

**CRAWLER DOZER (30T)**

Crawler Dozer with operating mass approximately 30,000kg, fitted with a ROPS cab and rear ripper,

**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

**2. TRANSMISSION**

- A three gear speed is required with a maximum travel speed of not less 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**

- Dual final drive is required to provide required traction in all operations and terrains
- Foot applied brake or any equivalent mechanism is required to ensure effective and efficient braking /speed reduction and or parking.
- A turning radius of not less than 7° is required.

**4. BLADE**

- Blade capacity of not less than 7m<sup>3</sup>
- Blade shape: Semi U shaped blade is required

**5. RIPPER**

- Hydraulically-controlled parallelogram-type ripper with three shanks with a maximum digging depth of not less than 750mm
- Ripper must be able to tilt

**6. UNDERCARRIAGE**

- The under carriage to be fitted with track rollers of not less than 7 on each side and not less than 2 carrier rollers on each side.
- Number of track shoes on each side not less than 38

**7. 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

**8. 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.

#### **9. PAINT COLOUR**

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

#### **10. 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

3. **TRANSMISSION**

Type of transmission

\_\_\_\_\_

Number of forward speeds

\_\_\_\_\_

Number of reverse speeds

\_\_\_\_\_

Maximum travel speed

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

4. **Steering and Brakes**

Type of final drive on offer

\_\_\_\_\_

What type of braking mechanism is on offer?

Braking

\_\_\_\_\_

Parking

\_\_\_\_\_

Turning radius (in Degrees)

\_\_\_\_\_

5. **Blade**

What is the blade capacity offered?

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

What is the blade shape offered?

\_\_\_\_\_

6. **Ripper**

How many shanks could be fitted?

\_\_\_\_\_

What is the maximum digging depth?

\_\_\_\_\_ m

7. **Undercarriage**

Number of track rollers

\_\_\_\_\_

Number of side rollers

\_\_\_\_\_

8. **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?

\_\_\_\_\_

Is it fitted with a Hydraulic park brake?

\_\_\_\_\_

**9. 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

\_\_\_\_\_

**10. PAINT COLOUR**

What colour is the machine

\_\_\_\_\_