

**TENDER SPECIFICATION
NO. BHE/PW/PUR/TPT-CRN/OJ-122**

**PROVIDING SERVICES FOR TRANSPORTATION
OF CRANES**

**A. MANITOWOC M250 TYRE MOUNTED CRANE CARRIER
BY ITS OWN POWER ON ROAD & ACCESSORIES BY
TRAILERS.**

B. 75 MT CAPACITY TATA 955 ALC CRANE BY TRAILERS

PART: I – TECHNICAL BID



**BHARAT HEAVY ELECTRICALS LIMITED
(A Govt. of India Undertaking)
POWER SECTOR - WESTERN REGION
345, KINGS WAY - NAGPUR 440 001**

CONTENTS

SL.N O.	DESCRIPTION	SECTION/ APPENDIX NO.	NO OF PAGES
1.	TENDER SPECIFICATION (COVER PAGE)	--	1
2.	CONTENTS	--	1
3.	FORWARDING LETTER	--	1
4.	PROCEDURE FOR SUBMISSION OF SEALED TENDER	--	1
5.	CHECK LIST	--	2
6.	DECLARATION	--	1
7.	CERTIFICATE OF NO DEVIATION	--	1
8.	CERTIFICATE OF CONFIRMATION	-	1
9.	NOTICE INVITING TENDER	-	\$
10.	GENERAL CONDITIONS OF CONTRACT	SECTION-1 & 2	\$
11.	OFFER OF CONTRACTOR	SECTION-3	1
SPECIAL CONDITIONS			
12.	SCOPE OF WORK	SECTION-4	8
	ANNEXURE / APPENDICES		
13	TRANSPORT MODULE FOR TRANSPORTATION OF MANITOWOC M 250 CRANE	ANNEXURE -I	5
14	TRANSPORT MODULE FOR TRANSPORTATION OF TELCO 955 ALC , 75 MT CAPACITY CRAWLER CRANE	ANNEXURE -II	2
15	DETAILS OF CONCURRENT COMMITMENT	ANNEXURE -III	1
16	RATE SCHEDULE (PRICE BID : PART-II)		@

LEGEND:

\$: Included in Tender Specifications Part-I. Hosted in BHEL web page (www.bhel.com) as file titled **"NIT+GCC OJ-122.**

@: Issued as separate hard copy booklet 'Tender Specifications Part-II (Price Bid- OJ-122)'. Hosted in BHEL web page (www.bhel.com) as file titled **"PRICE BID- OJ-122 (MONITOWOC) and . "PRICE BID- OJ-122 (TATA 955) .**

Note:

Rest of the tender documents are included in Tender Specifications Part-I. Hosted in BHEL web page (www.bhel.com) as file titled **"TECH BID-OJ-122.**

BHARAT HEAVY ELECTRICALS LIMITED

(A GOVERNMENT OF INDIA UNDERTAKING)

POWER SECTOR - WESTERN REGION

SHREEMOHINI COMPLEX

345, KINGS WAY - NAGPUR 440 001

TENDER SPECIFICATION DOCUMENT ISSUE DETAILS

TENDER SPECIFICATION NO:- BHE/PW/PUR/TPT- CRN /OJ-122

FOR

PROVIDING SERVICES FOR TRANSPORTATION OF CRANES

**C. MANITOWOC M250 TYRE MOUNTED CRANE CARRIER BY ITS OWN
POWER ON ROAD & ACCESSORIES BY TRAILERS.**

D. 75 MT CAPACITY TATA 955 ALC CRANE BY TRAILERS

EARNEST MONEY DEPOSIT: Please see Special Conditions of Contract clause no 8.00

LAST DATE FOR TENDER SUBMISSION: Please obtain updated information from web page
"http://www.bhel.com" → Tender Notifications → View Corrigendum.

THESE TENDER SPECIFICATION DOCUMENTS CONTAINING **PART-I** AND **PART-II** ARE ISSUED TO:

M/s.

.....

PLEASE NOTE:
THESE TENDER SPECS DOCUMENTS ARE NOT TRANSFERABLE.

For Bharat Heavy Electricals Limited

Dy. General Manager (Purchase)

Place: Nagpur

Date:

BHARAT HEAVY ELECTRICALS LIMITED
(A GOVERNMENT OF INDIA UNDERTAKING)
POWER SECTOR - WESTERN REGION
SHREEMOHINI COMPLEX
345, KINGS WAY - NAGPUR 440 001

PROCEDURE FOR SUBMISSION OF SEALED TENDERS

THE TENDERER MUST SUBMIT THEIR TENDERS AS REQUIRED IN TWO PARTS IN SEPARATE SEALED COVERS PROMINENTLY SUPERSCRIBED AS PART-I TECHNICAL BID AND PART-II PRICE BID AND ALSO INDICATING ON EACH OF THE COVERS THE TENDER SPECIFICATION NUMBER AND DUE DATE AND TIME AS MENTIONED IN THE TENDER NOTICE.

PART-I (TECHNICAL BID) COVER-I

EXCEPTING RATE SCHEDULE, ALL OTHER SCHEDULES, DATA SHEETS AND DETAILS CALLED FOR IN THE SPECIFICATION SHALL BE ENCLOSED IN PART-I "TECHNICAL BID" ONLY.

PART-II (PRICE BID) COVER-II

Bidders are requested to read carefully the instructions for submission of Price Bid Part-II for this Tender Specification which are as follows:

- a. Price bid for each option of Crane (i.e. 250MT Crane and 75MT Crane) is to be quoted separately and shall be sealed in two separate envelop.**
- b. Each envelop shall clearly indicate the Tender Specification Reference and Rating of the Crane.**

ALL INDICATIONS OF PRICE SHALL BE GIVEN IN THIS PART-II "PRICE BID". **EMD SHALL NOT BE INCLUDED IN THIS COVER.**

THESE TWO SEPARATE COVERS-I AND II (PART-I AND PART-II) SHALL TOGETHER BE ENCLOSED IN A THIRD ENVELOPE (COVER-III) ALONGWITH REQUISITE EMD AS INDICATED EARLIER AND THIS SEALED COVER SHALL BE SUPERSCRIBED AND SUBMITTED TO ADDL. GEN MANAGER (PURCHASE) AT THE ABOVE MENTIONED ADDRESS ON OR BEFORE THE DUE DATE AS INDICATED.

THE QUALIFIED TENDERER WILL BE INTIMATED SEPARATELY ABOUT THE STATUS OF THEIR OFFER.

TENDERER ARE REQUESTED TO MAKE SPECIFIC NOTE OF THE FOLLOWING CONDITIONS:

- CONTRACTOR SHOULD HAVE ADEQUATE RESOURCES INCLUDING MAJOR T&PS AT HIS DISPOSAL FOR THIS JOB.
- CONTRACTOR SHOULD HAVE SOUND FINANCIAL STABILITY.
- TENDERER SHOULD MEET QUALITY REQUIREMENT REGARDING WORKMANSHIP, DEPLOYMENT OF PERSONNEL, ERECTION TOOLS AND NECESSARY INSPECTION, MEASUREMENT & TESTING INSTRUMENTS.
- ALL INFORMATION AS CALLED FOR IN VARIOUS APPENDICES AND CLAUSES OF TENDER SPECIFICATION SHOULD BE FURNISHED IN COMPLETENESS. PLEASE REFER THE CHECKLIST.
- CLARIFICATION ON TENDER IF ANY SHALL BE OBTAINED BY THE TENDERER BEFORE SUBMITTING THEIR OFFER.
- OFFERS MUST BE SUBMITTED WITHOUT ANY DEVIATION.

