

(Tender No. IPGPL / Yard Cranes / 2017)

CLARIFICATIONS PERSUANT TO PRE-BID MEETING HELD ON 16 JANUARY 2017 FOR FOUR LOTS i.e. YARD CRANES, REACH STACKERS & EMPTY CONTAINER HANDLERS, TERMINAL TRACTOR TRAILERS AND FORKLIFTS.

YARD CRANES

Sr. No.	Volume-I Clause No.	Page No.	Tenders Specification Requirements	Queries	Clarification From IPGPL
1.	GLOBAL TENDER NOTICE IPGPL for YARD cranes Sl no ii- Earnest Money deposit		US Dollars 89000/- (US dollars Eighty Nine Thousand Only) or equivalent in Euros, Indian Rupees 60, 60,000/- (INR Sixty Lakhs Sixty Thousands Only) in favour of IPGPL in the form of Bank Guarantee, as per Annex-II of Tender Document (Vol-I), from any Nationalised or Scheduled Bank having its branch at Mumbai OR Demand Draft of above said amount in favour of IPGPL payable at Mumbai.	Due the still valid US sanctions against Iran, German banks are not prepared to give BG for supplies to Iran, requirement of EMD to be waived. Please consider same	Tender Condition Prevails Equivalent Euros 83000/- (Euro eighty three thousand) in form of B.G. or Demand Draft (D.D) as per tender condition is acceptable.

2.	GLOBAL TENDER NOTICE IPGPL for YARD cranes SI no vi Due date of submission of tender document		On or before 15th February 2017 up to 1500 hrs at the office of the India Ports Global Pvt Ltd,,4th Floor, NirmanBhavan, M.P. Road, Mazgaon, Mumbai-400010 .	In view of this tender requiring in-depth study and making detailed offer, werequest you to kindlyextend due date for submission of tender by at least 4 weeks, and make it up to 15 th March 2017,. Please consider the same.	Agreed. Revised Date 28th February
3.	Minimum Eligibility Criteria (MEC)-2.1.1		Capacity and capability- For 60 Ton Capacity Rough-Terrain (RT) Yard Cranes: The tenderer should have supplied at least three (3) nos. of Yard Cranes Rough-Terrain (RT) with minimum 60 ton Lifting Capacity under hook during the last seven (07) years.	We request you to kindly change description from “Rough Terrain crane” to “All Terrain Crane” and manufacturing standard as EN 13000 to ensure internationally acceptable quality. It will allow all internationally reputed company to participate and will ensure more competitive offers. Further Liebherr has supplied 50 ton All Terrain cranes to Iran Port recently and has been accepted	All terrain crane is also acceptable.

	<p>2.12- CONTRACT WORK AND CONTRACT PRICE:</p>		<p>2</p> <p>2.12.1 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.</p> <p>2.12.2 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.</p> <p>2.12.3 The Scope of Works, under this contract is as mentioned</p>	<p>Noted</p> <p>At employer's site, during erecting and commissioning of the cranes, we will provide only Service Engineer services and all the facilities, like manpower, craneage, test loads, slings, workshop tools, wooden blocks etc. and also necessary pass has to be provided and arranged by IPGPL free of cost.</p> <p>Our scope of supply will cover design,</p>	<p>Tender Condition Prevails. The Contractor is responsible for arranging for man and machinery for assembly, testing and commissioning and other works related to the contract. Assistance for entry passes shall be provided by IPGPL.</p> <p>Tender Condition Prevails.</p>
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			<p>below;“Design, Manufacture Supply, Installation, Testing, Commissioning and Guaranteeing the performance of 3 Nos. of All-Terrain 100 Ton. Capacity and 3 Nos. of Rough-Terrain 60 Ton. Capacity Yard Cranes atShahidBeheshti Port, Chabahar, Islamic Republic of Iran.”Contract Price: Price shall be inclusive of all charges for Design, Manufacture, Transportation including Transit/Marine and other 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 IPGPL personnel, Cost of O & M Manuals and Training Manuals as per</p>	<p>manufacture supply, testing at plant, transport to German port, shipmentCFR Iran port and at siteService Engineer servicesduring erecting and commissioning. The final load test at employers site on 2-3 preselected loads on practically possible parameters and within ordered configuration is to be treated as trial run and handing over of crane after such load test to be considered as a final acceptance by IPGPL.</p> <p>Please note that due to sanctions it is not possible to provide the Incoterm CIF. CFR would be possible.</p> <p>We would provide warranty visits whenever required on call basis. Warranty duration is, mentioned at the place of warranty clause. O & M manuals are a part of supply and would be included in the cost of the machine.</p>	<p>Tender Condition Prevails</p> <p>Tender Condition Prevails</p> <p>Tender Condition Prevails</p>
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			<p>Contractual Conditions, cost of the Warranty support service during 2 years guarantee/warranty period along with comprehensive mandatory AMC for first (2) two years (Including Spare-parts), but excluding the cost of spare-parts/tools listed in schedule 15 which is optional on the part of IPGPL as per Schedule of price i.e. Schedule 11 (Volume I) and all other incidental charges for the execution of the Contract .</p> <p>2.12.4 Contractors shall arrange for training of 2 Officers of the Employer for training on PLC, Drives and Crane Control System and Crane Monitoring System at Contractor's works. This training shall be conducted by the manufacturer's qualified and experienced personnel while carrying</p>	<p>As the cranes offered are not production machines, being used continuously, we gives rates on per day basis, plus rates for travel days and all other relevant expenses like air ticket, hotel, local transport etc. We charge you for the visit days as and when called for services. However, these rates can be given before warranty is over due to change in rates each year.</p> <p>We will provide necessary training to 2 IPGPL personnel for 5 working days at our plant, during the inspecting and testing at our plant. During such</p>	<p>Tender Condition Prevails</p>
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			<p>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. Cost for the same is deemed to be included in the CIF Price of the equipment (New Yard Cranes).Tenderer are required to quote in Price Schedule 11, part II for all the spare parts & Tools which is optional on part of IPGPL and not considered for evaluation of the bids, as per Clause 32 A, B & C Spares for 60 ton Capacity and Clause 18,19 & 20 for 100 ton Capacity Yard Cranes in Volume II of the tender. However, IPGPL reserves the right to review the same at the time of award of contract to the successful tenderer. Spare</p>	<p>training and inspection, we will provide accommodation close to our plant, airport transfers and pick and drop from hotel to plant.</p> <p>We would be providing the cost of recommended spares parts lists for 2 years of operation after the warranty period. The price cannot remain firm for two years, as every year the price got revised, and we do not have any control on the same. the spare parts can be procured along with the crane only as the parts price quoted are on ex-works basis.</p> <p>Please note that due to sanctions it is not possible to provide the Incoterm CIF. CFR would be possible.</p>	<p>Tender Condition Prevails. 5 days training is essential for 2 officers. Rest refer clause 3.24.2.</p> <p>Tender Condition Prevails(Kindly refer price schedule)</p>
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			<p>Parts/Tools as listed in respective schedule of tender are optional and not to be considered for evaluation of the bid. However, the bidder has to confirm that prices quoted for spares and tools will remain valid for 2 years from date of Final Acceptance.</p>		
4.	<p>Clause 2.15.5, 2.15.6, 2.15.7, 2.15.8</p>		<p>Copies of order</p>	<p>Due to secrecy agreements with our customers, we do not prefer to submit the respective order copies, but we will mention the year of supply, customer name, details, models etc., for your reference, and would also provide a worldwide exhaustive population list of the model offered.</p>	<p>Tender Condition Prevails. Documentary evidence is required as per Minimum Eligibility Criteria. While submitting the order copies, price related information may not be disclosed.</p>
5.	<p>2.16.1 i, ii</p>		<p>CIF cost of the equipment</p>	<p>Please note that due to sanctions it is not possible to provide the Incoterm CIF. CFR would be possible.</p> <p>As per Incoterms 2010 price basis CFR “it requires the seller to clear the goods for export, where applicable. However, the seller has no obligation to clear the goods for import, pay any import duty or carry out any import, customs</p>	<p>Tender Condition Prevails</p>

