

WHITE PAPER

Spotlight on Equipment for Landfill Diversion



As municipalities, manufacturers, and private waste processors confront mounting landfill capacity issues and stricter sustainability mandates, **landfill diversion** has become a core objective across the waste management industry. The goal is simple: keep reusable and recoverable materials out of landfills.

Achieving that goal, however, depends on the ability to **efficiently process, separate, and repurpose waste materials**. This white paper highlights how Bengal Machine's family of size reduction and material handling equipment enables high-performance landfill diversion, turning waste streams into valuable resources.

The Case for Landfill Diversion

With landfill space dwindling and tipping fees rising, the pressure to reduce waste-to-landfill has never been greater. Environmental regulations, corporate ESG commitments, and public demand for sustainable practices have made diversion an operational and reputational imperative.

Diversion not only reduces the volume of waste sent to landfills, but also supports:

- **Material recovery for recycling**
- **Feedstock generation for waste-to-energy systems**
- **Composting and organics management**
- **Circular economy initiatives**

However, successfully diverting waste from landfill hinges on one crucial step: **preparation**—specifically, **size reduction and material conditioning** that make downstream processes possible and profitable.

Key Challenges in Landfill Diversion

Operators seeking to divert waste at scale face several challenges:

- **Heterogeneous material streams**, including everything from wood and plastics to metals and textiles
- **High contamination rates** that complicate sorting and recovery
- **Bulky or inconsistent material sizes** that impede handling and downstream processing
- **Throughput requirements** that demand durable, continuous-duty equipment

Bengal Machine's integrated line of industrial equipment is purpose-built to meet these challenges head-on.

Equipment Solutions for Effective Diversion

1. Industrial Shredders and Hammer Mills

Our shredders and hammer mills, built by Schutte Hammermill are engineered to reduce a wide variety of materials to uniform, manageable sizes, making them easier to sort, separate, recycle, or convert to fuel. Common applications include:

- **Wood waste** from construction & demolition (C&D)
- **Plastic and packaging** for recycling or fuel conversion
- **Cardboard, textiles, and non-metallic waste**
- **Organics pre-processing** for compost or anaerobic digestion

2. Customizable Screens and Grates

To support various end-use goals, whether composting, recycling, or producing RDF (refuse-derived fuel), our mills are fitted with customizable screen sizes and grates to control particle size and optimize output quality.

3. Heavy-Duty Construction for Rugged Waste Streams

Our equipment features abrasion-resistant steel components, reinforced housings, and easy-access maintenance panels, ideal for continuous use in high-volume waste environments.

4. Integrated Material Handling

Bengal Machine also supports full-system integration, including conveyors, feeders, and discharge options that streamline processing from intake to output.

The Bengal Machine Advantage

As the parent company of Schutte Hammermill, CSE Bliss, and KannaMill, Bengal Machine offers a **complete portfolio of size reduction equipment** backed by decades of application expertise. Our solutions are:

- **Custom-engineered to your material and goals**
- **Built in the USA from heavy-duty, industrial-grade components**
- **Scalable from small operations to high-volume facilities**
- **Supported by a team that understands the nuances of waste processing**

Whether you're a municipality, recycler, waste hauler, or material recovery facility (MRF), Bengal Machine provides the tools you need to maximize landfill diversion and build a more sustainable waste strategy.


Landfill diversion is no longer optional—it's a requirement for operational resilience, regulatory compliance, and environmental stewardship. Bengal Machine is proud to supply the equipment that enables efficient, cost-effective diversion and resource recovery at scale.

If you're ready to reduce waste and increase value, we're ready to help.

Contact Us

Bengal Machine

Integrated Equipment Solutions for Waste, Recycling & Energy Recovery

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Bengal Machine is the parent company of Schutte Hammermill, CSE Bliss, and KannaMill, delivering comprehensive solutions for size reduction, grinding, and material processing.