

	<u>BHARAT HEAVY ELECTRICAL LIMITED</u>			Enquiry No.		
	<u>UNIT'S ADDRESS:</u>			Due Date :		
	<u>CONTACT PERSON'S NAME/DESIGN./PHONE NO./E-MAIL (FROM PURCHASE DEPTT.)</u>			Supplier Qtn. No.:		
				Date :		
SPECIFICATION CUM COMPLIANCE CERTIFICATE OF BATTERY OPERATED TRUCK.						
NOTE:-						
1. Vendor must submit complete information against clause no. 19. The offer meeting this clause would only be processed.						
2. 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 ..						
3. The offer and all documents enclosed with offer should be in English language only.						
NAME & ADDRESS OF THE SUPPLIER :				NAME & ADDRESS OF THE INDIAN AGENT :		
TELEPHONE NOS.:				TELEPHONE NOS.:		
FAX NOS.:				FAX NOS.:		
E-MAIL ADDRESS :				E-MAIL ADDRESS :		
SCOPE: SUPPLY, ERECTION & COMMISSIONING OF BATTERY OPERATED TRUCK COMPLYING WITH SPECIFICATIONS AS BELOW:						

SNO	DESCRIPTION FOR BHEL REQUIREMENT	Specified to/be Confirmed By:	Offered	Deviations	Remarks
1	PURPOSE: Battery Operated Platform Truck capable to lift 4000 kg weight is required for material movement of various jobs inside and outside Blocks.	Vendor to confirm			
2	SPECIFICATION/FEATURES :				
2.1	Carrying capacity = 4000 kg	Vendor to confirm			
2.2	Platform Length \geq 2500 mm	Vendor to confirm			
2.3	Platform Width \geq 1000 mm (approx.)	Vendor to confirm			
2.4	Platform Height: 800 mm (approx.)	Vendor to confirm			
2.6	Ground Clearance: \geq 80 mm	Vendor to confirm			
2.9	Travel Speed: (laden); 7 - 9 (Km/hr) max. (Unladen): 8 - 10 (Km/hr) max.	Vendor to confirm			
2.10	Outside turn radius: 4000 mm (approx)	Vendor to specify. .			
3	Motor				
3.1.1	Type: Variable speed totally enclosed (Details to be specified by vendor)	Vendor to confirm			
3.1.2	Motor should be independently mounted on rubber mountings.	Vendor to confirm			

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3.1.3	Output H.P (max) at R.P.M	Vendor to specify			
4	Battery				
4.1	Battery; 30V / 48 V, 200 AH / 300 AH	Vendor to confirm			
4.2	Electronic self compensative, single phase suitable to charge the battery mentioned in clause 4.1 should be provided.	Vendor to confirm			
5	Drive to wheel transmission: The drive wheels to be driven via a shaft with universal sliding coupling and double reduction gears housed in main differential. (Details to be given by vendor).	Vendor to specify			
6	WHEELS:				
6.1	Wheel base:	Vendor to specify			
6.2	Wheel Track:	Vendor to specify			
6.3	The drive wheels to be quickly demountable type permitting the wheel removal without exposing the bearing and other components	Vendor to confirm			
6.4	Tyre: Type and details to be given by vendor.	Vendor to specify			
7	Brakes:				
7.1	Heavy duty, self adjusting and self emerging hydraulic type to be provided on drive wheels actuated by foot pedals.	Vendor to confirm			
7.2	Hand operated parking brakes also to be provided.	Vendor to confirm			
7.3	In addition to this vendor to specify if any other braking system to be provided in case hydraulic brake fails.	Vendor to specify			

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8	CONTROL & Display				
8.1	Electrical control panel to be provided with 24 V coils.	Vendor to confirm			
8.2	Control panel to be located below steering handle.	Vendor to confirm			
8.3	Foot pedals for accelerator, inching/brakes	Vendor to confirm			
8.4	Forward reverse control mounted for easy operation.	Vendor to confirm			
8.5	Emergency cut off and key switch mounted on dash board.	Vendor to confirm			
8.6	Anti Plugging device to prevent the driver from suddenly changing the direction of the truck while it is running at full speed in one direction.	Vendor to confirm			
8.7	Low voltage battery discharge alarm.	Vendor to confirm			
9	SEATING: Adjustable and comfortable seating for driver with controls in reach to be provided.	Vendor to confirm			
10	STEERING: Feather touch steering providing a wide angle of lock and high degree of manoeuvrability. External forces on wheels should not produce reactions at the hand wheel.	Vendor to confirm			
11	Spring Shock absorbers to lessen shocks transmitted to driver as well on the load carried to be provided.	Vendor to confirm			
12	Horn, Headlights, Tail Lights, Parking lights for operation of truck during nights.	Vendor to confirm			

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13	SPARES: Spares for two year trouble free operation with item wise unit price.	Vendor to confirm			
14	Proving and Training.				
14.1	Demonstration of all features of the equipment and its accessories to the satisfaction of BHEL for their efficient and effective use.	Vendor to confirm			
14.2	Training of BHEL operators for operation, safety and maintenance problem know how and remedies to be provided.	Vendor to confirm			
15	4 set of operation and maintenance manuals along with O& M manual covering, Hydraulic system details's drawings, Lubrication circuit drgs. , spares part list Electrical circuit and control circuit diagram.	Vendor to confirm			
16	GUARANTEE: Battery operated platform truck should be warranted for performance for the period of 12 months from the date of commissioning.				
17	SAFETY :	Vendor to confirm			
17.1	Lateral stability				
17.2	Equipment should not start by any means if the battery voltage fails from the required minimum voltage.				
17.3	Control wiring should be of fire and heat resistive cable.				
17.4	The complete electric circuit is to be protected by adequately rated fuses.				

SNO	DESCRIPTION FOR BHEL REQUIREMENT	Specified to/be Confirmed By:	Offered	Deviations	Remarks
18	GENERAL				
18.1	Model	Vendor to specify			
18.2	Total size.	Vendor to specify			
18.3	Vendor to submit, along with offer, the reference list of customers where equipment have been supplied mentioning the customer, Machine Model, major specifications of the supplied machine, Year of Supply etc.	Vendor to confirm			
18.4	Detailed catalogues , sketch/ photographs of the m/c and accessories/ attachments should be submitted with the offer.	Vendor to confirm			
19	EVALUATION CRITERIA / QUALIFYING REQUIREMENT:	Vendor to confirm			
	Only those vendors, who have supplied at least two Battery Operated Truck of similar capacity in the past ten years and such machine is presently working satisfactorily for more than one year after commissioning, should quote. The following information is to be submitted by the vendor about the companies where similar machines have been supplied. This is required from all the vendors for qualification of their offer.				
	1. Name of the customer / company where similar machine is installed.				
	2. Complete postal address of the customer				
	3. Year of commissioning.				
	4. Name and designation of the contact person of the customer.				
	5. Phone, FAX no. and email address of the contact person of the customer.				
	6. Performance certificate from the customers regarding satisfactory performance of machine supplied to them				