				formalities”	
6.	General Conditions of Contract-3.4		Engineer In charge and his representative	Revoke of any decision should be with mutual consent. If mutual agreement not reached, original terms will prevail.	Tender Condition Prevails
7.	3.9		CUSTOMS DUES, PORT DUES etc.	We would only provide the CIF Iran port price. All The formalities at the Iran port after the arrival of the machine would be under the scope of IPGPL. The customs clearance, local transport, unloading at site etc.is to be done by IPGPL	Tender Condition Prevails It is clarified that all expenses towards registration of Agreement / Contract shall be on account of the selected bidder. Bidder should factor all expenses and duties related their respective country of export in their price bid.
8.	3.9.4		Road , Tax Registration and Insurance	We do not do the road registration; it is under scope of the IPGPL.	The customs duty / related taxes (if any payable in Iran) only related to those items/ equipment appearing in the Price Schedule, shall be initially borne by the contractor and later reimbursed on actual by IPGPL, based on production of relevant proof. The Bidder shall quote their CIF prices inclusive of all taxes and duties related to their country of export. The Bidder shall exclude from his Price only the custom duty

					<p>/ related taxes (if any payable in Iran) for the items/ equipment appearing in the Price Schedule.</p> <p>These taxes/ duties related to Iran shall be initially borne by the bidder and later reimbursed on actual by IPGPL, based on production of relevant proof.</p>
9.	3.11		Packing and Marking for Shipment	One consolidated packing list mentioning dimension and weight of all the packages with collie no would be provided crane wise.	Tender Condition Prevails
10.	3.12		Completion period of work – Total Completion period of 9 months from LC date	Please note that the delivery time is FOB shipment date and starts from the day of the export approval by the BAFA The action on approval from BAFA starts only after receipt of workable letter of Credit.	Tender Condition Prevails
11.	3.13		Rates and amount include all charges – CIF Price	Only CFR Prices possible	Tender Condition Prevails
12.	3.18		Contract Document Mutually Explanatory-explanation of Engineer In Charge	It should be with mutual consent. If mutual agreement not reached, original terms will prevail.	Tender Condition Prevails
13.	3.20		Contractors Equipment	We will only provide Service Engineer services during erecting commissioning	Tender Condition Prevails

				and warranty calls, All the facilities and equipment's has to be provided by IPGPL free of cost	
14.	3.21		Existing Services	We are not involved in any kind of Site work, so this clause would not be applicable to us.	Tender Condition Prevails. Though there is no site erection, while offloading/parking any damage occurring shall be responsibility of the bidder.
15.	3.22		Labour	We will only provide Service Engineer services during erecting commissioning and warranty calls. All the facilities and equipment's, manpower skilled and unskilled etc. has to be provided by IPGPL free of cost	Tender Condition Prevails
16.	3.23		Plant & Equipment	We will only provide Service Engineer services during erecting commissioning and warranty calls. All the facilities and equipment's, manpower skilled and unskilled etc. has to be provided by IPGPL free of cost	Tender Condition Prevails
17.	3.24		Inspection and testing of work at contractors and sub-contractors premises	The offered cranes are line product and are on continuous manufacturing. Once, an order is received, one of the cranes under manufacturing is allocated to this order. Hence, stage inspection is practically not possible. Similarly, inspection at subcontractors and OEM	Agree. However IPGPL will not appoint TPIA. In this regard clause 3.24.8 is revised and the cost of TPIA is to be borne by contractor and not IPGPL. Also TPIA has to be appointed by the contractor at his cost. 1. Before dispatch certification:

