

Cattle “Breathalyzer” Detects Infection Adjustable Chute Lines Up To Trailer

One of the largest issues beef and dairy producers face is detecting and treating respiratory disease.

Isomark Health, Inc., has patented an innovative “breathalyzer” technology to detect viruses, bacteria and fungi, usually 24 to 48 hours before illness symptoms arise.

The idea came from two of the company’s founders who wanted to do a better job of treating animals in the field.

The highly sensitive breathalyzer uses spectroscopy to detect any metabolism-related pathogens challenging the immune system, says Dr. Fariba Assadi-Porter, CEO, and Isomark Health Co-founder.

The mechanism is being used and tested in both feedlots and dairies. As cattle are held in a squeeze chute or during milking, they momentarily breathe into a mask. Within 30 seconds, the breathalyzer measures the different masses and reports a red or green signal indicating sickness or health.

The 90 to 95 percent accurate battery-powered breathalyzer is mounted on a wall or placed in a cart and can be used during daily routines.

Pre-symptomatic detection and identification of viruses or bacteria allows for more accurate decisions concerning treatment with antimicrobials or more expensive drugs.

Isomark has completed four successful feedlot trials. They’re planning on producing the breathalyzers in Wisconsin.

Hardware, software, machine and masks



Battery-powered breathalyzer is able to determine cattle health before symptoms develop.

are expected to be leased through a subscription model with the basic version costing approximately \$2 per test.

The technology should be available to U.S. beef markets by the end of 2022.

Contact: FARM SHOW Followup, Fariba Assadi-Porter, 5930 Seminole Centre Court, Suite F, Fitchburg, Wis. 53711 (ph 608-571-2609; info@isomark.com; isomark.com).



Bedding with the Top Spread inside a hoop barn.

Mounted Processor Quickly Spreads Baled Materials

The Top Spread™ Bale Processor from Arts Way Mfg. makes short work of spreading baled hay, straw or other materials in livestock pens or on newly seeded bare soil. Model 664 handles bales up to 6 ft. long and Model 864 handles bales up to 8 ft. long. Both models have universal mounting brackets that work on skid steers or telehandlers. Hydraulic capacity of 20 gpm is required along with a 14-pin electrical plug as well as a loader with 2,500 lb. lift capacity.

Bales or loose materials are easily loaded onto the processor as the operator tilts it forward and into a vertical position. Steel forks on the base then act like a pallet fork

to secure the bale or materials when the Top Spread is tilted back to the horizontal position. Top Spread is controlled in-cab with a joystick and push button control.

Material is shredded by rotating metal blades and thrown out the left side of the unit in a swath from 20 to 30-ft. wide, depending on the hydraulic flow sent to the beaters.

Prices start at \$21,000 with wiring harness, mulch kit, adapter and shipping extra.

Contact: FARM SHOW Followup, Arts Way Mfg., 5556 Hwy 9, Armstrong, Iowa 50514 (ph 712-208-8467; www.artsway.com).

“Best Bargain In Farming”



Join thousands of your fellow FARM SHOW readers who’ve already ordered a copy (or copies) of our 4 “Encyclopedias of Made It Myself” ideas. At just \$14.95 apiece (or \$49.95 for all 4), it’s the “best bargain in farming”, as one subscriber told us. See order forms at the back of this issue or go to www.farmshow.com.

Iowa hog producer Dennis Backhaus made it a lot easier for livestock haulers to back up to his hog loading chute when he built an adjustable platform that easily aligns to trailer doors.

“I built this because my stationary chute is in a tighter area for backing a trailer and some drivers needed almost an hour to hit it straight on, especially if the yard was a little wet or slippery,” Backhaus says. “With this device, I can adjust my top platform almost 30 in. side-to-side, so the trailer doesn’t have to be exactly flush or straight onto the loading ramp.”

