

NIT No. WEX/MCR/Chain Hoist/2-317/2011-12/Dt.18.11.2011

Scope of supply and work with general terms & conditions

Name of work:-Retrofitting of Electric chain hoist (1 Ton) on SKODA RAM BORER, Model-W250H, Plan No.3/2-317.

Quantity- ONE No.

Clause No.	Description	Vendor's Remarks
1	<u>PURPOSE-</u> Chain hoist shall be shall be designed, manufactured, supplied, erected, mounted and commissioned by the vendor on existing I-Beam of SKODA RAM BORER, Plan No. 3/2-317.	
2.	<u>TYPE OF CHAIN HOIST-</u> Floor operated (Pendant) Trolley Mounted / Suspended Electric Chain Hoist, Capacity 1000 Kg, Hoist duty class M5 Confirming to IS: 6547 (Latest Version).	
3.	<u>TECHNICAL REQUIREMENTS</u>	
3.1	Duty Class: M5/M6 for Indoor operations	
3.2	Lifting Capacity: 1 Ton	

3.3	Height of Lift: 6 Meter	
3.4	Type of Suspension: Motor driven Trolley	
3.5	Head Room : Low Head Room	
3.6	No. of falls: 2	
3.7	Hoist: Electric Chain Hoist as per IS: 6547 (latest version) STAHL/INDEF/TRACTEL make	
3.8	Hoisting speed (Main): 6-6.5 Mtr./Min	
3.9	Hoisting speed (Creep): 1.5 Mtr./Min	
3.10	Cross traverse (Trolley) speed: 10-12 Mtr./Min	
3.11	Built in Electric Control Panel: Through Pendant control with Push Button for ON, OFF, UP, DOWN, Left, Right & Emergency Stop, Hanging with hoist.	
3.12	Hook: Drop Forged, Plain 'C' type with Latch, Swiveling Bottom Block, Swiveling on Thrust Bearing, Duly tested as per IS: 15560:2005(latest version)	
3.13	Chain: Link type, Surface Hardened & Galvanized	
3.14	Gear Boxes: Grease packed compact gear box. Precision Machined & Case Hardened Alloy Steel Gears & Load Chain Wheel	
3.15	Bearings: Anti-friction Ball/Roller/Needle bearing of SKF / FAG / NTN / INA Make only. Grease nipples to be provided wherever required.	
3.16	Motors:- Squirrel Cage Induction Crane duty motors (make Alstom / Siemens / GEC) , CDF 40%, Totally enclosed, fan cooled, Insulation Class-F & confirming to relevant latest IS:325	

3.17	Motor Rating (Hoisting) : Suitable for required operations	
3.18	Motor Rating (Cross traverse): Suitable for required operations	
3.19	Brakes: Overload Slipping Clutch Conical rotor type or "Fail to safe" action type Electromagnetic shoe / disc brakes type to be provided to hold the mechanism in position instantaneously as soon as the power supply is 'OFF' either accidentally or intentionally for all motions.	
3.20	Limit Switches: For over Hoisting and Over lowering: Shunt, adjustable type. Two way lever type for CT both direction and LT both direction of reputed make.	
3.21	Wiring: All the penal wiring should be done by using standard multi core Copper PVC insulated cables of reputed make.	
3.22	All contactors, over load relays & fuses may be used preferably of Siemens / L&T / English Electric make. All Time delay relays may be used preferably of Cutler Hammer make.	
4.	<u>EXISTING BEAM DETAILS:-</u> Cross section: I-Section Cross section size: 250mm X125mm Length of beam: 3 Meter	
5.	<u>WORKING CONDITIONS:-</u>	
5.1	Ambient Conditions: Temperature: 4° C - 50° C. Working Condition: normal environment.	

5.2	Power Supply: 415±10% Volts, 50 Hz, 3 phase, AC	
6.	<u>PREDESPATCH INSPECTION:-</u> <u>Pre dispatch inspection shall be carried out by BHEL at vendor's works and chain hoist shall be cleared for dispatch after demonstration of lifting a load of 1.25 ton safely</u>	
7.	<u>ACCEPTENCE AT BHEL, Hardwar:-</u>	
	Hoist shall be load tested as per IS at 1.25 Ton load at BHEL, Hardwar. Load shall be provided by BHEL at site. Only after successful lifting of the load , the chain hoist shall be accepted	
8	<u>DELIVERY PERIOD:</u>	
8.1	Delivery period shall be four months from the date of receipt of confirmed work order.	
8.2	Vendor shall depute their manpower within 15 days of intimation for erection and commissioning of the machine at BHEL, Hardwar.	
8.3	The erection and commissioning work should be completed within 15 days from the date of start of erection and commissioning at BHEL, Haridwar.	
9.	<u>LATE DELIVERY:</u> LD of 0.5% of the total cost of work per week, subject to a maximum of 5% shall be imposed on delay in delivery from scheduled delivery date and delay in commissioning from scheduled commissioning date. Delay in commissioning due to reasons attributed to BHEL shall not attract LD.	
10.	<u>OTHER GENERALTERMS & CONDITIONS:</u>	