			<p>supplier's premises is not possible.</p> <p>The inspection at contractors work would be limited to the load test on 2-3 preselected load parameters on practically possible parameters, within ordered configuration.</p> <p>The third party inspection would be limited to the pre dispatch inspection only as they will witness, the materials as per scope of supply, painting of the crane and will sign the ready to ship document. The cost of such inspection would be included into our CIF price. In Germany. There are world renowned TPIA's specially meant for inspection of such equipment's and we have an approved list of the same, which would be provided to you in time. The name of the TPIA provided by you is not responsible and equipped for this kind of inspection so please include the name of TUV SUD who would be responsible for such inspection.</p>	<p>For Load test before dispatch, the contractor at his own cost is required to submit a certificate from Third Party Inspection Agency (should be a reputed international accredited agencies) to IPGPL certifying that the equipment is meeting the technical requirements of the tender.</p> <p>2. On site certification (Required only if cranes are assembled on site): If cranes are assembled on site then contractor at his own cost is required to submit a certificate from Third Party Inspection Agency (should be a reputed international accredited agencies) to IPGPL certifying that the equipment is meeting the technical requirements of the tender</p>
18.	3.24.2	Duration of stay of inspection and testing at work of contractor	The duration of stay during inspection at our plant will be 5 working days.	Tender Condition Prevails. 5 days training is acceptable for 2 officers. Rest refer clause 3.24.2.

19.	3.25		Testing of equipment at contractor and employer's site	<p>The overload test of 10 % can be shown at contractor's plant but as it requires bypass of safety system the same, cannot be performed at employers' site.</p> <p>We do not perform any trial run, the final load test at employer's site on 2-3 preselected load parameters on practically possible parameters, within ordered configuration, would be the handing over procedure and would be considered as a final acceptance by IPGPL. At employer's site, during erecting and commissioning of the cranes, we will provide service engineer services and all the facilities, like manpower, carnage, test loads, slings, workshop tools, necessary pass all has to be arranged by IPGPL free of cost.</p>	Tender Condition Prevails.
20.	3.26		Drawings	This drawings asked by you is a part of the Operation and maintenance manual and will be provided along with the crane,	Tender Condition Prevails.

21.	3.27		<p>TEST on completion at employers site</p>	<p>The final load test at employer’s site on 2-3 preselected load parameters on practically possible parameters, within ordered configuration, would be the handing over procedure and would be considered as a final acceptance by IPGPL. At employer’s site, during erecting and commissioning of the cranes, we will provide only service engineer services and all the facilities, like manpower, carnage, test loads, slings, workshop tools etc. and necessary pass all has to be provided and arranged by IPGPL free of cost. The service of service engineer will be for a time of 5 working days for erection, commissioning and load testing and training of your personnel for each crane.</p> <p>The load test would be carried out as per existing EN 13000 standard which is the only responsible standard worldwide, for these kind of cranes</p>	<p>Testing of equipment at Employer’s site is required after equipment assembly, by a third party who should be a reputed international accredited agencies. The cost of onsite testing is to be borne by the bidder only if the equipment is assembled on site.</p>
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22.	3.28		Rejection of Defective work	<p>The load test of the crane as defined above would be final acceptance. Rejection clause does not apply in such equipment.</p>	Tender Condition Prevails.
23.	3.29		Defect Liability Period	<p>Liebherr warrants that the sales good will be free of defects at the time the risk of loss passes to the Buyer.</p> <p>The warranty period will expire either 12 (twelve) months after taking the crane into operation but not exceeding 15 (Fifteen) months after the date of the bill of lading whatever comes first. The Buyer will inform Liebherr of visible defects within 30 days after arrival of the sales good in India, otherwise, the sales good will be considered as free of defects.</p> <p>Liebherr will repair or replace the defective part of the sales good and will bear the costs thereof.</p> <p>No warranty will be accepted for defects or damage resulting from normal wear, insufficient care, improper maintenance, inexperience or negligence. Rust, corrosion, water-damage or other contaminations, chemical or electrolytic processes arising from improper maintenance, insufficient care, inexperience or negligence will not be accepted either.</p> <p>Further claims of the buyer in particular of claims for consequential loss,</p>	Tender Condition Prevails.

				reduction as well as reimbursement for damages which have not occurred on the sales good themselves, will be explicitly excluded.	
24.	3.32		Terms of Payment	We will require you to open in our favor one irrevocable and confirmed letter of credit for 100% of its order value. The LC is to be opened within 30 days of order in favour of Liebherr with a first-class bank in India acceptable to Liebherr. The validity period is Delivery period plus 1 month for negotiation	Tender Condition Prevails.
25.	3.33 & 3.34		Payment of taxes and Levies, No interest on account of delayed payments	This clause is not applicable as our Prices are CFR	Tender Condition Prevails.
26.	3.36		GUARANTEE Period for new yard cranes	<p>We do not provide guarantee we provide warranty. And the terms and conditions are mentioned under the clause Defect liability period.</p> <p>There will be no additional load test, if a part is replaced or repaired during warranty.</p> <p>Compensation for indirect and/or consequential damages and losses are being excluded against each other, such as but not limited to loss of profit, loss of contract, loss of use and the like.</p>	Tender Condition Prevails.

27.	3.37		Commissioning of new equipment	<p>Final load test at employer's site on 2-3 preselected load parameters on practically possible parameters, within ordered configuration, would be commissioning of new equipment and to be considered as a final acceptance by IPGPL. At employer's site, during erecting and commissioning of the cranes, we will provide only service of service engineer and all the facilities, like manpower, carnage, test loads, slings, workshop tools etc. and necessary pass all has to be provided and arranged by IPGPL free of cost. This site work would be performed on each crane for a time of 5 working days only inclusive of training of your personnel and the erecting commissioning and load test.</p> <p>The load test would be carried out as per existing EN 13000 standard which is the only responsible standard worldwide, for these kind of cranes</p>	Tender Condition Prevails.
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28.	3.39		Performance guarantee bond towards performance of contract	Due the still valid US sanctions against Iran, German banks are not prepared to give BG for supplies to Iran, requirement of Performance Guarantee Bond to be waived. Please consider same	Tender Condition Prevails.
29.	3.40		Security Deposit	Due the still valid US sanctions against Iran, German banks are not prepared to give BG for supplies to Iran, requirement of Security Deposit to be waived. Please consider same	Tender Condition Prevails.
30.	3.43		Liquidated Damages	0,5% of CFR cost per week of delay in FOB delivery date (Bill of Lading Date) with maximum ceiling of 5% of CFR cost subject to Force Majeure	Tender Condition Prevails.
31.	3.44		Insurance of work at manufacturers site for new cranes	We cannot provide any insurance after FOB shipment due to reasons explained above	Insurance of work at manufacturer's site for new cranes is optional on part of manufacturers Clause 3.44.1 stands deleted.
32.	3.45		Insurance against third party liability at employer site	This clause is not applicable to this kind of equipment's. As we provide only services of service engineer of the installation and commissioning.	Tender Condition Prevails.
33.	3.49		SETTLEMENT OF DISPUTES	It should be with mutual consent. If mutual agreement not reached, it will be	Tender Condition Prevails.

