



Bharat Heavy Electricals Limited

Tender No:- 651240018/19/23 / TE /D / 18

Dt: 20.10.2014

TENDER NOTICE

Sealed Tenders are invited in Two part bid system, for Procurement of Spare Parts of DSL System as per Annex-A, Spare Parts of EOT Cranes Viz DCEM Brake Liner as per Annexure-B and Rotary geared Limit Switch and Counter weight Limit Switch as per Annexure- C for Fabrication Plant

General-

- **Opening of Techno-commercial bid** at 1500 Hrs.13.11.2014
- **Submission of Tender:** Till 1400 hrs 13.11.2014
- Bid's can be deposited in the Tender Box, kept in the Administrative Building, Fabrication Plant Bharat Heavy Electricals Ltd Industrial Area Jagdishpur Dist. Amethi-PIN-227817, UP.

The offer is to be submitted by the vendors in **two parts** in sealed envelop as per following details:

a. Part-I: Techno-Commercial Offer shall be sealed in Envelop-1.

Vendor to write Part-I, Tender Enquiry No. & Date, Due date of opening and complete address of the Vendor. This envelop should contain section 1. Technical details/brochures of the offered products if applicable . ***Please note, in "unpriced bid" vendor to write "QUOTED" in place of the prices offered in priced copy of Price bid. Percentage (%) of taxes & duties to be specifically mentioned in the un-priced copy also.***

b. Part-II: Price Bid shall be sealed in Envelop-2.

Vendor to write Part-II, Tender Enquiry No. & Date, Due date of opening and complete address of the Vendor. This envelop should contain following documents:

1. Priced copy of Price bid format (i.e Section II) .No terms or conditions should be written in Price Bid Format, else offer of the vendor is liable to be rejected.

ENVELOP-1 & ENVELOP-2 shall be sealed in BIG ENVELOP. On this envelop, vendor to write Tender Enquiry No. & Date, Due date of opening and complete address of the Vendor.

1. Offers with deviations from terms and conditions & specification of the tender may not be considered.
2. BHEL takes no responsibility for any delay / loss of documents or correspondence sent by courier or post.
3. BHEL reserves the right to accept or reject any of the bid / all bids with or without deviation, or cancel / withdraw the invitation for bid without assigning any reason whatsoever and in such case no bidder shall have any claim arising out of such action by BHEL.
4. Duly completed offers should reach following address on or before due date and time to
**Office of AGM (MM)
CSU&FP, BHEL,
Industrial Area Jagdishpur,
Dist. Amethi-227817, UP**
5. In case you are not quoting, please send your regret letter positively for our reference.
6. Tender received after the specified time of their "SUBMISSION" will be treated as "late tender" and shall not be considered under any circumstances.
7. Supplier shall quote for all the items in the enclosed price bid format only.



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PREFERENCES/BENEFITS FOR MSEs:

Following preferences/benefits shall be given to MSEs in line with Public procurement policy for Micro and Small Enterprises (MSEs), 2012:

1. The tender documents shall be issued free of cost to MSEs.
2. MSEs are exempted from payment of Earnest Money Deposit (EMD).
3. In tender, Micro and Small Enterprises quoting within the price band of L1+15% shall be allowed to supply the requirement up to 20% of the tender quantity subject to condition that such Enterprises bring down their price to L1 price where L1 price is from other than a Micro and Small Enterprise. If L1 offer is from a Micro / Small Enterprise, this provision will not be applicable. In case more than one Micro and Small Enterprise is there within this span, the supply shall be shared proportionate to the tender quantity. (70:30 or 50:30:20 of the eligible quantity).

Note: Special provision for Micro and small enterprises owned by SC or ST: -

Sub target of 20% (i.e. 4% out of 20%) would be earmarked for procurement from Micro and Small Enterprises owned by the Scheduled Caste or Scheduled Tribe Entrepreneurs provided that in event of failure of such Micro and Small Enterprises to participate in the tender process or meet the tender requirements and the L1 price, the 4% sub-target for procurement ear-marked MSE owned by Scheduled Caste or Scheduled Tribe Entrepreneurs shall be met from other MSE Enterprises/s.

MSE suppliers can avail the intended benefits only if they submit along with the offer, attested copies of either EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (Format enclosed at Annexure -1 where deemed validity of EM II certificate of five years has expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part 1 in case of two part bid). Non submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiency in the above required documents is not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or attested by a Gazetted officer.

