

Specification for Oil Extraction Machine


S. No	CRITERIA	REQUIREMENT	OFFERED SPECIFICATION
1	Machine Type	Cold Press Oil Extraction Machine (Screw-type Mechanical Press) designed for community-level agro-commercial use, suitable for village-based enterprises, farmer cooperatives, or small-scale income-generating activities	Make:- Model:- Manufactured Year:-
2	Pressing Method	Cold press method with mechanical screw operation. Oil temperature should not exceed 45°C to preserve nutrients, flavor, and aroma	
3	Production Capacity	≥ 150–200 kg/hr for single-stage pressing and ≥ 50–70 kg/hr for multi-stage pressing (varies by seed type); or better	
4	Raw Material Compatibility	Must be able to process various oilseeds like mustard, sunflower, soybean, sesame, peanut, flaxseed, cottonseed, coconut, etc.	
5	Power Supply	3-phase, 440V / 50Hz (customizable to 415V or 380V as per site condition); must be compatible with Nepal's industrial power system	
6	Motor Power	Minimum 11 kW (15 HP), copper-wound, heavy-duty electric motor, energy-efficient and suitable for continuous-duty operation	
7	Material of Construction	Stainless steel + cast iron body; oil-contact parts should have food-grade surface finish, with corrosion resistance on exposed areas	
8	Working Principle	Mechanical screw press: oilseeds fed into the chamber are compressed between rotating shaft and fixed press rings; oil is extracted while cake is expelled	
9	Oil Output Temperature	Maintained at ≤ 45°C during operation (Cold Press Standard)	
10	Daily Output Capacity	Capable of producing ≥ 2.5–3.0 tons per day under standard operation (18–24 hours/day)	
11	Control System	Manual or semi-automatic control panel with digital display, start/stop buttons, and overload protection	
12	Operation & Maintenance	Easy-to-operate interface; cleaning and part replacement should be simple with accessible mechanical components	
13	Safety Features	Must include: emergency stop switch, motor protection, enclosed pressing area, heat cut-off, oil overflow guard	
14	Noise & Vibration	Machine should operate with ≤ 75 dB noise level and have vibration-damping feet or mounts	
15	Machine Weight	Approx. 500 kg or more, depending on frame and build quality	
16	Proven Performance	Machine must be commercially in use in Nepal or India for at least 1 year; vendors must submit proof of performance	
17	Origin	Manufactured in ISO/BIS-compliant countries	
18	Warranty	Minimum 1-year comprehensive warranty on motor, gearbox, and key components	
19	Manuals & Training	Supplier should provide user and maintenance manual (in Nepali/English) and basic operator training at installation	

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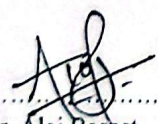
Specification for Combined Rice and Flour Mill Machine

S. No	CRITERIA	REQUIREMENT	OFFERED SPECIFICATION
1	Machine Type	Compact, Floor-Mounted Combined Rice and Flour Mill Machine, suitable for rural/agro-industrial use	Make:- Model:- Manufactured Year:-
2	Rice Milling Capacity	120-150 kg/hr or better, must efficiently remove husk	
3	Grinder Capacity	130-150 kg/hr or better, for grains such as wheat, maize, pulses, etc.	
4	Productivity	Combined productivity: 180-250 kg/hr or higher, based on continuous operation under normal conditions	
5	Motor Power	Electric motor of 3 HP (2.2 kW) or higher, copper winding, energy-efficient class, single-phase 230V, 50Hz	
6	RPM	2800 RPM or better.	
7	Material of Construction	Mild Steel body with anti-corrosion paint/powder coating, durable for continuous village/mill-side operation	
8	Drive System	Pulley/belt-driven or direct drive, with overload protection mechanism	
9	Hopper & Outlet	Built-in grain input hopper, separate discharge outlets for rice and flour, designed for ease of cleaning and handling	
10	Operation Mode	Semi-automatic or manual loading, with easy-to-operate control panel (switch-based or button control)	
11	Mobility/Portability	Rigid frame; optionally provided with wheels for ease of shifting if required	
12	Noise Level	Should operate under acceptable rural noise level ≤ 75 dB	
13	Safety Features	Emergency stop, motor guard, enclosed belt system, vibration-damping mount	
14	Power Supply	230V $\pm 10\%$, Single-phase AC, compatible with rural electricity distribution in Nepal	
15	Warranty	Minimum 1-year warranty on machine, motor, and drive system	
16	Proven Performance	Machine offered must have been in commercial use in Nepal for at least 1 year, proof to be submitted by vendor	
17	Origin	Must be Made In ISO/BIS-compliant manufacturing countries	
18	Manuals & Training	Vendor must supply operation and maintenance manual (in English/Nepali), and provide basic user training at installation	
19	Compliance	Should meet basic mechanical and electrical safety standards applicable in Nepal	


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Specification for Band Sealer Machine

S. No	CRITERIA	REQUIREMENT	OFFERED SPECIFICATION
1	Machine Type	PVC Band Sealer (Horizontal / Vertical / Hand-Held Type) – suitable for sealing plastic, laminated, or PVC bags in commercial and municipal packaging applications	
2	Sealing Mechanism	Continuous heat band sealing or better	
3	Power Supply	Single-phase, 220–230 V $\pm 10\%$, 50 Hz AC	
4	Power Consumption	Maximum power consumption up to 750 W.	
5	Sealing Speed	Adjustable sealing speed of 0–12 m/min or better	
6	Seal Width	Minimum 6–12 mm or better	
7	Temperature Range	Adjustable temperature range of 0–300°C or better	
8	Film Thickness Capacity	Capable of sealing film thickness up to 0.08 mm (80 micron) or better	
9	Conveyor & Load Capacity	Conveyor belt length of 900 mm and load capacity of up to 5 kg or better	
10	Body Construction	Powder-coated steel or stainless steel body, corrosion resistant and durable.	
11	Weight	Approx. 24–25 kg or more, depending on design and material	
12	Safety Features	Overheat protection, safety-insulated handle, temperature indicators, and cooling fan	
13	Mounting & Portability	Table-top or stand-mounted design with optional vertical mount/trolley—should offer compact and portable handling	
14	Origin	Manufactured in ISO/BIS-compliant countries	
15	Warranty	Minimum 1-year warranty on motor, heating elements, and electrical components	
16	Proven Performance	Offered machine must be in commercial use in Nepal for at least 1 year. Bidder must submit documented proof, performance data, or references	
17	Manuals & Training	Vendor must supply operation and maintenance manual (in English/Nepali), and provide basic user training at installation	


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