				subject to Arbitration.	
34.	3.51		ARBITRATION	International arbitration regulations will apply	Tender Condition Prevails.
35.	3.52		Termination of Contract	Only possible with proper reasons acceptable to us and to be without any liability to either side	Tender Condition Prevails.
36.	3.58		Warranty	The warranty period will expire either 12 (twelve) months after taking the crane into operation but not exceeding 15 (Fifteen) months after the date of the bill of lading as detailed above	Tender Condition Prevails.
37.	3.61		Limitation of liability	It is agreed upon by both parties that compensation for indirect and/or consequential damages are being excluded against each other, such as but not limited to loss of profit, loss of contract, loss of use and the like. Our total liability will be limited to 10% of contract FOB value under any clause of tender specification.	Tender Condition Prevails.
38.	Section 5		Comprehensive AMC	A. We have our representative in Iran, Boron Marz, who are equipped to provide you AMC. But it would be	Tender Condition Prevails.

				<p>finalized near to the completion of warranty period on 1 year, and will be based on the prevailing rates of that country that time.</p> <p>B. This equipment's are not production equipment so the availability clause is not applicable for the same.</p> <p>C. We provide only warranty; such maintenance work (like daily maintenance, greasing etc.) of the equipments during the warranty has to be carried out by the purchasers personnel. Whenever required due to any breakdown, our service engineers would render their expert services to solve those problems.</p>	<p>Tender Condition Prevails.</p> <p>Tender Condition Prevails. Point No 5.2- AMC Duration the contract covers a mandatory AMC period of 2 years which would be coterminous with the defect liability period.</p>
39.	Schedule 11		Format Of price Schedule –part 1A-no's of 100 ton All terrain crane	Comprehensive AMC should not be a part of evaluation criteria, as we provide per diem rates and it is subjected to revision every financial year. The rates would be provided at the completion of warranty period.	Tender Condition Prevails.
40.	Schedule 11		Format Of price Schedule –part 1(Total A & B)-no's of 100 ton All terrain crane	Both the machines are of different tonnage class and our submission will be not to be assessed together. Please consider.	Tender Condition Prevails.

				Also please modify the format to take out AMC charges	
41.	Date of submission and opening & 2.2.1	2	Global Tender Notice	Due date for submission of Tender Document	On or before 28th February 2017 up to 1500 hrs at the office of the India Ports Global Pvt Ltd.,4th Floor, Nirman Bhavan, M.P. Road, Mazgaon, Mumbai-400010 .
				Due date for opening of Tender Document	On 28th February 2017 at 1530 hrs. At Conference Hall, India Ports Global Pvt Ltd, 4th Floor, Nirman Bhavan, M.P. Road, Mazgaon, Mumbai-400010.
42.	2.1.1	4	Instruction to Tenderer - MEC	<p>Minimum Eligibility Criteria</p> <p>Financial Standing:</p> <ol style="list-style-type: none"> 1. The average annual financial turnover of the tenderer over the past three years shall be at least US Dollars 8,900,000 (US Dollars Eight million and Nine Hundred Thousand only) or 2. Indian Rupees 60, 00, 00,000. (Rupees Sixty crores only) 	<p>Minimum Eligibility Criteria</p> <p>Financial Standing:</p> <ol style="list-style-type: none"> 3. The average annual financial turnover of the tenderer over the past three years shall be at least US Dollars 8,900,000 (US Dollars Eight million and Nine Hundred Thousand only) or 4. Indian Rupees 60, 00, 00,000. (Rupees Sixty crores only) or 5. Euros 8,300,000 (Eight Million & Three Hundred Thousand)

Volume-I of TENDER NO : IPGPL/YARD CRANES/2017

Sl. No	Clause No.	Page No.	Tenders Specification Requirements	Queries	Clarification from IPGPL
1	2.1.1		b. Experience: The tenderer should be in the business of Supplying and Commissioning of Yard Cranes, at least for the last seven (07) years.	we suggest to the confirmation by providing the One Order Copy as evidence	Documentary evidence to meet the MEC criteria is sufficient.
2	2.11.1		STAMP DUTY & OTHER EXPENSES :	All the tax should be paid by employer, as a manufacturer, we only supply our equipment's without tax.	<p>Tender Condition Prevails</p> <p>It is clarified that all expenses towards registration of Agreement / Contract shall be on account of the selected bidder.</p> <p>Bidder should factor all expenses and duties related their respective country of export in their price bid. The customs duty / related taxes (if any payable in Iran) only related to those items/ equipment appearing in the Price Schedule, shall be initially borne by the contractor and later reimbursed on actual by IPGPL, based on production of relevant proof.</p> <p>The Bidder shall quote their CIF prices inclusive of all taxes and duties related to their country of export. The Bidder shall exclude from his Price only the custom</p>

