See-Through Collectible Tractors Highlight Tractor Evolution

You've never seen anything like these see-through model tractors that are designed to highlight the evolution of tractors throughout history.

The tractors are made of clear acrylic plastic except for one or two components on each tractor, which are made of shiny brass. The brass components are the first-of-the-kind features that made each tractor famous.

At the center of the display is a 1/4-scale Allis-Chalmers WD which is a tribute to Nicholaus Otto, who invented the four-stroke cycle engine which is still the basis of most engines today. The four stroke cycle is seen in brass with plugs firing and the valves opening and closing every other stroke.

The tractors and the display were made by Everett and Myra Weber of Lima, Ohio, who exhibit at various toy shows around the U.S. A taped narration describing the tractors on display plays continuously.

The display starts with what is considered the first tractor ever. It was powered by steam and served as an artillery tractor. It was invented by a Frenchman named Cugnot in 1769.

In 1876 G.S. Berry of California built a steam traction engine that had a combine attachment for harvesting grain. It could also pull a 20-bottom plow and was the first tractor to use lights. It also had the first straw-burning steam engine.

In 1892, John Froelich of Iowa invented the first gasoline tractor. This one-cylinder engine tractor was much smaller than comparable horsepower steam engines. A year later, in 1893, Charles Stratton of

This is a model of the first tractor ever made with tracks, invented in 1893 by Charles Stratton. The tractor steered with its front wheels. Note the two steering control wheels - one for each track.

Pennsylvania invented the first tractor with tracks. However, the tractor still steered with its front wheels. A control wheel for each track at the operator's platform would control the tilt of the 12-in. wide tracks by means of chain linkage. This steam tractor was equipped with an undermount engine.

In 1906 Albert Gougis of France invented the pto. His tractor had a resemblance to the later Farmall Regular.

In 1917 the first starter appeared on a tractor. It was applied to the Moline-Universal Model D in the U.S. Moline had purchased the Universal Tractor Company of Columbus, Ohio, a few years earlier.

The Diesel tractor did not make its appearance in the U.S. until 1931 when Caterpillar used a 650 rpm, 4-cyl. Diesel engine for its Diesel 65 Crawler.

In 1933 Harry Ferguson of England invented the 3-pt. and hydraulic system which

Agco sponsored the Webers' recent visit to the National Farm Machinery Show in Louisville, Ky., where they set up this display of their see-through tractors.

also included draft control. His black tractor looked like a low elongated Fordson.

In 1934 John Deere Co. incorporated the hydraulic lift for tractor-mounted machinery such as cultivators.

During 1961 Allis-Chalmers incorporated a turbo supercharger for its D-19 tractor. This gave the 6-cyl. engine a 10 to 15 hp boost.

Ev and Myra live just six miles from United States Plastic Corp., which has the world's largest assortment of plastics. Their son Ed has a vacuum form machine, so experiments were soon in process. Wood molds were made and the acrylic transformed into tractors. The strength and durability of the acrylic was questioned, so testing of a tractor was done by placing it outside in 20 below zero temperatures overnight. They then took it in their warm house with no breakage resulting.

The 1/4-scale Allis-Chalmers WD has all gears operational from the clutch to the drop axles. The belt pulley, pto, lights, fan, generator, switches and power shift wheels are all operational. Also included in the WD is the starter, all control levers and pedals, all gauges, the hand crank, steering gears plus the non-operational hydraulic system and brakes. The model even includes a 1/4-scale operator's manual.

The Webers don't sell these tractors privately. However, they say they may sell two models - an Allis-Chalmers WD and a John Deere A - at a farm toy auction this fall.

Contact: FARM SHOW Followup, Weber's Gem Acres, 5750 Sugar Creek Road, Lima, Ohio 45807 (ph 419 643-3024).

High Capacity Silage Blower Also Cracks Kernels

After reading and hearing a lot about cracking corn kernels in silage, it seemed like a good idea to Glen Horst and Ray Brubacher.

But to them, it seemed it made more sense to do it at the silo blower rather than out in the field on a forage harvester. The reason was that having a corn cracker on a silage chopper meant it could only be used on the chopper to process the silage as it's being chopped. But having one on the silage blower meant it could be used to process corn silage, whole grain corn (high moisture or dry), and for rolling small grains, cotton seed and other feed and forages, too.

With this in mind, Horst and Brubacher designed a new silage blower from the ground up, equipping it with a roller mill to process grain.

While it may look like an ordinary silage blower, their Model 2800 Corn Processor is anything but.

Silage goes in one side from the wagon or truck and is forced through a roller mill before being sent through the blower fan and up the tube into the silo.

Their mill has two 10 in. x 30-in. rolls that run at different speeds, so in addition to the crushing action, there is also some shearing action in them. Material is forced into the rolls by a beater. Since this arrangement keeps feed flowing through the roller, processing capacity is quite high.

Horst and Brubacher say they've had no problem keeping ahead of silage choppers and add that it has sufficient capacity to crack and blow high moisture corn into a silo faster than it can be harvested by a large combine.

Their roller blower mill requires a 1,000 rpm pto speed and a minimum of 80 to 100 hp. It is built to work on tractors with as much as 200 pto hp.

Capacity, of course, varies with horsepower of the tractor operating it. The hydraulically-powered feeding mechanism can run either from the tractor's hydraulic outlet or an optional self-contained hydraulic system that itself is powered by the pto.

To take feed samples and make sure grain is being processed properly, there is a sample port located between the roller mill and fan.

Horst and Brubacher say the blower has plenty of capacity for even the highest silos. Another option is a bypass chute that fits between the rolls and the blower. With this chute, you can throw silage or processed feeds 30 or 40 ft. into a pit or trench silo. You can also add a spout on the blower pipe just above the fan and use it to load trucks.

The Model 2800 Corn Processor blower roller sells for $18,500 U.S., plus S&H.

Contact: FARM SHOW Followup, Horst Choring Aids, Inc. Rt. 4, Elmira, Ontario, Canada N3B 2Z3 (ph 519 669-5439) or Raytek Industries, Rt. 1, Wallenstein, Ontario, Canada N0B 2S0 (ph 519 698-2731).

Silage goes in one side and is forced through a roller mill before being sent through the blower fan and up the tube into silo.

Some of the best new ideas we hear about are "made it myself" inventions born in farmers' workshops. If you've got a new idea or favorite gadget you're proud of, we'd like to hear about it. Send along a photo or two, and a description of what it is and how it works. Is it being manufactured commercially? If so where can interested farmers buy it? Are you looking for manufacturers, dealers or distributors? Send to FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 or call toll-free 800 834-9665. Or you can submit an idea at our web site at www.farmshow.com.

Mark Newhall, Editor

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