In case of any change in the MSE status of the Bidder, it shall be the responsibility of the Bidder to notify the change as a part of the Bid document. If at a later date it comes to the knowledge of BHEL, that the change in the status has not been intimated by the Bidder and the order is obtained under the premise of an MSE then BHEL would cancel the pending order against this tender and take necessary steps for suspension of the business dealing with the Bidder as per the procurement policy of BHEL.

In case after the bid opening it is seen that no MSE has become L1, then depending on the nature of the item, if it is not possible to split the tendered items / quantities on account of reasons like customer contract requirements of supplying one make for a given project or technical reasons like the tendered item being a system etc. then BHEL would not counter offer the L1 prices even though there may be MSE bidders within the +15% band of L1.



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ANNEXURE- I

Certificate by Chartered Accountant on letter head

This is to Certify that M/S.(Hereinafter referred to as 'company') having its registered office atis registered under MSMED Act 2006, (Entrepreneur Memorandum No (Part-11dated: Category: (Micro/Small) (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as on date as per MSMED Act 2006 is as follows:

1. For Manufacturing Enterprises: Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No.S.O.1722(E) dated October 5, 2006 :Rs.Lacs

2. For Service Enterprises: Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006: RsLacs

(Strike off whichever is not applicable)

The above investment of Rs Lac is within permissible limit of Rs ----- Lacs for..... Micro/Small (Strike off which is not applicable) Category under MSMED Act 2006.

Or

The company has been graduated from its original category (Micro/ Small) (Strike off which is not applicable) and the date of graduation of such enterprise from its original category is -----(dd/mm/yyyy) which is within the period of 3 years from the date of graduation of such enterprise from its original category as notified vide 5.0. No. 3322{E) dated 01.11.2013 published in the gazette notification dated 04.11.2013 by Ministry of MSME.

Date:

(Signature)

Name -

Membership number -

Seal of Chartered Accountant



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PRE- QUALIFYING CRITERIA FOR SUPPLY OF ITEMS AS PER Tender Enquiry No. 651240018/19/23/TE/D/18 dt 20.10.2014

Supplier should confirm the following:

1. Vendor should have supplied similar Crane spares to BHEL / PSU / reputed companies in the past 07 seven years. Proof of supply of similar items should be in the form of purchase orders placed on the vendor by their customer.
2. Capabilities with respect to personnel, equipment and manufacturing Facilities. However in case of traders/ dealers, authorization letter from their principal is mandatory.
- 3 Financial standing through latest I.T.C.C, Annual report (balance sheet and Profit & Loss Account) of last 3 years. i.e FY 2011-2012, 2012-13 & 2013-14.

All the above documents need to be submitted with Supplier registration Form (SRF) which can be downloaded from.
http://www.bhel.com/vender_registration/vender.php.



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The tender document consists of four parts :-

Section – 1: Techno-Commercial bid consists

- A- * Item Description
- B- * Technical specification
- C- * Commercial requirement
- D- * Special Instructions

* Un-price bid format (Copy of Price Bid without price part only **fill for taxes & duties**)

Section – 2: Price bid format

Section-1

A. ITEM DESCRIPTION:

Sr. No	Group	Item Description	Qty	Delivery Period
1.	Group-A	Spare Parts of DSL System as per Annex-A	As per Annexure-A	04 weeks
2	Group -B	Spare Parts of EOT Cranes Viz DCEM Brake Liner as per Annexure-B	As per Annexure-B	
3	Group-C	Rotary geared Limit Switch and Counter weight Limit Switch as per Annexure- C	As per Annexure-C	

Note:

- i. Catalogue of the offered items is to be provided by the firm along with their offer for evaluation for Group A & Group -B
- ii. Vendor to confirm the technical specifications of the items offered as per Annexure 'I' which Technical specification for the items of Group –B for evaluation.