					<p>duty / related taxes (if any payable in Iran) for the items/ equipment appearing in the Price Schedule.</p> <p>These taxes/ duties related to Iran shall be initially borne by the bidder and later reimbursed on actual by IPGPL, based on production of relevant proof.</p>
3	2.12.3		<p>Contract Price: Price shall be inclusive of all charges for Design, Manufacture, Transportation including Transit/Marine and other 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 IPGPL personnel, Cost of O & M Manuals and Training Manuals as per Contractual Conditions, Registration charges, Road tax and first party insurance charges as per applicable traffic authority rules, cost of the Warranty support service during 2 years guarantee/warranty period along with comprehensive mandatory AMC for first (2) two years (Including Spare-parts), but excluding the cost of spare-parts/tools listed in schedule 10 which is optional on the part of IPGPL as per Schedule of price i.e. Schedule 11</p>	<p>We suggest:</p> <ol style="list-style-type: none"> 1) the contract price should exclude all the taxes and first party insurance. 2) The warranty period should be 1 year or 2000 working hours whichever occurs first. 3) AMC should not be considered in this tender, because Yard Cranes are small value equipment's compared to big port machinery, and also the employer have the maintenance team that can handle maintenance according to the O&M manual. 	<p>Tender Conditions prevails.</p>

			(Volume I) and all other incidental charges for the execution of the Contract .		
4	2.12.4		Contractors shall arrange for training of 2 Officers of the Employer for training on PLC, Drives and Crane Control System and Crane Monitoring System at Contractor’s works. 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. Cost for the same is deemed to be included in the CIF Price of the equipment (Reach Stacker & New Empty Container Handler).	Unlike big port machinery, there is no need for such training mentioned in the clause 2.12.4 for Yard Cranes . Hence, we suggest delete this. We can give proper training at employer site in English.	Tender Condition Prevails. 5 days training is essential for 2 officers. Rest refer clause 3.24.2.
5	2.15.5		Lists of orders executed during the last seven (7) years and documentary evidence that is copies of work orders indicating supply of YARD CRANES	Since we have supplied more than 1000 Yard Crane overseas, we suggest the customer reference list could be the evidence for it . There	Tender Conditions prevail. It is clarified that the documentary proof shall be required to demonstrate that you have been in this business since last seven years to

			as per Clause 2.1.1.b.	is no need of all the P.O from customer side.	meet Minimum Eligibility Criteria.
6	2.15.9		The bidder shall submit the documentary evidence for having sea front for assembly and roll on if required for effecting delivery	Unlike big port machinery, YARD Cranes are standard equipment and sea front facility for assembly and roll on facility does not affect the Schedule, We suggest to delete it for Yard Cranes	We agree if supply is not being affected.
7	2.15.11		Work Schedule showing as per Schedule 3 (Volume-I) of this tender document:	Since Yard Cranes are almost standard equipment's, there is no need for this. We suggest to delete it.	Agreed
8	2.15.12		Details of the training programme of various categories of IPGPL and/or its Associate employees as per Schedule 4 & 4A (Volume-I) of this tender document.	We only provide the training at employer's site for operation and maintenance.	Agreed. Revised schedule 4A attached.
9	2.15.14		Details of Sub Contractors involved in the various activities according to Schedule 7 (Volume-I) of this tender document.	We suggest to delete it.	If the subcontractors are not involved then details are not required.
10	2.15.16		Details of current commitments and details of work completed in past, period etc. along with documentary evidence.	We suggest to delete it.	Details required to support compliance with Minimum Eligibility Criteria
11	2.15.17		Experience in having executed similar Works along with and other related details.	We suggest to delete it.	Details required to support compliance with Minimum Eligibility Criteria

12	2.15.18		Tentative drawings of various arrangements of the crane as per clause 3.26 (Volume-I) of this tender document.	We suggest to delete it.	Applicable drawings for relevant equipment to be provided
13	2.15.19		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 and list of spare-parts under schedule 10 of Volume-I and table 2 & 3 of (Vol-II) for Reach Stackers and as per schedule 10 (Vol-I) and table 1 & 2 of (Vol-II) for Empty Container Handlers.	We suggest to delete it.	Tender Condition Prevails. We need assurance and details of arrangement for after sale services
14	2.15.20		Details of major bought out items and its quality certification plan. 2.16.21	We suggest to delete it.	QAP for major bought out items is required. Same may be provided at an appropriate stage
15	2.18.3. d		OPENING OF PRICE BID within (15) fifteen days thereafter, successful tenderer shall submit performance bank guarantee as per clause 3.39 (Vol-I) of the tender document and Annexure V Volume I.	We suggest no need for submission the performance bank guarantee.	Tender Condition Prevails
16	3.9		CUSTOMS DUES, PORT DUES	We suggest this should be paid by employer	Tender Condition Prevails It is clarified that all expenses towards registration of Agreement / Contract shall be on account of the selected bidder.
17	3.9.4		ROAD TAX, REGISTRATION & INSURANCE:	We suggest this should be done and paid by employer	Bidder should factor all expenses and

					<p>duties related their respective country of export in their price bid. The customs duty / related taxes (if any payable in Iran) only related to those items/ equipment appearing in the Price Schedule, shall be initially borne by the contractor and later reimbursed on actual by IPGPL, based on production of relevant proof.</p> <p>The Bidder shall quote their CIF prices inclusive of all taxes and duties related to their country of export. The Bidder shall exclude from his Price only the custom duty / related taxes (if any payable in Iran) for the items/ equipment appearing in the Price Schedule.</p> <p>These taxes/ duties related to Iran shall be initially borne by the bidder and later reimbursed on actual by IPGPL, based on production of relevant proof.</p>
18	3.10.7		The Bills of Lading should be made to order and bank endorsed	There is no need for bank endorsed. We suggest to delete bank endorsed requirement.	Tender Conditions prevail
19	3.13		RATES AND AMOUNTS INCLUDE ALL CHARGES	We suggest to delete it.	Tender Conditions prevail. Kindly refer the schedule 11 – Format of Price
20	3.22		LABOUR	Since Yard Cranes doesn't require assembly, we will Depute our Service engineer for Commissioning of the cranes at Site(Port)	Not agreed. The Contractor is responsible for arranging for man and machinery for assembly, testing and commissioning and other works related to the contract.