BHARAT HEAVY ELECTRICALS LIMITED: PSWR:NAGPUR
TENDER SPECIFICATION No. **BHE/PW/PUR/ TPT- CRN /OJ-122**

- OFFERS RECEIVED WITH ANY DEVIATION OR WITHOUT RELEVANT INFORMATION AS DESCRIBED ABOVE ARE LIABLE TO BE REJECTED. PRICE BIDS RECEIVED IN THE FORM OTHER THAN SPECIFIED IN PART-II (PRICE BID) ARE LIABLE TO BE REJECTED.

CHECK LIST

(VIDE PARA 1.3 OF SECTION-I OF GENERAL CONDITIONS OF CONTRACT)

1	NAME OF THE TENDERER WITH ADDRESS		
2	NATURE OF THE FIRM	LIMITED / PARTNERSHIP / PROPRIETARY	
3	EMD DETAILS		
4	VALIDITY OF OFFER (REQUIRED 6 MONTHS FROM DUE DATE)		
5	MOBILIZATION TIME WITHIN THREE DAY NOTICE FROM FAX LOI)		
6	WHETHER NO DEVIATION CERTIFICATE FURNISHED	YES	NO
7	TENDERER HAS VISITED THE PROJECT SITE AND ACQUAINTED WITH THE SITE CONDITIONS	YES	NO
8	DETAILS OF CONCURRENT JOBS ARE FURNISHED (AS PER RELEVANT APPENDIX)	YES	NO
9	HEAD QUARTER'S ORGANISATION IS FURNISHED	YES	NO
10	PROPOSED SITE ORGANISATION IS FURNISHED	YES	NO
11	FINANCIAL STATUS OF THE COMPANY (RELEVANT ANNEXURE OF GCC) IS FURNISHED	YES	NO
12	PROFIT & LOSS ACCOUNT FOR PRECEDING THREE YEARS IS FURNISHED	YES	NO
13	LATEST SOLVENCY CERTIFICATE FROM THE BANKER IS FURNISHED	YES	NO
14	LATEST INCOME TAX CLEARANCE CERTIFICATE OR COPY OF PAN CARD ACCOMPANIED BY 'IT RETURN' COPY IS FURNISHED	YES	NO
15	ANALYSIS OF UNIT RATES QUOTED (AS PER RELEVANT APPENDIX) IS FURNISHED	YES	NO
16	POWER OF ATTORNEY ENCLOSED IN FAVOUR OF PERSON MAKING OFFER.	YES	NO

19	DETAILS OF SIMILAR WORK DONE IN LAST SEVEN YEARS (AS PER RELEVANT APPENDIX AND SUPPORTING DOUCMENTS FURNISHED.	YES	NO
20	PROGRAMME FOR THE SUBJECT WORK FURNISHED	YES	NO
21	BIDDER HAS FMILIARIZED HIMSELF WITH ALL RELEVANT LOCAL LAWS & CONDITIONS.	YES	NO
22	WHETHER ALL THE PAGES OF THE TENDER DOCUMENTS ARE READ, UNDERSTOOD AND SIGNED	YES	NO
23	ROAD DISTANCE FROM MANGROL TO PIPAVAV	YES	NO
24	SHORTEST ROAD ROUTE FROM MANGROL TO PIPAVAV	YES	NO
25	<p>WHETHER THE FOLLOWING DETAILS PERTAINING TO YOUR BANK ACCOUNT DULY ENDORSED BY THE BANK HAVE BEEN FURNISHED {TO ENABLE BHEL RELEASE PAYMENTS THROUGH ELECTRONIC FUND TRANSFER (EFT/RTGS) AS SPECIFIED IN SECTION 12 }</p> <ol style="list-style-type: none"> 1. Name of the Company 2. Name of Bank 3. Name of Bank Branch 4. City/Place 5. Account Number 6. Account type 7. IFSC code of the Bank Branch 8. MICR Code of the Bank Branch 	YES	NO

NOTE: STRIKE OFF YES OR NO, AS APPLICABLE

DATE:

SIGNATURE OF TENDERER

Offer of the Contractor

DGM/PUR
Bharat Heavy Electricals Limited
Power Sector - Western Region
Shreemohini Complex
345, Kingsway
Nagpur - 440 001

Dear sir,

I/we hereby offer to carry out the work detailed in tender specification no. BHE/PW/PUR/TPT-CRN/OJ-122 issued by Bharat Heavy Electricals Limited, Power Sector-Western Region, Nagpur, in accordance with the terms and conditions thereof.

I/we have carefully perused the following documents connected with the above work and agree to abide by the same.

1. Instructions to bidders
2. General conditions of contract
3. Special conditions of contract
4. Other sections, appendices, schedules and drawings.

I/WE HAVE DEPOSITED / FORWARDED HERewith THE EARNEST MONEY DEPOSIT FOR A SUM OF RS./- (RUPEESONLY) DETAILS OF EMD PAYMENT ARE FURNISHED IN THE CHECK LIST.

EMD shall be refunded should our offer not be accepted / EMD **need not be refunded and the amount may be adjusted towards the security deposit** . Should our offer be accepted, I/we further agree to deposit security deposit for the work as provided for in the tender specification within the stipulated time as may be indicated by BHEL, Power Sector-Western Region, Nagpur.

I/we further agree to execute all the works referred to in the said documents upon the terms and conditions contained or referred to therein and as detailed in the appendices annexed thereto.

Place:
Date:

Signature of Bidder:
Address:

Witnesses With Their Address

Signature	Name	Address
1.		
2.		

TENDER SPECIFICATION NO: BHE/PW/PUR/FEX/TPT-CRN/OJ-122

Declaration by Bidder's Authorised Signatory

I.....
hereby certify that all the information and data furnished by me with regard to this tender specification No. **BHE/PW/PUR/TPT-CRN/OJ-122** are true and complete to the best of my knowledge. I have gone through the specification, conditions and stipulations in detail and agree to comply with the requirements and intent of the specification. I further certify that I am duly authorised representative of the under mentioned tenderer and a valid power of attorney to this effect is also enclosed.

Bidders's name & address

Authorised representative's signature with
Name , Official Seal and address

Date :

TENDER SPECIFICATION NO: BHE/PW/PUR/TPT-CRN/OJ-122

CERTIFICATE OF NO- DEVIATION

I/WE, M/s

hereby certify that notwithstanding any contrary indications / conditions elsewhere in our offer, I /we have neither set any terms and conditions nor there is any deviation taken from the tender conditions of BHEL's tender specification and I /we agree to all the terms and conditions mentioned in the BHEL's tender specification with the associated amendments , clarification etc..

