

Firma adı: Nabonda, Consultoria e Serviços

İlgili kişi: Ms. Basilia da Conceição Felisberto Machatine

Tel: +258 84 321 53 10

E-mail: [comercial@triangulo.co.mz](mailto:comercial@triangulo.co.mz)

**Lote 1 (Inert)**

Description	Specifications	Units	As for.	Value
Sand	Granulometry [0.15–4.75 mm]; Clay theor ≤ 2%; [SECTION 1083, SECTION 201]	m3	400	
British 3/4"	Granulometry [9.5–19 mm]; Crushing strength ≤ 29% [SANS 1083, SANS 201]	m3	150	
Cement	CEM II 32.5N [EN 197-1]	And	1200	
Pave	Zig Zag, 80mm, 35Mpa, natural color, abrasion wear [TMH 9]	m2	1000	
Lancel	Fig 3 or equivalent; ≥25 MPA [sabs 927]	ME	1500	
Fine sand	Granulometry [0.05–1.18 mm]; Theor em clay 2%; [SECTION 1083, SECTION 201]	m3	300	
Clay	Solos G7 ou superior; CBR (at 93%) ≥ 15% [COLTO]	m3	2000	
Rachão	Gramulometry (200-320 mm) SATCC 2502(a)(i)	m3	300	
Boulder/Pebbles 500kg	Granulometry (330-1200mm); Resistance to abrasion and corrosion Saline, COTO	Ton	500	
Tout Venant	Coarse aggregate with extensive particle size, G3, PI<6, Granulometry (0.00-37.5 mm)(COLTO)	m3	200	
<b>Total</b>				

**Lote 2 (Asphalt)**

Amount	Designation of the asset	Technical Specifications	
1200 Ton	Bituminous Concrete	Marshall Stability (kN)	3,5-12,5
		Marshall deformation (mm)	2-4
		Voids in the mixture (%)	3-6
		Stability/deformation (KN/mm)	2-3,5
		Filler/bitumen ratio	1,0-1,5
		Granulometry (mm) [SATCC Table 4202/3]	00-9.5
		10% FACT [TMH1 B2] (kN)	180
10 And	Bituminous Emulsion	Anionic emulsion SS60; Minimum 12 degrees Engler at 20°C [SANS 4001-BT3]	

**Lote 1**

Amount	Designation of the asset	Technical specifications (minimum) of the asset
01	Bulldozer	Deforestation and leveling; Engine power: $\geq 180$ HP; Blade: Straight or semi-U, with hydraulic control; Operational weight: $\geq 18$ tons; Track system with wide shoes. Cabin: Closed, air-conditioned (A/C), with protection ROPS/FOPS Minimum warranty: 1 year

**Lote 2**

Amount	Designation of the asset	Technical specifications (minimum) of the asset
01	Milling machine	Milling width: $\geq 1000$ mm; Adjustable cutting depth: $\geq 30$ cm; Automatic leveling control system; Material conveyor: Articulated front conveyor; High traction wheels or tracks; Engine power: $\geq 300$ HP; Air-conditioned cabin with dust protection.

**Lote 3**

Amount	Designation of the asset	Technical specifications (minimum) of the asset
01	Compactor Roller (Smooth Drum)	Type: Self-propelled; Operational weight: $\geq 10$ ton; Drum width: $\geq 2.0$ meters; Vibration: Yes, with double frequency and amplitude; Motor: Diesel, $\geq 100$ HP; Cabin: Open or closed, with ROPS/FOPS protection.

**Lote 4**

<b>Amount</b>	<b>Designation of the asset</b>	<b>Technical specifications (minimum) of the asset</b>
01	Asphalt Paver	Adjustable paving width: 2.5 to 6 meters; Layer thickness: Adjustable $\geq$ 300 mm; Feeding system: By belt/conveyor belt + distributor screw; Motor: Diesel, $\geq$ 150 HP; High traction tracks or wheels; Table heating system: Gas or electric; Automatic leveling and tilt control.

**Lote 5**

<b>Amount</b>	<b>Designation of the asset</b>	<b>Technical specifications (minimum) of the asset</b>
02	Road Marker Cold	Ink tank capacity: $\geq$ 100 L; Type: Self-propelled or towable; Spray system: Pneumatically controlled gun; Number of pistols: Minimum 2; Double and single lines; Marking with reflectivity; Engine: Gasoline or diesel.

