



Backhoe Loader

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	 Operating weight not less than 8000 kg Loader: General purpose bucket with (6 in1) bolt on teeth of SAE rated capacity nominally heaped approx. 1 cu.m with shovel break out force not less than 6600 kgf. Dump Height: ≥ 2900 mm Load over height: ≥ 3350 mm Pin Height : ≥ 3600 mm 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: Minimum working height: ≥ 6000 mm Minimum digging depth: ≥5000 mm Minimum digging reach: ≥6900 mm (Ground Level to rear wheel center) Minimum Lifting capacity : ≥1480 kgs Minimum Bucket tear out force: ≥ 5680kgf Out triggers with controls from cabin shall be provided. 	
3.	Engine	Water Cooled diesel Engine, developing SAE rated Gross HP not less than 92 HP with minimum 400NM Torque with displacement of 4.4 liters (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 flow not less than 117 LPM and system pressure	
		PSI (bar) not less than 3300(228) for smooth operation of all attachments	
		smoothly.	
12.	Essential Accessories	1. Road lights, work lights and fog lights	
	Accessories	2. Cabin Lights	
13.	Instructions	3. Service hour meter	
		All signs and instructions in the equipment shall be in English	
14.	Manuals	One copy of the Operator's and Owner's Instructions and Maintenance manual in English shall be supplied with the each equipment. The state of the content of the cont	
		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	
1.0	Color	supplied with in a lockable tool box for each unit	
16.	Color	Orange / Construction equipment yellow.	
17.	Warranty	Manufacturer shall provide a minimum of one year warranty after acceptance.	
18	Delivery	1 unit backhoe loader shall be delivered Dhakari Rural Municipality,Dhakari,Achham district,Sudurpashchim province,Nepal	