SIGNATURE OF THE BIDDER

DATE:

BHEL :PSWR : NAGPUR

Tender Specification No. BHE/PW/PUR/TPT-CRN/OJ-122

CERTIFICATE OF CONFIRMATION

“I / We.....hereby confirms that I/We are not taking cenvat credit of duty paid on inputs or capital goods used for providing such taxable service under the provisions of cenvat credit rules, 2004 and also confirms that I / We have not availed the benefits under notification number 12/2003, ST dated 20/06/2003. Hence BHEL is liable to pay service tax on 25% of the value of freight charges and for any breach in the above we shall indemnify BHEL”

Date

Signature of Tenderer with seal

SPECIAL CONDITIONS OF CONTRACT

TENDER SPECIFICATION NO: BHE/PW/PUR/TPT-CRN/OJ-122

ENQUIRY FOR TRANSPORTATION OF TOOLS & PLANTS

1.0 SCOPE OF WORK

1.1 The intent of specification is to provide the services for transportation of cranes as detailed below . The omission of specific to the mode of transport shall not relieve the bidder of the responsibility of providing service as detailed in this tender specification. The contract shall be governed with the following terms & condition.

CRANE OPTION	Description Of T&P	Consignor & Consignee		Tentative Schedule of transportation
		Consignor	Consignee	
I	Transportation of Manitowoc M250 T, Truck Crane & its accessories (Refer Annexure –I)	Construction Manager BHEL Site Office , GIPCL, Surat Lignite Power Plant, Mangrol , Dist : Surat (GUJ)	Construction Manager BHEL Site Office 2 x350 MW CCPP GSPC Pipavav Power Company Village – Kovaya (Near Pipavav, Taluka –Rajula Dist –Amreli (Guj)	End Feb'2009
II	Transportation of Crawler Crane, 955 ALC , 75 MT Capacity (Refer Annexure –II)	Construction Manager BHEL Site Office , GIPCL, Surat Lignite Power Plant, Mangrol , Dist : Surat (GUJ))	Construction Manager BHEL Site Office 2 x350 MW CCPP GSPC Pipavav Power Company Village – Kovaya (Near Pipavav, Taluka –Rajula Dist –Amreli (Guj	End March '2009

1.2 Bidder shall provide trailers for transportation of crane & its accessories as envisaged in the Transport Modules of respective cranes (Refer enclosed Annexure I & II).

1.3 The weight & dimension of crane components given in transport modules/ loading slip are based on the original manufacture drawing / documents.

1.4 The transportation schedule as indicated in above table is tentative, however it may be re-scheduled depends on their release from respective site, however the exact date of requirement of the trailers shall be intimated in advance. On account of rescheduling of transportation of respective cranes, compensation shall be not entertained by BHEL.

2. BRIEF DESCRIPTION OF MANITOWOC TRUCK M250T CRANE & OTHER TECHNICAL REQUIREMENT FOR TRANSPORTATION OF CRANE.

2.1 The transportation of Manitowoc Crane Truck Carrier shall be self driven by its own power and transportation of other loose accessories in truck & trailers. The chassis of the crane carrier of 59.5 ft. length x 10 ft. wide, weight 89 MT with upper structure, left hand driven will be transported on it own power.

- 2.2 The GA drg. of the crane carrier is attached as a reference to bidder. This may please be noted that gantry will be folded to horizontal position. The detail of engine of carrier is attached as Annexure – B.
- 2.3 Bidder shall provide experienced drivers having license to drive heavy vehicles and having expertise in driving left hand driven wide and heavy vehicle.
- 2.4 Apart from the above bidder shall provide one pilot vehicle alongwith a crew comprises of Supervisor, Driver, Auto Electrician, Mechanic and helper. The supervisor shall lead the crew members. The crew shall be responsible for safe movement, taking care of any unforeseen eventualities, providing assistance /guide to driver of crane carrier during the traveling of crane carrier enroute from Mangrol to Pipavav .The entire operation shall be carried out under the leadership of competent supervisor.
- 2.5 Bidder shall carry out road route survey from GIPCL Mangrol to GSPC PIPAVAV POWER CO. and ascertain the road condition for safe movement of crane carrier prior to submission of their offer. Bidder shall take in to account the aspects, such road condition / capacity of bridges/ culverts etc for safe movement of crane carrier on road, while making the route plan. Responsibility of transportation without any hassles lies with the bidder without detailed route survey report bidder's offer is liable to be rejected. Bidder's clear commitment on safe transportation by the route proposed must be mentioned in their offer
- 2.6 The details of crane carrier, loose accessories and their dimension/weights are given in this tender specification for general guideline to bidder, however bidders are advised to see the crane physically at GIPCL Mangrol site prior to submission of their offer. The weight & dimension of cranes and accessories given in the loading advice slip is based on the originals manufacturer drawing & document. No extra compensation shall be allowed on account of any variation in measured weight & dimension with respect to given in loading advice slip. In this regards BHEL decision shall be final & binding upon the transporter. **Bidder shall provide wooden sleeper of sufficient length and size for placing the boom inserts on trailers.**
- 2.7 The bidder shall intimate daily report on the movement of the carriage preferably by fax or by telephone within working hours i.e. 9 hrs. to 17.30 hrs on working days to the facility Engg. Deptt. Nagpur.
- 2.8 It is responsibility of bidder to arrange "No Objection Certificate" from RTO Surat and road permit en-route to Pipavav for self driven and incidental expenses towards obtaining the statutory clearance shall be borne for bidder, however BHEL shall reimburse the official fees only on submission of original receipt / documentary proof of such payment.
- 2.9 Crew members and pilot vehicle must be deputed to GIPCL Mangrol site at least 72 hrs prior to starts the movement of crane and driver make himself familiar with the operation of crane . The vehicle movement of self driven carriage in the night time (from 8 p.m to 5 a.m) is not allowed.
- 2.10 Bidder shall arrange fuel, lubricant, during the traveling of self-driven crane carrier as well as for pilot vehicle from Mangrol to Pipavav at his own cost. In case of major break down in crane carrier and further movement is not possible, bidder shall intimate DGM/FEX and further course of action shall be decided mutually. However minor repair need to be attended by bidder at their own expenses to the extent of Rs.1000/- in single accession.

2.11 Bidder shall arrange at his cost accommodation, boarding, lodging, local conveyance etc. for their crew members at both location and during the traveling of the crane carrier.

