		contractor		
1				
2				
3				
4				
5				
6				
7				

8		
9		
10		
11		
12		
13		
14		

ARRANGEMENT FOR SPARE PARTS

Tenderer shall submit following information pertaining to availability of spare parts

1	Name, address and Contact Number of Service Centres of tenderer's firm with spare parts stock in destination country.	
2	The address of the dedicated website through which order for spare parts can be placed.	
3	Minimum number of days, on intimation, a service Engineers of tenderer's firm for this particular Equipment is available on site.	

STATEMENT OF DEVIATIONS

1. The following are the particulars for deviations from the requirements of the Tender specifications: (A soft copy to be submitted in **Word Format** in the following tabular form):

Sr. No.	Volume I/II	Proposed	Justification for	Price Adjustment	Remarks by
	Clause No./	Deviations	Proposed	in Terms of	IPGL
	Page No.		Deviations	Percentage	

Note: 1. Where there are no deviations, the statement should be returned in duly signed manner with an endorsement indicating no deviations.

- 2. The Tenderer shall indicate in this Schedule, the Price adjustment in terms of percentage against each deviation, which he may like to apply to the Tender Price for withdrawing his deviation, if the same is unacceptable to the Employer. However, the absolute amount of Price adjustment, if applicable, shall be mentioned in the Price Schedule, for each deviation.
- 3. In case of no submission of price-adjustment against any deviation, it will be deemed acceptance by the contractor without any price adjustment.
- 4. The deviation which is not acceptable to IPGL is required to be withdrawn unconditionally, failing which the offer will be treated as conditional offer and the same is liable for rejection.

Schedule -10

LIST OF SPARE PARTS (Chargeable) to be supplied under this contract.

Consolidated List for 4 units of 100 Ton cap. MHC and same list separately for 2 units of 140 Ton capacity MHCs

Supply of Spare parts shall be separate from scope of this tender. The prices of these spare-parts and special tools (chargeable) are to be submitted in Price-Schedule 11, part II, being optional, shall not be taken for evaluation of the bid. However, the prices quoted shall remain valid for a period of two years from the date of Final Acceptance of the equipment.

T	SPA	RES:
1.	171 7	

Details	Spares	Qty

To be filled in by tenderer as per clause No. 28 of Vol. II, i.e. 12000 running hours spareparts, separately for 100 Ton and for 140 Ton cap. MHCs, along with special tools (if any), which are essential for long term upkeep of the equipment and those not included in the list of maintenance tools (As listed under **Schedule 10 B**).

Schedule -10 A

OPERATIONS AND MAINTENANCE MANUALS

1 OPERATING AND MAINTENANCE (O&M) MANUAL

- 1.1 The contractor shall provide an operating and maintenance (O&M) manual which will cover the operation, lubrication, maintenance and inspection of the crane including routine and major maintenance of mechanical and electrical components. Routine and major inspection of the structure shall be covered by the structural maintenance manual. Detailed electrical record drawing shall be included with each O&M manual.
- 1.2 The O&M manual shall be durable and hardbound with properly indexed for easy reading. The contractor shall furnish 6 sets of O&M manuals with the supply of cranes. The contractor shall also provide O&M manual on a CD for reference. These manual shall be supplied 15 days before commencement of training schedule and commissioning of the equipment at employer's site. The O & M manuals shall consist following;
 - .1 A fully detailed as constructed manufacturing specification of the crane and equipment including, without limitation:
 - Drawings and diagrams where appropriate including electrical diagrams and hydraulic schematics.
 - All materials and component parts test certificates
 - A schedule of third party supplied components.
 - A schedule of spare parts provided under the contract.
 - .2 A fully detailed as constructed performance specification of the crane and equipment including, without limitation:
 - Wheel loading
 - Operating speeds and limitations
 - Commissioning test results including current readings

- Statutory test certificates
- .3 A fully detailed operating and maintenance manual for the crane, equipment and component parts including without limitation:
 - Setting up and testing procedures
 - Operational duties and restrictions
 - Maintenance and replacement schedules

SCHEDULE 10 – B

Maintenance Tools

Along with following Tools, Special Tools, if any, for maintenance of crane, are required to be supplied along with each Crane and cost of which is inclusive in CIF value of each equipments.

a) Electrical power screw driver set 230 V AC : 2 Nos.

b) Electrical powered grease gun with 25 m

hose & 20 kg reservoir : 01 per crane

c) Portable grease gun : 01 per crane

d) Set of spanners for maintenance of equipment : 01 per crane

e) Industrial vacuum cleaner : 01 Nos.

f) Pneumatic compressor installed in

machinery room & power wrench with

suitable head wrench and torque output : 01 Nos. per crane.

g) All special maintenance and overhauling tools &

tackles for the diesel engine : 01 set per engine

h) Pneumatic impact wrench for use on nuts.

(With fast speed nut removal action if possible)

completed with hose attachments, accessories, box

spanner fitted to a suitable portable compressor. : 01 set per crane

SCHEDULE 11. i.e. Format of PRICE SCHEDULE-PART I A

(Tender No. IPGL / MHC / 2018)

Sr. No.	Description (Part I) A	Price Quoted for new MHCs (In / EURO / INR)		Cs (In /
1.	Equipment	Currency	In Figures	In Word
2.	CIF price for Design, Manufacture, Supply, Transportation, Testing and Commissioning and Guaranteeing the performance of 4 units of 100 Ton cap. MHCs to IPGPL, Shahid Behesti Port, Chabahar including Transit / Marine Insurance etc. as prescribed in the Tender Document and including all other taxes, duties, levies, if any, payable at country of origin. Service component			
	A) Price for Training fee for imparting operational & maintenance training, as per the Tender document and as per training schedule provided in schedule 4 and 4A.			
	B) Price for providing 06 sets of operation and Maintenance manuals (prepared in accordance with the relevant Schedule 10 A) and "As-built" drawings and spare parts catalogue as per tender conditions.			

	C) Price for providing 04 sets of Training manuals.		
3.	Price for rendering warranty support as per tender conditions.		
	TOTAL OF 1 TO 3: TOTAL Landed Cost of 4 units of 100 Ton capacity (PRICE SCHEDULE-		
	11 PART-1 A)		

Note: Tenderer shall submit their offer for the entire work as tabulated above. The Price – Bids of 100 ton capacity MHC shall be kept in separate sealed cover duly super scribed, along-with separate sealed covers for other MHC(140 ton) and for accessories (Grabs, Spreaders, C-Hooks) duly super scribed and these covers shall be kept in sealed Envelop – 4.

IPGL reserves the right to split the work order separately for each type of MHC and accessories as per lowest offers.

Name, Designation and Signature of

Name Signature of witness

Tenderer with company seal & date.

SCHEDULE 11. i.e. Format of PRICE SCHEDULE-PART I B

(Tender No. IPGL / MHC / 2018)

Name of Work: Design, Manufacture, Supply, Installation, Testing, Commissioning and Guaranteeing the performance of 4 Nos. of 100 Ton and 2 Nos. of 140 Ton capacity Mobile Harbour Cranes at ShahidBeheshti Port, Chabahar.

Sr. No.	Description (Part I) B	Price Que EURO / IN		new MHCs (In	
		Currency	In Figures	In Word	
1.	Equipment				
	CIF price for Design, Manufacture, Supply, Transportation, Testing and Commissioning and Guaranteeing the performance of 2 units of 140 Ton cap. MHCs to IPGPL, Shahid Behesti Port, Chabahar including Transit / Marine Insurance etc. as prescribed in the Tender Document And including all other taxes, duties, levies, if any, payable at country of origin.				
2.	Service component				
	A) Price for Training fee for imparting operational & maintenance training, as per the Tender document and as per training schedule provided in schedule 4 A.				
	B) Price for providing 06 sets of operation and Maintenance manuals (prepared in accordance with the relevant Schedule 10 A) and "As-built" drawings and spare parts catalogue as per tender conditions.				

	C) Price for providing 04 sets of Training manuals.		
3.	Price for rendering warranty support as per tender conditions.		
	TOTAL OF 1 T0 3: TOTAL Landed Cost of 2 units of 140 Ton capacity (PRICE SCHEDULE-11 PART-1 B)		

Note: Tenderer shall submit their offer for the entire work as tabulated above. The Price – Bids of 100 ton capacity MHC shall be kept in separate sealed cover duly super scribed, along-with separate sealed covers for other MHC(140 ton) and for accessories (Grabs, Spreaders, C-Hooks) duly super scribed and these covers shall be kept in sealed Envelop -4.