10.1	All the components should be in metric sizes only.	
10.2	The hoist should have decent aesthetic look and Sound level should be minimum.	
10.3	All cables should be properly covered and protected.	
10.4	All the moving parts should be duly covered with guards as per safety norm. Proper guard / cover / tray to prevent falling of bolts from coupling etc should be also provided wherever required.	
10.5	The successful vendor is required to measure all necessary dimensions like span, head room and LT track etc. at site before starting of the crane design / manufacturing.	
10.6	Vendor shall bring all tools and manpower for erection & commissioning of the supplied item at BHEL, Hardwar.	
11.	<u>GUARANTEE PERIOD & PERFORMANCE BANK GUARANTEE:-</u>	
11.1	<u>Supplied equipment shall remain under guarantee for a period of year from the date of successful commissioning</u>	
11.2	Vendor shall submit performance bank guarantee of 10% of total work order value for the entire guarantee period of one year from the date of successful commissioning of the chain hoist.	
11.3	Vendor shall attend complaints in functioning of the chain hoist during the guarantee period.	
11.4	Vendor shall replace/repair any defective part/item free of cost during the guarantee period.	
12.	<u>TRANSPORTATION AND INSURANCE:-</u>	
12.1	Transportation & transit insurance will be on BHEL account.	

12.2	Transportation by BHEL approved Transporters only.	
12.3	Road permit, Form '31' & Form 'C' will be provided by BHEL.	
13.	<u>DOCUMENTS:</u>	
13.1	Five sets of operation and maintenance manuals having adequate details of machinery and electrical diagrams shall have to be supplied. 2 set of CDs having complete manual also to be provided.	
13.2	The 3 view drawing with complete details and Bill of quantity and complete specifications of BOI will be supplied.	
14.	<u>PAYMENT TERMS:-</u> No advance payment shall be made to the vendor. Part payment will be made after completion of following milestones-	
14.1	First payment of 80% of total work order value shall be payable after receipt of material at BHEL, Hardwar.	
14.2	Balance payment of 20% of total work order value along with 100% Taxes and Duties will be made after successful commissioning, acceptance as per para 7 and submission of performance bank guarantee as per para 11.2.	

14.3	All the payments shall be made through e-payment after submission of following documents along with first bill- i) E-payment form duly filled.(form will be provided by BHEL) ii) Bar chart showing the milestones iii) Income tax exemption letter(if applicable) iv) Receipt from the vendor that machine has been received by them at their works	
15.	<u>OFFER:-</u> The offer should be submitted in the following manner.	
15.1	<u>Part-1:-</u> Techno-commercial bid containing technical details and commercial terms & conditions.	
15.2	<u>Part-2:-</u> Price bid. The price bid containing any terms & conditions are liable to be rejected.	
15.3	Price bid shall be opened for only techno commercially accepted offers.	
15.4	Point-wise compliance of this scope of work is to be given by vendors while submitting their offer.	
16.	<u>QUALIFYING CRITERIA:-</u> The vendors meeting following criteria would only be considered:	
16.1	Who have Manufactured at least one no. Electric chain hoist of 1 ton load carrying capacity during last 5 years and the same is working satisfactorily for last six months.	
16.2	The vendor shall submit “Performance Certificate(s)” of the from the end user along with the offer and should agree to arrange the visit of BHEL team for verification at the end user’s works, if BHEL so desires.	

17.	<u>EARNEST MONEY DEPOSIT (EMD):</u>	
17.1	Vendors have to deposit Rs. 20,000/- as the EMD. EMD may be deposited in cash, through pay order in favor of BHEL, Hardwar or through demand draft only.	
17.2	EMD shall be converted to security deposit if the work is awarded.	
17.3	EMD of unsuccessful bidders shall be refunded back normally within fifteen days of acceptance of award of work by the successful bidder.	
17.4	EMD shall not carry any interest.	
18.	<u>SECURITY DEPOSIT(SD):-</u>	
	Successful vendor shall deposit security.	
18.1	<p>The rate of security deposit will be as below:</p> <ul style="list-style-type: none"> • For work Up to ` 10 Lakhs : <u>10% of work order value</u> • Above ` 10 Lakhs upto ` 50 Lakhs : <u>` 1 Lakh + 7.5% amount exceeding ` 10 Lakhs</u> • Above ` 50 Lakhs: <u>` 4 Lakhs + 5% amount exceeding ` 50 Lakhs</u> 	

18.2	The security deposit should be submitted before the start of work in the following forms: i) Cash (As permissible under the Income Tax Act) ii) Pay Order, Demand Draft in favour of BHEL, Hardwar iii) Local cheques of Scheduled Banks, subject to realization. iv) Bank Guarantee from Scheduled Banks/Public Financial Institution as defined in the companies Act. The Bank guarantee format should have the approval of BHEL.	
18.3	Security Deposit shall not carry any interest.	
18.4	EMD of successful tenderer can be converted and adjusted against the Security Deposit.	
18.5	100% of the Security Deposit amount shall be refunded to the vendor after post commissioning successful running of the machine for one month.	
19.	Vendors are required to measure all necessary dimensions like span, head room and Cross traverse track etc. and study the machine documents at site before submitting the offer.	

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