3. BIDDERS OBLIGATIONS & OTHER TECHNICAL REQUIREMENT COMMAN FOR BOTH CRANES OPTION

- 3.1 BHEL attaches more importance for proper lashing / tying of consignment for safe transportation. Necessary wire ropes, manila ropes, turn buckles, tyre gatter pieces, gunny bags, tarpaulins, etc., are to be provided by transporter at their cost and shall carry out necessary works for tying / covering of crane / components on trailer and care should be taken by the contractor to reach the material safe at final destination. However necessary weld supports including supply of material and welding and cutting will be arranged and provided by BHEL. These are accountable and returnable to consignee. Certain consignments are vulnerable and require more protecting during transportation. Enrooted if some temporary provisions are to be made for reinforcing the road with sleeper etc. the same will be arranged by bidder.
- 3.2 It is responsibility of Bidder to provide vehicle of suitable size and capacity keeping in view of details of dimension /weight of loose accessories as given loading advise slip and safety of transportation of the consignment to the destination. The vehicles should have valid RTO permits and in good working / running condition. Items such as boom inserts, jib assembly must not be combined with counter weight/ hook block / outriggers.
- 3.3 The transporter shall ensure that the consignments are delivered at destination in safe condition with minimum transit time. The standard time applicable for counting the transportation time shall be based on the travel rate of 100 Km / 200 Km / 300 Km / per day respectively for low bed Trailer, Flat bed trailer / standard Trucks. In addition to the normal time allowed, a grace period of 2 days is allowed to provide for any unforeseen contingency in transportation. For this purpose the date of loading and unloading will be excluded. Transportation delay beyond this limit will attract a token penalty @ 1% per day to the maximum @ 10% of individual consignment freight. The transporter shall place the vehicle at consignor place within 48 hours notice from the time of request of BHEL site / Owner representative.
- 3.4 The transporter shall place the vehicle at consignor place within 48 hours notice from the time of request of BHEL site / Owner representative.
- 3.5 Trans-shipment of any consignment enrooted is not permitted. A token penalty of 20% of that consignment freight amount shall be levied, if any consignment is Trans-shipped because of any reasons without prior permission, apart from force majeure conditions. It is responsibility of Transporter for transshipment of good without any extra cost on BHEL.
- 3.6 It is responsibility of transporter to carry out road survey between the destination points prior to movement of cranes and submitting the report to the owner confirming road condition suitable for transportation. The transporter shall take adequate care to check the capacity of culverts, bridges and level crossing before embarking upon the actual transportation.
- 3.7 BHEL shall take all care while loading the crane accessories as per transport module /model packing slip, however the contractor shall ensure & supervise proper loading at consignor end. There may be variation in weight and dimension of component as given in the model packing slip.

- 3.8 The total sub assemblies of crane to be transported in number / type of vehicle as called in transport modules /model packing slip, due to unforeseen reason if vehicles are not loaded in accordance of transport modules /packing slip and resulting extra weight /volume and no extra claim shall be entertained in this regard what so ever may be the reason.
- 3.9 It is responsibility of transporter to provide vehicle of suitable size, capacity and quality, keeping in view of Government regulations and safety of transportation of the consignment to the destination. The vehicles should have valid RTO permits and in good working / running condition.
- 3.10 BHEL prefers their main consignments being carried in the contractor's own vehicles only. If carried in a hired vehicles, the contractor should ensure that the party is reputed one and are having maintained vehicles and valid permits.
- 3.11 Transporter own escort will have to be accompanied with the Main consignments such as Upper works, revolving frame & Car body of cranes for the entire period of transportation.
- 3.12 The scope of work under this contract is deemed to be completed only when so certified by the Engineer in charge BHEL sites.
- 3.13 All consignments are to be transported through shortest route only.
- 3.14 Successful bidder shall produce RTO registration book as proof of loading capacity and fitness of trailer prior to loading.
- 3.15 The entire road permits and licenses or any relevant authorization from competent authority shall be obtained by the transporter (for the vehicles provided for transportation of loose accessories) as required running the vehicle as per Indian Motor Vehicle Act. BHEL shall not take any responsibility for any complication arising out of such contingencies. Any such contingencies arising in this regard are entirely the transporter's responsibility. The transporters will be solely responsible for any mishaps such accident, fire etc, enroute/during transit and consequence thereof, including legal consequences if any. The transporter shall be responsible for delivery of goods at destination in good condition of the consignment carried by them.
- 3.16 **Bidder shall submit details of road route and road distance from Mangrol to Pipavav site**

4.0 OWNER'S OBLIGATION

- 4.1 BHEL will arrange for loading of consignment on trailers and trucks. Required cranes, slings and manpower needed for loading will be arranged and provided by BHEL.
- 4.2 BHEL will also arrange for unloading of consignment from trailers and trucks. Required cranes, slings and manpower needed for unloading will also be arranged and provided by BHEL.
- 4.3 BHEL shall issue required state permit for the goods being transported to that state if required.
- 4.4 Octroi & Road tax ,if applicable in the State of Gujarat for BHEL's owned cranes for which transportation is covered under this tender specification , shall be in BHEL Scope

5.0 TRANSIT INSURANCE

- 5.1 BHEL shall insure the consignments with the underwriters/ insurance company etc. Insurance of the consignments by BHEL shall not absolve the transporter of any responsibility of safe and proper transportation of the goods to the final destination or his liability to compensate for the damages / shortages/ losses in respect of consignments transported by them.

6.0 SECURITY, RULES & REGULATION

The transporter and or his agent shall comply with Security & safety regulations in the matter of entry, exit and movement inside the BHEL/ BHEL's customer plant premises or else where. Ignorance of such regulations will not be accepted as an excuse. Spark arresters shall be provided on vehicles deployed to Hydrocarbon / Petrochemical installations/Refineries.

7.0 DETENTION CHARGES:

BHEL will not be responsible for the reasons beyond control towards delay at loading and unloading of consignment. However, detention charges (if any) @ of Rs. 2000/-, Rs. 1000/- & Rs. 500/- towards low bedded trailer, semi low / flat bedded trailer and trucks respectively shall be payable per day per vehicle on account of delay in loading or unloading provided that the transporter shall place vehicles at the loading/unloading point in the early hours up to 10 hrs. 24 hrs time will be provided to the Owner for loading and unloading from the time of placement of vehicle. In case loading / unloading is delayed beyond 24 hrs time for the reasons attributable to BHEL, the detention charges as above will be paid extra as detention charge.

8.0 EARNEST MONEY DEPOSIT, SECURITY DEPOSIT & BANK GUARANTEE

Earnest Money Deposit:

- 8.1.1 Bidder shall furnish the Earnest Money Deposit (EMD) in the following manner

A. EMD FOR EACH CRANE

Sl.No.	CRANE OPTION	EMD Amount
1	Crane Option – I (Transportation Manitowoc M 250 Truck Crane From BHEL Site GIPCL, Surat Lignite Power Plant, Mangrol(Gujarat) to Pipavav (Guj)	Rs.20,000/-
2	Crane Option – II (Transportation of Telco 955 ALC ,75 MT Crawler Crane BHEL Site GIPCL, Surat Lignite Power Plant, Mangrol(Gujarat) to Pipavav (Guj)	Rs.10,000/-

OR

B. EMD FOR BOTH CRANE : If bidder choose to quote for both the crane , EMD should be furnished as per following details

Sl.No.	CRANE OPTION	EMD Amount
1	Crane Option – I & II (Transportation Manitowoc M 250 Truck Crane & Telco 955 ALC , 75 MT Capacity Crawler Crane)	Rs.40,000/-

8.1.2 Bidder shall have option to quote for single crane (Crane option –I OR II) or both crane (I & II) options, bidder shall submit EMD amount according to crane option quoted as specified in the above tables.

Bidders who have already deposited One Time EMD of Rs. 2.00 lakh are exempted from submission of EMD for this tender. However a copy of 'One Time EMD' certificate issued by BHEL/PSWR, Nagpur shall be enclosed along with the Offer.

i) EMD is to be paid in cash (as permissible under Income Tax Act), by Pay order or Demand Draft in favour of Bharat Heavy Electricals Limited and payable at Nagpur.

ii) No other form of EMD remittance shall be acceptable to BHEL.