IPGL reserves the right to split the work order separately for each type of MHC and accessories as per lowest offers.

Name, Designation and Signature of

Name Signature of witness

Tenderer with company seal & date.

SCHEDULE 11. i.e. Format of PRICE SCHEDULE-PART I C

(Tender No. IPGL / MHC / 2018)

Name of Work: Design, Manufacture, Supply, Installation, Testing, Commissioning and Guaranteeing the performance of 4 Nos. of 100 Ton and 2 Nos. of 140 Ton capacity Mobile Harbour Cranes at Shahid Beheshti Port, Chabahar.

Sr. No.	Description (Part I) C	Price Quoted for new MHCs (In EURO / INR)		
		Currency	In Figures	In Word
1.	Equipment: CIF Cost including all other taxes, duties, levies, if any, payable at country of origin for all the items mentioned below.			
	A) C-1 Supply of Two (2) Nos. Of main telescopic spreaders 40 ton Capacity to handle 20 ft. And 40 ft. And 45 ft ISO containers.			
	C-2 Supply of Two (2) Nos. 4-Ropes Grab of minimum 24 cubic m. capacity.			
	C-3 Supply of Two (2) Nos. 4-Ropes Grab of minimum 40 cubic m. capacity.			
	C-4 Supply of Two units of special device for handling sheet-rolls (C-Hook) with 40 ton capacity.			
2.	CONTRACT PRICE FOR ABOVE ACCESSORIES			

Note: Note: Tenderer shall submit their offer for the entire work as tabulated above. The Price – Bids of 100 ton capacity MHC shall be kept in separate sealed cover duly super scribed, along-with separate sealed covers for other MHC(140 ton) and for accessories (Grabs, Spreaders, C-Hooks) duly super scribed and these covers shall be kept in sealed Envelop – 4.

IPGL reserves the right to split the work order separately for each type of MHC and accessories as per lowest offers.

Name, Designation and Signature of

Name Signature of witness

Tenderer with company seal & date

PRICE SCHEDULE 11 Part II-

For Supply of Spares and Special Tools

(Tender No. IPGL/MHC/2017)

A complete list of spare parts and special tools required for 12000 running hours of operation of the cranes with quantity, unit price and total amount to be paid by the employer shall be given in the following format.

The tenderer shall indicate the place and to what extent the spare parts will be available in India.

A) Spare Parts & Tools

Sl.	Description	Qty	Manufacturer'	Country	CI F price for Imported items or
No.			s Name and	of	ex- Works price for indigenous
			Model		Ite m
				Origin	
			Number		
					Unit rate Total amount
					quoted quoted
					Currency s In Figure s In Words (EURO/ INR)
1.					

INTEGRITY PACT

Between

"India Ports Global Limited, (IPGL)	hereinafter referred to as '	'The Principal''
	And	
1	hereinafter referred to as '	'The Bidder/Contractor''

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for "Design, Manufacture, Supply, Installation, Testing, Commissioning and Guaranteeing the performance of 4 Nos of 100 Ton and 2 NO.s of 140 Ton capacity Mobile Harbour Cranes at Shahid Beheshti Port, Chabahar."

The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relations with its Bidder(s) and/or Contractor(s).

Section 1 – Commitments of the Principal

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles;
 - a. No employee of the Principal, personally or through family members will be in connection with the tender for, or the execution of a contract, demand, take a promise for or accept for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
 - c. The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there will be a substantive suspicious in this regard, the Principal will inform the Chief Vigilance Officer and in addition can be initiate disciplinary action.

Section 2 - Commitments of the Bidder(s)/Contractor(s)

- (1) The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- (a) The Bidder(s)/Contractor(s) will not directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to. In order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- (b) The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submissions or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the Bidding process.
- (c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/Contractor(s) will not use improperly, for purpose of competition, or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details including information contained or transmitted electronically.
- (d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agent/Representatives in India, if any.
 - Similarly the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agent of
 - Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agent of Foreign Supplier" is annexed and marked as Annex-"A".
- (e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of contract

(2) The Bidder(s)/Contractor(s) will not instigate third person to commit offences outlined above or be an accessory to such offences.

Section 3- Disqualification from tender process and exclusion from future contracts.

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take appropriate action.

Section 4 – Compensation for Damages

- (1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor penalty for delays of the Contract value or the amounts equivalents to Performance Bank Guarantee.

Section 5- Previous transgression

- (1) The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any Country conforming to the anti- corruption approach or with any other Public Sector Enterprise in India that could justify his execution from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or appropriate action can be taken.

Section 6-Equal treatment of all Bidders / Contractors / Subcontractors

- (1) The Bidder(s)/ Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- (2) The Principal will enter into agreement with identical conditions as this one with all Bidders, Contractors and Subcontractors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7- Criminal charges against violating Bidder(s) / Contractor(s) /

Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8- Pact Durations

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this Pact as specified above, unless it is discharged / determined by Managing Director, IPGL

Section 9 - Other provisions

- (1) This agreement is subject to Indian Law, Place or Performance and Jurisdiction is the Registered Office of the Principal, i.e., Mumbai.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the reminder of this agreement remains valid. In this case the parties will strive to come to an agreement to their original intentions.

(For and on behalf of

	Principal)
(Office seal)	
Place	
Date	
Witness 1:	
(Name & Address)	
Witness 2:	

Schedule 13 - CHECK LIST

INDIA PORTS GLOBAL LIMITED

Tender: No. IPGL / MHC / 2018

CHECK LIST OF DOCUMENTS TO BE SUBMITTED ALONG WITH TECHNICAL BID.

All the pages of the document submitted under this tender shall be **properly and neatly numbered in serial**, and same shall be reflected in the summary to be
submitted as check list to the offer in the following manner for easy identification
of the documents during evaluation.

Sl.	DETAILS OF DOCUMENTS TO BE SUBMITTED
No.	
1.	A covering letter along with check list giving details of the documents being
	submitted with tender confirming validity of bid for 180 days and submission of
	Earnest Money Deposit- Envelope-1 so super scribed with the contents
	therein.
2.	Earnest Money Deposit as per tender condition- Envelope-2 so super scribed
	with the contents therein.
3.	The tender document is issued in two sets, one being marked as "ORIGINAL"
	and other as "TENDERER'S COPY". Original tender copy shall be returned
	along with the offer (Technical Bid), with each page of it duly signed by the
	authorised person and stamped with company's seal in token of having been
	read and accepted the tender conditions along with Letter of application cum
	Tender form duly signed by the person / persons who is/are competent to sign
	(Annex III of Vol.I of this tender document) and TECHNICAL BID Envelope

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Quality Assurance Plan indicating all activities steps by step at various stage of	
Testing &	
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s per this tender	
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	spare parts, if any and arrangement for after sales service. Tenderer shall
	submit the information as per Schedule 8 (volume-I) of the Tender
	Document.
16.	Statements of deviations as per Schedule 9 (Volume-I) of tender
	document.
17.	List of spare parts as per clause 28 (Volume–II) applicable for 140 Ton
	and 100 Ton cap. As Schedule 10.
	Price Schedule 11 Part – I (A, B & C) and Part – II along with Statement of Price
18.	Adjustment against each deviation, if any.
19.	Details of Warranty Support programme as per Contract Conditions.
	Information regarding any current litigation & MOU/Agreement entered in technical
20.	collaboration (if applicable)
21.	Undertaking to ensure integrity pact as per Schedule 12 of volume I.
22.	Any other details, which shall establish the technical competency and any
	deviation from technical specification
23	Non Disclosure Agreement Schedule 14.
24	Details of organisation showing hierarchy and key personnel as per Schedule 15 of
<u> </u>	this tender document.
	Details of current commitments indicating order value, period etc as per Schedule 16
25	of this tender document.
	Experience in having executed similar Works completed in Past along with Contract
26	value and other related details as per Schedule 17 of this tender document.
27	EXPERIENCE IN SIMILAR WORKS Schedule 18.

