

Backhoe Loader

Isaiah

Technical Specification of 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 (6 in 1) bolt on teeth of SAE rated capacity nominally heaped approx. 1 cu.m with shovel break out force not less than 5400 kgf. <ul style="list-style-type: none"> • Dump Height: ≥ 2700 mm 3. Back hoe bucket with bolt on teeth of SAE rated capacity approx. 0.3 cu.m with tear out force 5650 kgf and following working ranges: <ul style="list-style-type: none"> • Minimum working height: ≥ 5700 mm • Minimum digging depth: ≥ 4700 mm • Minimum digging reach: ≥ 6900 mm (Ground Level to rear wheel center) 	
3.	Engine	Water Cooled diesel Engine, developing SAE rated Gross IHP not less than 92 HP with minimum 380NM Torque (engine fully equipped with accessories) at governed RPM for efficient full load operation. 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.	
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 power shift type of 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 and system pressure not less than 225 bars for smooth operation of all attachments smoothly.	

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12.	Essential Accessories	1. Road lights, work lights and fog lights 2. Cabin Lights 3. Service hour meter Equipped with all accessories offered in standard model but not limited to above items.	
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	Orange / Construction equipment yellow.	
17.	Proven performance	The machine offered shall be a current model under standard production by the manufacturer for at least one year and manufacturing year should be 2021 or 2022.	
18	Warranty	Manufacturer shall provide a minimum of one years warranty after acceptance.	
	Delivery	1 unit Back Hoe Loader shall be delivered to Arjun Chaupari Rural Municipality, Arju Arjun Chaupari, Syangja, Gandaki province, Nepal	

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