8.1.1 EMD by the bidder will be forfeited as per Tender Documents if

- i) After opening the tender, the bidder revokes his tender within the validity period or increases his earlier quoted rates.
- ii) The bidder does not commence the work within the period as per LOI/Contract. In case the LOI / contract is silent in this regard then within 15 days after award of contract.

8.1.2 EMD shall not carry any interest.

8.1.3 In the case of unsuccessful bidders, the Earnest Money will be refunded to them after acceptance of tender by successful bidder

8.2 Security Deposit

8.2.1 Security Deposit shall be furnished by the successful bidder. The rate of Security Deposit will be as below:

Contract Value	Security Deposit Amount
0 lakhs	10% of Contract Value
0 lakhs upto Rs.50 lakhs	% of the Contract Value exceeding Rs. 10 lakhs.
0 lakhs	+ 5% of the Contract Value exceeding Rs. 50 lakhs.

The security Deposit should be furnished before start of the work by the contractor.

8.2.2 Security Deposit may be furnished in any one of the following forms

- i. Cash (as permissible under the Income Tax Act)
- ii. Pay Order, Demand Draft in favour of BHEL.
- iii. Local cheques of scheduled banks, subject to realization.
- iv. Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc. (Certificates should be held in the name of Contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back).

- v. Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL.
- vi. Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the contractor, A/C BHEL, duly discharged on the back.
- vii. Security deposit can also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of the Security Deposit should be remitted (either by cash/DD or **BG for maximum 50%** of total SD) before start of the work and the balance 50% may be recovered from the running bills.
- viii. EMD of the successful bidder shall be converted and adjusted against the cash Security Deposit excepting for such bidder who has remitted One Time EMD.
- ix. The Security Deposit shall not carry any interest.

NOTE: Acceptance of Security Deposit against Sl. No. (iv) and (vi) above will be subject to hypothecation or endorsement on the documents in favour of BHEL. However, BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

8.2.3 SECURITY DEPOSIT SHALL NOT BE REFUNDED TO THE CONTRACTOR EXCEPT IN ACCORDANCE WITH THE TERMS OF THE CONTRACT

8.3 BANK GUARANTEE

- i. It is the responsibility of the bidder to get the Bank Guarantees revalidated/extended for the required period as per the advice of BHEL Site Engineer / Construction Manager. BHEL shall not be held liable for issue of any reminders regarding expiry of the Bank Guarantees.
- ii. In case extension/further extensions of any Bank Guarantees are not required, the bidders shall ensure that the same is explicitly conveyed through the Construction Manager to BHEL PSWR/HQ, Nagpur
- iii. In case the Bank Guarantees are not extended before the expiry date, BHEL reserves the right to invoke the same by informing the concerned Bank in writing, without any advance notice/communication to the concerned bidder.
- iv. Bidders to note that any corrections to Bank Guarantees shall be done by the issuing Bank, only through an amendment in an appropriate non judicial stamp paper.**
- v. Bidders to ensure that the Bank Guarantees submitted are exactly as per format given in the Tender documents.
- vi. The Original Bank Guarantee shall be sent directly by the Bank to BHEL under Registered Post (Acknowledgement Due). However, in exceptional cases, where guarantee is directly received by Vendor, the Vendor shall instruct the Bank to send an unstamped duplicate copy of the guarantee directly to BHEL under Registered Post (Acknowledgement Due).

8.3.1 Guidelines for acceptance of Bank Guarantees are as follows :

- Vendors are advised to obtain BG from any of the following BHEL consortium banks

State Bank of India
ICICI Bank Ltd
Bank of Baroda
Canara Bank
Citi bank N.A
Corporation Bank
Detshe Bank
HDFC Bank Ltd

The Hongkong and Shanghai banking Corporation Ltd.
ABN Amro Bank N.V
IDBI Ltd
Punjab National Bank
Standard Chartered Bank
State Bank of Travancore
State Bank of Hyderabad
Syndicate Bank

- The Bank Guarantees of all Public sector banks shall be accepted (Other than consortium banks also).
- The Bank Guarantees of Co-operative banks shall not be accepted.
- Bank Guarantees of other banks (banks other than consortium bank, public sector bank, & Co-operative banks) can be accepted subject to an overall exposure limit (at BHEL, PSWR, Nagpur) of RS. 10 crores for banks with net worth of more than Rs. 500 crores as on last balance sheet date and Rs 5 crores for banks with net worth between Rs. 350 to Rs 500 crores(A certificate and copy of latest Balance Sheet to be given at the time of submission of bank guarantees .
- In case Bank Guarantees given by non consortium banks (Private sector or Public sector), the bank Guarantees shall be enforceable at Nagpur, Maharashtra.

8.3.3 Security deposit shall not be refunded / returned to the contractor after successful completion of contractual scope of work/ services.

9.0 **REJECTION OF TENDER & OTHER CONDITION**

The decision regarding acceptance of tender will rest with BHEL which does not bind itself to accept the lowest tender or any tender and reserves to itself full rights for the following without assigning reason whatsoever: -

- To reject any or all the tenders.
- To split up the work amongst two or more tenderers.
- To award the work in part.
- Either of the contingencies stated above to modify the time for completion suitably.
- Conditional and Un-witnessed tenders, tender containing absurd unworkable rates and tenders which are incomplete or otherwise defective and tenders not in accordance with the tender conditions, specifications, etc., are liable to be rejected.

10.0 **PRICE VARIATION**

The price shall remains firm for entire contract period.

11.0 **PAYMENT TERMS:**

The Ordering Authority will release payment within 45 days of safe delivery of consignment at destination on submission of following documents.

1. The invoice in duplicate based on the accepted rate,

2. Copy of LR with consignee's acknowledgement and seal clearly indicating the date of delivery and name of the person who received the materials, the vehicle registration number and type of vehicle etc in which the consignment is received duly affixing seal (rubber stamp) of consignee shall be submitted along with the bill . Number of packages / weight delivered with vehicle Nos. shall be indicated on the LR without exception.
3. Copy of Challan /packing slip issued by consignor, duly endorsed by consignee for receipt of all items in good condition at destination.
4. One set of photograph shall be submitted with invoice.
5. Payment shall be made by cheque only and shall be sent by registered post.

12.0 RATE SCHEDULE AND PRICING TERMS

12.1 Transporter shall quote the lumpsum rate for individual crane option separately for providing the transports vehicles as per Transport Modules/ Packing slip for respective crane as called in the Price Bid Part -II Rate Schedule.

12.2 The weight & dimension of cranes, given in the Transport Module of Cranes /model packing (refer annexures) are based on the originals manufacturer drawing & document.

12.3 Few consignments shall carry extra weight/ ODC in nature; hence lumpsum rate should be quoted accordingly. No extra compensation shall be allowed on account of any variation in measured weight & dimension with respect to given in model packing slip and also for consignment, which are of ODC nature, by weight/ volume. In this regards BHEL decision shall be final & binding upon the transporter.

12.4 The quoted rates shall be inclusive of all contingency expenses at loading/unloading point and during the transit.

13.00 TAXES, DUTIES, LEVIES

Refer to Clause 2.8.4 of General Conditions of Contract. Notwithstanding anything contained therein, the following provisions shall be applicable for this contract.