<u>SCHEDULE – 14 Non Disclosure Agreement</u>

THIS AGREEMENT is made this	day of		
Between			
Board of Directors of India Global Po	o rts Limited, i	ncorporated unde	er the Companies
Act (hereinafter called the 'Board' wh	nich expression	n shall, unless	excluded by, or
repugnant to the context, be deemed to	include the Bo	oard of Directors	of India Global
Ports Limited, its successors and assigns)	of the ONE PA	ART	
AND.			
M/s, a Comp	pany incorpora	ated in	
(Country) under the		and having	its office at
(hereinafter" referred to as "Contractor" vassigns) of the part: WHEREAS:	which expression	on shall include i	ts successors and
(1) By Tender No	(the "Tende	er"), offers wei	re invited from
Contractors to for the work of			
the "Project"):			
(2) M/S n	nade an offer	to act the Conti	ractor as per the
terms and conditions of the tender: an	d		
(3) After evaluation of the proposals /	offers receiv	ed, the Board h	as engaged M/s
as the Agence	•		
(Work Title), subject to signing of th	e Confidential	ity Agreement be	etween the Board
and the Contractor and conveyed to	the Contractor	by its	(Work
Order signatory) vide Work Order No	o. dated//	201_ which was	duly accepted by
the Contractor vide its letter dated/	′ <u></u> /201		

NOW, THEREFORE, in consideration of the mutual agreements contained herein, the Contractor covenants with the Board as follows:

- 1. All business, financial, operational and other information and data, of whatever kind and in whatever form, relating to the Board, which is disclosed or made known or comes to the knowledge of the Contractor (including but not limited to its representatives, professional advisors, employees and agents) by the Board or on the Board's behalf (including but not limited to its representatives, advisors, employees and agents) (collectively referred to as "Confidential Information") will be held in complete confidence and will not be used for any purpose other than directly in connection with the scope of services described in the tender.
- The Contractor will not, without the prior written consent of the Board or its
 authorised person/s, disclose or otherwise make available whole or any part of the
 Confidential Information to any third party except in accordance with the terms of
 this Agreement.
- 3. The Contractor will be entitled to copy and circulate the Confidential Information to its only such directors, officers and employees and to such of its professional advisors who are directly concerned with fulfilment of the scope of services as per the terms and conditions of the tender and to whom knowledge of such information is necessary for such purpose. All persons to whom any Confidential Information is disclosed shall treat the same as confidential and use the same solely for due discharge of its obligations under the Scope of Services stated in the tender. The Contractor will be responsible for procuring their compliance with the terms of this Agreement as if they were subject to the same obligations to the Company as the Contractor is subject to hereunder.
- 4. The restrictions, obligations and liabilities contained in this Agreement shall not apply to any information which:
- a) Was already in the public domain at the time of its disclosure to the Contractor by the Board; or subsequently becomes part of the public domain through no breach by the Contractor of its obligation under the Agreement.

- b) is generally available to or accessible by, the public or, after such disclosure, becomes generally available to, or accessible by the public, other than by reason of a breach of any undertaking by the Contractor contained in this Agreement; or
- c) is required to be disclosed by the Contractor by applicable law or regulation or judicial authority, provided that the Contractor agrees, to notify, the Board in writing, duly signed by an authorised signatory, as soon as possible, upon becoming aware of any such requirement and confirming the necessity of the disclosure prior to such disclosure; The Contractor shall promptly notify the Board in writing if any confidential information is required to be disclosed by law or other regulation and will co-operate with the Board regarding the timing and content of such disclosure or any action which the Board may elect to take to challenge the validity of such requirement unless such cooperation exposes the Contractor to claims, losses, damages or other liability for which the Contractor does not receive indemnification from the Board, and the Contractor undertake that any such disclosure shall be the minimum required by the relevant law or regulation in order for the Contractor to comply with its obligations there under.
- 5. The Contractor will not make, or permit its officers, directors, employees and professional advisors to make or procure or solicit or assist any other persons to make, any announcement or disclosure of the Confidential Information without the Board's prior written consent.
- 6. The Contractor and the Board shall individually keep a record of the Confidential Information provided by the Board to it in writing ("Confidential Information"). The Contractor shall, forthwith upon receipt of a written request from the Company or completion of the assignment as per the tender or if the Contractor ceases to act as the Agency for(Work Title) of the Board:

- a) Return to the Board any Confidential Information in the Contractor's possession or control of, or in the possession or control of, any of its employees, agents or professional advisors, together with all copies thereof, and
- b) Expunge all Confidential Information from any computer, word processor or similar device into which it has been programmed by the Contractor or its professional advisors on its behalf.
- c) Not make use of the information, contained in the confidential information for any of its business operations.

The Contractor acknowledges that neither the return of any Confidential Information nor the expunging of any Confidential Information from its records shall release it from its obligations under this Agreement.

- 7. The obligations contained in this Agreement are continuing and, in particular, shall survive the completion of the project.
- 8. The Contractor agrees and acknowledges that the Board may be irreparably harmed by the breach of the terms hereof and damages may not be an adequate remedy and that injunctive relief is an appropriate remedy to protect the rights of a party with respect to its Confidential Information. The Contractor shall be responsible for the breach of any of its covenants and obligations in this Agreement and will indemnify the Board from and against any claims, costs, expenses, losses or damages (including reasonable attorneys' fees) that are actually incurred by the Board and that are directly and solely attributable to the breach by the Contractor of its covenants and obligations in this Agreement. The Contractor further confirms that it is acting in this matter as principal and not as agent for any other person.
- 9. The rights, powers and remedies provided in this Agreement shall be in addition to, and not in substitution for, any other rights, powers and remedies provided by law. No

failure or delay in exercising any right, power or privilege hereunder will operate as a waiver thereof nor will any single or partial exercise of any right, power or privilege preclude any further exercise thereof or the exercise of any other right, power or privilege hereunder. The terms of this Agreement and the Contractor's obligations hereunder may only be amended or modified by written agreement between the Contractor and the Board.'

- 10. This Agreement shall be governed by and construed in accordance with Indian law.
 The parties hereby agree to submit to the jurisdiction of the courts of Mumbai.
- 11. If at any time any term or provision in this Agreement shall be held to be illegal, invalid or unenforceable, in whole or in part, under any rule of law or enactment, such term or provision or part shall to that extent be deemed not to form part of this Agreement, but the enforceability of the remainder of this Agreement shall not be affected.
- 12. This Agreement shall be freely assigned by the Board, with prior written notice to the Contractor, to any person or persons who are substituted in all in the interests or rights or obligations of the Board for the development of the Project.

IN WITNESS WHEREOF, the parties have caused this Non-Disclosure Agreement to be executed by their respective duly authorised officers as of the day and year first hereinabove written.

Authorized Signatory
For M/s
In Present Of
Managing Director on Behalf of the
Board of Directors of
India Ports Global Limited
In Present Of

DETAILS OF KEY PERSONNEL

Details of key personnel involved in administration and execution of the subject work till completion, are to be furnished. The information in this regard should be submitted in below mentioned format and separate sheets may be used to furnish necessary details, if required.

No.	Name in full	Designation	Qualification	Experience
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

CURRENT COMMITMENTS IN HAND

Tenderer should provide necessary information about their current commitments on all Contracts that have been awarded, or for which a 'Letter of Intent' is placed or 'Letter of Acceptance' has been received or for Contracts approaching towards completion and full completion certificate has yet to be issued. The information in this regard should be submitted in below mentioned format and separate sheets can be used to furnish necessary details.

In support of submitted information, it is very essential to submit copies of orders in hand or copies of 'Letter of Intent' / work orders as the case may be.

	Name of the Client	Order number / Reference number & Date	Order value	Date of Completion as per the Order	Estimated date of Completion
1.					
2.					
3.					
4.					

DETAILS OF WORKS COMPLETED IN PAST

Tenderer should provide necessary information about Works completed during last 03 years for which completion certificate or performance certificate is already issued by the Client. The information in this regard should be submitted in below mentioned format and separate sheets can be used to furnish necessary details.

In support of submitted information, it is very essential to submit copies of orders executed in past along with satisfactory performance certificates issued by Clients.

No	Name of the Client	Order number or Reference number & Date	Order value	Date of Completion as per the Order	Actual date of Completion
1.					
2.					
3.					
4.					

EXPERIENCE IN SIMILAR WORKS

Reference: -1

The information about experience in similar Works should be submitted in below mentioned format and separate sheets must be used for each reference.

You are advised to furnish details about similar works as stipulated in the Tender. In support of submitted information, it is very essential to submit copies of order/s executed along with satisfactory performance certificate issued by Client/s.

