



Retrofitted "Siamese" combine has 80 in. cylinder, two sets of straw walkers, 120 bu. grain tank, and 35 ft. header.

TWO DEERE 95's SPLICED TOGETHER HAVE CAPACITY "THAT WON'T QUIT"

Kansas Farmer Builds Siamese Combine

By Vance Ehmke

When it comes to combines, bigger is definitely better, according to Floyd Tuttle, Tribune, Kan. But because Tuttle couldn't buy a combine big enough, he made his own — a Siamese that sports an 80-in. cylinder, 35 ft. header, dual wheels, double straw walkers and capacity that just doesn't quit.

Tuttle, working with his son Bill, a grandson Lindy, and Carl LeBlanc, the husband of a granddaughter, spliced together two John Deere 95 combines to make the big single Siamese unit. "But there's no reason why most any two of today's 30-ft. header combines couldn't be made into one giant unit with a 60-foot header," he told FARM SHOW.

Tuttle points out that they wanted a bigger combine because with a big unit, one man could do the work of two: "Plus, you have the maintenance and servicing of just one machine rather than two."

In meeting those objectives, Tuttle says they took two John Deere 95's, then literally spliced them together into the one big machine. "Originally, the two combines had 18-ft. headers but we fastened them together into a 35-ft. header. Instead of being driven from the outside, the header is now driven from the middle. However, we had to put an extra bridge across the double header to keep ends from sagging."

Tuttle also notes that because the header is so wide, the operator may — on terraced ground, for example — have to overlap his cutting swath to make sure he gets all the wheat: "For moving from field to field, there's usually no problem. But, if distances are very far, it's generally best to remove the header by just sitting it on a fairly long trailer, then reattaching it after making the move."

Tuttle says that quite a few people thought the combine might be unstable in the field because of possibly

having a header that was too wide in relation to width of wheel base:

"However, we also lengthened our axle by welding the two original axles together. Then, we also added dual wheels which gives us a ratio of the platform to outside of tires which is actually less than that for a lot of smaller combines."

Tuttle notes, though, that when they stretched out the axle by welding the two originals together, the new axle broke several times at the wheel house. "We solved that problem by putting on a support — we've had no further problems since then."

The Kansas farmer points out that, when outfitting the big platform with hydraulics, they left the two original cylinders on each of the two smaller platforms, giving them four cylinders for the 35-ft. header. "However, since we didn't increase hydraulic capacity, we have a slower lifting speed — but still not a serious drawback since it lifts fairly fast.

"To increase combine capacity, we simply welded the two original 40-in. cylinders together, giving us an 80-in. cylinder. "We've also got two sets of straw walkers in the larger combine — giving us double width. However, we did have to put carriers or a bearing between them because the little 2-in. crankshaft couldn't carry that long of a support with that much weight. The straw walkers are supported in the middle with bearings," says Tuttle.

He also notes that, to further increase capacity of the Siamese combine, they took off the conventional trash spreaders and replaced them with a two-bladed, belt-driven propeller which runs on a vertical axis rather than horizontally.

"The idea behind the propeller was to provide a source of suction. With the propeller, we create a vacuum clear from the front of the cylinder all the way through the machine. And,

GIVES COMBINE OPERATOR MOISTURE READING OF GRAIN AS IT'S HARVESTED

First "On-The-Go" Grain Moisture Tester

Now you can moisture test grain from the combine cab while you're harvesting it, thanks to a new "on-the-go" moisture tester from New Concept Mfg., Sioux Rapids, Iowa.

Said to be the first of its kind anywhere in the world, the unit's remote moisture-sensing probe mounts near the bottom of the combine grain tank. It connects by a cable to a control module in the cab. Power is supplied through the combine's 12V system.

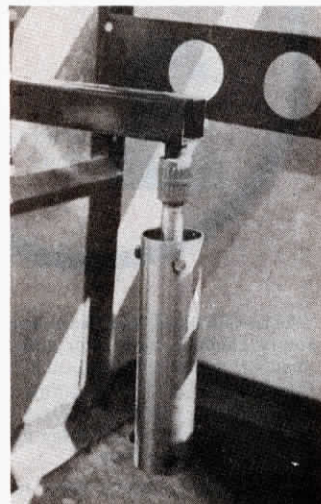
Dennis McHugh, president of New Concept, says you only need to combine a few feet of standing or wind-rowed grain to get enough grain to sample — just enough to cover the probe. A moisture reading is instantly flashed on the control module in the cab to tell you whether the field, or any portion of it, is ready to be harvested or if the crop should dry more. McHugh boasts a $\pm 1\%$ accuracy rating for the unit.

Called the Combine Special "Grain Brain", the unit is designed for "2-crop" capability. That is, it can handle a combination of corn and soybeans, wheat and soybeans, or wheat and corn, with one microcomputer base module. McHugh says conversion tables are available for use when harvesting other crops.

Extra moisture-sensing probes can be installed throughout the combine tank for added sampling versatility. Several probes can be run off the same control module in the cab.

One moisture probe for the combine's grain tank and the Combine Special control module that mounts in the cab both sell as a unit for \$1,099. Extra probes are available for \$139 each. The unit will fit any combine make or model, says McHugh.

New Concept has also developed a similar unit for sampling stored grain



Moisture sensing probe mounts near bottom of combine grain tank.

in bins without having to climb inside the bins. It tests for both moisture and temperature to help detect hotspots and potential spoilage. It's currently available only for corn but conversion charts are being developed for use with other stored grains.

The grain bin probe installs at the end of a 3/4 in. pipe suspended from top center of the bin, positioning the probe about 5 ft. off the bin floor. A wire runs from the probe, through the pipe, out the top of the bin and to a jack at a ground-level control box. Sells for \$1,209.

For more information, contact: FARM SHOW Followup, New Concept Mfg., P.O. Box 429, Sioux Rapids, Iowa 50583 (ph 712 283-2394).

even in wheat stubble as thick and heavy as it was this past season, the combine never worked easier.

For the grain unloading auger, the Tuttles used just one of the originals: "While it's a fairly large auger, it's still not as big as some of the newer ones. But we still don't consider that a bottleneck since we unload on the go."

Tuttle notes that the original combine grain tanks held about 70 bu. "When we made the bigger combine, we squared up the tapered bins so they'd fit together, then made one larger bin out of them which holds about 120 bu."

To power the big combine, the Tuttles initially coupled the two original diesel engines together with a U joint in the middle: "That gave us one engine with twice the size — and it operated with one governor, one control and with the same radiator.

However, we later changed to a bigger diesel engine.

"We also tried hooking the two radiators together but found that didn't work too well. So, we just put a larger single radiator in it.

"We were able to double the fuel tank capacity by simply mounting the two original tanks one on each side of the machine and coupling them together with a pipe," says Tuttle.

He feels that joining the two combines together has increased capacity — without resulting in any additional grain loss or damage: "We run the big combine at the same field speed the two single original combines used to run at. But it takes only one man to run the unit now. And, with time as valuable as it is during wheat harvest, that's a big advantage," Tuttle concludes.