

| BHARAT HEAVY ELECTRICAL LIMITED, JHANSI | | | | |
|--|--|--------------------------------|--------------|-----------|
| | | Specification No. | 10547 (R2) | |
| | | Item No. | MH-1/40/6297 | |
| | | Location | BAY-6 | |
| | | Quantity | 1 Number | |
| SCOPE : | | | | |
| SUPPLY & COMMISSIONING OF 2 T DIESEL OPERATED FORK LIFT TRUCK. COMPLYING AS PER SPECIFICATION BELOW | | | | |
| NOTE : | | | | |
| | 1. VENDOR must submit complete information against clause No. 6.0 (Qualifying condition). The offer meeting this clause would only be processed. | | | |
| | 2. The " offered" Column and where applicable, the " Deviations" Column of this format shall be filled in by the Vender and submitted along with the offer. Technical details also submitted with the offer. Inadequate / incomplete, ambiguous, or unsustainable information against any of the clauses of the specification / requirements shall be treated as non - compliance. | | | |
| | 2. The offer and all documents enclosed with offer should be in English language only. | | | |
| <u>SPECIFICATION CUM COMPLIANCE CERTIFICATE OF FORK LIFT TRUCK</u> | | | | |
| S.NO. | DESCRIPTION FOR BHEL REQUIREMENT | SPECIFIED / TO BE CONFIRMED BY | OFFERED | DEVIATION |
| 1.0 | PURPOSE | | | |
| 1.1 | 2 MT Diesel operated fork lift truck is required for transporting of material from outside / inside of the store / shop floor | VENDER TO CONFIRM | | |
| 2.0 | WORK PIECE MATERIAL | | | |
| 2.1 | PRIME MOVER | VENDER TO CONFIRM | | |
| 2.1.1 | Prime mover should be fuel efficient Diesel engine. | VENDER TO CONFIRM | | |
| 2.1.1 | Forklifter is to be fitted with direct injection system, 3/4 cylinder , 4 stroke diesel engine. | VENDER TO CONFIRM | | |
| 2.1.2 | Gear type oil pump to be provided for lubrication | VENDER TO CONFIRM | | |
| 2.1.3 | Water pump and radiator to be provided for cooling. | VENDER TO CONFIRM | | |
| 2.1.4 | Internal Lub oil cooler to be provided for maintaining oil viscosity, oil temperature of the engine. | VENDER TO CONFIRM | | |
| 2.1.5 | Exhaust should be vertical | VENDER TO CONFIRM | | |
| 2.1.6 | Engine should be complete with fly wheel, starter, battery , electric self starter, alternator | VENDER TO CONFIRM | | |
| 2.1.7 | Engine should be neutral start | VENDER TO CONFIRM | | |
| 2.1.10 | Details of fuel tank to be submitted | VENDER TO SPECIFY | | |
| 2.2 | STEERING | | | |
| 2.2.1 | The forklift is provided with feather touch hydraulic steering system | VENDER TO CONFIRM | | |
| 2.3 | TRANSMISSION | | | |
| 2.3.1 | The fork lifter is provided two speed forward and backward automatic torque flow transmission system (Auto torque converter) | VENDER TO CONFIRM | | |
| 2.4 | MAST | | | |
| 2.4.1 | Forklift should be fitted with hydraulically operated telescopic wide view mast for smooth lift, lowering, tilt and other auxiliary functions. | VENDER TO CONFIRM | | |
| 2.4.2 | A relief valve to be provided in the hydraulic circuit for protection against excessive pressure due to excessive loading. | VENDER TO CONFIRM | | |
| 2.5 | BRAKES | | | |
| 2.5.1 | The Forklifter should be fitted with heavy duty, self adjustable and self-energizing hydraulically type foot operated services brakes. | VENDER TO CONFIRM | | |
| 2.5.2 | Hand operated parking brakes to be provided | VENDER TO CONFIRM | | |
| 2.6 | ELECTRICALS | | | |
| 2.6.1 | The battery should be suitable rating for starting of engine. Battery should be exide make. Battery Voltage and rating should be submitted with offer | VENDER TO SPECIFY | | |
