"Our brackets can be bolted on any size of square or rectangular tube, so an old planter, cultivator or sprayer can be stripped and our flaming equipment bolted on," Prull says.

Modular Flaming Uses Less Fuel

FlameWerks specializes in delivering contained, targeted heat while reducing fuel consumption by up to 70% compared with competitors. This method not only cuts costs but also demonstrates a commitment to sustainability and operational excellence.

Modularity is key to FlameWerks' approach. Flexible, scalable designs can handle nearly any application, from path-side flaming to large-scale broadcasting. Turnkey packages include options such as toolbar or trailer frames and bolt-on burner kits. Whether an operation spans 3 or 48 ft., tiered equipment designs adapt to any scale.

"We have a broad clientele for applications and vegetation management," says Will Prull, FlameWerks owner. "Our primary customers are bed and row crop farmers looking to get rid of unwanted grasses and weeds in their carrots, kale, broccoli, onion and garlic crops."

All FlameWerks equipment is designed, manufactured, assembled and shipped from Eugene, Ore. Burners are adjustable for height, pitch and angle, and can be positioned close together for broad flaming or spaced apart for targeted applications such as vineyards or orchards. Each burner's 9 to 18-in. flame footprint allows a four-burner unit to cover up to 72 in. wide and treat up to an acre per hour at speeds of 1 to 3 mph.

"They're fully automatic system kits, which include in-cab control. Just hit a switch that sends a signal to the burners, each with individual flame controllers. They self-ignite to a pilot level, and when they confirm a flame, they boost to full pressure around 40 psi."

Burners are adjustable in pressure and can use different nozzles or orifices to alter the size and shape of the flame.

Units can be pulled by a tractor, pickup, quad or ATV, or supported with 3-pt. hitch options.

The Multi-Basket 2.0 excels at broadcast flaming, bed preparation, inter-row flaming and post-harvest cleanup. It's also a valuable tool for weed management, pasture rehabilitation, reseeding and maintaining riparian zones and gravel drives.

FlameWerks offers three tiers of toolbar options, including the 5-ft. Toolbar Trailer, which expands to a 12-ft. flaming width and supports various burner units and propane capacities. Units range from an 8.5-ft. width suitable for road use to 30 or 40-ft. toolbars with one or two 250 or 500-gal. propane tanks.

"Our systems are so flexible and scalable, the core 8.5 ft. can essentially become any width the farmer wants it to be," Prull says. "Our brackets can be bolted on any size of square or rectangular tube, so an old planter, cultivator or sprayer can be stripped — at least the rear tube — and our flaming equipment bolted on. This allows for extra versatility and cost savings."

For fuel, smaller operations should use forklift tanks for each burner, while larger setups benefit from high-capacity tanks. Burners operate at 450,000 to 650,000 Btu per hour, consuming 4 to 7 gal. per burner each hour, depending on vegetation and speed, at a cost of $10 to $30 per acre.

Pricing suits all sizes with complete grouping kits. A two-burner setup costs $5,295, while a four-burner is priced at $9,495.

Contact: FARM SHOW Followup, FlameWerks, P.O. Box 21108, Eugene, Ore. 97402 (ph 541-513-7927; info@flamewerks.com; www.flamewerks.com).

From Classroom To Cutting-Edge Cattle Solutions

When Dakota Belling, co-founder and CEO of Bovi-Jet, first teamed up with Eugene Meyer at Iowa State University, neither could have predicted that their class project would grow into a groundbreaking business revolutionizing cattle care.

"Our journey began with an idea rooted in practicality: designing devices that automatically apply pour-on insecticide to the backs of cattle," Belling says. "It takes care of more external parasites and soaks in to handle some internal parasites as well."

The duo quickly recognized the challenges faced by beef and dairy producers. Dairy operations, where cows move single file through alleyways, presented opportunities for automation. Inspired by garage door laser sensors, Belling and Meyer developed a system that detects cow movement and applies insecticides in a seamless, continuous manner. By upgrading to dual laser sensors, the device ensures precise application, maximizing efficiency and coverage.

On the beef side, the challenges were different. Beef calves typically weigh between 500 and 700 lbs. and don't move as uniformly as their dairy counterparts.

"They tend to stack up too much, so we came up with something more realistic and specific," Belling explains.

This led to the creation of the Bovi-Jet chute-mounted unit, designed for use during routine tasks such as vaccinations and ear tagging. By integrating its pour-on applicator into the chute, each calf receives a targeted dose as it's individually secured.

