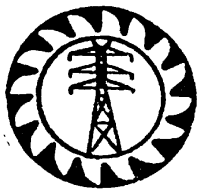


120-4 : 2008

**CEB
SPECIFICATION**

**CRANE (3MT) MOUNTED
LORRY (5MT)**



**CEYLON ELECTRICITY BOARD
SRI LANKA**

Specification

for

**CRANE (3MT) MOUNTED
LORRY (5MT)**

CEB Specification 120-4 : 2008

CEYLON ELECTRICITY BOARD

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SPECIFICATION FOR CRANE (3.5 MT) MOUNTED LORRY (5 MT)

1.0 General

The vehicle shall be normal or forward control right hand driven lorry with all steel open load tray with three hinged collapsible sides with manufacturer's factory fitted 3.5 MT hydraulically operated telescopic/rope type crane with a suitable winch. The vehicle should be capable of carrying a payload of 5 MT which would consist of concrete poles, cable drums, distribution transformer and other transmission and distribution line construction material & equipment etc. over flat and mountain terrains. The model offered should be of latest type suitable for use in tropical climate. The make of the lorry offered should have been used in Sri Lanka for at least five years and shall be of well known make in Sri Lanka represented by a reputed dealer. The vehicle shall conform to the Motor Traffic Act of Sri Lanka.

2.0 Cab

The enclosed cab shall be of all steel or steel and Aluminium construction of a standard pattern with toughened glass or laminated glass single piece front wind shield and rear window. The cab should be of tilt type with torsion bars. The cab should have seating capacity of 3 persons inclusive of the driver. The seats and back rest should have foam rubber cushions covered with toughened PVC or similar material. The driving seat shall be adjustable and reclining type with head rest. The floor has to be covered with rubber sheets or similar material. The floor has to be covered with rubber sheets or similar suitable material. The suitable type of carpets shall also be provided for cab.

3.0 Tray

The tray shall be made out of steel and have a minimum length of 4.5 m. The length of the wheel base should be about 3.5 m. These Lorries are mainly used for transportation of concrete poles.

4.0 Engine

The engine shall be 4/6 cylinder, 4 stroke radiator water cooled diesel engine with a minimum capacity of 4500cc. The diesel engine shall be fitted with heater plugs for easy cold starting.

5.0 Transmission

The minimum requirement is 5 forward speeds and a reverse with manual synchromesh transmission. The floor mounted gear shift and single drive plate clutch mechanism to be provided.

6.0 Steering

Hydraulic power assisted steering system with tilt column and steering lock shall be provided.

7.0 Suspension

Heavy duty semi-elliptic laminated leaf spring should be provided in front and rear together with heavy duty double action hydraulic shock absorbers on front and rear.

8.0 Brakes

Air assisted hydraulic brake system acting on all four wheels with parking breaks to act on rear wheels should be provided.

9.0 Wheels & Tyres

The front single, rear dual and spare wheels shall be of same size of at least 16 inch and having pressed steel wheels fitted with heavy duty standard size tyres of suitable tread pattern suit for rough roads. Spare wheel shall be mounted securely under the rear tray.

10.0 Rear Axle

Rear axle shall be suitable for transport of the specified maximum payload on all types of terrain.

11.0 Fuel tank

The capacity of the frame mounted fuel tank shall not be less than 130 litres with lockable type filling cap to be provided.

12.0 Electrical System

24V electrical system should consist of heavy duty battery, heavy duty starter motor and battery charging alternator.

13.0 Standard Fittings

The vehicle shall have following standard fittings.

1. FM radio/Stereo type cassette player with antenna
2. Clock
3. Fresh air blower 3 speeds
4. Front seat belts
5. Cigarette lighter socket and socket cover
6. Mud flaps
7. Full set of floor carpets
8. Sun visors for front passenger and driver
9. Seat head restraint for front passenger and driver.
10. Both side view mirrors and rear view interior mirror & globe type front view mirror.
11. Two wind shield wipers with two variable speeds and intermittent operation facility.
12. Wind shield washer
13. Cab interior lights
14. Electric horns
15. Halogen head lamps
16. Turning indicator lamps
17. Parking lamps.
18. Reverse lamps
19. Rear number plate lamp.
20. Hydraulically operated outriggers.
21. P.T.O. switch

14.0 Instruments

1. Speedometer with odometer and trip meter
2. Fuel level gauge
3. Cooling water temperature gauge
4. No/low battery charge indicator
5. Head light dip/beam indicator
6. Turning signal indicators
7. Hazard warning indicators
8. Parking brake indicator
9. Engine oil low pressure indicator
10. Low fuel indicator
11. Door open indicator
12. P.T.O. on/off indicator

15.0 Crane

A 3.5 MT crane shall be mounted on a 5 MT lorry to facilitate loading and unloading of heavy equipment in and out of the lorry. The crane shall be of telescopic/rope type with a winch of suitable capacity shall be fitted behind the cab. The crane shall be hydraulically operated and powered off the vehicle engine through PTO. The lifting capacity shall be 3.5 MT at radius of 5 m and lifting height of 9 m. Dual hydraulic operating controls of the crane shall be provided to facilitate operation of the crane and the outriggers from either side of the lorry.

16.0 Spares, Tools & Manuals

(a) The following spares and tools shall be supplied with each vehicle.

1. Spare wheel complete with tyre.
2. Wheel brace
3. Heavy duty jack with levers.
4. Set of spanners, screw driver and pliers

The spares recommended by the manufacturer for the crane for a three year period of maintenance shall be itemised and indicated separately.

(b) The following instruction manuals and the literature in English shall be supplied.

1. Operation & maintenance manual of vehicle & crane
2. Driver's instruction books.
3. Spare parts and service manual of the crane & truck.