21	3.24		INSPECTION AND TESTING OF WORK AT CONTRACTOR'S AND SUB CONTRACTOR'S PREMISES:	YARD CRANES are technical and manufacturing matured equipment's, there is no need for third party for this. For the sake of employer to save cost, we suggest to delete it.	IPGPL reserves his right to appoint TPIA, however, before dispatch, the contractor is required to submit a certificate from Third Party Inspection Agency (should be a reputed international accredited agencies) to IPGPL certifying that the equipment is meeting the technical requirements of the tender.
22	3.25		TESTING OF EQUIPMENT AT CONTRACTOR'S AND EMPLOYER'S SITE	We suggest the Load to be arranged by Employer at his Site and the operational cost to be borne by Employer at their site.	Testing of equipment at Employer's site is required after equipment assembly, by a third party who should be a reputed international accredited agencies. The cost of onsite testing is to be borne by the bidder only if the equipment is assembled on site.
23	3.27		TESTS ON COMPLETION AT EMPLOYER'S SITE	We suggest the Load to be arranged by Employer at his Site and the operational cost to be borne by Employer at their site.	Testing of equipment at Employer's site is required after equipment assembly, by a third party who should be a reputed international accredited agencies. The cost of onsite testing is to be borne by the bidder only if the equipment is assembled on site.
24	3.29		DEFECT LIABILITY PERIOD In this condition the expression 'Defect liability period' shall mean a period of 24 months calculated from the date certified at the time of acceptance in accordance with clause 3.31 (Volume-I of Tender Document).	We suggest the warranty period should be 1 year or 2000 working hours whichever occurs first.	Tender Condition Prevails
25	3.3		DEFECTS AFTER TAKING OVER	We suggest to delete it.	Tender Condition Prevails

26	3.32		TERMS OF PAYMENT:	Since it is standard equipment and small value product, we suggest payment should be 100% irrevocable LC at sight.	Tender Condition Prevails
27	3.32.1		Training Charges:	We only offer site training on free basis. Hence, there is no need for this quotation.	Tender Condition Prevails.
28	3.32.2		Payments towards Spare Parts	We suggest payment of spare parts and tools should be 100% irrevocable LC at sight.	Tender Condition Prevails
29	3.32.4		Payment of Duties	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
30	3.33		Payment of taxes and Levies	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
31	3.34		NO INTEREST ON ACCOUNT OF DELAYED PAYMENTS:	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
32	3.35		CERTIFICATE AND PAYMENT	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
33	3.35.3		Issue of Provisional Certificate	We suggest to delete it as it is applicable to big port machinery.	Agreed. Clause 3.35.3 stands deleted.
34	3.35.4		Issue of Final Acceptance Certificate	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails

35	3.35.5		Final Certificate conclusive	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
36	3.35.6		Adjustment to Certificate	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
37	3.35.7		Corrections and with-holding of certificates	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
38	3.36		GUARANTEE PERIOD FOR NEW YARD CRANES	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
39	3.37		COMMISSIONING OF NEW EQUIPMENT (3Nos 100 Ton (AT) and 3 Nos 60 Ton (RT) Capacity yard cranes) :	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
40	3.38		REMOVAL OF MATERIAL ON COMPLETION:	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails if applicable
41	3.39		PERFORMANCE GUARANTEE BOND TOWARDS PERFORMNACE OF CONTRACT	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
42	3.40.		SECURITY DEPOSIT TOWARDS ADVANCE PAYMENT FOR OF CONTRACT (i.e. for NEW YARD CRANES):	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
43	3.44		INSURANCE OF WORK AT MANUFACTURER'S SITE FOR NEW YARD CRANES:	We suggest to delete it as it is applicable to big port machinery.	Agreed

44	3.45		INSURANCE AGAINST THIRD PARTY LIABILITY (FOR NEW YARD CRANES) at Employer site:	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
45	3.46		COMPENSATION:	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
46	3.59		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.	We suggest to delete it as it is applicable to big port machinery.	Tender Condition Prevails
47	SCHE DULE 10 A		SCHEDULE 10 A OPERATIONS AND MAINTENANCE MANUALS	We will provide the O&M as per our standard O&M.	Agreed However, coverage, depth of details and other conditions specified in Schedule-10A are applicable and prevail, as far as relevant to the Equipment's O & M manual is concerned.
48	EMD	Page 2	US Dollars 89000/- (US dollars Eighty Nine Thousand Only) or equivalent in Euros, Indian Rupees 60, 60,000/- (INR Sixty Lakhs Sixty Thousands Only) in favour of IPGPL in the form of Bank Guarantee, as per Annex-II of Tender Document (Vol-I), from any Nationalised or Scheduled Bank having its branch at Mumbai OR Demand Draft of above said amount in favour of IPGPL payable at Mumbai.		US Dollars 89000/- (US dollars Eighty Nine Thousand Only) or equivalent in Euros 83,000 (Euro eighty three thousand) or Indian Rupees 60, 60, 000/- (INR Sixty Lakhs Sixty Thousands Only) in favour of IPGPL in the form of Bank Guarantee, as per Annex-II of Tender Document (Vol-I), from any Nationalised or Scheduled Bank having its branch at Mumbai OR Demand Draft of above said amount in favour of IPGPL payable at Mumbai.

(Tender No. IPGPL / Yard Cranes / 2017)

TECHNICAL CLARIFICATIONS PERSUANT TO PRE-BID MEETING HELD ON 16 JANUARY 2017 FOR FOUR LOTS i.e. YARD CRANES, REACH STACKERS & EMPTY CONTAINER HANDLERS, and TERMINAL TRACTOR TRAILERS AND FORKLIFTS.

