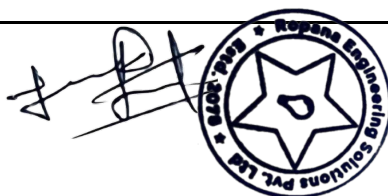


1. Equipment Technical Specifications

Machine Item	Key Technical Parameter & Minimum Requirement
Combined Rice & Flour Mill	• Motor: Min 3 HP (2.2 kW), 2800 rpm, Single-Phase 220V AC • Mechanism: Stone grinding (Flour), min 330mm wheel; Rice component min 76mm • Capacity: Rice: 150–170 kg/h; Flour: 40–45 kg/h • Features: Forced-air cooling, belt-driven with guards, weight ~120–130 kg
Electric Maize Sheller	• Motor: Min 1.1 kW continuous duty, Single-Phase 230V AC • Capacity & Efficiency: 300–400 kg/h throughput, ≥95% efficiency, ≤10% kernel damage • Build: Robust steel frame, noise ≤80 dB(A), weight 30–40 kg • Features: Separate kernel/cob chutes, integrated handles/wheels
Electric Knapsack Sprayer	• Power: 12V Battery (Min 8 Ah), 220–240V charger input, 6–8h charge time • Performance: 4–6 hours duration, 2.5–4.5 bar pressure, 3–4 L/min flow rate • Tank: 16 Litres, High-Density Polyethylene (HDPE) • Accessories: SS/Brass lance (≥60cm), chemical hose, 3 interchangeable nozzles
Mini Tiller	• Engine: 4-stroke, single-cylinder diesel engine, manual start, oil-bath air cleaner • Power: Updated to 5 HP (at 3,600 rpm); Displacement ~300 cc • Transmission: Gear transmission, Min 2 Forward + 1 Reverse gears (2F + 1R) • Tilling Capacity: Depth ≥150 mm, Width ≥1,150 mm, Min 32 blades
Coffee Hulling Machine	• Motor: 2.2 kW / 3.0 HP heavy-duty induction motor, Single-Phase 220V • Capacity & Efficiency: 120–150 kg/h throughput, ≥98% hulling rate, ≤1.5% bean breakage • Mechanism: Reverse spiral roller or steel cylinder with



	adjustable clearance • Separation: Integrated pneumatic air suction/blower fan system
Battery-Operated Grass Trimmer / Cutter	• Power Source: Rechargeable dual battery Lithium ion 12Ah 24 V setup (2 units included) providing 5 to 6 hours of continuous battery backup. • Motor: 500W high power, with no load speed of 800rpm($\pm 5\%$), Operating voltage of 15-30 V DC • Warranty: Includes a 1-year comprehensive warranty. • Operation: Cordless, lightweight handheld design suitable for home gardens, yard maintenance, and small farms. • Portability & Build: High-mobility shaft with an ergonomic handle for easy, non-fatiguing operation by users of all ages. • Blades & Accessories: Interchangeable blade mechanism capable of utilizing replaceable steel, alloy, or nylon cutting heads.
Manual Knapsack Sprayer	• Operation: 100% non-powered, manual hydraulic pressure via side lever • Tank & Pressure: 16–20 Litres UV-stabilized HDPE/PP; working pressure 0.2–0.4 MPa • Discharge: Kink-proof PVC hose ($\geq 1.2\text{m}$), SS304/Brass lance ($\geq 60\text{cm}$), trigger valve lock • Build: Contoured body, padded woven nylon straps, dry weight 3.5–4.5 kg
Sugarcane Crusher	• Type & Rollers: Heavy-duty horizontal mill with min 3 knurled rollers ($\geq 4\text{mm}$ depth) • Capacity & Output: 300–400 kg/h stalks; min 65% juice extraction yield on single pass • Power: Min 5.0 HP (3.7 kW) electric motor (supports backup ≥ 6.0 HP diesel engine) • Build: Food-grade SS304 for juice-contact parts; oil-bath spur/reduction gearbox
Bamboo Strip Cutter	• Drive Configuration: Dual-mode (Electric motor + manual hand-crank wheel fallback)



	• Motor & Speed: Min 0.75–1.1 kW (1.0–1.5 HP) Single-Phase; feeds 30–45 meters/minute • Blades & Feed: Detachable high-carbon steel/tungsten carbide blades; knurled steel traction rollers • Output Dimensions: Adjustable strip thickness (0.5–3.0 mm); handles split widths up to 25–40 mm
--	--

2. Unified Quality, Safety, Warranty & Support Requirements

- **Quality Assurance:** Manufactured under **ISO 9001 certified** quality management system or carry **CE certification** (verifiable certificates required).
- **Local Grid Compliance:** All electrical components optimized for **220V/230V, 50 Hz Nepal grid** with proper earthing and overload protections.
- **Safety Guards:** Full protective steel enclosure hoods/shields over all moving belts, pulleys, shafts, flywheels, and cutting zones.
- **Warranty:** Minimum **12-month comprehensive warranty** from date of successful commissioning covering all structural, mechanical, and electrical defects.
- **Local After-Sales Support:** Supplier must guarantee direct availability of fast-moving spare parts and an authorized service arrangement **within Nepal for 3 to 5 years** post-acceptance.
- **Delivery & Testing:** Complete supply, assembly, and **field load-testing required at the purchaser's designated site/warehouse in Nepal** before final payment authorization.
- **Documentation & Training:** Must include **English Operations & Maintenance Manual alongside a Nepali language quick-reference guide/safety sheet**, plus 1-day operator baseline orientation training.

