## **Latest New Products, Ideas From Europe**

Featured here are just a few of the "best of the show" ideas which caught Editor Mark Newhall's eye at the recent 1992 SIMA Show (Salon International De La Machine Agricole) in Paris, France. The SIMA Show, widely recognized as the world's biggest farm show, attracts nearly 1 million people each year to its 1,800 exhibits from more than 30 countries.



## First-Of-Its-Kind "Centrifugal Combine"

Two French inventors say they've come up with a totally new separation system for combines that they say will revolutionize grain harvest.

Engineer Alain Zacharie and farmer Etienne Moreau got the idea for their revolutionary Heliflow combine while working together on a combine during harvest. They were looking for a gentler, higher-capacity method of separation that would do less damage to grain. What they came up with is a threshing mechanism that's different from any other combine ever built.

The two men completely stripped the guts out of a Massey 620 - including cylinder, walkers, cleaning fan, etc. - and installed their huge Heliflow rotating cylinder which is 6 ft. in dia. and about 10 ft. long. Inside walls of the big cylinder are lined with baffles in a screw-like pattern that work their way back from the front of the combine in a screw-like fashion.

Grain stalks are deposited into the big rotating tunnel by the feederhouse, which is left intact. As the cylinder spins, grain and straw work their way toward the back of the combine, guided by the spiraling baffles around and around the outside of the rotating cylinder. Centrifugal force and movement of stalks over the screen pulls grain out

of the heads and through the screen. Grain then falls to the bottom of the machine and is augered into the grain tank. Straw drops out the back of the machine virtually untouched or it can be chopped at the back of the combine.

Zacharie and Moreau says the machine has a number of advantages over existing combines - it does much less damage to grain due to the gentle nature of the new separating process, has low power consumption with high straw throughput, it's not affected by slopes, and it leaves the straw intact for farmers who want to bale it.

The men tested the new machine in the field for the first time last fall and plan much more extensive testing this year. In addition to the Heliflow cylinder, they have patented three other new concepts on the combine including thresher feeding, pre-cleaning and cleaning sub-assemblies. They've also came up with a new-style ventilation system.

They're hoping to line up investors to enable them to produce the new machine, which is designed for all types of small grains and beans but not for corn.

Contact: FARM SHOW Followup, Alain Zachary, Semaz, 3, Rue Nationale, 92100 Boulogne, France (ph 33 1 46 08 40 44; fax 33 1 46 04 00 61).



Photo inside combine shows spiraling baffles - over screened outer wall - that carry crop to back of combine. As cylinder rotates, grain is pulled off by centrifugal force.



## "Affordable" Rubber-Tracked Tractor

Rubber tracks will be to rubber tires what rubber tires were to steel wheels 60 years ago, according to experts who have watched the huge success of Caterpillar's Challenger over the past few years. Now a European manufacturer has come out with what it says will be the first affordable rubber-tracked tractor for the average-size farmer.

ZTS Martin is a subsidiary of the Czechoslovakian tractor manufacturer Zetor, which has made strong inroads into the U.S. market over the last few years. ZTS designed its new PPT 130 tracked tractor to compete with the Challenger and also with the Track Marshall (built in England) but it plans to knock 30 percent or more off the price. So far the tractor is only available in Europe. Features a 6-cyl. Zetor engine delivering 175 hp with hydrostatic steering operated by a wheel (rather than levers) like the Cat Challenger. It has a conventional synchromesh transmission with 32 speeds forward and 16 reverse but the company plans to offer a hydrostatic transmission.

Unlike the Challenger and Track Marshall tractors, the Zetor has both front and rear 3-pt. Its tracks are made of rubber-coated steel plates that allow road speeds up to 15 mph. The large rear drive gears provide the power.

Contact: FARM SHOW Followup, ZTS Martin, CSFR, 036 57 Martin, Czechoslovakia (ph 0842 601; fax 0842 33583).



## Easy Way To "Speak" A Foreign Language

Many FARM SHOW readers who've tried to get more information about a hot new product from Europe have found out that some of the companies featured do not have anyone on staff who speaks English.

Now there's a new interpreting service from AT&T that makes it easy to dial up a foreign company for more information. The "Language Line" gives you access to over 140 languages 24 hrs. a day. You simply dial up the 800 number, ask for an interpreter in the language of your choice,

and then make the call with the aid of the interpreter, who acts as your operator. The interpreter sets up the call and then asks your questions for you.

The charge for the sevice is \$3.50 per minute plus ordinary phone charges, which in many cases now run \$10 or less for a 3 min. call to Europe. The service can also be used face-to-face if, for example, a foreign visitor comes to your farm.

The AT&TLanguage Line phone number (U.S. & Canada) is 1-800-628-8486.