

Farm Talk

by
Jerry Webb
Delaware Extension

I never expected my oldest daughter Tracy to have anything to do with agriculture. In college she majored in communications and showed a keen interest in history. Then she went to England, married a Welshman and worked for a newspaper. A couple of years and one grandson later we learned that she had become the token American woman in a British electronics firm—something to do with marketing.

And then a few weeks ago this neat farm equipment brochure came in the mail along with a note from Tracy. It seems Griffith Elder and Company Limited of Suffolk, England is a customer of her Macro-Marketing Limited.

Her company makes electronic components and she had just closed a sizeable order to Griffith Elder who manufacture an attachment that fits on a combine that allows a farmer to weigh his crop right in the field.

The device, known as Yield Per Field, attaches to the discharge auger of most combines. It looks about like the usual auger spout but it's actually wired to an electronic panel in the combine cab. And according to the manufacturer "Using the most up-to-date solid electronics the Yield Per Field enables grain to be accurately weighed as it passes from the discharge auger of the combine into a transporting

vehicle". Griffith Elder claims this device helps cost conscious farmers measure the true effects on yields of modern farming practices from crop treatments, cultivations, fertilizers and chemicals. The company also says Yield Per Field helps overcome the disadvantages and inaccuracies of trailer or barn based units providing more information than any other weighing system. The incab micro-computer does its own moisture tests and records the weight of each tank full of grain. Each load is automatically recorded and totaled within the control box. All the operator has to do is turn it on. As grain is unloaded from the combine the gross weight is displayed and recorded.

As I read the literature I couldn't help wondering if the British were that far ahead of American manufacturers. I hadn't seen any of our farmers weighing directly from the combine. And then a few days later the machinery issue of Successful Farming Magazine landed on my desk. In it was a well illustrated article titled "High Tech Machinery Takes To The Field". And there among a dozen or more state of the art electronic gadgets was the American counterpart. The Acu-Grain Measuring System, a sixteen hundred dollar device complete with micro-computer that measures the grain coming out of a combine's discharge auger.

Successful Farming says the biggest challenge confronting equipment designers these days is finding accurate inexpensive sensors to convert the properties of crops and soils into electrical signals. The Acu-Grain device uses a potentiometer to measure the deflection of a swinging plate installed at the end of a combine unloading auger. This converts into bushel measurements and per acre yield. The company claims accuracy to one percent.

As indicated the grain flow device is just one of many electronic gadgets showing up on modern farm equipment. The story described a device that uses sonar to maintain sprayer boom heights. Another that controls combine speed for maximum harvesting efficiency and another that provides precise depth control for chisel plows.

And if you want something really space age, researchers at the Coastal Plains Experiment Station in Tifton, Georgia, are developing an irrigation controller. It's based on little transmitters buried in the field. They radio messages to a computer mounted on a center pivot irrigation system. The computer then controls the speed of the center pivot and tailors water application to individual areas of the field. According to the researchers the computer can then take a number of variables into account to determine an optimum irrigation scheme for the entire system.

Of course, farmers have had electronic sensors for corn planters for a long time. I remember

the Dickie John Company when it was essentially a one man operation demonstrating its seed drop sensors at a crop show in Delaware almost twenty years ago. Since then that company has gone big time and is marketing a full range of electronic farm devices.

My daughter's farm equipment customer also markets a line of stationary scales known in England as vehicle weighing platforms. The company's Ton-Tel Axle Weighers range from a straight forward digital readout of individual axle weights to one where the vehicle is weighed without stopping and a digital readout together with a printed tally of each axle weight is provided. According to the company this system sells for a fraction of traditional vehicle weighing machines. Griffith Elder says the Ton-Tel is easily transportable, inexpensive to maintain and very accurate. The real secret of the device rests with the microprocessor and all of those little electronic components that my daughter's company sells.

Well, selling electronic components to a British farm equipment company is a long way from production agriculture as we know it here on the Delmarva peninsula. But in her own way, Tracy is making a contribution to agriculture. In fact she may well be working in an industry that will have a significant impact on the future of production agriculture. I'm sure her electronic components will be showing up in all sorts of agricultural applications during the years ahead.

