



Instead of large, full-size concave panels, Sunnybrook Welding offers frames that each hold individual modules. Modules in this frame are designed for peas and beans.

## “Mix And Match” Modules Let You Design Your Own Concave

By Jim Ruen, Contributing Editor

You can match your combine concaves to your crop, and easily change between crops with the new modular design from Sunnybrook Welding & Machine Shop, Ltd. Instead of large, full-size concave panels, Sunnybrook offers frames that each hold individual modules, or “boxes”. Introduced initially for Deere STS combines, they are now also available for International Harvester combines.

“Two frames replace an existing OEM concave,” says Gerald Foster, Sunnybrook. “Our design lets you pick one or more of 4 levels of threshing action. You can mix and match modules to fit your crop.”

The 4 module styles include the Minimum Thresh for canola, Maximum Thresh for wheat and barley, 21 Hole standard, and Round Bar for peas/beans and corn.

The Minimum Thresh has a smooth face with no holes and is designed to disperse the crop better and use more of the cleaning area. Installing one or two frames with smooth boxes is recommended to increase rotor speed without damaging more sensitive crops like canola.

The Maximum Thresh box is designed for rotary combines. It has slots and square bars on a 45° angle to better match the flow of material across the concaves.

“We find it provides much more aggressive threshing, but it also lets you open up more in clearance between the concave and the rotor, which reduces power consumption,” says Foster.

The 21 Hole functions like a standard wire concave, but it offers more threshing area. It’s not as aggressive as the Maximum Thresh box.

Round Bar boxes are designed for large seeds and gentle action. The rounded bars offer gentle threshing action without overloading the shoe. It’s recommended to avoid seed-skin damage on crops like beans and lentils and appears to keep crop samples cleaner.

“When you order your first set of frames, you can pick any of the four inserts,” says Foster. “The first may be all smooth, the second a mix to match the flow of material through the combine.”

If a single box is damaged, it can be pulled out and repaired or replaced, as opposed to replacing an entire concave. When boxes are bolted into place, they have the added impact of putting the concave under a negative load, bending it upward. This makes the concave even stronger.

“Another benefit of the boxes is the ability to treat the surface,” says Foster. Sunnybrook



Photo (above) shows 6 frames with 3 different kinds of modules - 2 Minimum Thresh at the top, 2 Maximum Thresh in the middle, and two 21-Hole standards at the bottom. Photo below shows how modules fit into frame.



has been a leader for years in boronizing wear parts for longer life and reduced friction.

“You can’t boronize an entire concave, but it’s an option with our boxes,” says Foster. “You can also reverse the boxes as the edge wears down, giving your concave fresh edges.”

The introductory price for two concave frames with 7 boxes each is \$1,200. Four frames are \$2,000, and 6 are priced at \$2,700. The first bolt-on lip is free with additional lips priced at \$120 each.

Foster notes that shipping concaves is very costly. However, once the initial investment in frames and boxes has been made, shipping individual boxes will cost about 1/10th that of a frame and inserts. “If a rock bends two or three boxes, that’s all you’ll have to buy,” says Foster.

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Wire cattle panels hang from top rail that’s held in place by short pieces of pipe on T-posts.



## How To Build A Strong, Cheap Fence

When Rick Cleveland inherited his dad’s farm near Terrell, Texas, he needed to fence in a pasture. He didn’t like the look of barbed wire and couldn’t justify the cost of pipe-type corral panels. So he started looking for ways to make a strong fence out of 16-ft. wire mesh panels.

“They’re flimsy so even if you have a lot of posts, they’re going to sag or stretch. That’s when I got the idea for a simple top rail,” says Cleveland.

What he did was buy a bunch of fence pipe normally used to put up chain link fence. He cut some of the pipe up into 3-in. long pieces and drilled a 5/16-in. hole through each of them, 3/4 in. from one end.

The pipe is the perfect size to fit tightly over the top of a T-post. So he drove T-posts in every 10 ft. and then slipped one of the 3-in. pieces of pipe over the top of each post. A jig attached to each short piece of pipe holds a horizontal piece of fence pipe running from post to post. The bolt through the short piece of pipe rests on top of the post holding the

rail solidly in place.

Once the top rail was in place, he used chain link fence hangers to hang the 52-in. high mesh cattle panels, wiring them together end-to-end and to the T-posts.

“The top rail makes the fence solid. I weigh 250 lbs. but I can hit the fence running and hop over without damaging the fence at all. It looks great and is strong,” says Cleveland.

“I flattened the ends of the horizontal pipes and lag bolted them to the corner posts. I also bolted the ends together where they meet along the fenceline.”

Cleveland says the cost of the fence, which has already been copied by others who’ve seen it, is about \$3.75 per foot. “I’ve discovered cows can’t push it over or lift it. Fastening all the components together gives it strength, kind of like what auto makers do with unibody construction.”

Contact: FARM SHOW Followup, Rick Cleveland, Terrell, Texas (rtkcleve@sbcglobal.net).

## Stalk Stopper Protects Tractor

Gene and Jerry Johnson were tired of fixing damage to wiring and hose on back of their tractors from stalks and debris whipped around by their stalk chopper. So, the brothers came up with the idea of making a shield to cover the back of the tractor.

It also protects the tractor frame from dents and scratches. It’s made from slightly corrugated metal seed corn signs. The metal is solid enough to stop small rocks and tough borer-resistant stalks. There are slots cut in the shield for the 3-pt. lift arms. The pieces of sign are bolted together and then bolted to the 3-pt. hitch frame.

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**Metal shield on back of tractor keeps stalks and other debris from causing damage on back of tractor.**



## How To Reach Us

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