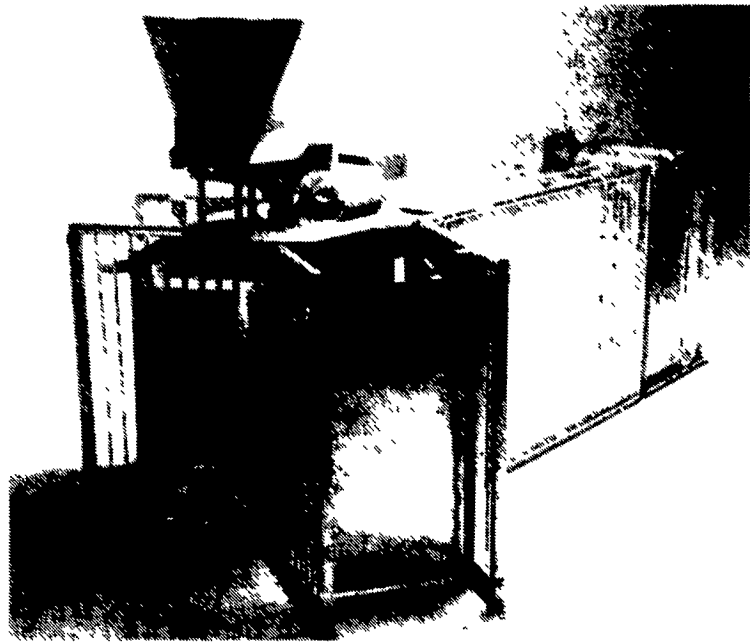


Business News



The Osborne-engineered and manufactured feed station modifications include heavier hot-dip galvanized steel construction and improved exit and entrance details.

Feed Station Offers Automatic Separation

OSBORNE, Kan. — Osborne Industries introduces a new "Separation" electronic feeding station for Porcode® Management Systems. The station is part of the Porcode® electronic sow feeding system (ESF), which provides individual sow feeding and management attention for group-housed sows.

The Porcode® ESF system keeps sows in prime condition in an open environment that has been shown to yield high productivity without the need for special gestation or tethered stalls.

With two exit gates, the Separation station provides an automatic separation option for sows that are due for treatment, removal to farrowing, or special attention. By a signal from the computer, the feed station automatically separates a sow into an alternative pen on a preprogrammed date by opening the respective exit gate as she leaves the feedstation after eating.

The Osborne-engineered and manufactured feed station is based on a proven design licensed by Osborne from Nedap-Poiesz B.V., Hengelo, Netherlands. Osborne

modifications include heavier hot-dip galvanized steel construction and improved exit and entrance details. The station's patented entrance gate permits only one sow to enter the station at one time and has been improved with all-steel entry rollers that are durable, but avoid sow entry injuries. Modular entry and exit panels have also been extended to eliminate competition.

Other special features of the Osborne station include Osborne RTM-Glas® feed trough and a standard brush damper to reduce wear on the exit gate as sows leave the station. A single Separation station can feed 40 to 50 sows and operates on safe 24 Vdc electrical power. An optional dual-hopper can be used to deliver two separate feeds during each feeding cycle. The feed station is controlled by a choice, based on management size and goals, from one of several Porcode® computers.

For more information, contact the Customer Service Department, Osborne Industries, Inc., P.O. Box 388, Osborne, KS 67473, (800)255-0316.

Mycogen Signs With Kubota

SAN DIEGO, Calif. — Mycogen Coporation (NASDAQ: MYCO), involved with the development of environmentally compatible biological pest control for agricultural crops, has announced the signing of an international licensing agreement with Kubota Corporation.

The agreement, which provides for the commercialization of bioinsecticide products in Far East Asia and Japan, formalizes the existing research collaboration between Mycogen and Kubota.

Under the terms of the agreement, Kubota will establish a subsidiary corporation which will be owned 60 percent by Kubota and

40 percent by Mycogen for the commercialization of bioinsecticides in Japan. Mycogen will form a subsidiary corporation owned 60 percent by Mycogen and 40 percent by Kubota for the commercialization of bioinsecticides in the remainder of Far East Asia. Mycogen retains product marketing rights elsewhere around the world.

Additional terms call for the payment of a one-time licensing fee to Mycogen as well as additional research and development funding.

Since 1989, Mycogen and Kubota have been field testing products in Far East Asia.



