

Great Plains' 4400 MAX Produces Heavy Parts For Rugged, Durable Agricultural Equipment

Great Plains Manufacturing, Inc., considered a "short-liner" in the agricultural equipment field, manufactures more than 40 models of grain drills, planters, spraying and tillage systems - different lengths and types of drills, different types of tillage equipment. If their customers and salesmen have their way, the number of models will continue to expand.

With three manufacturing facilities on the company campus in Salina, KS and a fourth about 90 miles away in Tipton, KS, Great Plains Manufacturing has the central location ideal for quick shipping to 1000 farm equipment dealers across the U.S., Canada and overseas.

"We compete with some big guys in this type of equipment," says Vance Stinnett, Manufacturing Engineering Manager for Great Plains Manufacturing. "In most areas of the country, where they plant crops that require seeding accuracy, our grain drills are considered the most accurate and efficient machines made."

What makes Great Plains grain drills and other equipment outstanding? All are designed and built with customer input. Agricultural producers want – and need – to produce more with



The majority of metal components over 1/2" thick that go into a Great Plains agricultural implement begin their fabrication process on the Whitney 4400 MAX. Operator Larry Shepherd monitors production.

less. To accomplish greater productivity, their equipment must be reliable, accurate, and a size that meets their needs whether they are a small, medium, or large operator.

Great Plains satisfies those needs by providing a range of rugged, reliable equipment. For example, their heavy-duty grain drills are designed for flexibility to provide uniform seeding depth to precisely place seeds in variable field conditions. The variety of size models plus seeding and press wheel options give operators the opportunity to assure maximum productivity based on their individual requirements.

Rugged equipment; heavy parts
To produce metal components strong enough to build their equipment, Great Plains needs heavy-duty, reliable fabricating equipment

Whitney



Three retractable, independently controlled workclamps, optional for the 4400 MAX, allow use of the entire plate.



Completed parts are automatically removed via the 4400 MAX drop door without slowing production. They go directly to a secondary fabrication operation such as the press brake, to welding, or to the paint booth. No clean-up processes.

to efficiently handle thick plate. About half of the metal parts that go into a Great Plains implement are produced from 1", A36 Steel.

"Farm equipment is heavy. We make big stuff. So we use very heavy material. Years ago we got into looking for a better way to produce parts. Whitney was the only one I thought was making cutting equipment for the heavier plate," Stinnett says.

Parts started coming off the first Great Plains Whitney in 1997 when the company purchased a 3400 RTC (Rail Tool Changer), to punch and plasma cut parts up to 1/2" thick. It's been running three shifts since installation. As equipment designs advanced, Great Plains products became larger and the



plate size heavier. So when Whitney introduced the 4400 MAX which punches and cuts plate up to 1" thick, Stinnett says "our antennas went up".

The 4400 MAX joined the smaller punch/plasma model in 2003. Again, running three shifts a day since installation, over half of the plate is 1" thick with the rest 5/8" or 3/4". Parts from 1/2" plate are still run on the 3400 RTC or sometimes the 4400 MAX.

Constant Parts Flow

Keeping up with part demand to feed assembly for all Great Plains models demands accuracy and productivity. Stinnett

More Whitneys in Action

Land Pride, a division of Great Plains Manufacturing, Inc., produces construction and landscaping equipment such as tractor-mounted backhoes, mowers, rotary tillers and dirt-working tools.

Four Whitney 3400 models – two 3400 RTCs and two 3400 XPs, produce parts at the Land Pride Division manu-

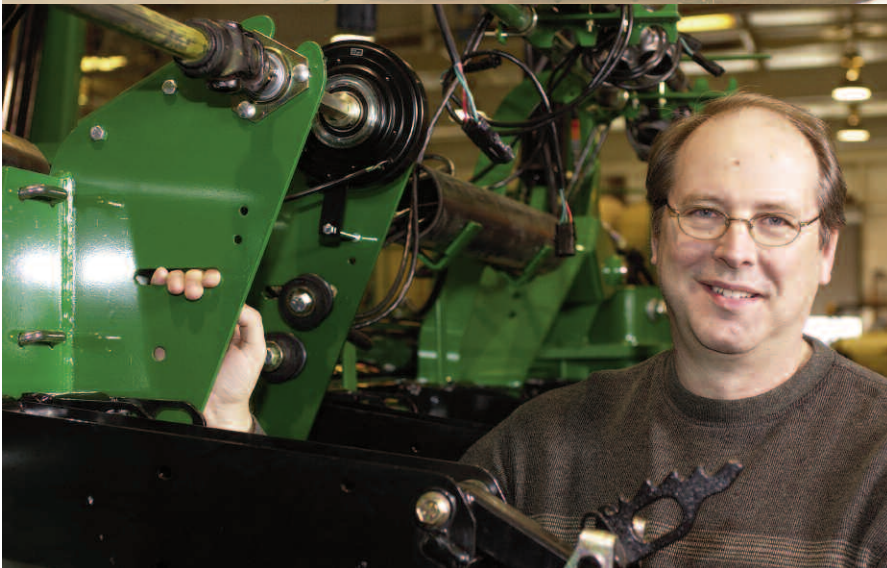
facturing facilities located in Kansas.

Although not directly involved in the day-to-day operation with Land Pride, Stinnett speaks to the decision to purchase their first 3400.

"I'll speak to the Land Pride side because I do know what happened there. We had good success with the 3400 RTC; it's been a real good machine. The

Land Pride side had a need similar to ours, so they purchased one... then they got a second one."

At the end of 2005, two 3400 XPs featuring the new HPR260 plasma cutting system were delivered to Land Pride plants.



Vance Stinnett, Manufacturing Engineering Manager for Great Plains Manufacturing, Inc., grips one of the parts from the 4400 MAX in a completed grain drill. Stinnett worked with Owner Roy Applequist on the acquisition of the Whitney 4400 MAX and 3400 RTC.

explains why they choose the 4400 MAX, "If you're looking for a big plate processing machine, productivity-wise, you're not going to produce more parts on anything else. With laser, when you get into that thickness, your productivity goes way down. A 1" plate on the Whitney, with 400 amp cutting, runs about 80" a minute."

In addition to the cutting speed, productivity comes from the ability to rapidly punch holes in the 1" material as part of one fabricating process. Parts are produced faster and material handling time is greatly reduced.

The majority of the Great Plains parts run on the 4400 MAX are automatically removed via the drop door while production continues and go directly to welding, to paint or to a secondary fabricating operation such as a press brake.

"Accuracy is very good. That thing eats 1" plate day in and day out. We like running 1" plate on the 4400 because there is nothing that will cut 1" plate better than that." ♦