B. Technical Conditions:

Sl. No	Description	Required
1	Sample Requirement With offer	NO
2	Pre Dispatch Inspection	NO
3	Test certificate	NO
4	Guarantee/ Warrantee certificate against manufacturing defects for 12 Months (For Each Group)	YES
5	Calibration certificate	NO
6	Spares and tool	NO
7	Job Prooving	NO
8	Training	NO



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C. Commercial conditions:

SL.NO.	DESCRIPTION	BHEL'S REQUIREMENT
1	Delivery Schedule	Within 04 (Four) weeks from date of LOI/P.O. for each Group
1.1		Early delivery is acceptable to BHEL
1.2		Deliveries shall be F.O.R. BHEL,FP, Stores, Jagdishpur,
1.3		Date of receipt at BHEL, Jagdishpur works shall be treated as date of delivery.
2	Insurance	Insurance shall be borne by Vendor
3	Price	
3.1		The basic prices shall be firm. All taxes & duties to be specified specifically.
3.2		Supplier shall quote for all the items in the enclosed price bid format only.
4	Evaluation	Groupwise, on the basis of landed cost to BHEL,FP, Stores, Jagdishpur inclusive of loading, if any for each group
8	Terms of Payment	i) 100% payment within 90 days after receipt of material at BHEL Jagdishpur through E-payment. ii) 100% payment within 45 days after receipt of material at BHEL Jagdishpur through E-payment.(For MSME registered vendors only) iii) All bank charges shall be on vendors account. iv) Original excise duty gate pass shall be submitted by the vendor to enable purchaser to claim Cenvat credit (if applicable).
9	Validity of offer	Offer validity will be for 90 days from date of opening of Tender enquiry
10	Penalty for Delay	The delivery of material shall be made within the time prescribed. Failure to deliver the material in time as per the delivery specified above would make the vendor liable to an un-conditional penalty at the rate of half percent (1/2%) of the price of the goods in arrears per week (or part thereof) Subjected to a maximum of ten percent (10%) of the order value.
11	Reverse Auction (RA)	BHEL reserves the right to go for Reverse Auction (RA) i.e., "on line bidding on internet " instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. All bidders to give their acceptance for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA. The philosophy followed for reverse auction shall be English Reverse (No ties). Information and General terms and conditions governing RA are given below.



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		<p>a. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.</p> <p>b. BHEL will engage the services of a Service Provider who will provide all necessary training and assistance/ demonstration before commencement of online bidding on internet.</p> <p>c. BHEL will inform the Vendors in writing the details of Service Provider to enable them to contact for training/ demonstration.</p> <p>d. Business rules like event date, time, start price, bid decrement, extensions etc. also will be communicated through Service Provider for compliance.</p> <p>e. Vendors have to fax the Compliance form in the prescribed format (provided by Service provider) before start of Reverse Auction. Without this, the vendor will not be eligible to participate in the event.</p> <p>f. BHEL will provide the calculation sheet which will help the Vendors to arrive at "Total Cost to BHEL" by including items like Packing & Forwarding charges, Taxes and Duties, Freight charges, Service Tax for Services and loading factors (for non-compliance to BHEL Commercial terms & conditions, if any) for each of the Vendors to enable them to fill-in the price and keep it ready for keying in during the Auction.</p> <p>g. Reverse auction will be conducted on a scheduled date & time.</p> <p>h. At the end of Reverse Auction event, the lowest bid value will be known on the network.</p> <p>i. The lowest bidder has to fax the duly signed filled-in prescribed format as provided to BHEL through Service Provider within 2 working days of Auction without fail.</p> <p>j. Any variation between the on-line bid value and the signed document will be considered as sabotaging the tender process and will invite disqualification of vendor to conduct business with BHEL as per prevailing procedure.</p> <p>k. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids already submitted and available with BHEL shall be opened as per BHEL's standard practice.</p> <p>l. Bidders shall be required to read the "Terms and Conditions" section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the „Business Rules of Reverse Auction“, which will be communicated before the Reverse Auction.</p> <p>m. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any</p>
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		<p>kind, directly or indirectly by communicating with other bidders, action as per extant BHEL guidelines, shall be initiated by BHEL and the results of the RA scrapped/ aborted.</p> <p>n. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.</p> <p>o. In case BHEL decides to go for reverse auction, the H1 bidder (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process.</p>
12	Rejections:	The supplier shall arrange replacement/repair within one month from the date of rejection intimation upon failure on supplier's part to comply. BHEL will take whatever appropriate action they may think fit in addition to repair/return of rejected material at the cost and risk of the supplier.
13	Risk purchase:	In case of delays in supply of materials/defective materials not fulfilment of any other terms and conditions given in the purchase order, the purchase may cancel the full or part thereof, and may also make purchase of such material from elsewhere/alternate source at the risk and cost of supplier.
14	Arbitration	Any dispute arising out of this contract shall be referred to the sole arbitration of GM- CSU & FP, BHEL, Jagdishpur. Its award shall be final and binding on the parties. The venue of arbitration in all cases shall be at Administrative building, BHEL, FP, Jagdishpur.
15	Jurisdiction	In case of any suit or other legal proceedings arising under or relating to the contract, the Jurisdiction of Sultanpur (UP) district court shall apply.
16	Consignee	The Stores Officer, BHEL, FP, IA Jagdishpur, Distt. Amethi(UP) 227817
17	Billing Address	The Purchase officer, FP, BHEL, IA Jagdishpur, Dist-Amethi(UP),227817
18	Documentations	<p>One set of all required documents (ink signed)like TC, GC, Invoice copy, packing list etc.(whichever applicable) with P.O copy must accompany the supply (material).</p> <p>And one set (Ink Signed) to be sent in separate envelope to Purchase officer before the dispatch. " Original for buyer " must be sent to purchase officer for advising the payment.</p>



