The Original Resinator®
Innovation Beyond Measure

CRYO-CRUSHER™

CRYOGENIC HAMMER MILL


Cryo-Crusher™


XLS Pro

INTRODUCING THE CRYO-CRUSHER™
the perfect accomplice to the XLS Pro for ultra efficient live resin and solventless extraction activities.

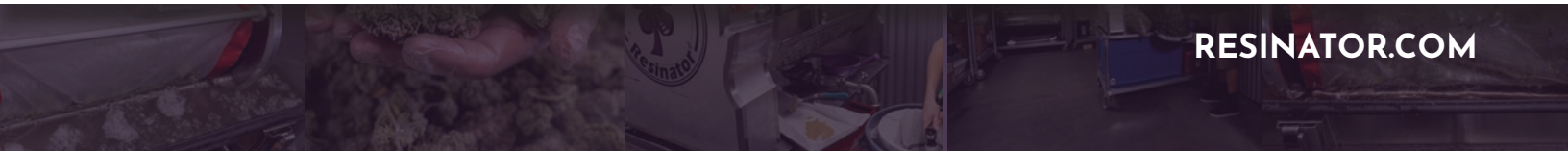
In the evolving world of cannabis extraction, product quality, efficiency, and yield are everything. For operators processing fresh frozen biomass at scale, the inefficiencies of traditional hydrocarbon and solventless extraction have become increasingly difficult to ignore. Enter the Cryo-Crusher by The Original Resinator: a cryogenic hammer mill engineered from the ground up to transform the way cannabis is prepared for extraction. Whether you're working with fresh frozen or dry cured material, this system is built to dramatically enhance throughput, preserve cannabinoid integrity, and deliver clean, precision-milled input material for solventless and solvent-based applications alike.

HOW THE CRYO-CRUSHER WORKS

- Liquid Nitrogen Integration: Biomass is fed into a hopper and kept at ultra-low temperatures via direct LN2 injection. Multiple cryogenic ports maintain consistent temperature from intake through milling.
- Cryo Hammer Milling Action: Curved, non-bladed hammer components rapidly fracture biomass while preserving structural trichome integrity. This process avoids grinding and slicing, focusing instead on reducing raw biomass to optimum particle size to increase exposed surface area.
- Particle Size Customization: Interchangeable screens allow operators to adjust output size to match downstream needs. Whether targeting biomass reduction to live resin, cured resin, solventless, or ethanol-based extraction workflows, the output is dialed in for efficient trichome access.
- Optional Feed Integration: Custom cryogenic feed screw system available, designed to keep biomass cold as it moves from batch loading to the Cryo-Crusher intake hopper. (Manual feed tray at operator waist height comes standard.)
- Wash Down Safe: Built with food-grade stainless steel and sealed components for easy sanitation and GMP facility compliance.

INTEGRATION WITH THE RESINATOR ECOSYSTEM

- Pair the Cryo-Crusher with the XLS Pro and Cryo-Sieve workflows to create a vertically integrated, cryogenically maintained processing environment
- Reduce overhead by replacing manual labor with automated throughput
- Maintain cold-chain integrity from biomass intake to extraction
- Maximize ROI by optimizing bio source for precision trichome collection
- Consolidate input volume and reduce biomass storage needs by up to 80 percent



TECHNICAL SPECIFICATIONS

Built for Commercial Cannabis Labs	Power Configuration & Flexibility
Runs on 208V / 240V single-phase or 480V 3 phase power	240V single-phase via included inverter
Modular output: 75 to 150 lb (34 to 68 kg) per hour throughput	208V single-phase supported
Standard cryo dust collection and insulated jacket included	480V direct 3-phase compatible
Compatible with both fresh frozen and dry cured material	277V requires transformer
Optional cryogenic screw feed for seamless hopper integration	Dust collector requires 3-phase

Dimensions / Weight / Footprint	
Height	7 ft 8 15/16 in (92.91 in / 2360 mm)
Width	4 ft 9 1/16 in (57.09 in / 1450 mm)
Length	5 ft 4 3/16 in (64.17 in / 1630 mm)
Operating Footprint	Approx. 6 ft × 6 ft workspace recommended for safe feeding, collection, and service access
Machine Weight	680 kg / 1,499 lb
Motor Systems	
Main Crushing Motor	5.5 kW, variable frequency speed control (via VFD) — Target range 500–2500 RPM
Feed Motor	0.55 kW, variable frequency speed control
Forced Stirring Motor	0.55 kW, variable frequency speed control (included for enhanced feeding)
Inverter	Included to enable 240V Single-Phase compatibility
Motor Control & Drive Systems	
Main Crusher Speed	5.5 kW variable frequency speed control via VFD (target range 500–2500 RPM)
Feed Motor	0.55 kW variable frequency speed control
Hopper Stirring Motor	0.55 kW variable frequency speed control
Exhaust Fan	2.2 kW variable frequency speed control
Independent Motor Control	All motors adjustable independently during operation
Total Installed Motor Power	8.25 kW (combined)
Throughput / LN2 Use	
Estimated Range	75 to 150 lb (34 to 68 kg) per hour. Actual throughput varies based on feed rate, screen size, material condition (fresh frozen vs dry), run time, and operator workflow. Over a standard 8 hour shift this equates to approximately 600 to 1,200 lb (272 to 544 kg) of processed material
Liquid Nitrogen Consumption	LN_2 usage depends on feed rate, operator workflow, material temperature, particle size target, and overall process conditions. A typical operating range is 0.75 to 1.25 lb LN_2 per lb of biomass processed, with approximately 1:1 LN_2 to biomass as a common planning value. A 230 L low pressure (22 psi) LN_2 Cylinder contains approximately 410 lb of liquid nitrogen
Screens	
Included Sizes	5 mm, 10 mm, 12 mm, 15 mm interchangeable screens included (full set)
Cleaning & Maintenance	
Cleaning Method	Crushing chamber designed for wash-down cleaning
Electrical Protection	Electrical components and bearings should be protected from direct moisture exposure during cleaning operations
Handling & Mobility	
Transport Method	Forklift-ready base with integrated fork pockets for safe lifting
Installation Requirements	Requires a flat, level surface capable of supporting machine weight and vibration. Placement in cold rooms, freezers, or covered outdoor setups is supported