



# TURN WASTE INTO PROFIT

**O**NE OF THE PRIMARY KEYS to success in the free-enterprise system is learning how to take something that is apparently useless and turn it into something that is obviously useful—useful enough that people will want to pay good money for it.

Here's a good case in point:

Within the last two years, an Arkansas company has taken a pile of discarded limestone—all of it 0.25-in. (0.64 cm) minus—and they have turned it into a significant profit center for themselves. How did they do it? They applied some innovative thinking. Then they bought some unique production equipment. And then they hit the streets with some creative and effective marketing.

"We probably had accumulated close to 65,000 tons (59,000 tonnes) of waste limestone out there in that pile," said Jim Blackmon, superintendent of Souter Construction Company's operation in Gore, Oklahoma. "It was all 0.25-in. (0.64-cm) minus stuff that was left over from our other products. There was really no market for it. Some of it was being used for building pads and some of it was being used for cheap agricultural lime. But that waste pile was just growing bigger and bigger every day.

"I kept looking for some piece of equipment that we could buy that would help us make some more or less different

**Less than two years ago, this company had a 65,000-ton pile of limestone waste, all of it 1/4-in. minus. There was absolutely no market for it... until they started using a high-frequency screen to make four different specialty products.**

products—without costing us an arm and a leg to do it."

Souter Construction Company, Inc. started into business in 1950 in Little Rock, Arkansas. Back then, the company's main activity was hauling bauxite at an aluminum plant. Since then, they have grown and diversified. The company now operates in five states (Arkansas, Oklahoma, Texas, Louisiana, and Florida) and is involved in heavy construction, highway construction, and utility con-

struction. In addition, the company has the limestone crushing operation that is located in Gore, Oklahoma, which is about 40 miles (64 km) west of the Arkansas-Oklahoma state line.

"Here in Gore," Blackmon explained, "we're processing dolomite limestone from the St. Clair limestone layer for the powerplant in Shadypoint, Oklahoma. Our main supply for the powerplant is a 3-in. to 0.75-in. (7.6-cm to 1.9-cm) chip of limestone. They crush it into dust and blow it in with the coal to neutralize the sulphur that's generated by burning coal at the powerplant."

But then there was all of that left-over 0.25-in. (0.64-cm) minus material sitting out there on the company's growing waste pile. Blackmon decided something had to be done. He sent some samples to Kolberg-Pioneer in Yankton, South Dakota so they could run them through their laboratory.

"I was trying to get to a really fine-grade lime that would be marketable," said Blackmon. "I wanted to see if they had any suggestions as to how I could get there. And that's when they suggested that I should take a look at the Vari-Vibe screen from PEP, Inc."

Blackmon's first look at the Vari-Vibe high-frequency, two-deck screen was at the ConExpo-Con/Agg show in 1999. He was interested, so the people at PEP

arranged to bring a demonstration unit to his plant site in Gore.

"They brought in this little single-deck, truck-mounted demo unit and we played around with it for awhile. We tried all sorts of things. We kept changing screens on it and then recycling the material. I ran gradations on what we got. And then I got to calling around to potential customers to see what I could sell and what I couldn't. It wasn't long before I could tell that it was going to work."

Blackmon convinced management at Souter Construction Company that they should invest in a PEP Portable Power Structure plant that was equipped with a Vari-Vibe III-M screen. The variable high-frequency screen action can range from 3,000 to 5,000 rpm. Depending on how it is set up, the producer can achieve separations ranging from 0.75 in. (1.9 cm) to 30 mesh so that it is possible to achieve up to four different products. Although the Portable Power Structure plant can be configured with either one, two, or three screen decks, Souter Construction Company opted for the two-deck configuration.

"Right now," said Blackmon, "we're making four different materials on this one machine. We're putting a 0.25-in. (0.64-cm) minus material into it. Our first scalping screen is a 20 mesh—and we're pulling agricultural lime off of it

by basically scalping the bottom. Then, it's separating and we're pulling 0.25-in. (0.64-cm) chips off the top deck.

"On the bottom, we have our screens graded so that we're pulling 6, 10, and 12 mesh out for a fertilizer filler. When it comes out of there, the way we have the screens graded out, it's running to about a 14 minus. And we're selling that for charcoal filler."

## **"We were able to pay for the whole set-up in just eight months of actual running time."**

Blackmon said that it took them awhile to get their new products marketed.

"After I got this equipment into operation, there were a couple of months of beating the bushes, trying to sell this stuff. I had to get the word out that it was available. At first, I gave away some of it in order to get it out there on the market. But then I had to quit doing that because they were coming in here to get it faster than I could make it!"

Has the PEP Vari-Vibe system worked out to their expectations?


"We bought this thing and set up the operation, including a shed to put some of the finer material in to keep it dry. It

wasn't a cheap set-up by any means. But we were able to pay for the whole set-up in just eight months of actual running time! And I'll tell you this: Anytime I can get a piece of equipment that will pay for itself that fast... Well, I'll buy that equipment in a heartbeat!"

Blackmon said that the equipment has done everything they expected it to do—and more.

"Since we started up, I've run some special material for the Arkansas Highway Department. I screened some of that limestone on a 30 mesh. It was just like baby powder!" Blackmon explained that they highway department wanted such a fine-graded material to use when they seeded the slopes alongside the highways.

"We've run this equipment for a year and a half now," said Blackmon. "There is somewhere between 2,500 and 3,000 hours on the meter. And it's been virtually maintenance-free. All we've done is change oil filters on it. Well, I think we let one screen get a little bit loose and it got to flapping around and knocked a hole in it. But that was our fault. Other than that, we haven't had to do a thing to that machine. Nothing."

"One thing is for sure: It's the first piece of equipment I was able to find that could do exactly what we wanted to do—while paying for itself in a very short period of time." 



*Souter Construction Company's crushing operation in Gore, Oklahoma includes a PEP Portable Tower Structure with a Vari-Vibe III-M screening unit. This specialized, high-frequency unit is equipped with two screen-decks that can be fine-tuned in their screening action by varying the frequency of individual vibrators. Depending*

*on how it is set up, the Vari-Vibe screening unit can produce up to four different products. The Portable Power Structure is compact in design—and it requires no permits to transport over the road. The transport length is just 34 ft. 2 in. (10.4 m) and the transport height is 13 ft. 6 in. (4.1 m). Towing width is 8 ft. 6 in. (2.6 m)*

**HERE'S WHERE you can learn more ABOUT THIS APPLICATION**

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