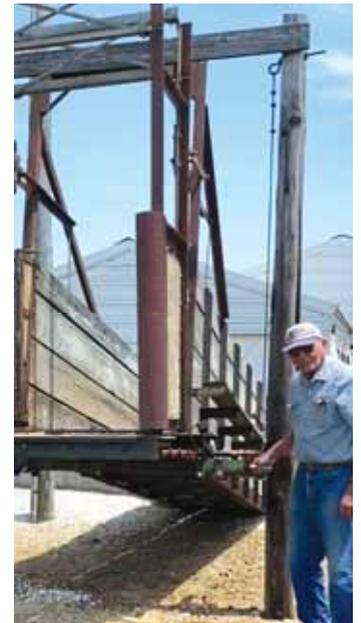
Backhaus says he did a lot of thinking, drawing, cutting and head-scratching in his shop to come up with the design and make sure it would work. “First, I built a prototype out of wood, then made some adjustments before I fabricated the metal framing.”

His custom design is an adjustable 3-ft. wide flat platform that extends out from the top of his stationary loading chute. The platform’s base is supported by a piece of 2 1/2-in. wide angle iron bolted across the lip of the stationary chute. Angle iron struts support the floor and vertical angle iron posts support the side walls, forming a strong mounting point for hinges that allow the platform to swivel side-to-side. A metal frame with X bracing supports the 3/8-in. plywood sidewalls.

The platform’s floor is made out of 1 1/2-in. wide by 3/8-in. thick flat steel metal bars, secured with stainless steel bolts and lock nuts. The metal bars are spaced about 3/4-in. apart so they can rotate closer together or further apart as the platform moves side-to-side. Dirt or manure can drop through the spaces.

The front of the platform has an adjustable metal plate that can pivot 3-in. out and flush to the base of the trailer so hogs have a continuous flat surface to walk across and can’t injure their feet or legs. Rubber belting covers vertical posts on the front of the platform. It flexes and compresses against the rear of the trailer to form a tight seal when hogs are loaded.

Backhaus moves the platform side-to-side with a 4-ft. long stirator auger mounted inside a piece of pipe. “I welded metal cogs



Dennis Backhaus built an adjustable platform on the front of his loading chute that moves side to side and aligns to the door of a livestock trailer.

inside the pipe to catch the fighting and have a lock on the end so I can secure it every quarter turn, which results in about 2 in. of movement.”

The main chute height is adjustable up and down with a cable winch from a grain auger. Backhaus says when they occasionally load into a horse trailer, he has pins and pivot points that can raise or lower the platform so it’s the same angle as the loading chute.

“The platform works really well, I’ve gotten a lot of compliments and even been told I should have the design patented,” Backhaus says. He’s quick to reply that “I should’ve built this 25 years ago, but the idea didn’t come to me until 2019.”

Contact: FARM SHOW Followup, Dennis Backhaus, 2550 378th St., Westside, Iowa 51467.

Remote Water Line Shut-Off Works Without Wi-Fi

Flo by Moen doesn’t even need an internet connection to operate. It’ll monitor water flow in a building and shut itself off if sensors indicate a problem. It can also be used to monitor and shut down a water system remotely when it’s connected to the internet.

“There are other smart water usage monitors on the market, but they all require internet connections,” says Bryan Uhler, Pioneer Builders. “All Flo by Moen needs is a power supply and a water line.”

Uhler is an active contributor to YouTube and Instagram with videos on all things building. After Moen sent him the device, he installed it and shared his impressions with FARM SHOW.

The water usage monitor senses water usage over time and the total gallons that pass through the system. It has high, medium and low sensitivity settings. If a selected setting is exceeded, the valve closes, and water is shut off.

Flo by Moen can be used with any 3/4 to 1 1/4-in. cold water pipe, including in agricultural situations. It’s designed to be installed after the water meter and the main water shut-off. When installed on well or irrigation water service lines, it should be placed downstream of water filtration systems.



Water usage monitor senses water usage, water flow over time and total gallons that pass through the system. It has high, medium and low sensitivity settings. If a selected setting is exceeded, the valve closes, and water is shut off.

Flo by Moen is priced starting at \$700 (www.moen.com).

Contact: FARM SHOW Followup, Pioneer Builders, Inc., 1744 SW Old Clifton Rd., Port Orchard, Wash. 98367 (ph 360-874-2311; www.pioneerbuildersonline.com).