The entire Seedway management staff assembled recently in Mifflinburg for groundbreaking. Front, from left, Gene Hohl; Ray and Doris Galer; Kay Martin; David Galer; Hugh Markham, location manager, Emmaus; Norman Tyson, operations manager, York; Fred Mohr, assistant marketing director, York; and Greg Davis, director of marketing support services. Back row, Joel Hunter, production manager, Emmaus; Richie Lent, production manager, Hall; Duane Shively; Mike Mullany; David Whitely; Todd Zimmerman; Robin Markham, quality control, Emmaus; Laverne Kinney, field seeds, Hall; Pete Hall, vegetable seeds, Hall; and Don Wertman, CEO.

Seedway Breaks Ground For Expansion

MIFFLINBURG (Union Co.) — Seedway, Inc. held a groundbreaking ceremony to initiate the expansion of its warehouse here recently.

Donald Wertman, Seedway's chief executive officer, praised the Mifflinburg staff for increasing sales from \$700,000 in 1984 to \$3 million in 1991. He also thanked Ray and Doris Galer, who own the warehouse and are financing the expansion, for their continuing support since 1984, when their association with Seedway began.

"Our goal is to provide superior seed products and customer service," said David Galer, sales and business manager of the Mifflinburg warehouse.

Wertman attributed the dedication of the Galer family and the staff members for the dramatic increase of sales in the central Pennsylvania area.

Mifflinburg staff members working with the Galers include David Whiteley, salesman; Todd Zimmerman, customer service manager; Kay Martin, accounting; Duane Shively, delivery; and

Michael Mullany, warehouse manager. Ray Galer assists with delivery during peak time periods.

Seedway markets a full line of farm, turf, and vegetable seed as well as select birdfood products. The company also sells Asgrow agronomic products in eastern Ohio, the Northeast, and mid-Atlantic states.

Current Seedway customer service locations include Mifflinburg, York, and Emmaus, Pa.; Shoreham, Vt.; Milford, Del.; and corporate headquarters in Hall, N.Y.

New 170 H.P. Tractor From Massey Ferguson

DES MOINES, Iowa — Massey Ferguson is introducing a new 170 PTO horsepower tractor, the MF 3690, in two and four-wheel-drive models.

The primary customer for these units is the capital-intensive farmer who needs 170 PTO horsepower tractors that provide additional reliability and durability in western and row crop configurations.

A unique feature of the MF 3690 is a double epicyclic reduction in the final drive. The rear axle and differential of a tractor are where the high speed engine horsepower is converted to the slower speed high torque, which makes a tractor useful for farm applications. It is not unusual for torque loads to exceed 50,000 to 70,000 pounds.

With the double epicyclic reduction in the MF 3690 final drive, all components in-board of the final drive turn faster to carry smaller torque loads for increased

durability for longer life. The final drive is also located in a separate compartment that is lubricated with a special oil designed to hold up under extreme pressures.

The transmission is designed for maximum flexibility. Features include synchromesh, powershift, and shuttle. The 16 speeds provide a range of field speeds, and the synchromesh/powershift/shuttle gives flexible shifting.

The MF 3690 transmission has also been designed to accommodate the higher road speeds desired by today's farmer. Top road speed, depending on wheels and tires selected, will reach approximately 25 m.p.h.

The 6-cylinder, 452 cubic inch diesel engine provides the key

characteristics that farmers demand — good torque rise, a wide operating range (peak torque occurring at low engine RPM), and fuel efficiency.

The 3690 four-wheel-drive model features a front end with differential lock which can be operated either fully engaged or disengaged. This gives improved traction from the front end when four-wheel-drive and differential lock are engaged, yet the flexibility to obtain the improved turning radius when the differential lock is fully disengaged.

The MF advanced electronic 3-point-linkage system provides precise position control and automatic draft control, or an intermix of the two.



New MF 3690 tractor with 170 PTO H.P. six-cylinder diesel engine. 16 speed synchromesh/powershift/shuttle transmission, and advanced electronic 3-point linkage system.

Registration is currently pending in Japan, Taiwan, and Korea for MVP® bioinsecticide, the first product that will be commercialized in Far East Asia.

"The establishment of the joint venture will enable Kubota and Mycogen to manage the development in their respective territories while sharing in the commercialization and economic benefits to the technology," said Jerry Caulder, Mycogen's chairman, president, and chief executive officer.

Mycogen provides crop protection products and services.