

Case Study

Monarch Waste Co.



Cultivating a better cannabis destruction solution with Monster Shredders

The state of Missouri requires cannabis cultivators, manufacturers, testers, and dispensaries to appropriately render, remove, and dispose of excess or unusable marijuana and marijuana byproducts. Failure to do so can result in substantial fines, license revocation, and even criminal charges.

St. Louis-based Monarch Waste Co. is a licensed cannabis waste management company that streamlines the disposal process, saving customers time, labor, money, and hassle, while guaranteeing compliance with the state's regulations. The family-run small business started with a truck, a generator, and a 3-SHRED Monster Industrial Shredder.

"When we first started, we figured we would just shred our customers' green waste and compost it," explained Annie Macheca, COO and cofounder. "But as the years have progressed, we've expanded to handle any type of cannabis waste that a facility might have."

Solving cannabis waste challenges

Regulations require that all plant material—root balls, stocks, flowers, stems, and leaves—be destroyed onsite and mixed 50/50 by volume with a rendering material, so waste is no longer recognizable as cannabis.

Problem

Adhering to complex cannabis waste disposal requirements is costly and labor-intensive

Solution

3-SHRED, 3-SHRED-2 with Torque Overload Protection, and 4-SHRED Monster Industrial® Shredders

Some cultivators and manufacturers may try to meet this requirement with a wood chipper. However, they quickly discover it is not a viable long-term solution; wood chippers jam frequently, especially when the material is wet. Chippers are also loud, run on propane, and offer few safety features.

By using a Monster Industrial Shredder, Monarch efficiently grinds up wet and dry material. "Cannabis waste is gross; it can be mushy, stinky, or sticky," said Macheca. "While not plant material, gummies and sodas are treated as green waste. We shred it, mix it with rendering material, and take it to our composting partner." The shredder does not jam easily, but if one does occur, pushing the reverse button on the control panel safely clears the jam.

Monarch helps customers with green waste, packaged consumables like gummies and sodas, and one-time-use glass vape pens. “Our customers face different types of waste issues,” explained Macheuca. “We are very confident in our ability to solve those problems. We’re constantly evolving and growing to provide them with a convenient, affordable, and sustainable disposal solution.”

Tackling jobs of all sizes

Monarch purchased a 4-SHRED Monster Industrial Shredder to handle large-scale disposal projects. When Missouri regulators caught one licensee bringing in cannabis from out of state, the licensee was ordered to destroy \$10 million worth of product. Monarch brought the 4-SHRED out to the site. Using a forklift, the team placed the shredder on a dock and went to work. “We were shooting the waste right into a 30-yard dumpster, while the Missouri Department of Cannabis Regulation watched,” said Macheuca. “We shredded 86,000 vape pens in a little over a day. Without the 4-SHRED, we couldn’t take these big projects on.”

Building a sustainable future

“Missouri has several programs for diverting waste from landfills,” explained Macheuca. “Over the last year, we’ve diverted more than 100,000 pounds of cannabis waste from Missouri landfills, which helped us qualify for a grant from the state for new equipment.”

With the money, Monarch added a new 3-SHRED-2 with the optional torque overload protection to their fleet. This purchase more than doubles Monarch’s shredding capabilities. Their original unit, the 3-SHRED, has a 5-horsepower motor and can grind 64 cubic feet per hour. The 3-SHRED-2 has a 10-horsepower motor and can handle up to 142 cubic feet per hour. Additionally, the new grinder’s feed area is twice as big as the 3-SHRED.

Along with the efficiency gains of the 3-SHRED-2, Monarch now has a valuable insurance policy against catastrophic failure caused by tramp metal entering the grinder. “We constantly find non-cannabis waste in the cannabis waste barrels,” said Macheuca. “As we dump the waste into the shredder, it’s easy to miss a pair of scissors, an old iPod, or something else that shouldn’t be in the trash. It then goes into the shredder, damages the cutters, and creates a safety hazard for our team.”

To try to prevent these situations, Monarch started charging clients a fee if non-waste went through the grinder. “Upgrading to the torque overload protection means we no longer have to charge these fees,”



“JWC is such a high-caliber business that cares so much about their product. They’ve offered us help whenever we need it, providing us with parts and advice to ensure we’re back up and running and not missing a scheduled service.”

- Annie Macheca, COO and cofounder, Monarch Waste Co.

explained Macheca. When torque exceeds 90% of the shaft’s mechanical yield, the device decouples the shaft from the motor. The tramp metal can then be removed and the system reset without requiring a major teardown.

Monarch’s long-term plan is to franchise and expand beyond Missouri. The goal is to create a replicable model with the right equipment to handle all kinds of cannabis waste. “The grant money allowed us to get the shredder that we think will be the best fit for expansion,” said Macheca.

Delivering peace of mind

Macheca values her relationship with JWC: “It sets us up for more success as we continue to work and grow together. I’m one of those ‘buy-for-life’ people. The things I invest in are high quality and will last a lifetime, and I really feel like JWC provides a product like that.”

And for Monarch, Monster Industrial Shredders aren’t simply equipment; they are the company’s lifeline. “Without these shredders, our business wouldn’t exist,” stated Macheca. “Our entire business relies on this shredder working, and it always does.”



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