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(D)-Special Instructions:

- 1) ***For new vendors who are not registered with BHEL(CSU & FP) duly filled up “Supplier Registration Form”(available at www.bhel.com) along-with all the supporting documents has to be submitted along-with techno commercial bid of offer. Please confirm that SRF is being submitted with your offer if applicable. However please note that if in any case duly filled up SRF along-with all the supporting documents is not received within 15 days of tender opening, your offer may liable to be ignored. If the vendor is already registered in same category / items in PMD of other BHEL’s Unit, then please furnish the details of Purchase Orders.***
- 2) ***All taxes/duties/levies etc. must be specified separately in amount or in percentage. Incomplete offer shall not be acceptable.***
- 3) ***In case vendor do not accept BHEL, CSU & FP, Jagdishpur payment terms as per enquiry proper loading shall be done.***
- 4) ***Duly filled & signed with company seal on all documents(of tender enquiry) to be submitted along with offer as token of acceptance of tender enquiry terms & conditions.***
- 5) ***Offers not meeting our requirement because any kind of deviations in technical or commercial terms are liable to be rejected by BHEL at its discretion.***
- 6) ***Please submit point wise compliance to our specification, terms & conditions .Otherwise it will be presumed that you are accepting BHEL’s Terms & condition .***
- 7) ***Original manufacturer’s test certificate required along with dispatch documents. In case supplies are from traders, It shall be the responsibility of the trader to provide original manufacture’s certificate with linkage to trader’s invoice stating batch No.***
- 8) ***BHEL, CSU & FP, Jagdishpur reserve the right to procure from more than one vendor.***
- 9) ***Please quote price in figures & words both. In case the prices quoted in words and figures are different, the value indicated in words will be considered for evaluation and establishing L1 status.***
- 10) ***The offers of the bidders who are on the banned list as also the offers of bidders, who engage the services of the banned firms, shall be rejected. The list of firms is available on web site www.bhel.com.***



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TECHNO-COMMERCIAL COMPLIANCE STATEMENT

TENDER ENQUIRY NO & DATE: 651240018/19/23/TE /D /18 Date: 20.10.2014

DUE DATE OF OPENING:

TECHNICAL:

Sr. No	Specification Clause No	Technical Deviation	Remark/Reasons for seeking Deviations

(Need to mention the technical deviations from Tender enquiry in above table, else mention "No deviation ")

COMMERCIAL:

Sr. No	Specification Clause No	Commercial Deviation	Remark/Reasons for seeking Deviations

(Need to mention the commercial deviations from tender enquiry in above table, else mention "No deviation ")

We hereby confirm that except for above, there are no other Techno-Commercial Deviation

Signature of Authorised
Representative /Bidder

Name :
Designation:
Date:
Name of Organisation:



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UNPRICE BID
(To be submitted on Vendor's Letter Head)

Un-Price bid: The Un-price bid is to be submitted in the following format with clearly written “Quoted” in place every where you have mentioned numeric values /prices in Price Bid. No prices should be mentioned on UNPRICED BID: -

