

CLEANER compost

A plastic-removal system works in tandem with a composter's screen plant to make a near-pristine product.

BY KEVIN YANIK

Awheel loader dumps green waste containing pieces of plastic into a grinder's hopper. A moment later, that plastic is ground into an infinite number of itty-bitty pieces that are dispersed in the processed material.

This can be a nightmarish scenario for compost producers facing government regulations limiting how much contamination can be present in a finished product. Just ask Bob Dressel, owner of North Mason Fiber Co. in Belfair, Wash., which produces organic compost, landscaping bark and more from raw products such as land-clearing debris, yard waste and fish waste.

The Airlift Separator removes about 95 percent of the plastic from North Mason's trommel screening plant, says owner Bob Dressel.

For years, Dressel had to live with the contamination and hope his compost was up to spec. Dressel no longer has to worry, though, because of an investment he made in a machine that removes plastic and other lightweight materials from compost.

The machine, the Airlift Separator, removes about 95 percent of the plastic from North Mason's McCloskey 733 trommel screening plant – and it removes between 50 and 80 percent of plastic on the first pass through it, Dressel says.

“Anything over 70 percent is what most compost producers are going for,” says Jimmy Smith, a manufacturer rep who started with Lane Forest Products 12 years ago and now works for Hawker Corp., which makes the Airlift Separator. “If you can remove more than 50 percent of the plastic on your oversized product, you're making headway.”

So an achievement of 95 percent removal is that much more remarkable.

“I think the whole industry, including myself, was very skeptical about the Airlift Separator at first,” Dressel says. “They really made some phenomenal improvements in the thing. That says a lot about the piece of equipment. It sometimes takes time to make something really good. The Airlift Separator





is one of those things. It's one of the products we use here at the plant that are made really well."

Built to last

Dressel says North Mason removes as many contaminants as it can before material ever reaches the Airlift Separator. An employee handpicks contaminants from raw material once the company receives it. Later, after North Mason prepares its compost mix, a grapple removes remaining contaminants – including plastics and non-ferrous metals – as material is being fed to a Peterson 6700 horizontal grinder.

Contaminants remain despite those efforts, though. And that's when the Airlift Separator, which is mounted on a two-axle trailer, is put to use.

"We've got it hooked up with the 733, and then it's hooked into a 55-cu.-yd. dumpster where we blow our contaminants," Dressel says. "As it gets filled we take it to the landfill."

North Mason has three 40-cu.-yd. dumpsters on site, Dressel adds. He estimates plastic and other contaminants fill two of those dumpsters each week upon the first pass through the trommel.

"Bob's application is pretty typical compost," Smith says. "He has probably an average amount of contamination

compared with what I see across the country."

Finished product is inspected for plastics and other materials once it's

North Mason uses a McCloskey 733 trommel screening plant similar to the model pictured.

**SELL REDI-MIX CONCRETE
CUT YOUR CONCRETE COSTS 50%**
COMPLETELY REFURBISHED CONCRETE BATCH PLANTS WITH SILOS

**STATIONARY OR PORTABLE • 1 YEAR WARRANTY • SETUP AND TRAINING
FREE TRIP TO OUR FACTORY & HANDS-ON BATCH PLANT DEMO** Call for details

N-2200 PORTABLE CONCRETE BATCH PLANT

- 24 Yards Capacity
- 100 Yards per Hour
- Portable 60 Ton Silo
- Detachable Hitch
- Electric or Diesel
- Scales with Weigh Ticket
- Water Meter

COMPLETE SYSTEM \$114,000

N-3300 PORTABLE CONCRETE BATCH PLANT

- 36 Yards Capacity
- 100 Yards per Hour
- 60 Ton Portable Silo
- Detachable Hitch
- Electric or Diesel
- Scales with Weigh Ticket
- Water Meter

COMPLETE SYSTEM \$128,000

**Sell Short Load Redimix
Certified & Weigh Tickets
\$236 Profit per Load
No Permits Required**

3 Yards Capacity

26,500

PINTLE HITCH MIXER

3 Yards Capacity

26,500

GOOSE NECK MIXER

23,500

4 Yards Capacity

SKID-MOUNTED MIXER

VISIT OUR WEBSITE FOR MORE PRODUCTS
American Mixers and Plants LLC



855-523-6050
MixersandPlants.com
sales@mixersandplants.com

processed. Dressel says North Mason meets all county and state requirements for compost contaminants.

“That really has a lot to do with the Airlift Separator putting the final touches on the product,” he says.

North Mason has been using the Airlift Separator for more than a year now, and Dressel says he has not encountered any major maintenance issues with the machine.

“It’s built well, it’s maintenance free,” he says. “It’s never even broken a fan blade, a bearing, wiring. It’s like an Energizer Bunny for us.”

Smith adds that the Airlift Separator is built for continual use for between five and eight years before a rebuild is necessary.

“It’s really heavy-duty,” he says. “In this industry people really beat up their machinery. I have machines out there that have been running for about eight years now with no more than a little bearing grease. That’s significant.”

For North Mason, the wet and windy weather of Washington’s west coast doesn’t slow the Airlift Separator down, either.

“It works in very inclement conditions,” says Dressel, who estimates North Mason produces about 75,000 tons of compost per year. “One reason it works well for us is we pre-load our piles for our compactor so rain absorption is limited. When we screen, we’re screening a pile that’s not weather wet. If it’s



The Airlift Separator is mobile along with the screening plants with which it works in tandem. Some contractors move it with a forklift.

weather wet we’re not going to screen.”

According to Smith, customers will maximize the Airlift Separator’s efficiency if they use their screening equipment to spec.

“We’re going to be pretty successful at pulling the plastic out then,” he says. “I’ve seen some guys run their screen plants where they’re trying to put too much material through them. They’re overwhelming their overs belt and not taking enough of the fines out.”

Additional fines will trap the plastic in the material, Smith adds.

“If you’re getting all the fines out of the overs, that will leave more air space,” Smith says. **PP&E**

The fish composters

North Mason Fiber Co., which launched in 1988, has been composting for about 15 years. Owner Bob Dressel says the company’s flagship product is fish compost, which it’s been making for about 11 years.

“It takes three years to make our fish compost,” Dressel says. “It’s like making fine wine. It takes time.”

The company’s brand, Oly Mountain Fish Compost, is a registered organic product through the Washington State Department of Agriculture. North Mason didn’t develop its organic recipe overnight, though.

“We tripped, stumbled and fell when we first started this fish compost,” Dressel says. “It was terrible. We finally figured out our Kentucky Fried Chicken/Coca-Cola recipe.”

The majority of Oly Mountain Fish Compost is distributed in Washington, Oregon and Idaho, but Dressel says the company has customers as far away as Hawaii and New York.

North Mason sources fish from a variety of places.

“We’re in a fish-growing area,” Dressel says. “We get it from growers, off shore, on shore. Right now I’m finishing the first volley of a 350-ton batch that went bad on a boat. They called us and said, ‘Help us.’”

Available to 330 HP

Long Lasting

20 Million Tons, No Problem

Compact

Self Lubricating

Rulmeca Motorized Pulleys,
the world’s most powerful since 1953.

RULMECA CORPORATION

6508 Windmill Way Suite B, Wilmington, NC 28405
910-794-9294 www.rulmecacorp.com