The contractor shall pay all (save the specific exclusions as enumerated in this contract) taxes, fees, license charges, deposits, duties, tools, royalty, commissions or other charges which may be levied on the input goods & services consumed and output goods and services delivered in course of his operations in executing the contract. In case BHEL is forced to pay any of such taxes, BHEL shall have the right to recover the same from his bills or otherwise as deemed fit.

Service Tax & Cess on Service Tax

Service Tax and Cess on Service Tax as applicable on output Services are excluded from contractor's scope; therefore contractor's price/rates shall be **exclusive** of Service Tax and Cess on Output Services. In case, it becomes mandatory for the contractor under provisions of relevant act/law to collect the Service Tax & Cess from BHEL and deposit the same with the concerned tax authorities, such applicable amount will be paid by BHEL. Contractor shall submit to BHEL documentary evidence of Service Tax registration and remittance record of such tax immediately after depositing the tax with

concerned authorities. Contractor shall obtain prior written consent from BHEL before billing the amount towards such taxes.

With introduction of Cenvat Credit Rules 2004, which came into force w.e.f. 10.09.2004, Excise Duty paid on Input Goods including Capital Goods and Service Tax paid on Input Services that are used for providing the output services can be taken credit of against the Service Tax payable on output services. However BHEL may opt for availing the abatement provision in which case cenvat credit may not be available on input duty.

Sales Tax / WCT /VAT

As regards Sales Tax / WCT /VAT on transfer of property in goods involved in Works Contract applicable as per local laws, the price quoted by the contractor shall be **exclusive** of the same. Where such taxes are required to be paid by the contractor, this will be reimbursed on production of proof of payment made to the authorities by the Contractor. In any case the Contractor shall register himself with the respective Sales Tax / WCT /VAT authorities of the state and submit proof of such registration to BHEL along with the first RA bill. The contractor has to take all necessary steps to **minimize tax on input goods** by purchasing the materials from any registered dealer of the concerned state only. In case contractor opts for composition, it will be with the prior express consent of BHEL. Deduction of tax at source shall be made as per the provisions of law unless otherwise found exempted. In case tax is deducted at source as per the provisions of law, this is to be construed as an advance tax paid by the contractor and no reimbursement thereof will be made unless specifically agreed to.

Modalities of Tax Incidence on BHEL

Wherever the relevant tax laws permit more than one option or methodology for discharging the liability of tax/levy/duty, BHEL will have the right to adopt the appropriate one considering the amount of tax liability on BHEL/Client as well as procedural simplicity with regard to assessment of the liability. The option chosen by BHEL shall be binding on the Contractor for discharging the obligation of BHEL in respect of the tax liability to the Contractor.

New Taxes/Levies

In case the Government imposes any new levy/tax on the output service/ goods/work after award of the work, the same shall be reimbursed by BHEL at actual.

In case any tax/levy/duty etc. becomes applicable after the date of Bidder's offer, the Bidder/Contractor must convey its impact on his price duly substantiated by documentary evidence in support of the same **before opening of Price Bid**. Claim for any such impact after opening the Price Bid will not be considered by BHEL for reimbursement of tax or reassessment of offer.

No reimbursement/recovery on account of increase/reduction in the rate of taxes, levies, duties etc. on input goods/services/work shall be made. Such impact shall be taken care of by the Price Variation/Adjustment Clause (PVC) if any. In case PVC is not applicable for the contract, Bidder has to make his own assessment of the impact of future variation if any, in rates of taxes/duties/ levies etc. in his price bid.

14.0 **GENERAL**

- 14.1. In case any contradiction between “General Condition Of Contract “ & Special Condition of Contract” of this tender specification, the provision of “Special Condition of Contract” shall prevail.
- 14.2 In case of contradiction between Quoted Unit Rate and total amount, the quoted unit rate shall be taken as correct and total amount recalculated for the for intended order quantity.
- 14.3 In case of contradiction between Rate in Figure and Rates Words, the lesser of the two shall be considered as correct.
- 14.4 In case BHEL finds that any bidder has furnished incorrect information , the offer is liable for rejection.

15.00 **CONSIGNEE & CONSIGNOR ADDRESS**

Please refer clause no. 1.1(Scope of work).

APPENDIX-I					
TRANSPORT MODULE FOR TRANSPORTATION OF CRANE					
MANTITOWAC TRUCK CRANE M250					
STANDARD LOADING ADVISE SLIP FOR MANITOWAC M250 T TRUCK CRANE					
Sr.No	Description of items	Size of the Consignment in Mtr.	Wt. In MT	Qty	Type of transport Required
1	Crane Upper Structure with Carrier	17.8 x 2.59 x 2.59	82.6	1	Crane Carrier to be transported by Road by its own power
2	Boom Insert	12.38X2.59X2.59	3.2T each	1	40'STD Trailer, 15 Ton Cap
3	Boom Insert	12.38X2.59X2.59	3.2T each	1	40'STD Trailer, 15 Ton Cap
4	Boom Insert	12.38X2.59X2.59	3.2T each	1	40'STD Trailer, 15 Ton Cap
5	Boom Insert	12.38X2.59X2.59	3.2T each	1	40'STD Trailer, 15 Ton Cap
6	Boom Insert	12.38X2.59X2.59	3.2T each	1	40'STD Trailer, 15 Ton Cap
7	Boom But	12.4x2.6x2.7	5T	1	40'STD Trailer, 15 Ton Cap
8	Boom Top	10x2.6x3	5.4T	1	40'STD Trailer, 15 Ton Cap.
9	Boom Insert	6.3x2.6x2.6	1.4T	1	40'STD Trailer, 15 Ton Cap
	Boom Insert	3.2X2.6X2.6	1.3T	1	
10	Jib Strut	6.1x1.2x0.14	0.7T	1	40'STD Trailer, 15 Ton Cap
	Jib Insert	6.3x1.22x.9	0.5	4	
	Jib Top	6.2x1.2x.9	1.3T	1	
	Jib Bottom	6.2x1.2x0.9	1.3T	1	
11	Out Rigger Assy	6.2x1.2x1.4	5.2T each	2	40'STD Trailer, 15 Ton Cap
12	Out Rigger Assy	6.2x1.2x1.4	5.2T each	2	40'STD Trailer, 15 Ton Cap
13	Right Hand Counter Weight	2.3x0.9x0.6	6.2T each	3	20 T Trailer
14	Left Hand Counter Weight	2.3x0.9x0.6	6.2T each	3	20 T Trailer
15	Bottom Counter Weight	4.9x2.3x0.7	13.7T	1	15 T Trailer
16	Middle Counter Weight	2.5x2x1	13.5T	1	15 T Trailer
17	Counter Weight Tray	4.9x2.3x0.9	16.4T	1	15 T Trailer
18.	140T Hook Bloc	1.3x1.5x1.2	2.8T	1	9T Truck
	30T Hook Block	0.2x0.5x1	0.6T	1	
	Jib Hook Block	0.3x0.3x0.7	0.4T	1	
19	Misc.Box	2.3x1x1	2.3T	1	9T Truck
	Pendants Box	1.8x1.8x1.2	5.2T	1	
	Spare Parts Box	1x0.7x0.5	1T	1	
TOTAL VEHICLES REQUIRED :					
	40' 15 T Trailer	14 nos.			
	35' 20 T Trailer	2 Nos.			
	9T Standard Truck	2 No.			

