

Technical Specifications

Backhoe Loader

1 Unit

S.N.	CRITERIA	REQUIREMENT	OFFERED SPECIFICATION
1	General	Four wheel drive , rigid frame backhoe loader with steel cab, suitable for operation under rough working conditions and adverse climatic condition at operating altitude ranging from 80 m to 2500 m (msl) and ambient temperature varying between -10 ⁰ C to 50° C.	
2	Capacity / Size	1. Operating Weight: 8000 kg±10% 2. Loader: Multi purpose (6-in-1, to facilitate dozing, digging, grading, backfilling, grabbing and loading application) bucket with bolt on teeth of SAE rated capacity nominally heaped: Not less than 1 cu.m ➤ Shovel break out force: Not less than 5250 kgf ➤ Maximum dumping height: Not less than 2700 mm 3. Backhoe: Backhoe bucket with bolt on teeth of SAE rated capacity of 0.3 cu.m. ±10% ➤ Bucket break out force: Not less than 5400 kgf ➤ Maximum working height: Not less than 6000 mm ➤ Maximum digging depth : Not less than 4600 mm ➤ Maximum loadover height: Not less than 4000 mm ➤ Maximum digging reach: Not less than 6800 mm (From ground level to rear wheel centre) To be equipped with out riggers with controls from cabin.	
3	Engine	Water cooled, Diesel engine , developing Maximum Gross Power not less than 90 HP (engine fully equipped with accessories) at governed RPM and Maximum Torque not less than 375 N-m for efficient full load operation of backhoe loader at operating conditions as stated in the bid document. Backhoe loader 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	Transmission	Torque converter with four speed synchromesh type of transmission	
5	Axles	Four wheel drive with fixed rear axle and oscillating front axles.	
6	Steering	Power assisted	
7	Brakes	Hydraulically actuated, wet multiple disc/caliper disc type service brake and separate parking brake	
8	Hydraulics	Suitable hydraulic system for smooth operation of all attachments Hydraulic System Pressure: Not less than 220 Bar Maximum pump flow: Not less than 115 LPM	
9	Cab	All steel enclosed FOPS cab with laminated glass windscreen insulated roof, suitably located controls for back hoe (excavator) and loader operation, rear view mirror, cabin light, wiper and adjustable cushioned seat for operator shall be provided	
10	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 the above items.	
11	Instructions	All signs and instructions in the equipment shall be in English	

12	Manuals	<ol style="list-style-type: none"> 1. One copy of the Operator's and Owner's Instructions and Maintenance manual in English shall be supplied with each equipment 2. Eight copies of following manuals in English shall be supplied with equipments: <ul style="list-style-type: none"> ➤ Spare parts catalogue ➤ Comprehensive workshop manual 	
13	Tools	A set of tools including hydraulic jack with handle as required for general maintenance shall be supplied with in a lockable tool box/tool bag for each unit	
14	Warranty	Manufacturer shall provide a minimum of one year warranty after delivery	
15	Initial Service	The supplier shall provide all necessary filters, lubricants and spare parts including lubricants with the equipment, required for the first three services, after the equipment has been commissioned and accepted	
16	Proven performance	The equipment offered shall be a current model under standard production and should be manufactured in 2024/2025 .	
17	Delivery	The Backhoe Loader, 1 unit shall be delivered to following place in Nepal: Pancheshwor Rural Municipality, Baitadi , NEPAL	

Note:

- a) The major items are indicated by bold and highlighted letters/alphabets/figures in the technical specifications. Non-compliance of these major items will result in non-responsiveness of the bid offer.