1.	Client's Name:	
2.	Contract / Order number	
	and Date	
3.	Name of the Contract:	
4.	Client's Address in full:	
5.	Name of Client's	
	Contact person:	
6.	Client's Telephone	
	Number/s	
7.	Client's fax number	
8.	Contract / Order value	
9.	Completion period as per	
	Contract / Order	
10.	Date of Actual completion	
	Of Contact / Order	
11.	Brief details of Contract/Order	

EXPERIENCE IN SIMILAR WORKS

Reference: -2 (if any)

1.	Client's Name:	
2.	Contract / Order number and Date	
	Name of the Contract:	
4.	Client's Address in full:	
5.	Name of Client's	
	Contact person:	
6.	Client's Telephone Number/s	
7.	Client's fax number	
8.	Contract / Order value	
9.	Completion period as per	
	Contract / Order	
10.	Date of Actual completion	
	of Contact / Order	
11.	Brief details of Contract/Order	

RFP - VOLUME II

TECHNICAL SPECIFICATIONS FOR EQUIPMENT FOR MOBILE HARBOUR CRANES

(For Shahid Beheshti Port (Chabahar)

FEBRUARY 2018

PART 1 – GENERAL

1.1 Introduction

This Specification is for the design, fabrication, construction, delivery, installation, commissioning and testing of various container handling equipment for Shahid Beheshti Port (Chabahar). The equipment will be used for the loading and unloading of container on vessels of approximately 8,600 TEU capacities and for container handling operations in the yard.

1.2 Environmental Conditions

The port equipment will be exposed to an extremely corrosive marine atmosphere with particularly high salinity, high temperatures and humidity. In addition, these regions of the Persian Gulf and Oman Sea are subjected to frequent dust and haze storms and periodic seismic activity.

The Manufacture shall design and construct the cranes to ensure reliable operation under the following site conditions: -

1.3 Temperatures (measured in shade)

Ambient Air Temperatures: Maximum 50°C

Minimum 0°C

1.4 Relative Humidity

Maximum relative humidity (RH) 99%

1.5 Rainfall

Mean annual (17 years) 171mm

Max annual (1976) 494mm

Min annual (1962) 1mm

Intensity 20mm/20 min

4	_	WW79	•
ı	.h	Win	as

Wind strength and direction variable through the seasons:

Maximum operating wind speed 20m/s

Maximum storm winds 44m/s (gust)

1.7 Seismic

Seismic Design Data (minimum values):

Horizontal acceleration (50 year) 0.34g

0.17g

Vertical (50% x horizontal)

It is further clarified that vibration period of quay: -X direction: 0.33 s

-Y direction: 0.45 s

The design criteria are to protect structure. More over The crane structure shall be designed to withstand earthquake loads in accordance with the Japanese Building Code for seismic zone applicable to the site. The code shall be used for determining the seismic acceleration. Equivalent standards are also applicable.

140 TONS MOBILE HARBOUR CRANES

1.0 This specification covers the design, manufacturing, supply, installation, inspection, testing, commissioning and guaranteeing the performance at site of 140 Tons Mobile Harbour Cranes.

IPGL intends to procure 2 (two)Nos. of Mobile Harbour Cranes of each 140 Tons capacity for handling break bulk / dry bulk / general / container cargo at Chabahar Port Multipurpose terminal. The following specifications are determined for 2 units of mobile harbour cranes of 140 Tons capacity, which are going to be installed in the Multi Purpose Terminal in Chabahar Port with environmental conditions stated below. The design and manufacture of these units should comply with the well known standards such as ISO, FEM, IEEE, ASME, IEC, JIS, EN, ECC, AWS, and SIS as applicable.

2.0 Environmental conditions

- Temperature range: 0 to +50°C

- Humidity: relative humidity up to 99%

- Height from sea level: 0 (in one level)

- Environment: Dusty, corroding and salty environment

- Permissible wind speed when the units are working: 72 Km/h (20 m/s)

3.0 Main Conditions

Suggested cranes should be designed for destination country conditions. The cranes must work in the port conditions for continuous 20 hours per day and 7 days of the week. MHCs shall be of approx. 140 Tons capacity. The maximum permissible distributed load on the surface of the quay is 5 tons/m². A separate winch for grabbing is to be provided. The radius of operation should be at least 50m.

4.0 Spreader& Grab

The following equipment shall be supplied for common use of 2x140 T and 4x100 T Mobile Harbour cranes:

- 4.1 Two nos. of main telescopic spreader 40t to handle 20 ft and 40 ft and 45 ft ISO containers.
- 4.2 Two nos. of Grab of minimum 24 cubic meter capacity and Two nos. of Grab of minimum 40 cubic meter capacity.
- 4.3 Two units of special device for handling sheet rolls (C-hook) with 40 ton capacity.

5.0 Auxiliary systems:

The cranes must be equipped with the following systems:

- Fully Localized lubrication system for main parts that need lubrication separately.
- Wind speed alarm system
- All the sub-assemblies should have been manufactured by original and well known companies. For brands other than the enlisted ones, the acceptance of the same will be confirmed by IPGL prior to the end of technical evaluation.
- Appropriate warning lights (rotary or flashing strobes), motion alarms (horn, acoustic alarms), luminous air obstruction lights, emergency shutdowns and other necessary warning lights an alarms.
- Adequate illumination for the working area, driver & operator cabins, machinery & electrical houses.
- Lightning protection system.
- Fire detection and fire alarm system especially in electrical house, machinery house and Operator / Driver cabins.
- All maintenance platforms should have enough space for the repair of equipment and strong enough to support the weight of personnel and equipment together, with suitable access means.
- The lighting system should be fitted on anti-vibration mounts to prevent failure, and according to existing practices and standards. The System should meet any applicable international standard.
- All stairs, walkways, platforms, bolts and nuts should be hot dip galvanized and stairs should have required safety.
- Vertical ladders should not be used for access, as far as possible.
- One spare tyre with ring for each crane should be supplied.
- The manufacturer is bound to mention size, make and technical details of tyres for its crane (along with detail spec. of them including dia, width, layers, etc.)
- The machinery house should be equipped with proper air filter for particles of the inlet air.
- Emergency power supply (UPS) for warning and emergency lights.
- In all necessary locations of E-house, M-house and driver's & operator's cabins fire extinguishers should be installed.
- All of special and standard tools for maintenance & specially those required for engine routine maintenance and its related components must be supplied, as listed by the bidder under **Schedule 10 B of Volume I.**

- Air-conditioning system and electric panel for MHCs should be supplied via AC power supply from the port mains (in parked position). The crane should have provision for shore power supply arrangement and shall be operable in both diesel and electric modes.
- Air compressor for adjusting the tyres pressure and its necessary equipment.
- Fuel tank should be equipped with drain valve and fuel level indicator separately.
- Fuelling must be done from the most suitable location of the crane with easiest access.

6.0 Operator's Cabin (Tower & Lower) or (Operator & Driver):

Each of two cabins must be equipped with the following:

- Air cooling (split type) in the cabin to adjust the temperature around 22°c with standard relative humidity.
- Monitor in the cabin to check the following places with camera (LCD is preferable).
 - 1 Spreader (for fitting the spreader on the container)
 - 2 For travelling
- The cameras should be controllable (with all movements, focus & zoom ability) from the operator's cabin (with a good resolution at night and day).
- Communication system including a public address system consisting a microphone and amplifier together with speakers and 2 walkie-talkie handsets with at least three VHF channels for each crane are needed.
- Maximum acceptable noise level in the cabs: 75 dBA.
- Cabin windows should have wipers and fresh water spraying for cleaning the window to clearly see the crane operation. Further, all the windows should be able to be cleaned manually. All windows should be equipped with auto reset curtains. Window glasses should preferably be tinted safety glass with sunblinds.
- All of loading and operation indications should be displayed on the operator's display monitor.
- Tower cabin bottom glasses shall have guards.

7.0 Crane Control System

- Monitoring system besides of common abilities, should include suitable table and electrical drawings for quick fault tracing
- The logic (Ladder) diagram of PLC control system should be submitted.
- Real time monitoring and recording of main movements (hoisting, slewing, luffing) should be done with PLC.
- The electrical house should be equipped with air-conditioning system and filter for inlet air.
- All joysticks must be equipped with dead man protection system.

8.0 Design Rules

Manufacturer should cover below items with FEM for its design:

- Classification and loading on structures and mechanisms.
- Stress calculations in structures.
- Fatigue calculations and selection of mechanisms component.
- Stability and safety factor against movements by the wind.
- The manufacturer should foresee all the necessary conditions in its design and should give the most compatible design for the mentioned ports environments.
- The manufacturer should carry out the final test.