Tender No: 651240018/19/23 / TE/D/18 Date: 20.10.2014

S.N.	ITEM DESCRIPTION	UNIT	QTY.	Unit Rate (INR)	Amount (INR)
1	4.5 Mtr., 250A DSL COPPER CONDUCTOR BAR WITH SLEEVE RED (W TYPE)	NOS.	6		
2	4.5 Mtr., 250A DSL COPPER CONDUCTOR BAR WITH SLEEVE YELLOW (W TYPE)	NOS.	6		
3	4.5Mtr., 250A DSL COPPER CONDUCTOR BAR WITH SLEEVE BLUE (W TYPE)	NOS.	6		
4	4.5Mtr.,250A DSL COPPER CONDUCTOR BAR WITH SLEEVE GREEN (W TYPE)	NOS.	6		
5	4.5 Mtr., 500A DSL COPPER CONDUCTOR BAR WITH SLEEVE YELLOW (V TYPE)	NOS.	6		
6	4.5 Mtr.,500A DSL COPPER CONDUCTOR BAR WITH SLEEVE GREEN (V TYPE)	NOS.	4		
7	4.5 Mtr.,800A DSL COPPER CONDUCTOR BAR WITH SLEEVE YELLOW (V TYPE)	NOS.	4		
8	4.5 Mtr., 800A DSL COPPER CONDUCTOR BAR WITH SLEEVE GREEN (V TYPE)	NOS.	4		
9	CURRENT COLLECTOR 250 A FOR 250 A DSL WITH 1 MTR. CABLE (W TYPE)	NOS.	10		
10	CURRENT COLLECTOR 250 A FOR 500 / 800 A DSL WITH 1 MTR. CABLE (V TYPE)	NOS.	10		
11	FOUR POLE HANGER ASSLY FOR 250 A DSL (W TYPE)	NOS.	20		
12	SINGLE POLE HANGER ASSLY FOR 500/800 A DSL (V TYPE)	NOS.	40		
13	BOLTED JOINT COPPER FOR 250 A DSL (W TYPE)	NOS.	40		
14	ALUMINIUM BOLTED JOINT FOR 500/800 A DSL (V TYPE)	NOS.	30		
15	JOINT COVER FOR 250 A DSL (W TYPE)	NOS.	40		
16	JOINT COVER FOR 500/800 A DSL (V TYPE)	NOS.	10		
17	WEB BRACKET 400MM LONG	NOS.	15		
18	WEB BRACKET 650MM LONG	NOS.	15		
19	SINGLE COLLECTOR BRACKET 25MM FOR 250 A DSL	NOS.	2		
20	CURRENT COLLECTOR BRACKET 40X40X500 SINGLE FOR 500/800 A DSL	NOS.	2		
21	END COVER FOR 250 A DSL (W TYPE)	NOS.	4		
22	END COVER FOR 500//800 A DSL (V TYPE)	NOS.	4		
23	CENTER POWER FEED ASSLY FOR 250 A DSL (W TYPE)	NOS.	8		



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24	CENTER POWER FEED ASSLY FOR 500/800 A DSL (V TYPE)	NOS.	8		
25	Sub Total Group-A (Sl. No. 1 to 24)				
26	SPARE COIL FOR 400 MM DIA DCEM BRAKE	NOS.	1		
27	SPARE COIL FOR 300 MM DIA DCEM BRAKE	NOS.	3		
28	SPARE COIL FOR 250 MM DIA DCEM BRAKE	NOS.	2		
29	SPARE COIL FOR 200 MM DIA DCEM BRAKE	NOS.	1		
30	SPARE COIL FOR 160 MM DIA DCEM BRAKE	NOS.	4		
31	ASBESTOS BRAKE LINER FOR WIDTH 70 MM ,THICKNESS 6 MM FOR BRAKE	MTR.	20		
32	ASBESTOS BRAKE LINER FOR WIDTH 90 MM ,THICKNESS 6 MM FOR BRAKE	MTR.	20		
33	ASBESTOS BRAKE LINER FOR WIDTH 110 MM ,THICKNESS 6 MM FOR BRAKE	MTR.	20		
34	ASBESTOS BRAKE LINER FOR WIDTH 140 MM ,THICKNESS 8 MM FOR BRAKE	MTR.	20		
35	ASBESTOS BRAKE LINER FOR WIDTH 180 MM ,THICKNESS 10 MM FOR BRAKE	MTR.	10		
36	SPARE RIVET FOR M6 X 25 MM FOR BRAKE LINER	KG	2		
37	SPARE RIVET FOR M6 X 30 MM FOR BRAKE LINER	KG	2		
38	Sub Total Group-B (Sl. No. 26 to 37)				
39	ROTARY GEARED LIMIT SWITCHES GRLS/48/2SH-40A Rotary Geared Type Limit Switch with 2 NC Contact and having gear ratio 48:1. Contacts rated for 40 Amps rated at 500VA.C IP-54 Enclosure.	NOS.	10		
40	COUNTER WEIGHT LIMIT SWITCHES CWLS/1SH/2-40 A Counter weight operated gravity type shunt limit switch with 2 NC contract rated for 40 Amps rated at 500 v.a.c. IP-54 Enclosure	NOS.	10		
41	Sub Total Group-C (Sl. No. 39 to 40)				
42	Sub Total For Group-A, Sub Total Group-B & Sub Total Group-C				
43	Excise Duty @.....				
44	VAT@...../ CST against form "C" @.....				
45	Freight & Insurance				
46	Total Value (Purchase Order Value)				



