

BHARAT HEAVY ELECTRICAL LIMITED, JHANSI



Specification No.	
Item No.	
Location	BHEL JHANSI

SPECIFICATION CUM SCOPE OF WORK FOR "Consultancy work for enhancement of cranes capacity at Bay- 9 and Bay 10 inside factory premises in BHEL Jhansi."

NOTE:-

- Vendor to furnish the offer using this standard template of the specification. While furnishing the offer, no change is to be made in the first three columns (i.e. 'S.NO.', 'DESCRIPTION FOR BHEL REQUIREMENT' & 'ACTION BY VENDOR'). Only the "Offered" column and where applicable, the "Deviations" & "Remarks" Column of this format shall be filled in by the Vendor and submitted along with the offer. Inadequate / incomplete, ambiguous, or unsustainable information against any of the clauses of the specifications/requirements shall be treated as non-compliance.
- The offer and all documents enclosed with offer should be in English language only.
- Wherever "vendor to specify" or "suitable" is mentioned, suitable backup data or calculation or justification is required for establishing the suitability.

NAME & ADDRESS OF THE CONSULTANT:	
TELEPHONE NOS.:	
FAX NOS.:	
E-MAIL ADDRESS :	

S.NO.	DESCRIPTION FOR BHEL REQUIREMENT	ACTION BY VENDOR	OFFERED	DEVIATION/ REMARK
1.0	SCOPE The scope of work shall be including but not be limited to the following:			
1.1	Subject to their availability, the relevant foundation and structure steel drawings of the existing system along with details of EOT cranes shall be provided by BHEL to the extent possible based on which technical analysis / assessment shall be carried out by the consultant. In case foundation drawings/safe bearing capacities of the strata underneath are not available in drawings or elsewhere, physical examination of one or more typical foundations shall be made BY CONSULTANT depending on its feasibility. Civil work such as excavation, dismantling etc. if any shall be arranged by BHEL.	Vendor to confirm		
1.2	Analysis of the existing structures shall be done by the consultant on suitable civil design platform(s) such as Staad Pro, Midas-Gen etc. or conventional calculation method based on the fundamental principles of structural analysis. Design calculations may consist of checks against design parameters such as sectional modulus, bending moment, lateral moment, shear force, creep, fatigue etc. Design documents/calculations and revised propositions in the modified structures (if any) shall be submitted by the consultant in soft copies as well as spirally bound hard copies (3 sets).	Vendor to confirm		
1.3	All necessary field tests shall be conducted by the consultant at site with his own testing apparatus/instrument at no extra cost over and above his awarded rates.	Vendor to confirm		
1.4	The detailed "Feasibility Study" of existing structure at Bay 9 and Bay 10 is required to be carried out. The consultant shall carry out the study and submit detailed report in order to ascertain stability of structural steel structure and foundation to sustain the loading of 300 MT through Single EOT crane in place of existing 250 MT (2 Cranes of 125 MT are used in tandem) in Bay 9 and 125 MT through Single EOT crane in place of existing 50 MT in Bay 10 by way of conducting Non-destructive testing as needed such as spectrometer analysis, ultrasonic testing of structural steel members, analysis of verticality of columns through total station and rebound hammer test over foundation and any other test necessary to ascertain the required loading. The approximate load details are:	Vendor to confirm		
	Bay 9			
	Self Weight of 300 T EOT Crane (Approximate)		200 T	
	Test Weight (125% of crane capacity)		375 T	
	Bay 10			
	Self Weight of 125 T EOT Crane (Approximate)		150 T	
	Test Weight (125% of crane capacity)		156.25 T	
	Consultant may seek any other information required for designing of structure and BHEL shall provide the same on the basis of availability.			
1.5	Measures and recommendations for strengthening of Gantry Girders of Bay 9 and Bay 10 over which the above mentioned EOT cranes will be installed must be submitted by the Consultant in the report.	Vendor to confirm		
1.6	Measures and recommendations for strengthening of lifting girder of Bay 9 for lifting of 300 T EOT Crane & recommendation for erection of 125T EOT Crane in Bay 10 (alongwith the BOQ for lifting girder arrangement of Bay 10 or any other suitable procedure) for crane installation must be submitted by the Consultant in the report.	Vendor to confirm		
1.7	As per study and results of test obtained, if the existing support structures are found to be inadequate, consultant has to propose modifications/alterations/additions (if practically viable) in the existing structures along with submission of design calculations for safe installation and operation of EOT crane (s) of enhanced capacity and / or installation of additional crane (s) as the case may be in three copies. The recommendation must contain the Bill of Quantity for modifications work proposed by consultant along with the supporting drawings for enhancement of Cranable Capacity.	Vendor to confirm		
1.8	Design, drawing and recommendation documents will be vetted by any reputed govt. institution such as IIT's/NIT's/other Government reputed college or university (at Consultant's cost and scope) for suitability of the existing structural steel structure and foundation as per relevant Indian standards. No additional payment shall be made to consultant on this ground.	Vendor to confirm		
1.9	All civil works like Earthwork, dismantling of concrete, Re-concreting, etc shall be in BHEL scope. Agency shall have to communicate timely for such enabling works.	Vendor to confirm		
1.10	After the completion of modification work the consultant shall provide "Structural Stability Report & Certificate" of proposed modification carried out by independent contractor on behalf of BHEL in the existing Bay structure re-designed by them.	Vendor to confirm		
1.11	The consultant or his representative(s) shall adhere to the standard safety norms of BHEL while inspecting the site. Safety appliances such as safety helmet, safety belt, etc. shall, however, be provided to them by BHEL. During visual inspection, they may be required to climb upto crane level with all safety measures as mentioned above.	Vendor to confirm		
1.12	The scope of work shall consist of all allied and enabling activities too (other than activities specified in point 1.9) for which nothing extra shall be claimed by the consultant over and above the awarded rates.	Vendor to confirm		
2.0	BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false/incorrect, the offer shall be rejected.	Vendor to confirm		