Farmer-Designed "Power Platform"

Matt Tipple, who farms near Wellington, Ohio, worked with business partner, Mike Huhn, to design and build the new "Power Platform" tractor that was exhibited for the first time at the recent Ohio Farm Science Review near London, Ohio.

The 4-WD, 4-wheel steer rig has a two-seat, front-mounted cab and is powered by a 260 hp Cummins turbocharged diesel engine connected to a 6-speed forward, 3-speed reverse powershift transmission. The truck-tractor can be equipped with front and rear 3-pt. hitch, front and rear 540 and 1,000 rpm pto, front and rear remote hydraulic outlets, a front and rear drawbar hitch, and a 12-yard rear dump box. It rides on 5-ft. high by 25 1/2-in. wide high flotation tires. Top speed is 32 mph; optional gearing bumps that up to 45 mph.

The vehicle has two weight ratings. At high speed, cargo capacity is 26,000 lbs. At 5 mph or less, cargo capacity is 44,000 lbs.

The machine has a 12-ft. long wheelbase and an overall length of 229 in. Tucked under the dump box is an engine-mounted air compressor along with a 16-gal. air reservoir, a 50-ft. air hose reel, and a locking toolbox. The cab has 14 work lights and can be tilted for service with a manual hydraulic pump or with air assist. Inside the cab you'll find a 10-in. LCD color display with all vehicle instrumentation include on-board scales, color backup camera, and hydraulic flow control adjustment.

"We see it as a heavy duty tractor or farm support vehicle that can do many jobs normally performed by a tractor," says Tipple. "Once we tell farmers what it can do, they're amazed. It works great for hauling forage and grain, and it also makes a good corn and soybean planting machine. You can mount a 3-pt. planter on front to plant corn and fill the dump box with seed. A vacuum system would run from the box to the planter. To plant soybeans, you can mount a 30-in. planter on front and another one on back, offsetting the rear planter 15 inches to make a splitter planter.

"It has amazing power in the field. I've used it on my farm to pull a 26-ft. disk and a 28-ft. field cultivator. It also works great with a fertilizer spreader or spray boom. We plan to build a dump-style flatbed for it. "

The vehicle's suspension system features oscillating trunnion axle mounting, electro-hydraulic load carrying and bounce control. "The suspension system is tough enough to carry the heaviest load yet soft enough to smooth the roughest terrain," says Tipple.

Total and individual axle weights are constantly monitored to determine if the machine is loaded, overloaded, or severely overloaded. When overloaded, a warning indicator will illuminate and prevent shifting higher than first gear. When severely overloaded, a warning indicator will illuminate and any movement is prevented until the weight is reduced.

"Power Platform" is a 4-WD, 4-wheel steer rig that can be equipped with front and rear 3-pt. hitch, pto, and hydraulic outlets. It rides on 5-ft. high flotation tires.

The machine comes with a three-mode steering system that provides excellent maneuverability and safety, says Tipple. "Front steering mode is the default setting. Coordinated mode steers the rear axle wheels in the opposite direction as the front wheels, allowing you to turn in a tight 16 1/2-ft. radius. And crab mode steers the rear axle wheels in the same direction as the front wheels."

The Power Platform starts at $205,000 and goes up to $230,000 with front and rear 3-pt. hitch and pto, and dump bed.

Contact: FARM SHOW Followup, Custom Chassis, Inc., 21950 Gore Orphanage Road, Wellington, Ohio 44090 (ph 440 647-6401; fax 440 647-3817; mttipple@customchassisinc.com; www.customchassisinc.com).

Trailer-Based Firewood Processing System

"It's a simple, inexpensive system that lets me cut and split wood without too much strain on my back," says William Kelsey, Jr., Sharon, Conn., about his trailer-based firewood processing system.

Kelsey uses eight different trailers to get wood back to the farm. There's a log-cutting trailer, a log-splitting trailer, and four pallet trailers. There are also two small, covered trailers for hauling firewood. He uses his 1981 Ford 28 hp loader tractor to load logs and pull the trailers.

"It lets me cut and split wood anywhere I want. I can take the trailers to wherever the wood is and do my cutting and splitting there. I can hitch the cutting and splitting trailers behind the tractor one at a time or both together," says Kelsey.

"My wife and I heat our home with wood so we use these rigs a lot. Another factor is the height difference between her and me. My wife is 5 ft. 2 in. tall while I'm 6 ft. 6 in., so I set up the trailers at a height low enough for both of us to work comfortably."

The cutting trailer was made from an old house trailer that Kelsey bought at an auction. He added a 30-in. wide, fold-down panel onto one side with cutting blocks spaced 18 in. apart. After several logs have been loaded onto the trailer, Kelsey raises a hinged panel on the opposite side of the trailer to bring one log at a time onto the spaced cutting blocks, then cuts them with a chainsaw. After the log is cut to size, he picks up the pieces, turns around and uses the splitting trailer.

"The cutting trailer's fold-down panel is on the same side as the splitter on the splitting trailer. Although the cut logs are brought to the splitter one by one, it's only a few steps to go back and forth," says Kelsey.

The splitting trailer measures 8 ft. wide and is made from an old truck frame. Kelsey cut the frame down the middle and widened the axle to 6 ft. One side of the trailer is equipped with a pair of channel iron tracks. The 5 hp log splitter he uses mounts on wheels that move along the track, allowing Kelsey to use the full length of the trailer.

"I split one section of wood, then roll the splitter about 4 ft. down the track and repeat the process. That way I always have the wood at my fingertips," says Kelsey.

The pallet trailers are made from old hay wagons with the floorboards removed. The pallets he uses measure 3 ft. wide by 4 ft. long, with 40-in. high sides. They're placed directly on the wagon's metal rails.

"I pull a pallet trailer over to the splitting trailer, then fold down the gates on the splitting trailer and stack the finished wood onto the pallets. The stacking trailer is covered with a sheet metal roof to keep the wood dry. Whenever I need a load of wood in the house, I hitch the stacking trailer up to the tractor, drive it up to our house and bring the wood straight in."

He added a pair of forks to his loader bucket to handle the pallets of wood. "During the winter I leave the loaded pallets on the wagon, where the wood is up high and dry. Whenever I need wood in our house I just remove it by hand from the pallets," says Kelsey. "I often leave the wood on the pallet trailers for a full year before I burn it, so the wood gets really dry."

Contact: FARM SHOW Followup, William S. Kelsey, Jr., 5 Weber Road, Sharon, Conn. 06069 (ph 860 364-0288).

William Kelsey and his wife use eight different trailers to get wood back to their farm. Their splitting trailer is shown at left side of photo, and log-cutting trailer at right. Splitter mounts on wheels that roll down a pair of channel iron tracks. Note spaced cutting blocks on log-cutting trailer.

Pallet trailers are made from old hay wagons with the floorboards removed.

Log splitter rolls back and forth on tracks.

Kelsey added a pair of forks to his loader bucket to handle pallets of wood.