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Section-2

PRICE BID

(To be submitted on Vendor's Letter Head)

Price bid: The price bid is to be submitted in the following format: -

Tender No: 651240018/19/23 / TE/D/18 **Date:** 20.10.2014

S.N.	ITEM DESCRIPTION	UNIT	QTY.	Unit Rate (INR)	Amount (INR)
1	4.5 Mtr., 250A DSL COPPER CONDUCTOR BAR WITH SLEEVE RED (W TYPE)	NOS.	6		
2	4.5 Mtr., 250A DSL COPPER CONDUCTOR BAR WITH SLEEVE YELLOW (W TYPE)	NOS.	6		
3	4.5Mtr., 250A DSL COPPER CONDUCTOR BAR WITH SLEEVE BLUE (W TYPE)	NOS.	6		
4	4.5Mtr.,250A DSL COPPER CONDUCTOR BAR WITH SLEEVE GREEN (W TYPE)	NOS.	6		
5	4.5 Mtr., 500A DSL COPPER CONDUCTOR BAR WITH SLEEVE YELLOW (V TYPE)	NOS.	6		
6	4.5 Mtr.,500A DSL COPPER CONDUCTOR BAR WITH SLEEVE GREEN (V TYPE)	NOS.	4		
7	4.5 Mtr.,800A DSL COPPER CONDUCTOR BAR WITH SLEEVE YELLOW (V TYPE)	NOS.	4		
8	4.5 Mtr., 800A DSL COPPER CONDUCTOR BAR WITH SLEEVE GREEN (V TYPE)	NOS.	4		
9	CURRENT COLLECTOR 250 A FOR 250 A DSL WITH 1 MTR. CABLE (W TYPE)	NOS.	10		
10	CURRENT COLLECTOR 250 A FOR 500 / 800 A DSL WITH 1 MTR. CABLE (V TYPE)	NOS.	10		
11	FOUR POLE HANGER ASSLY FOR 250 A DSL (W TYPE)	NOS.	20		
12	SINGLE POLE HANGER ASSLY FOR 500/800 A DSL (V TYPE)	NOS.	40		
13	BOLTED JOINT COPPER FOR 250 A DSL (W TYPE)	NOS.	40		
14	ALUMINIUM BOLTED JOINT FOR 500/800 A DSL (V TYPE)	NOS.	30		
15	JOINT COVER FOR 250 A DSL (W TYPE)	NOS.	40		
16	JOINT COVER FOR 500/800 A DSL (V TYPE)	NOS.	10		
17	WEB BRACKET 400MM LONG	NOS.	15		
18	WEB BRACKET 650MM LONG	NOS.	15		
19	SINGLE COLLECTOR BRACKET 25MM FOR 250 A DSL	NOS.	2		
20	CURRENT COLLECTOR BRACKET 40X40X500 SINGLE FOR 500/800 A DSL	NOS.	2		
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22	END COVER FOR 500//800 A DSL (V TYPE)	NOS.	4		
23	CENTER POWER FEED ASSLY FOR 250 A DSL (W TYPE)	NOS.	8		