| 2.6.2 | Self starter to be providid | VENDER TO CONFIRM | | |
| 2.6.3 | An alternator should be provided for charging the battery. | VENDER TO CONFIRM | | |
| 2.6.4 | Forklifter should be fitted with head & tail lights. | VENDER TO CONFIRM | | |

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| 2.6.5 | Electric horn to be fitted with the fork lifter. | VENDER TO CONFIRM | | |
| 2.6.6 | Forklifter should be fitted with a warning horn. This warning horn should be operated at the time of backward operation of the forklifter. (Reversing alarm) | VENDER TO CONFIRM | | |
| 2.7 | GAUGES | | | |
| | Desh board should be mounted in the front at a convenient place for clear view and fitted with water temp. gauge, engine oil pressure gauge, Battery charging indicator, fuel gauge, parking brake On indicator, Direction indicator, control switches etc. | VENDER TO CONFIRM | | |
| 2.8 | DRIVER /OPERATOR CABIN | | | |
| 2.8.1 | The operator's cabin should be ergonomically designed for best comforts, fully tested and sturdy overhead guard with provision for clear view upwards when stacking. | VENDER TO CONFIRM | | |
| 2.8.2 | Comfortable , adjustable cushion seat with back rest to be provided. | VENDER TO CONFIRM | | |
| 2.8.3 | Seat is to be fitted with safety brake switch, which will apply automatically on vacation . | VENDER TO CONFIRM | | |
| 2.8.4 | Ample leg space to be provided in the cabin | VENDER TO CONFIRM | | |
| 2.8.5 | An overhead guard to be provided | VENDER TO CONFIRM | | |
| 2.9 | TYRES | | | |
| 2.9.1 | The front and rear wheels to be fitted with standard non- skid cushion rubber type. | VENDER TO CONFIRM | | |
| 2.10 | CONSTRUCTION | | | |
| 2.10.1 | The frame of forklifter should be rugged in construction and designed for maximum strength for assigned duty. | VENDER TO CONFIRM | | |
| 2.10.2 | The fork attachment should be of welded steel construction with quick adjustment facility. | VENDER TO CONFIRM | | |
| 2.10.3 | The fork attachment should be supplied complete with load back rest. | VENDER TO CONFIRM | | |
| 2.11 | List of standard accessories to be submitted with offer | VENDER TO SPECIFY | | |
| 2.12 | List of optional Accessories with item wise prices to be submitted. | | | |
| 3.0 | SPECIFICATION: | | | |
| 3.1 | Capacity when used with for attachment at 500 mm load center : 2000 KG | VENDER TO CONFIRM | | |
| 3.2 | Capacity when used with for attachment at 900 mm load center : 1000 KG | VENDER TO CONFIRM | | |
| 3.3 | Power type : Diesel Engine | VENDER TO CONFIRM | | |
| 3.4 | Engine make - Simpsons/Parkins/Kirloskar | VENDER TO SPECIFY | | |
| 3.5 | BHP of engine | VENDER TO SPECIFY | | |
| 3.6 | 3/4 Cylinder 4 stroke engine | VENDER TO SPECIFY | | |
| 3.7 | Gear type oil pump for lubrication | VENDER TO CONFIRM | | |
| 3.8 | Radiator for cooling | VENDER TO CONFIRM | | |
| 3.9 | Non- skid cushion rubber type | VENDER TO CONFIRM | | |
| 3.10 | Hyd. System for lowering/hoisting/tilting | VENDER TO CONFIRM | | |
| 3.11 | Power steering | VENDER TO CONFIRM | | |
| 3.12 | Transmission : Auto torque converter | VENDER TO SPECIFY | | |
| 3.13 | Over head guard | VENDER TO CONFIRM | | |
| 3.14 | Overall height with mast lowered : 1753 mm | VENDER TO SPECIFY | | |
| 3.15 | Maximum telescopic fork height : 2400 mm | VENDER TO SPECIFY | | |
| 3.16 | Overall height raised : 3654 mm | VENDER TO SPECIFY | | |
| 3.17 | Free fork height | VENDER TO SPECIFY | | |
| 3.18 | Length of forks : 1000 mm | VENDER TO SPECIFY | | |
| 3.19 | No. of forks : Two | VENDER TO SPECIFY | | |