BHARAT HEAVY ELECTRICALS LIMITED: PSWR:NAGPUR
TENDER SPECIFICATION No. **BHE/PW/PUR/ TPT- CRN /OJ-122**

APPENDIX-II					
TRANSPORT MODULE FOR TRANSPORTATION OF CRANE					
STANDARD LOADING ADVISE SLIP FOR TATA 955 ALC CRAWLER CRANE					
Consignment No.	DESCRIPTION	Size of the Consignment in ft. L X W X H	QTY	WEIGHT IN MT	Type of Trailers/Trucks required with dimensions L x W x H in ft.(Dimension are indicative)
1	REVOLVING FRAME INCLUDING POCKET COUNTER WTs. GANTRY & HOISTING ROPES.	18' X 10' 8" X 12'	1	28.0	40'x11'x11' size 35 MT Low Bed Trailer 1 NO.
2	COUNTER WEIGHT	10' 5" X 2' 11" X 2' 4"	1	10.0	40'x9'.8"x9'.8" size 20 MT Flat Bed Trailer 1 NO.
	COUNTER WEIGHT	10' 5" X 2' 11" X 2'	1	9.0	
3	SIDE FRAME	18' 6" x 4'3" x3' 4"	2 (Each WT 9.8 MT)	19.6	40'x9'.8"x9'.8" size 20 MT Flat Bed Trailer 1 NO.
4	BOOM TOP WITH PENDANTS	31' 6" X 4' 2" X 3' 11"	1	1.8	40'x9'.8"x9'.8" size 15 MT Flat Bed Trailer - 1 NO.
	BOOM BOTTOM WITH BACK STOP	21' X 4' 2" X 3' 11"	1	1.4	
	BOOM INSERT WITH PENDANT	20' X 4' 2" X 3' 11"	4 (Each WT 0.8 MT)	3.2	
	BOOM INSERT WITH PENDANT	10' X 4' 2" X 3' 11"	2 (Each WT 0.5 MT)	1.0	
5	CAR BODY	9' X 7' 10" X 6' 6"	1	7.0	40'x9'.8"x9'.8" size 15T Flat Bed Trailer 1 No.
	HOOK BLOCK 4 SHEAVE	5' 6" X 1' 8" X 1' 10"	1	0.7	
	HOOK BLOCK SINGLE SHEAVE	4'10" X 2' 2" X 0.10"	1	0.3	
	HOOK BLOCK 2 SHEAVE	4'10" X 2' 2" X 1'	1	0.4	
	JIB TOP	10' X 2' X 2'	1	0.3	
	JIB BOTTOM WITH STRUT	10' X 2' X 2'	1	0.3	
	JIB INSERT	10 X 2' X 2'	1	0.3	
	JIB HOOK	2' X 10" X 10"	1	0.2	
SPARE PARTS BOX	4' X 4' X 3	2 (Each WT 1 MT)	2.0		
		Total Weight in MT		85.5	
TOTAL VEHICLES REQUIRED :					
1	35MT LOW BED TRAILER.	1 No.			
2	20 MT FLAT BED TRAILER	2 no.			
3	15 MT FLAT BED TRAILER .	2 Nos			
					DGM / FEX

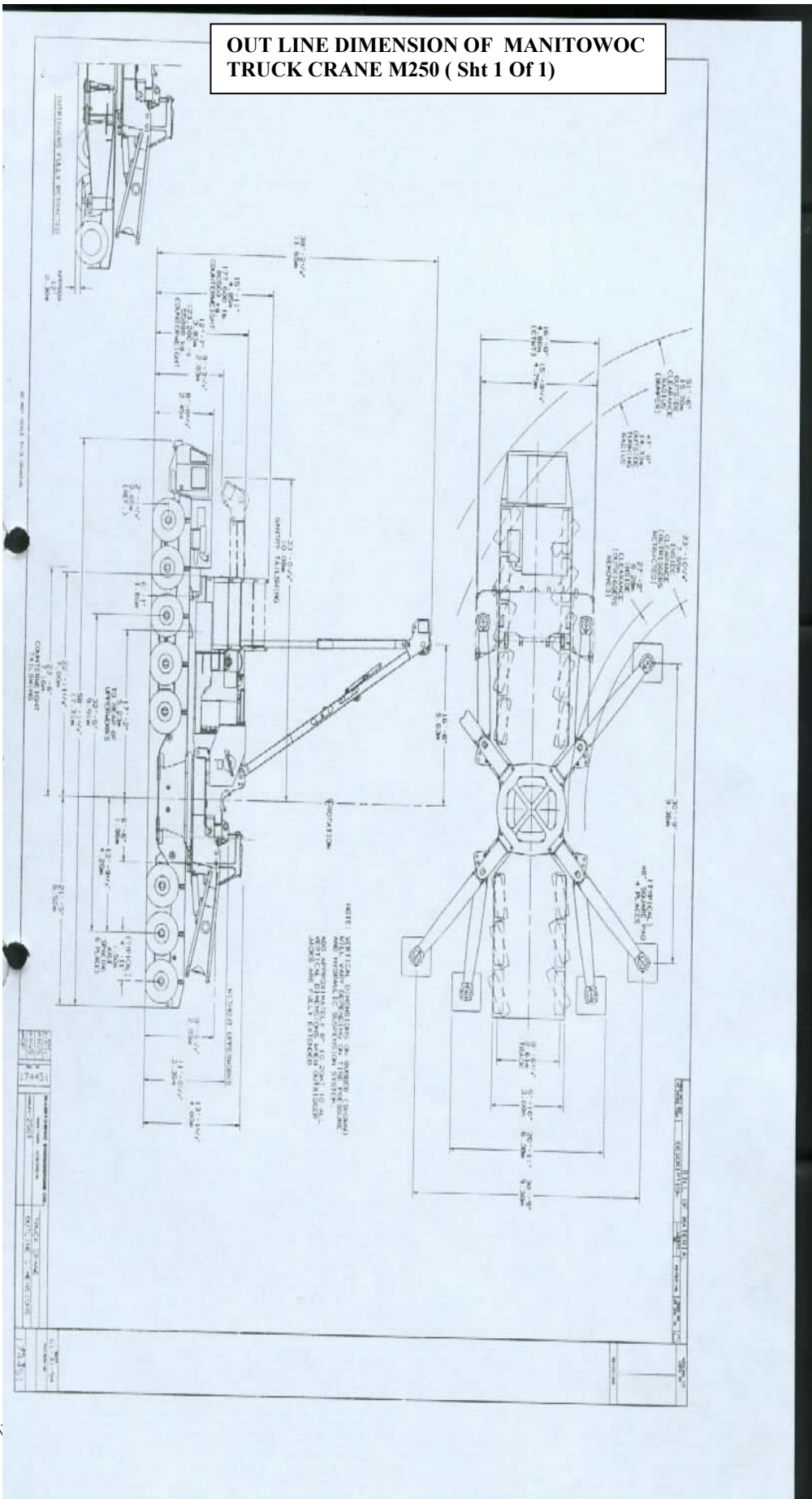
BLANK PAGE

APPENDIX-III

SIMILAR JOB CARRIED IN PAST SEVEN YEAR / CONCURRENT COMMITMENTS

SL.NO	FULL POSTAL ADDRESS OF CLIENT AND NAME OF OFFICER IN-CHARGE	DESCRIPTION OF THE WORK	VALUE OF THE CONTRACT	COMMENC-EMENT DATE	SCHEDU-LED COMPLE-TION	% COMPL-TD. AS ON DATE	ANTICIPA-TED COMPLN. DATE	REMARKS