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24	CENTER POWER FEED ASSLY FOR 500/800 A DSL (V TYPE)	NOS.	8		
25	Sub Total Group-A (Sl. No. 1 to 24)				
26	SPARE COIL FOR 400 MM DIA DCEM BRAKE	NOS.	1		
27	SPARE COIL FOR 300 MM DIA DCEM BRAKE	NOS.	3		
28	SPARE COIL FOR 250 MM DIA DCEM BRAKE	NOS.	2		
29	SPARE COIL FOR 200 MM DIA DCEM BRAKE	NOS.	1		
30	SPARE COIL FOR 160 MM DIA DCEM BRAKE	NOS.	4		
31	ASBESTOS BRAKE LINER FOR WIDTH 70 MM ,THICKNESS 6 MM FOR BRAKE	MTR.	20		
32	ASBESTOS BRAKE LINER FOR WIDTH 90 MM ,THICKNESS 6 MM FOR BRAKE	MTR.	20		
33	ASBESTOS BRAKE LINER FOR WIDTH 110 MM ,THICKNESS 6 MM FOR BRAKE	MTR.	20		
34	ASBESTOS BRAKE LINER FOR WIDTH 140 MM ,THICKNESS 8 MM FOR BRAKE	MTR.	20		
35	ASBESTOS BRAKE LINER FOR WIDTH 180 MM ,THICKNESS 10 MM FOR BRAKE	MTR.	10		
36	SPARE RIVET FOR M6 X 25 MM FOR BRAKE LINER	KG	2		
37	SPARE RIVET FOR M6 X 30 MM FOR BRAKE LINER	KG	2		
38	Sub Total Group-B (Sl. No. 26 to 37)				
39	ROTARY GEARED LIMIT SWITCHES GRLS/48/2SH-40A Rotary Geared Type Limit Switch with 2 NC Contact and having gear ratio 48:1. Contacts rated for 40 Amps rated at 500VA.C IP-54 Enclosure.	NOS.	10		
40	COUNTER WEIGHT LIMIT SWITCHES CWLS/1SH/2-40 A Counter weight operated gravity type shunt limit switch with 2 NC contract rated for 40 Amps rated at 500 v.a.c. IP-54 Enclosure	NOS.	10		
41	Sub Total Group-C (Sl. No. 39 to 40)				
42	Sub Total For Group-A, Sub Total Group-B & Sub Total Group-C				
43	Excise Duty @.....				
44	VAT@...../ CST against form "C" @.....				
45	Freight & Insurance				
46	Total Value (Purchase Order Value)				



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ANNEXURE-A SPARE PARTS OF DSL SYSTEM IN EOT CRANES

S.N.	ITEM DESCRIPTION	UNIT	QTY.
1	4.5 Mtr., 250A DSL COPPER CONDUCTOR BAR WITH SLEEVE RED (W TYPE)	NOS.	6
2	4.5 Mtr., 250A DSL COPPER CONDUCTOR BAR WITH SLEEVE YELLOW (W TYPE)	NOS.	6
3	4.5Mtr., 250A DSL COPPER CONDUCTOR BAR WITH SLEEVE BLUE (W TYPE)	NOS.	6
4	4.5Mtr.,250A DSL COPPER CONDUCTOR BAR WITH SLEEVE GREEN (W TYPE)	NOS.	6
5	4.5 Mtr., 500A DSL COPPER CONDUCTOR BAR WITH SLEEVE YELLOW (V TYPE)	NOS.	6
6	4.5 Mtr.,500A DSL COPPER CONDUCTOR BAR WITH SLEEVE GREEN (V TYPE)	NOS.	4
7	4.5 Mtr.,800A DSL COPPER CONDUCTOR BAR WITH SLEEVE YELLOW (V TYPE)	NOS.	4
8	4.5 Mtr., 800A DSL COPPER CONDUCTOR BAR WITH SLEEVE GREEN (V TYPE)	NOS.	4
9	CURRENT COLLECTOR 250 A FOR 250 A DSL WITH 1 MTR. CABLE (W TYPE)	NOS.	10
10	CURRENT COLLECTOR 250 A FOR 500 / 800 A DSL WITH 1 MTR. CABLE (V TYPE)	NOS.	10
11	FOUR POLE HANGER ASSLY FOR 250 A DSL (W TYPE)	NOS.	20
12	SINGLE POLE HANGER ASSLY FOR 500/800 A DSL (V TYPE)	NOS.	40
13	BOLTED JOINT COPPER FOR 250 A DSL (W TYPE)	NOS.	40
14	ALUMINIUM BOLTED JOINT FOR 500/800 A DSL (V TYPE)	NOS.	30
15	JOINT COVER FOR 250 A DSL (W TYPE)	NOS.	40
16	JOINT COVER FOR 500/800 A DSL (V TYPE)	NOS.	10
17	WEB BRACKET 400MM LONG	NOS.	15
18	WEB BRACKET 650MM LONG	NOS.	15
19	SINGLE COLLECTOR BRACKET 25MM FOR 250 A DSL	NOS.	2
20	CURRENT COLLECTOR BRACKET 40X40X500 SINGLE FOR 500/800 A DSL	NOS.	2
21	END COVER FOR 250 A DSL (W TYPE)	NOS.	4
22	END COVER FOR 500//800 A DSL (V TYPE)	NOS.	4
23	CENTER POWER FEED ASSLY FOR 250 A DSL (W TYPE)	NOS.	8
24	CENTER POWER FEED ASSLY FOR 500/800 A DSL (V TYPE)	NOS.	8



