

**STEEL WHEEL – LANDFILL COMPACTOR (30T)**

Steel wheeled front-end loader converted for landfill compaction with operating mass approximately 30,000kg, fitted with a ROPS cab

**OPERATING SPECIFICATION**

- Rated operating capacity to be not less than 28,000kg
- Travel speed (forward or reverse) not less than 10km/h
- All direction visible climate controlled ROPS cab with air suspension seat, air conditioner and heater.
- The cab must be equipped with defroster, radio and seat belt.

**1. ENGINE**

- The machine is to be diesel powered engine with liquid cooling having a minimum gross engine output power of not less than 180 KW.
- Engine to be naturally aspirated or turbocharged
- Emission certification to be compliant to EPA-T3 (EU St3A) or equivalent
- Turbo 2 Pre-Cleaner and Modification of Intake Higher
- A hydraulically driven fan must be automatic reversible and computer controlled with programming.

**2. TRANSMISSION**

- Not less than a two speed transmission is required with a maximum travel speed of approximately 10km/h both forward and backwards
- Single stage torque convertor, modular counter shift, power shift transmission with electro hydraulic control and auto-downshift.
- The transmission to be fitted with locking device to switch it to neutral safety.

**3. STEERING AND BRAKES**

- Foot applied brake or any equivalent mechanism is required to ensure effective and efficient braking /speed reduction and or parking.
- An articulation of not less than 30° is required.

**4. WHEELS**

- Steel compactor wheels
- Weld-on rolling wire guard
- Cleats, not less than 200mm, with hard facing tips.

**5. DIFFERENTIAL**

- Differential Lock or limited slip are required in the front and rear, to assist with traction.

**6. BLADE**

- Blade capacity of not less than 10m<sup>3</sup>
- Blade shape: Semi U shaped blade is required
- Top Blade Guard for overfill (Trash Rack)
- Blade liner Standard

**7. PROTECTION**

- Guards covering engine and transmission, with easy access to the latter.
- Front and rear differential guards with axle seal guards.
- Radiator guard
- Centre pin Guard
- 2x Front and rear striker-bars cover the front and rear wheels.

**8. CAB**

- ROPS - must meet the requirements of SAE-J1040 and ISO 3471:1994
- FOPS - must meet the requirements of SAE-J1043 and ISO 3449:1992 Level I
- Fully enclosed, Sealed pressurized cab with heater/defroster,

- Air conditioning,
- Side windows with all round vision,
- Mechanical and air suspension seats with seat belt,
- Radio

#### **9. LIGHTING AND ELECTRICAL**

- Two front and one rear work lights must be fitted.
- An orange revolving light must be fitted on the roof of the machine offered.
- Cab mounted instrument panel with ignition, fuel gauge, hour meter and electronic throttle
- Incorporate into the instrument panel a warning light cluster which also has audible alarms for:
  - Low charge pressure,
  - Engine water temperature,
  - Hydraulic oil pressure,
  - Blocked air filter,
  - Engine oil pressure,
  - Alternator
- All lights must be covered and protected.

#### **10. PAINT COLOUR**

Machines or equipment are to be painted golden yellow unless otherwise specified.

#### **11. PRICES TO INCLUDE THE FOLLOWING:**

One each of the following is to be supplied with each machine:

- (i) Spare parts list (in book form)
- (ii) Workshop repair manual
- (iii) Operator's instruction.

## **COMPULSORY SPECIFICATION QUESTIONNAIRE**

**The Technical Schedule must be completed in full; failure to comply will invalidate your bid**

**1. SIELENT POINTS**

Make

\_\_\_\_\_

Model

\_\_\_\_\_

Operating weight

\_\_\_\_\_

**2. ENGINE**

Net power output

\_\_\_\_\_ kW

Net torque output

\_\_\_\_\_ Nm

Emission certification

\_\_\_\_\_

Permissible exposure limits for noise

\_\_\_\_\_ dB

What pre-cleaning system is fitted?

\_\_\_\_\_

Indicate the operation of fan

\_\_\_\_\_

**3. TRANSMISSION**

Type of transmission

\_\_\_\_\_

Number of forward speeds

\_\_\_\_\_

Number of reverse speeds

\_\_\_\_\_

Maximum travel speed

\_\_\_\_\_ km/h

**4. Steering and Brakes**

What type of braking mechanism is on offer?

\_\_\_\_\_

Braking

\_\_\_\_\_

Parking

\_\_\_\_\_

Articulation (in Degrees)

\_\_\_\_\_

**5. Wheels**

What kind of wheels are fitted?

\_\_\_\_\_

Are the wheels fitted with wire guard?

\_\_\_\_\_

Wheel Diameter

\_\_\_\_\_ m

Number of cleats fitted

\_\_\_\_\_

**6. Differential**

What anti-slip/traction system is use in the differential?

\_\_\_\_\_

**7. Blade**

What is the blade capacity offered?

\_\_\_\_\_ m<sup>3</sup>

What is the blade shape offered?

\_\_\_\_\_

Is a Blade spill guard fitted?

\_\_\_\_\_

**8. Protection**

Are the following protection guards fitted:

Guards covering engine and transmission

\_\_\_\_\_

Front and rear differential guards with axle seal guards

\_\_\_\_\_

Radiator guard

\_\_\_\_\_

Centre pin guard

\_\_\_\_\_

2x Front and rear striker-bars cover the front and rear wheels

\_\_\_\_\_

**9. CAB**

Is the cab ROPS certified? (SAE-J1040 and ISO 3471:1994)

\_\_\_\_\_

Is the cab FOPS certified? (SAE-J1043 and ISO 3449:1992 Level I)

\_\_\_\_\_

Is the cab fully enclosed and lockable?

\_\_\_\_\_

Is the cab sealed pressurized?

\_\_\_\_\_

Is the cab fitted with heater/defroster or Air conditioning?

\_\_\_\_\_

Does it have sound protection?

\_\_\_\_\_

What level?

\_\_\_\_\_ dB (A)

Is it fitted with a windscreen and side windows with all round vision?

\_\_\_\_\_

Are windshield wipers fitted?

\_\_\_\_\_

Type of operators' seat?

\_\_\_\_\_

Is a seat belt fitted?

\_\_\_\_\_

**10. LIGHTING AND ELECTRICS**

Detail of all lights

\_\_\_\_\_

Fuel gauge

\_\_\_\_\_

Is an orange revolving light fitted?

\_\_\_\_\_

Indicate the instruments fitted in the cab

\_\_\_\_\_

fuel gauge

\_\_\_\_\_

hour meter

\_\_\_\_\_

Is audible alarms fitted for:

Engine oil pressure

\_\_\_\_\_

Low charge pressure

\_\_\_\_\_

Engine water temperature

\_\_\_\_\_

Hydraulic oil pressure

\_\_\_\_\_

**11. PAINT COLOUR**

What colour is the machine

\_\_\_\_\_