9.0 Materials and structural steels

All materials for load bearing structures should be weldable low carbon steel and free from defects and also have well-known certificates.

- All materials should confirm to the most applicable specifications of DIN and FEM standard.

10.0 Warning / Caution Instructions

In all the necessary positions and locations of the crane that caution instructions, are needed, a note plate should be installed on that place, warning the personnel in Farsi & English languages (corrosion resistant durable permanent plates).

11.0 Packing

- All equipment must be packed in a way that handling with forklift truck or crane is possible.
- If there is a risk of damage to apparatus during transportation, they shall be disconnected and tagged. All the components shall then be securely packed.
- Equipment shall be adequately packed to withstand at least six months storage at construction site prior to installation and the manufacturer shall recommend any necessary procedures to be imposed during storage.
- Spare parts and tools to be packed separately and clearly marked "spare parts" and "tools" respectively.

12.0 Standard Parts/Equipment Uniformity

- If possible, all the standard group parts / equipment shall be bought or procured from a same sub-supplier and in one brand. For example all of bearings must be bought from SKF or all of electrical motors shall be bought from (x) company.
- All of the equipment that is going to be bought must be bought from the manufacturers given in the maker list. (LOM attached).
- Spare parts & tools shall be packed separately and clearly marked as "spare parts" and "tools" respectively.

13.0 Documentation

The manufacturer should submit the below items in addition to the other stated documents:

- 1. General view of crane (2 Dimensional and 3 Dimensional with related dimensions)
- 2. Electrical house equipment arrangement.
- 3. Machinery house equipment arrangement.
- 4. Catalogue with these information:
 - 4-1) Loading diagram (lifting capacity chart)
 - 4-2) Technical data (working speed: hoisting, slewing, luffing and travelling...)

- 5. Operating user's manual and maintenance manual clearly giving details of preventive/ breakdown maintenance, procedures for removing / reassembling of various sub-assemblies for the main equipment as well as bought out items also indicating spare parts numbers and ordering information should be written in English Languages in soft (CD) & hard (paper) version.
- 6. All equipment should have nameplates.
- 7. All of the Technical specification pages should be signed and stamped.
- 8. The attached L.O.M is indicative.

14.0 Principal Duty

The Harbour Mobile crane shall have not less than 140 Tons lifting capacity under hook at minimum radius, able to handle break bulk / general cargo as well as fully loaded containers from 62000 DWT size ships, along the berth and yards at the Multipurpose Terminal of Port of Chabahar. The cranes' outreach shall be not less than 50m.

15.0 Power pack:

Dual system:

- (i) Diesel-electric with diesel engine with a main three-phase generator.
- (ii) Medium voltage Shore power supply arrangement. The crane to be equipped with 'Automatic Phase Changer'.

Diesel Electric or Diesel hydraulic system is acceptable. Crane shall have provision to operate on shore electric supply (20kv), for which trailing cable of length sufficient for the crane to travel 100m on either side from mid-position, along with cable reel drum to be provided.

16.0 Group Classification of Crane and Components

Authorities, Regulations EN, FEM, DIN, VDE, VDI, IEC, ISO

The following parameters / values shall be indicative only. The capacity parameters for Hoisting, slewing, luffing and travelling as per the proven design model offered

by the manufacturers are acceptable, as long as they are within the range of general industry norms for such capacity cranes.

CRANE CAPACITY		Not less than 140 tons (under hook)
General	MAX. Outreach	Not less than 50 m
	CAP	ACITY
	Heavy Lift	Minimum of 140t up to about
		22 m radius
		Approx. 92t up to about 31 m radius
	General Cargo Handling	radius
		Approx. 56t up to about 45 m radius
		Approx. 72t up to about 27 m radius
	Four Rope Grab Operation	
	Maximum hoisting height on	At minimum radius =
	hook above ground	minimum 51 m and above
Hoisting		At maximum radius =

	minimum 30m and above			
	Minimum hoisting height on	15 1 1		
	hook below ground	15m and above		
	nook below ground			
	OPERATING SPEED			
	empty hook	120 m/min approx		
40 t, Grab mode		approx.50 m/min and above		
	60 ton hook	approx.33 m/min and above		
		appromot in initiation accord		
	144 ton hook	Approx.14 m/min and above		
	Minimum slewing speed			
	(without load)	Approx.1.6 rpm		
	(wanout loud)			
	Minimum slewing speed (to	Approx. 1.3 rpm		
	63 ton hook)			
Slewing	Minimum tangential speed	A may recover 200 mm / mm : m		
	at boom head (without load)	Approx. 280m/min		
	at boom head (without load)			

	Minimum tangential speed	Approx.111 m/min to 186m/min	
	at boom head (with load)		
	Slewing Range	360 deg	
Luffing Maximum luffing speed		approx. 55m/min to 90 m/min	
	Average luffing speed (to 63		
		55m/min approx.	
ton hook)			
Travelling Long Travel		5 Km/h approx.	

The crane and its machinery shall be designed according to the FEM 1.001 (Rules for the Design of Hoisting Appliances) and shall have the following minimum classifications:

Crane Classification

MHC 100T		MHC 140T	
Crane Classification		Crane Classification	
Heavy lift operation 100T on			
hook	A3	Heavy lift operation 140T on hook	A3
General Cargo 65T to 77T on			
hook	A6	General Cargo up to 70T on hook	A6
Four rope operation, 50T	A8	Four rope operation, 50T	A8
Hoist		Hoist	
Heavy lift operation, 100T on			
hook	M5	Heavy lift operation, 140T on hook	M5
General cargo 60T on hook	M7	General cargo 90T on hook	M7
Four rope operation, 50T	M7	Four rope operation, 75T	M7
Slewing Gear		Slewing Gear	
All operation modes	M6	All operation modes	M6
Luffing gear		Luffing gear	
All operation modes	M6	All operation modes	M6
Travelling gear	M4	Travelling gear	M4

Main Dimensions:

Outreach of the boom from crane centreline minimum 50 m or above

Height of boom pivot point above ground minimum 17 m

Height of eye level in tower cab minimum 24 m

The crane shall be designed to work safely and reliably under the following conditions:

Maximum gradient for travelling

- in direction of travel 5% to 6 %

- perpendicular to direction of travel 2% to 2.5 %

17.0 ENGINE:

Appropriately sized direct injection, diesel engine. The Tenderer shall provide proof that the engine shall provide adequate power and torque to the crane while maintaining maximum fuel efficiency, preferably engines from the list indicated in Annex, single heavy duty tropical fin & tube type radiator, engine coolant radiator and transmission oil cooler. To have Automatic Engine shutdown at conditions that might be deemed harmful to the engine e.g. high temperature and low engine oil pressure. Air intake Pre-cleaner is designed to minimize dust intake. To have an on board & External fault diagnostic facility.

All air intake filters to be fitted with sensors to feed PLC system with warning fault messages when clogged. Machine house designed to be able to minimize dust intake.

Diesel Electric or Diesel hydraulic system is acceptable. Crane shall have provision to operate on shore electric supply (20kv), for which trailing cable of length sufficient for the crane to travel 100m on either side from mid-position, along with cable reel drum to be provided.

18.0 Drive System: Prime Mover - Diesel Engine, 4 stroke direct injection.

19.0 Undercarriage:

Adequate Number of axles suitable for the design uniform distributed load of the quay shall be deployed.

All axles to be steerable.

All axles must have level compensation and fitted with differential equalizers.

A pair of twin pneumatic preferably tubeless tyres per axle.

Pneumatic impact wrench for use on nuts (with fast speed nut removal action if possible) completed with hose attachments, accessories, box spanner fitted to a suitable portable compressor.

Wide spacing of wheel axles for optimum stability during travelling.

Automatic central greasing systems as standard Outriggers to be preferably fitted with rollers

20.0 Steering:

Should be capable of performing several steering modes i.e. driving in longitudinal, diagonal direction and also conventional steering or as standard.

21.0 Brakes:

Luffing brake, Hoist brake, slew brake, parking / holding brake; Must be ableto stop automatically in case of power failure.

22.0Tower:

Welded pipe construction /box and beam construction of torsionally rigid design with staircase leading to the tower cabin for access to the upper tower and jib—heel. The tower should be well lit.

23.0 Boom:

Fixed torsion resistant lattice construction with three main chords and consisting of sections (fulcrum section and boom head.) Boom sections connected with flanges. Boom luffing cylinders shall be protected from effects of climatic conditions.