YARD CRANES

Sl No	Volume-II Clause No.	Page No.	Descriptions	Comments	Clarification From IPGPL
1.	16.0		Capacity (85% of the Tipping Load)	The rough terrain crane technology is very primitive as per the recent safety rules 85 % stability criteria is not acceptable in developed countries. It is only 75% as per EN13000. We would request you to change the type of crane from “rough terrains Crane” to “All terrain Crane” and stability rating as 75% to ensure safety in operation..	All terrain Crane is also acceptable.
2.	1.0		STANDARD	The standard for All Terrain crane worldwide is only EN13000. Please make suitable amendment in the tender specification.	All terrain Crane is also acceptable. Corresponding EN standard acceptable
3.	6.0		ENGINES	We use LIEBHERR manufactured engines.	Acceptable if required power and torque is adequate and subject to manufacturers guarantee for 4

Sl No	Volume-II Clause No.	Page No.	Descriptions	Comments	Clarification From IPGPL
					years
4.	11.0		DESIGN Rules	We follow only EN13000	FEM or Equivalent EN standard is acceptable.
5.	15.0		Hook Blocks : Volume II Yard Cranes (100 Ton) A.T	The crane hook/ball hook is generally 7.5 ton, but probably due to typographical error the same is mentioned as 75 Ton. Decimal point is missing. Please rectify the same.	Agreed

Volume- II of YARD CRANES				
Sl.	Clause No.	Tenders Specification Requirements	Sany Queries	Clarification from IPGPL
100 TON ALL TERRRAIN YARD CRANES TECHNICAL CLARIFICATIONS				
1	3.0- Main conditions	The Lifetime of the parts must be at least 25000 running hours	We suggest to delete it.	Tender Condition Prevails.
2	6.0- Engine	All tenderer companies must introduce their relevant agent in Iran for installed engines in respect to maintenance and spare parts supply	we will introduce our agent in Iran once our Order Confirms	Schedule 8 Prevails.

3	14.0 List of Equipment Manufacturers	All Equipment must be Supplied from manufacturer's country(from Western Europe) and also not from their Stock -Only japanese companies can use equipment made by reputable japanese companies	We suggest to consider the equipment supplied from other than western Europe and Japan , Attached in Attachment 1	LOM given in Volume –II is Preferred / Indicative List. Other than it is subject to approval of IPGPL.
4	16.0 Carrier	Fuel Tank Capacity - approx 500 L	We will provide as per our standard	Proven standard design of OEM is acceptable.
5	18.0 Supply of initial spares	Supply of initial spares like filters, belts etc. for scheduled servicing as per manufacturer recommendations for successful operation for a period of 2 years (or) 3000 hours of operation	we suggest 2000 working hours or one year	Tender Condition Prevails.
6	19.0 Supply of Guaranteed spares	Supply of guaranteed spares, required for one year or 1500 hours of operations, after completion of warranty whichever is earlier	We suggest to delete it.	Tender Condition Prevails.
7	15.0 Hook Blocks	Volume –II Yard Cranes (100 Ton) A.T.	The crane hook/ball hook is generally of 7.5 ton, but probably due to typographical error the same is mentioned as 75 ton, the decimal point is missing. Please rectify the same.	Agreed for 7.5 tonne
60 TON ROUGH TERRAIN YARD CRANES TECHNICAL CLARIFICATIONS				
1	3.0- Main conditions	The Lifetime of the parts must be at least 25000 running hours	We suggest to delete it.	Tender Condition Prevails.

2	6.0- Engine	All tenderer companies must introduce their relevant agent in Iran for installed engines in respect to maintenance and spare parts supply	we will introduce our agent in Iran once our Order Confirms	Schedule 8 Prevails.
3	13.0 List of Equipment Manufacturers	All Equipment must be Supplied from manufacturer's country(from Western Europe) and also not from their Stock -Only japanese companies can use equipment made by reputable japanese companies	We suggest to consider the equipment supplied from other than western Europe and japan , Attached in Attachment 2	LOM given in Volume –II is Preferred / Indicative List. Other than it is subject to approval of IPGPL.
4	16.0 Capacity	Capacity(85% of the TIPPING LOAD)	We will provide as per our standard (75%)	All terrain Crane is acceptable.
6	32.0 A. SPARES	Supply of initial spares like filters, belts etc. for scheduled servicing as per manufacturer recommendations for successful operation for a period of 2 years (or) 3000 hours of operation	we suggest 2000 working hours or one year	Tender Condition Prevails.
7	32.0 B. SPARES	Supply of guaranteed spares, required for one year or 1500 hours of operations, after completion of warranty whichever is earlier	We suggest to delete it.	Tender Condition Prevails.

INDICATIVE MAUNFACTURERS FOR MAJOR COMPONENTS FOR THE EQUIPMENT 100 TON ALL TERRAIN CRANE					
	ADDITIONAL PREFERRED MANUFACTURER AS PER TENDER		BIDDER PROPOSAL		
Description	Manufacturer / Supplier	Country	Manufacturer / Supplier	Country	IPGPL Comments
Diesel Engine	Volvo/Cummins/Benz	Sweden/UK,UK, Germany	Benz	Germany	Accepted.
Brakes	Webastor, Knorr	Germany, Germany	Benz	Germany	Accepted.
Differential	Kessler	Germany	Kessler	Germany	Accepted.
Gearbox	ZF	Germany	ZF	Germany	Accepted.
Main Slew Bearing	RotheErde	Germany	SANY	CHINA	Not Accepted.
Drivers Cabin	Depend Manufacturer		SANY	CHINA	Accepted.
All Hydraulic Pumps	BOCH, Rexroth	Germany, Germany	Rexroth	Germany	Accepted.
All Hydraulic Cylinders	Montahydraulic, BOSCH, Rexroth	Germany,Germany,Germany	SANY	CHINA	Not Accepted.
All Wire Ropes	Casar,Pfeiefer	Germany,Germany	Juli	CHINA	Japanese and Korean also Accepted.
Operators Cabin	Depend Manufacturer		SANY	CHINA	Accepted
Air Conditioning	Wolfer,LG, Mitsubishi,Bosch	Germany, Korea, Japan,Germany	Matshushiba(May Change)	CHINA	Not Accepted.
Compressors	Mersedes,AtlasCopco	Germany,Germany	Matshushiba(May Change)	CHINA	Not Accepted.
Paint	Felda,Suding,International,Hem ple	Germany,Germany,Germany,Denmark	ZHONG SHANG DA QIAO AND ZHONG HUA ZHI QI	CHINA	Accepted.
Tires	Michelin,Bridgestone	Germany,Japan	THAI KAI YING	CHINA	Reputed International Brands such as Dunlop, Goodyear, Bridgestone, Michelin, etc. Are Acceptable even if Made in China.
BOOM	Depend Manufacturer		SANY	CHINA	Accepted.
Axles	Kessler		Kessler	Germany	Accepted.
Truck Chassis	Depend Manufacturer		SANY	CHINA	Accepted.
All Sheavings	Depend Manufacturer		Zelda	CHINA	Accepted.
All Winches	Depend Manufacturer		SANY	CHINA	Accepted.
Hook	Hann, Mohr	Netherland, Germany	Flyover	CHINA	Accepted.
Hydrauliv Directional AND Propotional Control Valves	Boush, Rexroth	Germany,Germany	SANY	CHINA	Not Accepted.
Joysticks & Push Buttons	FFG,Gessman	Germany,Germany	HONG YING	CHINA	Not Accepted.
Load Sensors	Philips	Netherlands	Danfoss	Denmark	Accepted.