**Lote 6**

<b>Amount</b>	<b>Designation of the asset</b>	<b>Technical specifications (minimum) of the asset</b>
02	Concrete mixer	Drum capacity: 500 liters; Type: Towable with hitch; Engine: Gasoline (25 HP); Tilt system: Hydraulic; Reinforced steel structure, with wheels pneumatics.

**Lote 7**

Amount	Designation of the asset	Technical specifications (minimum) of the asset
02	Mini on - Skid loader	Power: 60 HP; Operational weight: 2 to 3 tons; Bucket capacity: $\geq 500$ liters; Auxiliary hydraulic system for accessories, Traction tires or tracks; Closed cabin with ROPS/FOPS protection; Optional accessories: Pallet fork, breaker hammer, mini milling machine, broom

**Lote 8**

Amount	Designation of the asset	Technical specifications (minimum) of the asset
01	12 Ton Lowbed Trailer	Load capacity: 12 tons; Machine loading Hitch type: Pin; Reinforced carbon steel chassis; Brakes: Pneumatic; Floor: Metallic; Load tires with reinforced suspension, Lighting and signaling system.

**Lote 9**

Amount	Designation of the asset	Technical specifications (minimum) of the asset
02	Portable emulsion sprayer (by drum)	Spraying $>18$ L/min (adjustable); Spray Width 500-1000 mm; Hose length 5 m; Nozzle Type Stainless steel, incl self-cleaning; Rotation speed 1500 rpm; Gear Pump Maximum Flow 310 L/min; Motor $\geq 5$ HP.

**Lote 10**

<b>Amount</b>	<b>Designation of the asset</b>	<b>Technical specifications (minimum) of the asset</b>
03	Jumping	Operational weight $\geq 65$ kg Operational coverage $\geq 250\text{m}^2/\text{h}$ Impact force 2 13 KN

**Lote 11**

<b>Amount</b>	<b>Designation of the asset</b>	<b>Technical specifications (minimum) of the asset</b>
02	Autobetoneiras 3,5m <sup>3</sup>	Drum capacity $\geq 3500\text{lit}$ Lid for emergency discharge; 4-wheel drive; Capacity per load min 600 liters; production hourly $\geq 18\text{m}^3$ ; Electronic scale; High pressure water pump; 2 extra gutters included; Maximum external turning radius 4m; Cabin with ROPS-FOPS, rear view camera and AC; Mixing and discharge speed independent of engine speed; Electronic drum probe (optional); Discharge on all four sides of the vehicle.

**Lote 12**

<b>Amount</b>	<b>Designation of the asset</b>	<b>Technical specifications (minimum) of the asset</b>
02	Skid loader/ Bobcat	Power: $\geq 60$ HP Skid loader/ Bobcat Operating weight: 2 to 3 tons Bucket capacity: $\geq 500$ liters Auxiliary hydraulic system for attachments Traction tires or tracks Enclosed cabin with ROPS/FOPS protection Optional accessories: Pallet fork, breaker hammer, backhoe, broom and milling machine.

**Lote 13**

<b>Amount</b>	<b>Designation of the asset</b>	<b>Technical specifications (minimum) of the asset</b>
01	Vibratory tandem roller - asphalt	Type: Self-propelled, tandem Operational weight: $\geq 2.70$ tons Drum width: $\geq 1.1$ meters Vibration: Yes, with double frequency and amplitude Motor: Diesel, $\geq 30$ HP Cabin: Open or closed, with protection ROPS/FOPS

