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# BHARAT HEAVY ELECTRICALS LIMITED UNIT: JHANSI (WORK. ENGG. & SERVICES DEPTT.)

**EQUIPMENT** 

5 MT. DIESEL OPERATED FORK FORK LIFT TRUCK

DEPARTMENT

BAY-9

SPEC.NO

10574

ITEM NO.

MH-1/40/6263

QUANTITY

ONE NOS.

## DIESEL OPERATED FORK LIFT TRUCK OF 5 MT CAPACITY

A single drive forklift truck with simplex clear view mast of 5 ton capacity at 600 mm load canter operated through diesel engine is required for transporting material from outside/inside of the shop floor. The fork lift truck shall consist of following major items:

The diesel engine used is to be of Simpson's / Perkins / Kirloskar make only delivering maximum torque for rated capacity. The diesel engine is to be 4 cylinders and provided with direct injection system. Gear type oil pump for lubrication, water pump and radiator for cooling shall be provided. The drive wheels to be quickly dismantled permitting the wheel removal with out exposing the bearing. The front & rear wheels are to be fitted with standard non-skid cushion rubber type. The frame is to be mugged in construction and designed for maximum strength for assigned duty.

It is to be neatly laid out and provided with hydraulic system for smooth lift lowering, tilt, power steering and other auxiliary functions. A relief valve is to be provided in the hydraulic circuit for protection against excessive pressure due to excessive loading. The forklift truck is to be provided with auto torque converter. All the gears need for power transmission to run in continuous oil bath and power shift selector lever to be floor mounted. The forklift is to be equipped with a neutral start. All steering connections are to be equipped with high-pressure hydraulic fittings.

The fork attachment is to be of welded steel construction with quick adjustment facility. The fork attachment to be supplied complete with load back rest an adjustable and comfortable cushioned sear for driver is to be provided .Seat is to be fitted with safety brake switch, which will apply automatically on vacation an overhead guard is also to be provided.

A battery of suitable rating is to be provided for starting of engine by means of self operation, horn used for warning and head and taillight. An alternator charging is to be provided along with Amp. Meter to monitor charging.

The forklift is to be provided with heavy duty, self-adjusting and self-energizing hydraulic type brakes mounted on axle housing inside the wheel. Oil seals & sleeves are to be provided so as to prevent entry of grease in the brake area. In addition to the above a hand brake is also to be provided for parking.

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The bidders to also quote for optional accessories like oxy-catalyst muffler and spark arrestor separately.

The truck is to be suitable to carry full load up to 28% Gradient. All under carriage fittings and steering connections are to be treated against corrosion. The forklift truck is to be supplied complete with tool kit, canopy and all other accessories needed for successful operation/commissioning.

### **SPECIFICATION:**

1. Capacity (Lifting Load)	:	5000 KG
2. Load center	:	600 mm
3. Overall height with mast full lowered	:	2530 mm
4. Max. fork height	:	3660 mm
5. Over all length with fork face	:	3250 mm
6. Turning radius	:	3000 mm
7. Fork length	:	1200 mm
8. Overall width	:	1815 mm
9. Fork spread (Adjustable)	:	330 to 1510 mm
10. Traveling speed (Loaded)	:	18 KM/HR
11. Tilt forward/backward	:	6 DRG/12 DRG
12. Engine	:	Diesel Engine
13. Transmission	:	Fluid coupling / Automatic
14. Steering	:	Hydrostatic power steering
15. Tyres	:	Bearcat dual tyres
16. Drive / Steer	:	4 Nos front / 2 Nos. rear
17. Wheel base	:	2030 mm
18. Ground clearance		
(a) At lowest point	:	180 mm
(b) At centre of wheelbase	:	240 mm
19. Service brake	:	Hydraulic
20. Parking brake	:	Mechanical
21. Gradient	: '	28%

#### **MISCELLANEOUS:**

- 1. The offer should be complete with dimensioned outline general arrangement DRAWING WITH complete details of engine, power transmission system, hydraulic system with circuit diagram and write up explaining special features.
- 2. List of standard accessories supplied.
- 3. List of optional accessories offered with item wise prices.
- 4. Recommended spares for 2 years normal working to be quoted with item wise prices
- 5. Optional equipment to be quoted extra for Environmental protection.

The equipment shall be tested / inspected by BHEL engineers at supplier's works as per test chart in accordance to IS for all accuracies & performance before dispatch. Equipment shall be guaranteed for its satisfactory performance for a period of 24 months from the date of commissioning along with guarantee certificate four copies of test & maintenance manuals, foundation/general arrangement & other drawings. Schematic circuit diagram, spares parts catalogues with make must be supplied before dispatch of the equipment.

Not with standing anything, the details this specification, if anything else is required for it's functioning, the same shall be specifically brought out & indicated. The tendered is to submit complete details of the equipment in the first instance. Offers without complete details are liable to be rejected.

### **OUALIFYING CONDITIONS**

Only those vender, who have supplied and commissioned 10 Nos. 5 T or higher capacity diesel operated forklift truck in the past ten years and such trucks is presently working satisfactorily for more than one year (more than six month if supplied to BHEL) after commissioning should quote. The following information is to be submitted by the vender about the companies where similar trucks have been supplied. This is required from all venders for qualifications of their offers.

- 1. Name of the customer/ company where similar truck 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 e.mail address of the contact person of the customer
- 6. Performance certificate from the customer regarding satisfactory performance of the truck supplied to them

Inder Mathur Manager (WE&S)

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