24.0 Ropes and sheaves:

Self-lubricating, low twisting galvanized greased steel ropesfor hoisting, Large diameter rope sheaves with anti-friction bearings. Sheaves made from special steel and the groove surface hardened to increase lifetime of sheave. Hardness Number (Rockwell) to be mentioned by the manufacturer.

25.0 Electrics: The electric equipment to comply with the relevant IEC and EN standards. All wiring and cabling according to relevant DIN/VDE and IEC standards. Load sensing and fault detection central computer

26.0 Propping system:

Two integrated boxes housing four hydraulically operated outrigger beams Manual and automatic operation. Even load distribution in rugged terrain: pot holed yards, climb over rails and raised ground.

27.0 Testing: Crane to be fully erected rigged and load tested prior to handover.

28.0 Spares/tools etc.:

12000 running hours' Spare parts shall be quoted according to the contractual bidding forms of price **Schedule 11 Part - II** and the buyer has the right to exclude/ reduce it, however a comprehensive list of spares parts complete with prices shall be submitted with the tender.

PREFERRED / INDICATIVE MANUFACTURERS FOR MAJOR COMPONENTS FOR THE EQUIPMENTS

Manufacturers List / List of Materials (L. O. M.)

LOM For 100 and 140 tons MHC

DESCRIPTION	MANUFACTURERS	COUNTRY
HOIST, TRAVEL	NORD	GERMANY
LUFFING AND SLEWING AC	LEROY SOMER	FRANCE
ELECTRIC MOTORS	ABB	SWEDEN
	SIEMENS	GERMANY
	WOELFER	GERMANY
	SIEGERLAND	GERMANY
COUPLINGS	FLENDER	GERMANY
	NORD	GERMANY
	PIV	GERMANY
	TECHNODRIVE	ITALY
SLWING, HOIST AND	SEW	GERMANY
LUFFING GEARBOX	NORD	GERMANY
	FLENDER	GERMANY
	P.I.V	GERMANY
	BREVINI	ITALY
	DINAMIC OIL	ITALY
	ZOELLERN	GERMANY
SLWING, HOIST AND	BUBENZER	GERMANY
LUFFING BRAKES	SIEGERLAND	GERMANY
(In diesel-hydraulic crane, brakes are	SIBRE	GERMANY
installed in the gear-box)	BREVINI	ITALY
	DINAMIC OIL	ITALY
	ZOELLERN	GERMANY
ELECTRICAL	SIEMENS	GERMANY
PACKAGE	ABB	GERMANY
	TELEMECANIQUE	FRANCE
	SCHNEIDER	GERMANY
ALL HYDRAULIC PACKAGE	PARKER	ENGLAND

AND EQUIPMENT	REXROTH	GERMANY
	VICKERS	ENGLAND
	BOSCH REXROTH	GERMANY
(Except Hydraulic Cylinder-If not in the	LOTTI	ITALY
product range)	SIGHINOLFI	ITALY
ALL WIRE ROPES	CASAR	GERMANY
	CERTEX	FINLAND
	DIEPA	GERMANY
	TREFIL EUROPE	FRANCE
	REDAELLI	ITALY
	LABBKABAL (OLFLEX)	GERMANY
SPREADER CABLE	SIEMENS	GERMANY
	AEG	GERMANY
	PIRELLI	ITALY
	FAG(INA)	GERMANY
BEARINGS	SKF	SWEDEN
	TNT	JAPAN
	ROTHE ERDE	GERMANY
LIMIT AND PROXIMITY	SIEMENS	GERMANY
SWITCHES	IFM	GERMANY
	TELEMECANIQUE	FRANCE
	SCHNEIDER	GERMANY/FRANCE
	STROMAG	GERMANY
	SIEMENS	GERMANY
TRANSFORMER	ABB	GERMANY/SWEDEN
	TRANSFO	FRANCE
	TESAR	ITALY
	IMEFY	ITALY
	MG	ITALY
FERQUENCY	ABB	GERMANY
INVERTER (Not Applicable In Diesel	SIEMENS	GERMANY
Hydraulic Crane)	LENZE	GERMANY

	AEG	GERMANY
MAIN FEEDING CABLE	SIEMENS (PIRELLI)	GERMANY
	$\mathbf{F} + \mathbf{G}$	GERMANY
	NEXANS	FRANCE
	ELETTROTEK	ITALY
	PIRELLI	ITALY
	VOLVO	SWEDEN
DIESEL ENGINE	BENZ	GERMANY
	MWM	GERMANY
	CUMMINS	USA
	MTU	GERMANY
	MICHLEAN	FRANCE
TIRES	BRIDGESTONE	JAPAN
	DAUNLOOP	GERMANY
	CONTINENTAL	GERMANY
	ВКТ	INDIA
	BROMMA	SWEDEN/ MALASYSIA
SPREADER	SMITS	NETHERLAND
	RAM	UK/CHINA
	STINIS	NETHERLAND/GERMANY
COMPRESSORS	ATLAS COPO	GERMANY
	KAEASER	GERMANY
	SCANCAB	DENMARK
OPERATOR'S CABIN	O.M.BRIEDA	ITALY
	MATEC	GERMANY
	MILLER	GERMANY
	CD CABINE	ITALY
OPERATOR'S CAB AIR	SAMSUNG	JAPAN
CONDITIONING	LINDE	GERMANY
	O-GENERAL	JAPAN
	FUJITSU	JAPAN
	DAIKIN	JAPAN
	MITSUBISHI	JAPAN

	TOSHIBA	JAPAN
	SIEMENS	GERMANY
GENERATOR	AKV	GERMANY
	STAMFORD	UK
GRABS	SMAG	GERMANY
	TGS	NETHERLAND
	VERSTGEN	NETHERLAND
	NEMAG	NETHERLAND

The other brands maybe indicated by the tenderers. However, the acceptance of the same will be subject to confirmation by the tender holder prior to the end of technical evaluation.

100 TONS MOBILE HARBOUR CRANES

1.0 This specification covers the design, manufacturing, inspection, testing and commissioning at site of 100 Tons Mobile Harbour Cranes.

IPGPL intends to procure 4 (four) nos. of Mobile Harbour Cranes of 100 Tons capacity for handling break bulk / dry bulk / general / container cargo at Chabahar Port Multipurpose terminal. The following specifications are determined for 4 units of mobile harbour cranes of 100 Tons capacity, which are going to be installed in the Multi Purpose Terminal in Chabahar Port with environmental conditions stated below. The design and manufacture of these units should comply with the well known standards such as ISO, FEM, IEEE, ASME, IEC, JIS, EN, ECC, AWS, and SIS as applicable.

2.0 Environmental conditions

- Temperature range: 0 to +50°C

- Humidity: relative humidity up to 99%

- Height from sea level: 0

-Environment: Dusty, corroding and salty environment

- Permissible wind speed when the units are working: 72 km/h

3.0 Main Conditions

Suggested cranes should be designed for destination country conditions. The cranes must work in the port conditions for continuous 20 hours per day and 7 days of the week. MHCs shall be of approx. 100 Tons capacity. The maximum permissible distributed load on the surface of the quay is 5 tons/m². A separate winch for grabbing is to be provided. The radius of operation should be at least 50m.

4.0 Spreader& Grab

The following equipment shall be supplied for common use of 2x140 T and 4x100 T Mobile Harbour cranes:

4.1 Two nos. of main telescopic spreader 40t to handle 20 ft and 40 ft and 45 ft ISO containers.

- 4.2 Two nos. of Grab of minimum 24 cubic meter capacity and Two nos. of Grab of minimum 40 cubic meter capacity
- 4.3 Two units of special device for handling sheet rolls (C-hook) with 40 ton capacity.