OUT LINE DIMENSION OF MANITOWOC TRUCK CRANE M250 (Sht 1 Of 1)



**BRIEF DESCRIPTION OF MANITOWOC
TRUCK CRANE M250 (Sht 1 Of 3)**

TECHNICAL SPECIFICATIONS

MODEL: CRANE CARRIER, M-250, MANITOWOC

ENGINE: CATERPILLAR
MODEL: 3406B, AUTOMOTIVE, 50-STATE APPROVED
HORSEPOWER: 460 HP @ 1900 RPM
TORQUE: 1650 LB FT @ 1200 RPM
GOVERNED AT 1900 RPM
DISPLACEMENT: 893 CU. IN.
TURBOCHARGED, ELECTRONIC CONTROLS, INCLUDING ELECTRONIC
ACCELERATOR CONTROLS, DRY TYPE AIR CLEANER, SINGLE
EXHAUST
JAKE ENGINE BRAKE - PROVISION FOR INSTALLATION

TRANSMISSION: ALLISON AUTOMATIC
MODEL: CLT - 5961
SIX (6) SPEEDS FORWARD
ONE (1) SPEED REVERSE

RATIOS: 1ST 4.00
2ND 2.68
3RD 2.01
4TH 1.35
5TH 1.00
6TH .67
REV. 5.12

TORQUE CONVERTER MODEL TC-680

AUXILIARY TRANSMISSION: FABCO 2-SPEED RATIOS: 1:1
MODEL: TC-142 2.17:1

INCLUDING PROPORTIONING DIFFERENTIAL FOR FRONT AND
REAR AXLE DRIVE

AXLES #1, #3, #6, #7 DRIVE-STEER, PLANETARY TYPE
TRACK: 102.75"
RATIOS: 8.47:1
AXLE RATINGS: 12 T (METRIC), AIR DRUM BRAKES
AXLE #3 AND #6 INCLUDE DIFFERENTIAL W/LOCKOUT CONTROL

AXLES #2, #4, #5, #8 STEER AXLES WITH DROP CENTER, AIR DRUM BRAKES

WHEELS: 11.25 X 25, HEAVY DUTY FORMED DISC WHEELS
SIXTEEN (16) SUPPLIED, (28000# CREEP CAPACITY)

TIRES: 14.00 R 25 MICHELIN - XVC TUBELESS
SIXTEEN (16) SUPPLIED

1/1

BHARAT HEAVY ELECTRICALS LIMITED: PSWR:NAGPUR
TENDER SPECIFICATION No. **BHE/PW/PUR/ TPT- CRN /OJ-122**

**BRIEF DESCRIPTION OF MANITOWOC
TRUCK CRANE M250 (Sht 2 Of 3)**

CAB: ONE-MAN TYPE DRIVER CAB, L.H. DRIVE, FULLY INSULATED FITTED WITH SAFETY GLASS AND SLIDING WIDE WINDOWS, CAB EQUIPPED WITH BOSTROM VIKING TYPE SEAT, HEATER, DEFROSTER, WINDSHIELD WIPER AND WASHER, SEATBELTS, ALL VEHICLE CONTROLS, FULL INSTRUMENTATION, DOMELIGHT, FLOOR MAT, STEERING COLUMN, WESTCOAST MIRRORS, GRABHANDLES, ACCESS STEPS

ELECTRICAL: 12 VOLT SYSTEM, TWO 8D TYPE BATTERIES ENGINE DRIVEN ALTERNATOR, SEALED BEAM DUAL HEADLIGHTS, FRONT AND REAR DIRECTIONAL SIGNALS, 4-WAY FLASHER, COMBINATION STOP & TAILLIGHTS, CLEARANCE LIGHTS

HYDRAULICS: ONE P.T.O. DRIVE FROM TRANSMISSION HYDRAULIC OIL RESERVOIR WITH SUCTION STRAINERS AND RETURNLINE FILTERS DUAL HYDRAULIC PUMP FOR POWERSTEERING WITH SELECTOR-VALVE FOR OUTRIGGER HYDRAULICS. TWO ELECTRIC REMOTE CONTROL BOXES. EIGHT SECTION CONTROL VALVE WITH ELECTRICAL PUSHBUTTON CONTROLS FOR OUTRIGGERS AND PIN PULLERS HOSES AND FITTING TO QUICK DISCONNECT COUPLINGS ENGINE ACCELERATOR CONTROLS FROM REMOTE CONTROL BOXES

BRAKES: SERVICE BRAKES: DUAL AIR BRAKE SYSTEM ON ALL WHEELS 13.2 CFM AIR COMPRESSOR WITH GOVERNOR
PARKING BRAKES: SPRING LOADED BRAKE CHAMBERS ON FOUR (4) AXLES, CONTROLLED BY HANDVALVE IN CAB
BRAKE SIZE: 500 MM DIA X 160 MM - ALL WHEELS SYSTEM IN ACCORDANCE TO US MVSS - 121

COOLING: HIGH CAPACITY RADIATOR WITH AIR TO AIR CHARGE-COOLING FOR ENGINE AND COOLING FOR TRANSMISSION/TORQUE CONVERTER

SUSPENSION: HYDRAULIC SUSPENSION SYSTEMS WITH VERTICAL CYLINDERS MOUNTED TO KINGPINS OF AXLES AXLES GUIDED BY TRANSVERSE AND LONGITUDINAL TIERODS HYDRAULIC ACCUMULATORS AND HYDRAULIC VALVING AND CONTROLS FOR FIVE (5) AND THREE (3) AXLE GROUPINGS. CONTROL PANEL WITH LOCKOUTS IN DRIVERS CAB. AXLE LOAD COMPENSATION WITHIN THE SUSPENSION GROUPS

STEERING: DUAL HYDRAULIC POWERSTEERING SYSTEM ON ALL AXLES. MECHANICAL LINKAGES FOR CO-ORDINATED STEERING CONTROL. TWO CYLINDERS PER AXLE

FRAME: CENTER MOUNT TURRET DESIGN. DESIGNED BY TOR TRUCK FABRICATED BY MANITOWOC

1/2

**BRIEF DESCRIPTION OF MANITOWOC
TRUCK CRANE M250 (Sht 3 Of 3)**

SHEETMETAL: FULL LENGTH FENDERS FRONT TO REAR
FRONT DECK WITH ACCESS STEPS
TOP DECK COVERS FRONT TO REAR
ENGINE HOOD WITH DOORS
WALKING SURFACES MADE FROM NON-SKID CHECKERPLATE

FUEL SYSTEM: ONE DIESEL FUEL TANK - 75 GAL. CAPACITY

PAINT: PRIME PAINT

CARRIER WEIGHT: 80000 LB

1/3