| 3.20 | Width of forks | VENDER TO SPECIFY | | |

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| 3.21 | Centre distance of forks : Adjustable between 300 mm to 1100 mm | VENDER TO SPECIFY | | |
| 3.22 | Wheel base : 1600 mm | VENDER TO SPECIFY | | |
| 3.23 | Width of truck : 1140 mm | VENDER TO SPECIFY | | |
| 3.24 | Overall length of truck : 3434 mm | VENDER TO SPECIFY | | |
| 3.25 | Minimum outside turning radius : 2200 mm | VENDER TO SPECIFY | | |
| 3.26 | Tilt - Forward - 6 degree & Backward - 12 degree | VENDER TO SPECIFY | | |
| 3.27 | Maximum speed of truck in Forward / reverse at full load : 16KM /Hr | VENDER TO SPECIFY | | |
| 3.28 | Lifting speed (Laden) : 0.43 Meter / Sec | VENDER TO SPECIFY | | |
| 3.29 | Lowering speed (Laden) : 0.43 Meter / sec. | VENDER TO SPECIFY | | |
| 3.30 | Maximum gradient at full load : 19 % | VENDER TO SPECIFY | | |
| 3.31 | Maximum gradient at NO load : 21% | VENDER TO SPECIFY | | |
| 4.0 | INSPECTION / TESTING | | | |
| 4.1 | The equipment shall be tested/ inspected by BHEL engineer at suppliers works as per test chart in accordance to IS for all accessories & performance before dispatch. | VENDER TO CONFIRM | | |
| 5.0 | MISCELANIOUS | | | |
| 5.1 | The forklift to be supplied complete with tool kit, canopy and all other standard accessories needed for successful operation. | VENDER TO CONFIRM | | |
| 5.2 | The offer should be complete with dimensional details outline general arrangement drawing with complete details of engine, power transmission, hydraulic system with circuit diagram and write up explaining special features. | VENDER TO CONFIRM | | |
| 5.3 | Recommended spares for 2 years normal working to be quoted with item wise prices. | VENDER TO CONFIRM | | |
| 5.4 | Optional equipment to be quoted for environmental protection. | VENDER TO CONFIRM | | |
| 5.5 | Four copies of test, operation , maintenance manual & spare part list to be supplied with the forklifter. | VENDER TO CONFIRM | | |
| 5.6 | Not withstanding anything, the details in this specification, if any thing else is required for its functioning, the same shall be specifically brought out & indicated. | VENDER TO CONFIRM | | |
| 6.0 | QUALIFYING CONDITION OF VPD | | | |
| 6.1 | Only those vendor who have supplied at least 5 Nos. Diesel fork lifter of similar spec. capacity in the past ten year and such forklifters presently working satisfactorily for more then one year after commmssioning, should quote. The following information is to be submitted by the Vendor about the companies where similar forklifters have been supplied. This is required from all the vendors for qualification of their offer. | VENDER TO CONFIRM | | |
| | 1 . Name of the customer / company where similar forklifter is installed. (copy of purchase order to be furnished) | VENDER TOSUBMIT | | |
| | 2 . Complete postal address of the customer. | VENDER TOSUBMIT | | |
| | 3. Year of suppling / commissioning. | VENDER TOSUBMIT | | |
| | 4 . Application for which forklifter is supplied. | VENDER TOSUBMIT | | |
| | 5 . Name and designation of the contact person of the customer. | VENDER TOSUBMIT | | |
| | 6 . Phone. FAX, no andE-mail address of the contact person of fne customer. | VENDER TOSUBMIT | | |
| | 7 . Performance certificate from the customer regarding satisfactory performance of forklifter. | VENDER TOSUBMIT | | |
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| Inder Mathur | | H.V.Bhatia | | S.J.Chakraborty |
| Sr. Manager (WE&S) | | Sr. Manager (TRM) | | Sr. DGM (WE&S) |