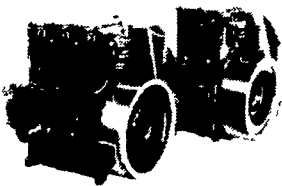
SMUCKER'S SALES & SERVICE, INC.

RD #2, BOX 21
NEW HOLLAND, PA 17557



12-36 bhp

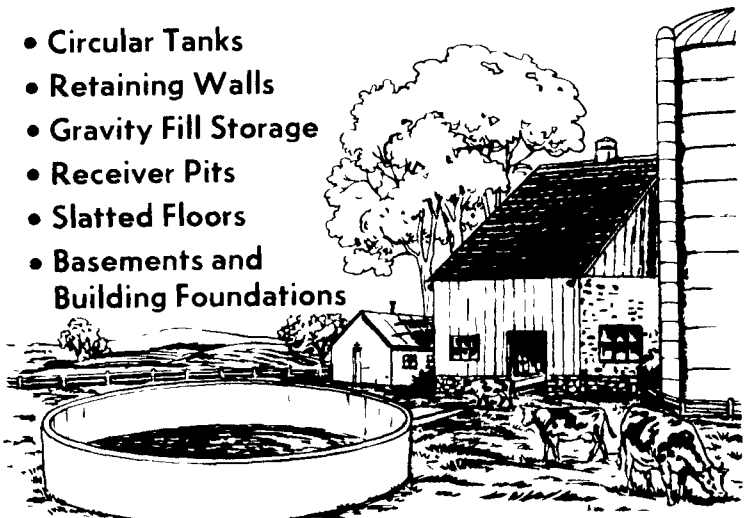
**TS2/TS3
AIR
COOLED
DIESELS**



**FOR PROMPT SERVICE CALL
717-354-4158 OR IF NO ANSWER
CALL 717-354-4374**

POURED REINFORCED CONCRETE CONSTRUCTION

- Circular Tanks
- Retaining Walls
- Gravity Fill Storage
- Receiver Pits
- Slatted Floors
- Basements and Building Foundations



SIZES & LAYOUTS TO YOUR SPECIFICATIONS

We are qualified to handle any poured concrete job you may need. We use a practical aluminum forming system to create concrete structures of maximum strength and durability. For a highly satisfactory job at an affordable price, get in touch with us

POURED FOR DURABILITY

Groffdale

concrete walls, inc.

BRICK CHURCH RD. LEOLA, PA. 17540

FOR SALES & LAYOUT CONTACT
GROFFDALE POURED WALLS (717) 656-2016
JAKE KING (717) 656-7566

Quality...



... for business ...

Yes, Morton Buildings designs and erects all types of buildings!! To meet your building needs — from farm buildings to those designed for industrial use — trust Morton Buildings. You'll recognize our

quality workmanship, construction and appearance — with a strong, written warranty to back it up — in every Morton Building. Bring your building plans to us, we'll show you why

a Morton Building is a must for your operation. Our sales team will explain in full detail the Morton Building best suited to your farm and business needs. Call or write today!!



... and farm!



YEAR-ROUND CONSTRUCTION

FREE WEATHER VANE
with every building
purchased!

For information call 24 hr toll free 800/447 7436



MORTON BUILDINGS

80 Yrs. of Service to the American Farmer

1185 York Rd
Gettysburg PA 17325
Rd #10 Box 76
Meadville PA 16335
State College Box 361
Centre Hall PA 16828
Box 126
Phillipsburg NJ 08865
1918 Industrial Drive
Culpeper VA 22701
P O Box 187
Harrington DE 19952

Ph 717/334 2168
Ph 814/336 5083
Ph 814/364 9500
Ph 201/454 7900
Ph 703/825 3633
Ph 302/398 8100

Call or write today for more reasons why you should own a Morton Building

<input type="checkbox"/> Send more information on MORTON BUILDINGS	<input type="checkbox"/> Horse Barns
<input type="checkbox"/> Have your salesman phone for an appointment	<input type="checkbox"/> Dairy Barns
<input type="checkbox"/> Commercial & Industrial	<input type="checkbox"/> Livestock Shelters
<input type="checkbox"/> Machine Storage	<input type="checkbox"/> Riding Arenas
<input type="checkbox"/> Garages & Shops	
<input type="checkbox"/> Airplane Hangars	

Name _____
Address _____
Phone No _____