5.0 Auxiliary systems:

The cranes must be equipped with the following systems:

- Fully Localized lubrication system for main parts that need lubrication separately.
- Wind speed alarm system
- All the sub-assemblies should have been manufactured by original and well known companies.
- Appropriate warning lights (rotary or flashing strobes), motion alarms (horn, acoustic alarms), luminous air obstruction lights, emergency shutdowns and other necessary warning lights an alarms
- Adequate illumination for the working area, driver & operator cabins, machinery & electrical houses.
- Lightning protection system
- Fire detection and fire alarm system especially in electrical house, machinery house an Operator & Driver cabins.
- All maintenance platforms should have enough space for the repair of equipment and strong enough to support the weight of personnel and equipment together, with suitable access means
- The lighting system should be fitted on anti-vibration mounts to prevent failure, and according to existing standards/ dimensions in destination country.
- All stairs, walkways, platforms, bolts and nuts should be hot dip galvanized and stairs should have required safety.
- Vertical ladders should not be used for Access.
- One spare tyre with ring for each crane should be supplied.
- The manufacturer is bound to suggest 3 common sizes of tires for its crane (along with detail spec. of them including dia, width, layers, etc.)
- The machinery house should be equipped with proper filter for particles of the inlet air
- Emergency power supply (UPS) for warning and emergency lights.
- In all necessary locations of E-house, M-house and driver's & operator's cabins fire extinguishers should be installed.
- All of special and standard tools for maintenance & (specially those required for engine and its related components) must be supplied (related tables in questionnaire should be filled).

- Air-conditioning system and electric panel for M.H.Cs should be supplied via AC power supply from the port mains (in parked position). The crane should have provision for shore power supply arrangement and shall be operable in both diesel and electric modes.
- Air compressor for adjusting the tyres pressure and its necessary equipment.
- Fuel tank should be equipped with drain valve and fuel indicator separately.
- Fuelling must be done from the most suitable location of the crane with easiest access.

6.0 Operator's Cabin (Tower & Lower):

Each of two cabins must be equipped with the following:

- Air cooling (split type) in the cabin to adjust the temperature around 22°c with standard relative humidity.
- Monitor in the cabin to check the following places with camera (LCD is preferable).
 - 2 Spreader (for fitting the spreader on the container)
 - 2 For travelling
- The cameras should be controllable (with all movements, focus & zoom ability) from the operator's cabin (with a good resolution at night and day).
- Communication system including a public address system consisting a microphone and amplifier together with speakers and 2 walkie-talkie handsets with at least three VHF channels for each crane are needed.
- Maximum acceptable noise level in the cabs: 75 dBA
- Cabin windows should have wipers and fresh water spraying for cleaning the window to clearly see the crane operation. Further, all the windows should be able to be cleaned manually. All windows should be equipped with auto reset curtains. Window glasses should preferably be tinted safety glass with sunblinds.
- All of loading and operation indications should be displayed on the operator's display monitor.
- Tower cabin bottom glasses shall have guards.

7.0 Crane Control System

- Monitoring system besides of common abilities, should include suitable table and electrical drawings for quick fault tracing
- The logic (Ladder) diagram of PLC control system should be submitted.

- Real time monitoring and recording of main movements (hoisting, slewing, luffing) should be done with PLC.
- The electrical house should be equipped with air-conditioning system and filter for inlet air.
- All joysticks must be equipped with dead man protection system.

8.0 Design Rules

Manufacturer should cover below items with FEM for its design:

- Classification and loading on structures and mechanisms.
- Stress calculations in structures.
- Fatigue calculations and selection of mechanisms component.
- Stability and safety factor against movements by the wind.
- The vendor should foresee all the necessary conditions in its design and should give the most compatible design for the mentioned ports environments.
- The vendor should carry out the final test.

9.0 Materials and structural steels

- All materials for load bearing structures should be weldablelow carbon steel and free from defects and also have well-known certificates.
- All materials should conform to the most applicable specifications of DIN and FEM standard.

10.0 Warning / Caution Instructions

In all the necessary positions and locations of the crane that caution instructions, are needed, a note plate should be installed on that place, warning the personnel in Farsi & English languages (corrosion resistant durable permanent plates).

11.0 Packing

- All equipment must be packed in a way that handling with forklift truck or crane is possible.
- If there is a risk of damage to apparatus during transportation, they shall be disconnected and tagged. All the components shall then be securely packed.
- Equipment shall be adequately packed to withstand at least six months storage at construction site prior to installation and the vendor shall recommend any necessary procedures to be imposed during storage.

- Spare parts and tools to be packed separately and clearly marked "spare parts" and "tools" respectively.

12.0 Standard Parts/Equipment Uniformity

- If possible, all the standard group parts / equipment shall be bought or procured from a same sub-supplier and in one brand. For example all of bearings must be bought from SKF or all of electrical motors shall be bought from (x) company.
- All of the equipment that is going to be bought must be bought from the manufacturers given in the maker list. (attached)
- Spare parts & tools shall be packed separately and clearly marked as "spare parts" and "tools" respectively.

13.0 Documentation

The vendor should submit the below items in addition to the other stated documents:

- 1. General view of crane (2 Dimensional and 3 Dimensional with related dimensions)
- 2. Electrical house equipment arrangement.
- 3. Machinery house equipment arrangement.
- 4. Catalogue with these information:
 - 4-1) Loading diagram (lifting capacity chart)
 - 4-2) Technical data (working speed: hoisting, slewing, luffing and travelling,...)
- 5. Operating user's manual and maintenance manual clearly giving details of preventive / breakdown maintenance, procedures for removing / reassembling of various sub-assemblies for the main equipment as well as bought out items also indicating spare parts numbers and ordering information should be written in Farsi or English Languages in soft (CD) & hard (paper) version.
- 6. All equipment should have nameplates.
- 7. All of the Technical specification pages should be signed and stamped.
- 8. This technical specification (including 13 items) and its attached L.O.M are fixed conditions and the manufacturer is bond to follow them exactly unless the buyer otherwise requires.

14.0 Principal Duty

The Harbour Mobile crane shall have not less than 100 Tons lifting capacity under hook at minimum radius, able to handle break bulk / general cargo as well as fully loaded containers from 62000 DWT size ships, along the berth and yards at the Multipurpose Terminal of Port of Chabahar. The cranes' outreach shall be not less than 50m.

15.0 Power pack:

Dual system: (i) Diesel-electric with diesel engine with a main three-phase generator.

(ii) Medium Voltage Shore power supply arrangement. The crane to be equipped with

16.0 Group Classification of Crane and Components

Authorities, Regulations EN, FEM, DIN, VDE, VDI, IEC, ISO

The following parameters / values shall be indicative only. The capacity parameters for Hoisting, slewing, luffing and travelling as per the proven design model offered by the manufacturers are acceptable, as long as they are within the range of general industry norms for such capacity cranes.

CRANE CAPACITY		Not less than 100 TONS (under hook)
General	MAX. Outreach	Not less than 50 m
	CAI	PACITY
		Minimum of 100t at 20 m
	Heavy Lift	no dive (common)
		radius (approx)
		63t up to 31 m radius
	General Cargo Handling	(approx)

^{&#}x27;Automatic Phase Changer'.

		39t up to 45 m radius
		(approx)
		70t up to 20 m radius
	Four Rope Grab Operation	(approx)
	Maximum hoisting height on	At minimum radius = minimum
	hook above ground	40 m and above
Hoisting		At maximum radius =
		minimum 28m and above
	Minimum hoisting height on	10m and above
	hook below ground	Tom and above
	OPERA	FING SPEED
	empty hook	120 m/min (approx)
	40 t, Grab mode	50 m/min and above
	60 t on hook	33 m/min and above
	100 4 25 11-	16 m/min and there
	100 t on hook	16 m/min and above
	Minimum slewing speed	1.6 rpm (approx)

(without load) **Slewing** Minimum slewing speed (to 1.3 rpm (approx..) 63 t on hook) Minimum tangential speed 280m/min (approx..) at boom head (without load) Approx.111 m/min to Minimum tangential speed 186m/min at boom head (with load) Slewing Range 360 deg (approx..) Maximum luffing speed approx. 55m/min to 90 m/min Luffing Average luffing speed (to 63 55m/min (approx..) t on hook) **Travelling** Long Travel 5 Km/h (approx..)

