

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 6000 kgf. <ul style="list-style-type: none"> • Dump Height: ≥ 2000 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: ≥ 6000 mm • Minimum digging depth: ≥ 4700 mm • Minimum digging reach: ≥ 6950 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 380 NM Torque with displacement not less than 4.4 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.	

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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 130 LPM and system pressure (Bar) not less than (220) for smooth operation of all attachments smoothly.	
12.	Essential Accessories	1. Road lights, work lights and fog lights 2. Cabin Lights 3. Service hour meter	
13.	Instructions	All signs and instructions in the equipment shall be in English	
14.	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.	
15.	Tools	A set of tools as required for general maintenance shall be supplied with in a lockable tool box for each unit	
16.	Color	Standard.	
17.	Warranty	Manufacturer shall provide a minimum of one year warranty after acceptance.	
18.	Delivery	Supplier should deliver one unit of Backhoe Loader to Dilashaini Rural Municipality, Baitadi.	