The device mounts to a stationary top bar of the chute with three bolts and wingnuts, with the pump and circuit board secured on either side of a chute bar. The hose connects to a nozzle that points down the animal's back, applying pour-on from the shoulders to the hip. When the animal is in the headgate, the nozzle extends, and the pump distributes product along the back, covering 4 to 6 ft.

Belling and Meyer's innovation didn't stop at automated application. Recognizing the importance of accurate dosing — especially for preventing resistance among parasites and reducing waste — they developed a version that connects directly to a chute's scale head. This mechanism calculates the exact dosage based on each animal's weight, eliminating guesswork and lowering the chances of underdosing or overdosing.

Recognizing the varied settings of cattle operations, the team created models powered by interchangeable Milwaukee and Dewalt batteries, along with a 110-volt option. Whether in remote pastures or modern feedlots, ranchers can rely on these components to treat thousands of cattle on a single battery charge.

The Bovi-Jet product line offers multiple tiers, from basic models without apps or control panels to advanced versions that integrate seamlessly with existing livestock management software.

The pair handles production, assembly and shipping directly from their garage in Ames, Iowa. They're attending farm shows, reinvesting all profits into the company, and considering adding dealer partnerships.

The entry-level unit costs $1,200, the mid-tier model is priced at $1,800, and the scale head version, currently in trials, costs $2,500.

By integrating its pour-on applicator into the chute, each calf receives a targeted dose as it's individually secured.

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Pelleting Adds Value To Wool

Karen Mayhew and Elaine Becker are adding value to farmstead wool by turning it into fertilizer and mulch products. Their company, Woollets, is processing raw wool into soil-friendly pellets and shreds, as well as fleece for mulching.

"Karen heard about a fellow in Germany who converted a wood-pelletizing machine to make wool pellets," recalls Becker. "He reported success using the wool pellets for fertilizer. She had no market for the wool from her sheep flock, and I like helping the environment. We decided to start Woollets."

With a flock of nearly 80 Clun Forest and Clun Mule ewes, Mayhew had wool but no market. She and Becker started with a small U.S.-made pelleting machine and an equally small wool shredder from the Czech Republic. The machines produced only 6 lbs. of pellets per hour. Although Woollets showed promise, the low output limited sales potential. Combined with their full-time jobs (Mayhew is a local postmaster and Becker is a librarian), they needed to make a change.

"We proved there was a market," says Becker. "After a year and a half, we invested in higher-productivity equipment. Today, we can fill any size order, even for a commercial farmer."

They bought a plastic crusher to process the wool and a high-volume pelletizing machine, complete with conveyor belts. They also moved from a corner of Mayhew's barn to a rented building, with room for the equipment and other aspects of the business.

"We wanted to lift up shepherds and create a local market for their wool," says Becker. "Right now, we're taking wool from sheep producers in central and southern Wisconsin and some in northern Illinois. We're able to pay more than the going market price and already have a waiting list of sheep producers wanting to sell to us. We just have to increase demand."

Woollets is gaining attention and sales, with one or more garden centers in each of eight states carrying their products. They have shipped products to gardeners from New York to California.

Becker notes that the pellets and shreds have an NPK value of 9-0-2 and contain additional micronutrients. One farmer purchased 1,000 lbs. for a field trial.

"We'd like to find other farmers willing to try the pellets and shreds, which can be applied to the surface or mixed with the soil," says Becker. "They start to break down quickly yet they feed the soil throughout the season. They break down completely in 9 to 12 months."

The greater the demand Woollets create, the more wool they can buy from producers in their region. Becker is confident the time is right.

"People are looking for more sustainable options," she says. "With Woollets pellets and shreds, they can eliminate synthetic fertilizers and reduce watering by 25%. With our mulching fleece, they can eliminate plastic mulch.

"The mulching fleece protects plants by shading roots and maintaining soil temperature," adds Becker. "It also boosts nitrogen and suppresses weeds, all while deterring slugs and snails, deer and rabbits."

Woollets sells pellets in 1, 5 and 25-lb. bags for $16, $55 and $200, respectively. The pellets are also available in 1,000-lb. totes.

Wool shreds can be mixed into the soil to replace peat moss while feeding and aerating the soil. They're available in 1-lb. packages for $13 and cover 30 sq. ft.

The mulch is also priced at $13 per 1-lb. package, which covers 9 sq. ft.

Becker notes that the pellets and shreds have an NPK value of 9-0-2 and contain additional micronutrients.

"We distribute throughout the U.S.," says Becker. "If Canadian readers are interested, we can connect them with pelletizers in Canada."

Contact: Farm Show Followup, Woollets, 1982 Horner Lane, Argyle, Wis. 53504 (ph 608-286-5004; woolletsllc@gmail.com; www.woollets.net).