The crane and its machinery shall be designed according to the FEM 1.001 (Rules for the

Design of Hoisting Appliances) and shall have the following minimum classifications:

Crane Classification

MHC 100T		MHC 140T	
Crane Classification		Crane Classification	
Heavy lift operation 100T on			
hook	A3	Heavy lift operation 140T on hook	A3
General Cargo 65T to 77T on			
hook	A6	General Cargo upto 70T on hook	A6
Four rope operation, 50T	A8	Four rope operation, 50T	A8
Hoist		Hoist	
Heavy lift operation, 100T on			
hook	M5	Heavy lift operation, 140T on hook	M5
General cargo 60T on hook	M7	General cargo 90T on hook	M7
Four rope operation, 50T	M7	Four rope operation, 75T	M7
Slewing Gear		Slewing Gear	
All operation modes	M6	All operation modes	M6
Luffing gear		Luffing gear	
All operation modes	M6	All operation modes	M6
Travelling gear	M4	Travelling gear	M4

Main Dimensions:

Outreach of the boom from crane centreline minimum 50 m

Height of boom pivot point above ground minimum 16.5 m

Height of eye level in tower cab minimum 24.0 m

The crane shall be designed to work safely and reliably under the following conditions:

Maximum gradient for travelling

- in direction of travel 5 % to 6 %

- perpendicular to direction of travel 2 % to 2.5 %

17.0 ENGINE:

Appropriately sized direct injection, (Normal engine instead of turbocharged to be asked) diesel engine. The Tenderer shall provide proof that the engine shall provide adequate power and torque to the crane while maintaining maximum fuel efficiency, preferably engines from the list indicated in Annex..., single heavy duty tropical fin & tube type radiator, engine coolant radiator and transmission oil cooler. To have Automatic Engine shutdown at conditions that might be deemed harmful to the engine e.g. high temperature and low engine oil pressure. Air intake Pre-cleaner is designed to minimize dust intake. To have an on board & External fault diagnostic facility.

All air intake filters to be fitted with sensors to feed PLC system with warning fault messages when clogged. Machine house designed to be able to minimize dust intake.

Diesel Electric or Diesel hydraulic system is acceptable. Crane shall have provision to operate on shore electric supply (20kv), for which trailing cable of length sufficient for the crane to travel 100m on either side from mid-position, along with cable reel drum to be provided.

18.0 Drive System: Prime Mover - Diesel Engine, 4 stroke direct injections preferably turbocharged.

19.0 Undercarriage:

Adequate Number of axles suitable for the design uniform distributed load of the quay shall be deployed.

All axles to be steerable.

All axles must have level compensation and fitted with differential equalizers.

A pair of twin pneumatic preferably tubeless tyres per axle.

Pneumatic impact wrench for use on nuts (with fast speed nut removal action if possible) completed with hose attachments, accessories, box spanner fitted to a suitable portable compressor.

Wide spacing of wheel axles for optimum stability during travelling

Automatic central greasing systems as standard Outriggers to be preferably fitted with rollers

- **20.0 Steering:** Should be capable of performing several steering modes i.e. driving in longitudinal, diagonal direction and also conventional steering or as standard.
- **21.0 Brakes:** Luffing brake, Hoist brake, slew brake, parking / holding brake; Must be able to stop automatically in case of power failure.
 - **22.0 Tower:** Welded pipe construction /box and beam construction of torsionally rigid design with staircase leading to the tower cabin for access to the upper tower and jib heel. Should be well lit.
- **23.0 Boom:** Fixed torsion resistant lattice construction with three main chords and consisting of sections (fulcrum section and boom head.) Boom sections connected with flanges. Boom luffing cylinders shall be protected from effects of climatic conditions.
- **24.0 Ropes and sheaves:** Self-lubricating, low twisting galvanized greased steel ropesfor hoisting, Large diameter rope sheaves with anti-friction bearings. Sheaves made from special steel and the groove surface hardened to increase lifetime of sheave.. Hardness Number (Rockwell) to be mentioned by the manufacturer
- **25.0 Electrics:** The electric equipment to comply with the relevant IEC and ENstandards. All wiring and cabling according to relevant DIN/VDE and IEC standards. Load sensing and fault detection central computer
- **26.0 Propping system:** Two integrated boxes housing four hydraulically operatedoutrigger beams Manual and automatic operation. Even load distribution in rugged terrain: pot holed yards, climb over rails and raised ground.
- **27.0 Testing:** Crane to be fully erected rigged and load tested prior to handover.

PREFERRED / INDICATIVE MANUFACTURERS FOR MAJOR COMPONENTS FOR THE EQUIPMENTS

Manufacturers List / List of Materials (L. O. M.)

LOM For 100 and 140 tons MHC

DESCRIPTION	MANUFACTURERS	COUNTRY
HOIST, TRAVEL	NORD	GERMANY
LUFFING AND SLEWING AC	LEROY SOMER	FRANCE
ELECTRIC MOTORS	ABB	SWEDEN
	SIEMENS	GERMANY
	WOELFER	GERMANY
	SIEGERLAND	GERMANY
COUPLINGS	FLENDER	GERMANY
	NORD	GERMANY
	PIV	GERMANY
	TECHNODRIVE	ITALY
SLWING, HOIST AND	SEW	GERMANY
LUFFING GEARBOX	NORD	GERMANY
	FLENDER	GERMANY
	P.I.V	GERMANY
	BREVINI	ITALY
	DINAMIC OIL	ITALY
	ZOELLERN	GERMANY
SLWING, HOIST AND	BUBENZER	GERMANY
LUFFING BRAKES	SIEGERLAND	GERMANY
(In diesel-hydraulic crane, brakes are	SIBRE	GERMANY
installed in the gear-box)	BREVINI	ITALY
	DINAMIC OIL	ITALY
	ZOELLERN	GERMANY
ELECTRICAL	SIEMENS	GERMANY
PACKAGE	ABB	GERMANY
	TELEMECANIQUE	FRANCE
	SCHNEIDER	GERMANY
ALL HYDRAULIC PACKAGE	PARKER	ENGLAND

AND EQUIPMENT	REXROTH	GERMANY
	VICKERS	ENGLAND
	BOSCH REXROTH	GERMANY
(Except Hydraulic Cylinder-If not in the	LOTTI	ITALY
product range)	SIGHINOLFI	ITALY
ALL WIRE ROPES	CASAR	GERMANY
	CERTEX	FINLAND
	DIEPA	GERMANY
	TREFIL EUROPE	FRANCE
	REDAELLI	ITALY
	LABBKABAL (OLFLEX)	GERMANY
SPREADER CABLE	SIEMENS	GERMANY
	AEG	GERMANY
	PIRELLI	ITALY
	FAG(INA)	GERMANY
BEARINGS	SKF	SWEDEN
	TNT	JAPAN
	ROTHE ERDE	GERMANY
LIMIT AND PROXIMITY	SIEMENS	GERMANY
SWITCHES	IFM	GERMANY
	TELEMECANIQUE	FRANCE
	SCHNEIDER	GERMANY/FRANCE
	STROMAG	GERMANY
	SIEMENS	GERMANY
TRANSFORMER	ABB	GERMANY/SWEDEN
	TRANSFO	FRANCE
	TESAR	ITALY
	IMEFY	ITALY
	MG	ITALY
FERQUENCY	ABB	GERMANY
INVERTER (Not Applicable In Diesel	SIEMENS	GERMANY
Hydraulic Crane)	LENZE	GERMANY

	AEG	GERMANY
MAIN FEEDING CABLE	SIEMENS (PIRELLI)	GERMANY
	$\mathbf{F} + \mathbf{G}$	GERMANY
	NEXANS	FRANCE
	ELETTROTEK	ITALY
	PIRELLI	ITALY
	volvo	SWEDEN
DIESEL ENGINE	BENZ	GERMANY
	MWM	GERMANY
	CUMMINS	USA
	MTU	GERMANY
	MICHLEAN	FRANCE
TIRES	BRIDGESTONE	JAPAN
	DAUNLOOP	GERMANY
	CONTINENTAL	GERMANY
	ВКТ	INDIA
	BROMMA	SWEDEN/ MALASYSIA
SPREADER	SMITS	NETHERLAND
	RAM	UK/CHINA
	STINIS	NETHERLAND/GERMANY
COMPRESSORS	ATLAS COPO	GERMANY
	KAEASER	GERMANY
	SCANCAB	DENMARK
OPERATOR'S CABIN	O.M.BRIEDA	ITALY
	MATEC	GERMANY
	MILLER	GERMANY
	CD CABINE	ITALY
OPERATOR'S CAB AIR	SAMSUNG	JAPAN
CONDITIONING	LINDE	GERMANY
	O-GENERAL	JAPAN
	FUJITSU	JAPAN
	DAIKIN	JAPAN
	MITSUBISHI	JAPAN

	TOSHIBA	JAPAN
	SIEMENS	GERMANY
GENERATOR	AKV	GERMANY
	STAMFORD	UK
GRABS	SMAG	GERMANY
	TGS	NETHERLAND
	VERSTGEN	NETHERLAND
	NEMAG	NETHERLAND

The other brands maybe indicated by the tenderers. However, the acceptance of the same will be subject to confirmation by the tender holder prior to the end of technical evaluation.