**Lote 1**

Amount of	Designation of the asset	Technical specifications of the asset
03	Pick-Up Cabine Simples (4x4)	<ul style="list-style-type: none"> <li>• Engine: Diesel, minimum 2.2L, turbo intercooler</li> <li>• Power: Minimum 120 HP</li> <li>• Traction: 4x4</li> <li>• Transmission: Manual, 5 or 6 speeds</li> <li>• Payload capacity: <math>\geq 1000</math> kg</li> <li>• Power steering</li> <li>• Air conditioning</li> <li>• Electric windows</li> <li>• Radio with USB/Bluetooth</li> <li>• Mixed-use tires (on/off road)</li> <li>• Spare wheels (minimum 1)</li> <li>• Color: White (preferred)</li> <li>• Warranty: minimum 3 years or 100,000 km</li> <li>• Tool kit and warning triangle included</li> </ul>
02	Pick-Up Cabine Dupla (4x4)	<ul style="list-style-type: none"> <li>• Engine: Diesel, minimum 2.2L, turbo intercooler</li> <li>• Power: Minimum 120 HP</li> <li>• Traction: 4x4</li> <li>• Transmission: Manual, 5 or 6 speeds</li> <li>• Payload capacity: <math>\geq 750</math> kg</li> <li>• Power steering</li> <li>• Air conditioning</li> <li>• Electric windows (front and rear)</li> <li>• ABS braking system</li> <li>• Front airbags (driver and passenger minimum)</li> <li>• Basic entertainment system (USB/Bluetooth)</li> <li>• Fabric or synthetic leather seats (easy to clean)</li> <li>• Mixed-use tires</li> <li>• Spare wheel</li> <li>• Color: White (preferred)</li> <li>• Warranty: minimum 3 years or 100,000 km</li> <li>• Tool kit, hydraulic jack and emergency accessories</li> </ul>

**Lote 2**

Amount of	Designation of the asset	Technical specifications of the asset
01	Tricycle	<p>Purpose: Internal logistical support or light transport of materials.</p> <p>Minimum specifications:</p> <ul style="list-style-type: none"><li>• Type: Gasoline powered</li><li>• Load capacity: <math>\geq 300</math> kg</li><li>• Number of passengers: 1 to 2</li><li>• Cargo compartment: Closed</li><li>• Brakes: Disc</li><li>• Headlights and direction indicators</li></ul>
03	Motorbikes	<p>Type: Utility motorcycle, new, zero kilometer</p> <ul style="list-style-type: none"><li>• Engine: 110cc to 160cc</li><li>• Fuel: Gasoline</li><li>• Starting system: Electric</li><li>• Transmission: Manual (minimum 4 speeds)</li><li>• Brakes: Front disc, rear drum (minimum)</li><li>• Tank capacity: <math>\geq 8</math> liters</li></ul> <p>Maximum speed: <math>\geq 90</math> km/h</p> <ul style="list-style-type: none"><li>• Average consumption: <math>\geq 35</math> km/l</li><li>• Tires: 17" or compatible with road use</li><li>• Panel: Digital</li></ul>

**Lote 3**

Amount of	Designation of the asset	Technical specifications of the asset
		<p>8x4 dump truck or equivalent</p> <ul style="list-style-type: none"><li>- Volumetric capacity of the cargo box: Minimum 28 m<sup>3</sup></li><li>- Payload capacity: <math>\geq 15,000</math> kg</li></ul> <p>Engine: Diesel, minimum power of 350 HP</p> <ul style="list-style-type: none"><li>- Curved box, bottom and sides with a minimum of 5mm</li></ul> <p>Hydraulic support cylinder and PTO</p>

05	20 m <sup>3</sup> Garbage Compactor Trucks	<ul style="list-style-type: none"> <li>- Hydraulic device lock</li> <li>Sewage tank: Side suspended</li> <li>Rubber Seal Type</li> <li>Transmission: Manual or automatic</li> <li>Tilting system: Rear hydraulic</li> <li>reinforced- Cabin: Closed, with air conditioning</li> <li>Power steering</li> <li>Tires: Reinforced radials for heavy loads</li> <li>Fuel tank: <math>\geq 400</math> liters</li> <li>Equipped with spare wheel, triangle, fire extinguisher, and kit of tools</li> <li>Complete documentation for circulation within the national territory</li> <li>Cabin with bed</li> </ul>
05	20 m <sup>3</sup> Dump Trucks	<ul style="list-style-type: none"> <li>6x4 or larger dump truck</li> <li>Volumetric capacity of the cargo box: Minimum 20 m<sup>3</sup></li> <li>Payload capacity: <math>\geq 15,000</math> kg</li> <li>Engine: Diesel, minimum power of 350 HP</li> <li>Transmission: Manual or automatic</li> <li>Tilting system: Rear hydraulic</li> <li>Cabin: Closed, with air conditioning</li> <li>Power steering</li> <li>Tires: Radials, suitable for operations mixed (urban and rural) - Fuel tank: <math>\geq 300</math> liters</li> <li>- Equipped with spare wheel, triangle, extinguisher, and kit of tools</li> <li>- Complete documentation for circulation within the national territory</li> </ul>