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ANNEXURE-B

SPARE PARTS OF DCEM BRAKE OF EOT CRANES

S.N.	ITEM DESCRIPTION	UNIT	QTY.
1	SPARE COIL FOR 400 MM DIA DCEM BRAKE	NOS.	1
2	SPARE COIL FOR 300 MM DIA DCEM BRAKE	NOS.	3
3	SPARE COIL FOR 250 MM DIA DCEM BRAKE	NOS.	2
4	SPARE COIL FOR 200 MM DIA DCEM BRAKE	NOS.	1
5	SPARE COIL FOR 160 MM DIA DCEM BRAKE	NOS.	4
6	ASBESTOS BRAKE LINER FOR WIDTH 70 MM ,THICKNESS 6 MM FOR BRAKE	MTR.	20
7	ASBESTOS BRAKE LINER FOR WIDTH 90 MM ,THICKNESS 6 MM FOR BRAKE	MTR.	20
8	ASBESTOS BRAKE LINER FOR WIDTH 110 MM ,THICKNESS 6 MM FOR BRAKE	MTR.	20
9	ASBESTOS BRAKE LINER FOR WIDTH 140 MM ,THICKNESS 8 MM FOR BRAKE	MTR.	20
10	ASBESTOS BRAKE LINER FOR WIDTH 180 MM ,THICKNESS 10 MM FOR BRAKE	MTR.	10
11	SPARE RIVET FOR M6 X 25 MM FOR BRAKE LINER	KG	2
12	SPARE RIVET FOR M6 X 30 MM FOR BRAKE LINER	KG	2



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Annexure-I

TECHNICAL SPECIFICATIONS: SPARE PARTS OF DCEM BRAKE OF EOT CRANES (Annexure-B)

S.N.	ITEM	VEDOR TO CONFIRM	REMARKS
1	CHARACTERISTIC OF ASBESTOS BRAKE LINER		
a	Temperature: Max. Temp: 230°C Max. Continuous Temp: 150°C		
b	Co-efficient of Friction: 0.3 /0.40		
c	Specific gravity: 1.6		
d	Ultimate tensile strength: 246 kg/cm ²		
e	Ultimate compressive strength: 630 kg/cm ²		
f	Rivet holding capacity: 900 kg/cm ²		
2	CHARACTERISTIC OF DCEM BRAKE COIL Dia. 400 mm		
a	Coil Voltage		
b	Rated current		
3	CHARACTERISTIC OF DCEM BRAKE COIL Dia. 300 mm		
a	Coil Voltage		
b	Rated current		
4	CHARACTERISTIC OF DCEM BRAKE COIL Dia. 250 mm		
a	Coil Voltage		
b	Rated current		
5	CHARACTERISTIC OF DCEM BRAKE COIL Dia. 200 mm		
a	Coil Voltage		
b	Rated current		
6	CHARACTERISTIC OF DCEM BRAKE COIL Dia. 160 mm		
a	Coil Voltage		
b	Rated current		



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ANNEXURE-C

Sl. NO	ITEM DESCRIPTION	UNIT	QTY. REQD.
1	ROTARY GEARED LIMIT SWITCHES GRLS/48/2SH-40A Rotary Geared Type Limit Switch with 2 NC Contact and having gear ratio 48:1. Contacts rated for 40 Amps rated at 500VA.C IP-54 Enclosure.	NOS.	10
2	COUNTER WEIGHT LIMIT SWITCHES CWLS/1SH/2-40 A Counter weight operated gravity type shunt limit switch with 2 NC contract rated for 40 Amps rated at 500 v.a.c. IP-54 Enclosure	NOS.	10