INDICATIVE MAUNFACTURERS FOR MAJOR COMPONENTS FOR THE EQUIPMENT 60 TON ROUGH TERRAIN CRANE					
Description	ADDITIONAL PREFERRED MANUFACTURER AS PER TENDER		BIDDERS PROPOSAL		
	Manufacturer / Supplier	Country	Manufacturer / Supplier	Country	IPGPL Comments
Diesel Engine	Volvo/Cummins/Benz	Sweden/UK,UK, Germany	DONGFENG CUMMINS	CHINA	Not Accepted.
Brakes	Webastor, Knorr	Germany, Germany	MRCO	USA	Not Accepted.
Differential	Kessler	Germany	With Axles AXLETECH Purchase Together		Accepted.
Gearbox	ZF	Germany	DANA	USA	Accepted.
Main Slew Bearing	RotheErde	Germany	SANY	CHINA	Not Accepted.
Drivers Cabin	Depend Manufacturer		SANY	CHINA	Accepted.
All Hydraulic Pumps	BOCH, Rexroth	Germany, Germany	PERMCO AND SANY	CHINA	Not Accepted.
All Hydraulic Cylinders	Montahydraulic, BOSCH, Rexroth	Germany,Germany,Germany	SANY	CHINA	Not Accepted.
All Wire Ropes	Casar,Pfeiefer	Germany,Germany	Juli	CHINA	Japanese and Korean also Accepted.
Operators Cabin	Depend Manufacturer		SANY	CHINA	Accepted.
Air Conditioning	Wolfer,LG, Mitsubishi,Bosch	Germany, Korea, Japan,Germany	XIE ZHONG	CHINA	Not Accepted.
Compressors	Mersedes,AtlasCopco	Germany,Germany	XIE ZHONG	CHINA	Not Accepted.
Paint	Felda,Suding,International,Hemple	Germany,Germany,Germany,Denmark	ZHONG SHANG DA QIAO AND ZHONG HUA ZHI QI	CHINA	Not Accepted.
Tires	Michelin,Bridgestone	Germany,Japan	TECHKING	CHINA	Reputed International Brands such as Dunlop, Goodyear, Bridgestone, Michelin, etc. Are Acceptable even if Made in China.
BOOM	Depend Manufacturer		SANY	CHINA	Accepted.
Axles	Kessler		AXLETECH	USA	Accepted.
Truck Chassis	Depend Manufacturer		SANY	CHINA	Accepted.
All Sheavings	Depend Manufacturer		AN TAI	CHINA	Accepted.

All Winches	Depend Manufacturer		SANY	CHINA	Accepted.
Hook	Hann, Mohr	Netherland, Germany	ZHU ZHOU TIAN QIAO OR JULY	CHINA	Accepted.
Hydraulic Directional AND Proportional Control Valves	Bosch, Rexroth	Germany, Germany	NING BO YU ZHOU	CHINA	Not Accepted.
Joysticks & Push Buttons	FFG, Gessman	Germany, Germany	We have Control Handle- Brand Prince	ITALY	Not Accepted.
Load Sensors	Philips	Netherlands	Do not have Load Sensors- we have SANY Brand LIMITERS	CHINA	Not Accepted.

Revised MEC for Yard Cranes

The minimum Eligibility Criteria and Price Schedule of all the tenderers participating in this tender shall be evaluated separately for 100 tonnes and 60 tonnes of yard cranes. It may be noted that the Price Schedule for both shall be separately evaluated and the Selected Bidder for the same shall be separately announced. To clarify, the parties for both the equipment may be separate. Corresponding changes shall be made in the tender contract while signing of the same.

In this regard Schedule 11 – Part 1 (total of A&B) stands deleted.

REVISED SCHEDULE 4 A

TRAINING SCHEDULE

1. TRAINING OF CRANE OPERATORS & MAINTENANCE PERSONNEL:

1.1 GENERAL:

The contractor can assign qualified mechanical and electrical / electronic specialists to instruct the employers Terminal operations personnel in the Eco-Driving / Operating and cost effective maintenance on all equipments installed under this contract. The training session by OEM for Hydraulics, Electrical & Electronic Components / Mechanisms 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 and electrical / electronic components of the Yard Cranes. 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 IPGPL to use and maintain the Yard Cranes 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) Control Systems & Maintenance / Trouble Shooting / Repairs B) Mechanical / Hydraulic System	5
At employer's site	Mechanical / Hydraulic System	5

after arrival of equipment in class room	Electrical / Electronic Control Systems & Maintenance / Trouble Shooting / Repairs	5
	Yard Cranes Operations / Mechanical / Hydraulic System Electrical / Electronic Control Systems	5
On site in Yard Crane at IPGPL	Mechanical / Hydraulic System	5
	Electrical / Electronic Control Systems & Maintenance / Trouble Shooting / Repairs	5
	Yard Cranes Operations: i) Economical Driving & Lifting Techniques. ii) Improving Knowledge of RPM v/s Torque. iii) Interpreting Information Provided on the Display. iv) How the Driver can affect Fuel Consumption & Emissions.	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 knowledge of Electrical & Electronic Components / Mechanisms shall remain at site for the first two weeks of the performance test period of each equipment.