

# Products Improve Manure Waste Naturally

PitCharger offers a range of bacteria and enzyme products that build soil health, break down manure, reduce odorous gases, and eliminate crust and flies to improve animal health and human working conditions. "We offer products and services that cover all problems that involve manure and its containment systems," says Tim Kremer, PitCharger representative.

The original PitCharger formula contains 51 anaerobic, aerobic, and multi-facultative bacteria strains. In recent years, the company has expanded to offer a more diverse product line.

"Twenty years ago, there were one or two manure issues facing livestock farmers, maybe crusts or solids," says Kremer. "But today, as you fix one problem, another pops up. Farmers are facing more complexity than before." As one example, he explains that the average manure pit was 5 percent solids and 95 percent water in 2005. "Now those same pits are 10 percent solids, 90 percent water due to higher fiber diets and other changes," says Kremer. "That might seem like a small change, but it's a 200 percent increase in



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floating manure. There's less oxygen in the water, and conditions become anaerobic. That affects bacteria levels for breaking down the solids."

Due to this complexity, PitCharger primarily sells products through consultation. Explains Kremer, "That's a big difference between us and our competitors. We speak directly with each customer to determine what ratios and quantities of products they need. Ninety percent of our phone calls are about specific problems. Then we'll recommend a custom treatment regimen and provide precise application instructions."

Several products are available, including a manure digester to reduce solids and maintain your manure system long-term, LTC-E (lagoon treatment concentrate and enzymes), Feed Digester for breaking down feed spills, and ORB (odor-reducing bacteria). The company also sells a defoamer for use when hauling active manure. It can produce a 19-in. drop in foam in just 20 min. after use. "Our goal is to solve the main manure problems so that farms get back into equilibrium," he says. "Then farmers can maintain order with our standard mix, still sold for just \$50 a gallon."

Ordering PitCharger is a nuanced process. The company's customer service will ask numerous questions to understand all

aspects of your operation, including the type of livestock, number of head, stage of production, your manure management system, and overall goals for the manure. The amount of PitCharger necessary depends on the size of your operation and production stage. Using pigs as an example, 1 gal. works per 1,000 hogs per month.

The product is shipped out in 5-gal. buckets filled to the amount necessary for monthly application. 55-gal. drums and 250-gal. totes are available for lagoon treatments. The treatment should be applied within 30 to 45 days of receipt and stored in a cool environment beforehand. If it accidentally freezes, the bacteria will go dormant until a thaw and should retain most of its potency afterward.

"Just reach out directly," says Kremer. "We'll help you figure out what will work best."

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Top removed, showing hopper and drying beds.

## Hot Air Flow Dryer For Wood Chips And More

FlowDrya from Stronga was designed for and introduced into the wood chip/wood fuel market in 2012. Over the past dozen years, the horizontal airflow dryer has quickly been adapted for a wide array of uses. They include but aren't limited

to crops, animal bedding, plastic waste packaging, wood chips and biomass for biochar production.

"Since promoting the dryer, we've been approached from a wide range of sectors," says Will Ray, Stronga. "Over the past year

or so, we've had significant interest in our dryer from the wood gasification market and have pushed into this market."

FlowDrya systems consist of a heat source and a twin-deck, insulated drying bed. Stronga works with a wide range of heat sources, both direct and indirect, via heat exchangers. Hot air is pushed through the lower bed and rises through the ventilated floor to the upper bed. Unlike conveyor belt systems, the materials move as the hydraulic floor strokes back and forth beneath them.

FlowDrya features PulseWave, which automatically agitates the materials. As materials enter the drying beds from a hopper, blades tumble them forward. The shape of the blades produces a significant driving force close to the bed. At the same time, some materials near the top of the blade tumble backward. On the return stroke, most of the materials again tumble forward, this time over the top of the backward-sloped blade. Each forward stroke moves materials closer to the end of the beds where they are augered away.

"With each stroke, materials are displaced from their position, giving them equal access to the warm airflow and thermal conduction," says Ray. "Compared to other woodchip dryers available in the market, the FlowDrya

offers the benefits of simple operation with few moving parts."

The DryStation is the graphical interface between the programmable logic control (PLC) and the dryer. The PLC optimizes the drying process to maximize efficiency while reducing drying time and management costs.

While the units share the same basic features, they also differ considerably. "Important factors include the client's location, heat source, material to be dried and more," he says. "These all affect the build and the price."

Stronga is based in the United Kingdom and markets its units through its European distribution network. Outside of Europe, sales are handled directly by the company.

"We've sold a few of our FlowSteama units (steam heat treatment) into North America, but we've yet to sell a dryer there," says Ray. "We have a few units in Australia, Mexico, South Africa and elsewhere."

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## Splitter Converted To 3-pt. Mount

When the carburetor on John Owen's wood splitter went bad, he didn't waste time or money replacing it. He upgraded his splitter with 3-pt. mounts and tractor hydraulics.

"A new carburetor was going to cost me \$85," says Owens. "I removed the wheels, engine, hydraulic pump and oil reservoir and welded a 3-pt. hitch to the end of the frame, opposite the splitting wedge."

Owens retained the control valve and hooked hoses from it to the tractor hydraulics.

Not only did the conversion cost less than fixing the carburetor, but he also no longer had to deal with the small engine. Even better, it gave him a more versatile, easier-to-use wood splitter.

"With the splitter on wheels, I had to lift the chunks of wood up and onto the frame," says Owens. "Now the splitter is only 6 in. off the ground. I just roll the big rounds into place and pull the handle. Plus, with it on the 3-pt., I don't have to unhook it to use the tractor to drag a log into position for splitting."

Contact: FARM SHOW Followup, John



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Owens, P.O. Box 875, Paris, Texas 75461 (ph 903-982-6952).

## Simple Firewood Storage Posts

With his moveable retainer posts, Victor Schantz can set up firewood storage wherever he wants. The retainers are made from salvaged T-posts. One is used for the upright. A second post cut in two is welded to the bottom of the upright in a V shape as a base. When wood is stacked on the base, it holds the upright in place.

"I got tired of driving fence posts into the ground to stack wood against and have to pull them out later," says Schantz. "I decided to take my rusty old fence posts and use them instead."

Schantz trims posts to 4 to 5 ft. for the uprights. He cuts others into 18 to 20-in. pieces to use as bases. He welds two to each upright with a spread of about 18 in. at their farthest points.

"I can set them up from 4 ft. apart to 50 ft. or more," says Schantz. "No matter how far apart, they work. Sometimes, I'll place them closer and lay down a couple of 2 by 4s before stacking the wood to keep it off the ground."

When no longer needed, the steel post retainers are picked up and stored for the



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next season. "It was a good way to use the old posts instead of scrapping them out," says Schantz. "Welding rod for making them was my only cost."

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