17.0 Warranty

Minimum warranty period of 12 months or 20,000 km mileage for the lorry whichever come first. Minimum of 12 month warranty should be provided for the Crane.

18.0 Services

The vehicle shall be of well known make represented by a reputed dealer in Sri Lanka for the period of at least 10 years who maintains adequate spares, competent service and repair facilities for both lorry and the crane

Appendix 1

**GURANTEED SCHEDULE OF PARTICULARS -
CRANE (3.5MT) MOUNTED (5MT) LORRY**
(Please state the description and availability when and where necessary)

1	Make	
2	Model	
3	Year of manufacture	
4	Name & Address of Manufacturer	
5	Name & Address of Local Agent	
6	General Information	
	(a) Overall length (m)	
	(b) Overall width (m)	
	(c) Wheel base (m)	
	(d) No. of crew	
	(e) Vehicle weight in kg	
	(f) Pay load in kg	
	(g) Gross weight in kg	
	(h) Overall height to roof top in mm	
	(i) Ground clearance (un laden) in mm	
	(j) Right hand drive or otherwise	
	(k) Colour of the Truck	
	7	Seats
(a) No. of seats		
(b) Type of Sets		
(c) Whether Driving seat is adjustable		
(d) Availability of seat belts		
8	Engine	
	(a) Model	
	(b) Type	
	(c) Maximum Output	atrpm
	(d) Displacement	
9	Fuel	
	(a) Type of fuel used	
	(b) Fuel tank capacity (Lt)	
	(c) Whether fuel tank filling cap is lockable	

	(d) Fuel consumption (km/Lt)	
10	Transmission System	
	(a) Model	
	(b) Gear System	
	(c) Type	
	(d) No. of Forward gear	
	(e) Whether floor mounted gear shifting	
11	Steering System	
	(a) Type	
	(b) Power steering	
	(c) Minimum turning radius	
12	Suspension System	
	(a) Front	
	(b) Rear	
13	Breaking System	
	(a) Front	
	(b) Rear	
	(c) Parking breaks	
14	Wheels & Tyres	
	(a) Number of wheels & tyres	
	(b) Tyre size & type front	
	(c) Tyre size & type rear	
	(d) Spare wheel provided (Specify the wheel size)	
15	Standard fittings	
	(a) Fm Radio/Stereo cassette player with antenna & 02 speakers (State the frequency range)	
	(b) Clock (Analogue or Digital)	
	(c) Fresh Air blower 3 speed /Air Conditioner Auto or Manual	
	(d) Cigarettes lighter socket and socket cover	
	(e) Mud Flap	
	(f) Full set of floor carpets.	
	(g) Sun wiser for front passenger & Driver	
	(h) Seat head restraint for front passenger and driver	
	(i) Both side view mirror, globe type front view mirror and rear view interior mirror	

	(j) Two wind shield wipers with two variable speed & Intermittent Operation facility	
	(k) Wind shield washers	
15	Instruments	
	(a) Speedometer with Odometer & Trip Meter	
	(b) Fuel level gauge	
	(c) Cooling Water temperature gauge	
	(d) No/low Battery Charge Indicator	
	(e) Head light dip/beam Indicator	
	(f) Turning Signal Indicators	
	(g) Parking Break Indicator	
	(h) Hazard warning indicators	
	(i) Parking break indicator	
	(j) Engine oil low pressure indicator	
	(k) Low fuel indicator	
	(l) Door Open indicator	
	(m) Break fluid low level indicator	
16	Electrical system	
	24V electric system with heavy duty battery and alternator charging system	
	Turning indicator lamps, parking lamps, stop lamp, rear number plate lamps, reverse lamps, hazard lamps and cab interior lamp	
	Halogen head lamps	
	Head lamps dipper switch	
	Electrical horns (01 set)	
	Heavy duty starter motor	
17	Spares, tools & manuals	
	(a) Spare wheel complete with tyre	
	(b) Wheel brace	
	(c) Jack with lever	
	(d) Set of spanners, screw driver and pliers	
	(e) Operation & maintenance manual and the Service booklet in English	
	(f) Standard accessories (Please list out)	
18	Address of the dealer in Sri Lanka	
19	Availability of spare parts for 08 years (Please provide details)	

20	Availability of repair facilities (please provide details)	
21	Number of similar vehicles sold during last 05 years	
22	Whether the vehicle offered conforms to Motor Traffic Act of Sri Lanka	
23	Whether the letter of confirmation is attached to prove the offered Vehicle conform to the specification	
24	Warranty	

	Crane	
1	Make & Model of Crane	
2	Country of manufacture	
3	Name of manufacturer	
4	Capacity	
5	Maximum Lifting Load Main Boom (kgf) Sub Boon (kgf)	
	Details of winch	
6	Working range	
7	Maximum Lifting height Main Boom (m) Sub Boom (m)	
8	Working radius Main Boom (m) Sub Boom (m)	
9	Lifting Range over rear (Degrees)	
10	Out rigger extended with Front (m) Rear (m)	
11	Safety devices	
12	Warranty for Crane	
	Hydraulic System	
13	Oil reservoir capacity (Litres)	
14	Recommended Hydraulic Oil	
15	Maximum Hydraulic Pressure (kgf/cm ²) Main relief (kgf/cm ²) Attachment (kgf/cm ²)	
	Hydraulic Pump	

16	Pump Type	
17	Discharge Volume (cc/rev)	
18	Warranty Hydraulic equipment	

We hereby guarantee that the above particulars given by us are true and accurate. We also confirm that the required spares for the model offered are available with us and we maintain adequate after sales service and repair facilities.

Signature & Seal of the bidder

Date