

Er. KHEM RAJ CHATAUT
(C. Eng., B.E., Mechanical)
Nepal Engineering Council
Reg. No. "248"

Mahendranagar-6,
Distt. Kanchanpur
Email: khemrajchataut@gmail.com
khemchaut@yahoo.co.in
Mobile: 9848723786
9858750354

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To
The Chief Administrative Officer
Khapad Chhededaha Rural Municipality Office
Bajura

Ref. Technical Specification of Backhoe Loader

Sir

With reference to your instruction to check and verify the technical specification of the construction equipment required for municipality office, we found the earth moving vehicle / machine (i.e. Backhoe Loader) with specification as follows shall be appropriate to carry out different types of operations during the construction work and so deemed useful for the municipality office.

You are requested to take necessary action for this.

Er. Khem Raj Chataut
Mechanical Engineer
NEC Regd. No.248


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Technical Specifications (Backhoe Loader)

S.N	CRITERIA	DEPARTMENTAL REQUIREMENT	OFFERED SPECIFICATION
1.	General	All wheel drive, rigid frame back hoe loader with Steel cab, suitable for operation under rough working conditions, and adverse climate condition at operating altitude of 2000 m and ambient temperature varying between -5°C to 50°C.	
2.	Capacity	<ol style="list-style-type: none"> 1. Operating weight not less than 8000 kg 2. Loader: General purpose bucket with bolt on teeth of SAE rated capacity nominally heaped not less than 1 cu.m with Break out force not less than 5900 kgf. <ul style="list-style-type: none"> • Dump Height: ≥ 2720 mm 3. Back Hoe : Back hoe bucket with bolt on teeth of SAE rated capacity approx. 0.3 cu.m with Bucket tear out force ≥ 5650 kgf and following working ranges: <ul style="list-style-type: none"> • Minimum working height: ≥ 5800 mm • Minimum digging depth: ≥ 4540 mm • Minimum digging reach: ≥ 6900 mm (Ground Level to rear wheel center) 	
3.	Engine	<p>Water Cooled diesel Engine, developing SAE rated Gross HP not less than 92 HP with minimum 378 NM Torque with displacement not less than 4.3 litres (engine fully equipped with accessories) at governed RPM for efficient full load operation.</p> <p>Back hoe shall be equipped with heavy duty radiator, cold starting device, direct electric starting system, heavy duty battery, heavy duty air cleaner, heavy duty fuel filter, with water trap and drainage in fuel line and drain tap in fuel tank.</p>	
4.	Gauges	To include ammeter, water temperature, fuel, oil pressure, transmission and hydraulic gauges as necessary for efficient operation and maintenance.	
5.	Transmission	Torque converter with four speed synchromesh / synchroshuttle transmission.	
6.	Axles	Four wheel drive with fixed rear axle and at least 15° oscillating front axles.	
7.	Tires	Suitable four tires with tubes for operating machine in rough road conditions shall be provided.	
8.	Steering	Power assisted Hydrostatic steering.	
9.	Brakes	Hydraulically actuated, wet multiple disc/caliper disc type service brake and separate parking brake.	
10.	Cab	All steel enclosed cab with laminated glass windscreen insulated roof, suitably located controls for back hoe and loader operation, rear view mirror, cabin light, wiper and adjustable cushioned seat for operator shall be provided.	

11.	Hydraulics	Suitable hydraulic pumps flow not less than 118 LPM and system pressure not less than 225 Bar for smooth operation of all attachments smoothly.	
12.	Ground Clearance	Minimum 350 mm	
13.	Fuel Tank	Minimum 125 Litres	
14.	Year of Manufacture	2025 preferred otherwise 2024	
15.	Essential Accessories	1. Road lights, work lights and fog lights 2. Cabin Lights 3. Service hour meter.	
16.	Instructions	All signs and instructions in the equipment shall be in English	
17.	Manuals	1. One copy of the Operator's and Owner's Instructions and Maintenance manual in English shall be supplied with the each equipment. 2. Two copies of following manuals in English shall be Supplied with each equipment : a. Spare parts catalogue b. Comprehensive workshop manual.	
18.	Tools	A set of tools as required for general maintenance shall be supplied with in a lockable tool box for each unit	
19.	Color	Standard.	
20.	Warranty	Manufacturer shall provide a minimum of one year warranty after acceptance.	
21.	Delivery	Supplier should deliver one unit of Backhoe Loader to Khapad Chhededaha Rural Municipality Office, Bajura	

Estimated Tentative Price:- Around 56 to 60 Lakhs

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