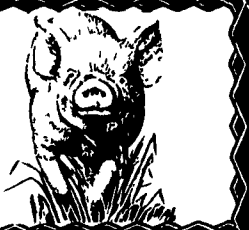


Swine Management News



MAINTENANCE NOW PAYS IN ENERGY SAVINGS LATER

Dr. Richard Barczewski
Extension County Agricultural Agent

University of Delaware

During the winter months, the hog business is more dependent on energy than some other animal enterprises.

Maintaining higher environmental temperatures in farrowing houses and nurseries means greater financial output. But paying attention to details in your operation to reduce energy use can be money in the bank.

Many farms rely on a heating unit either to space-heat or zone-heat their barns. After purchase, many of these heat units are never looked at again — as long as they are working, that is. Regular maintenance, however, can result in big energy savings.

The Delaware Department of Energy recently sent out a flier describing how routine tune-up procedures can improve the efficiency of home furnaces. With a little effort, 5, 10 or even 15 percent improvement in efficiency rating of a furnace are possible. These tune-up procedures are as simple as changing a filter or adjusting the thermostat.

On many farms, the over-the-year buildup of dust and dirt can result in inefficiencies as a result of extra weight on the blower and ventilation fans alone. With the recent surge in energy costs, attention to these little details can mean big savings to your operation.

When was the last time you had

the heating units in your facility tuned up? Are they firing properly? Are room temperatures set within the desired ranges at pig level? If you are trying to attain an 80 degree Fahrenheit nursery, make sure that the temperature is 80 degrees at pig level. Temperatures need to be measured where they will benefit you the most.

Ventilation is another way you can save energy costs. You know the importance of proper ventilation in a confinement operation. When functioning at the proper level, animal health is optimized because of adequate air changes and moisture removal. Poor ventilation can result in higher-than-desired humidity, stale air buildup, and eventually respiratory problems in the herd.

Winter ventilation problems arise if air is changed too rapidly, because a lot of already heated air is removed, resulting in wasted energy. The key to proper ventilation is to adjust ventilation rates in relation to the size of your buildings and the number of animals housed in the unit.

Just as dust and dirt can build up on heating units and contribute to wasted energy, these same factors can cause fans to operate with less-than-desired efficiency and reduce performance. Since the size of ventilation fans is selected based on the number of animal units in the barn and their air-moving capacity, and since most farms buy the right size for purely economical reasons, any reduction in efficiency will be the result of a fan that does not work properly.

Livestock Notes

Improving Animal Welfare

We have read and heard about stress management in humans. In the future we will undoubtedly read more about reducing stress in animals.

With the animal rights/animal welfare issues confronting us today, the '90s will certainly be a time to reflect on how we cared for animals in the past, how we care for them in the present, and how we'll be caring for them in the future.

Animals are better cared for, are kept in better facilities, are genetically improved, and are receiving more nutritional diets than 20 or 30 years ago, but improvement will continue. Improved management practices in processing baby pigs has reduced stress.

Sows that are first sent to a weaning pen can be less stressed if they are placed in a gestation pen with feeders designed with dividers that allow sows of all sizes an equal chance to eat their fill before they are moved into a pen without special feeders. They tend to re-establish their pecking order in the new pen.

A new development in farrowing building design which minimizes the sows time in crates and reduces sow and pig stress is called the SS system. Pigs leave the nursery at a weight of 78 pounds at nine weeks. The system is a 7x7 pen system with a 5x7 crate. A 2-foot wide creep is to one side with a crate in the middle and a 3x7 pen on the other side. The 3x7 pen becomes a 5x7 pen when the side of the crate is opened up.

The sows are initially brought into the 5x7 pen and are placed in

the crate when the water breaks just prior to farrowing. Three days after farrowing, the side is opened, and she has a 5x7 pen in which she remains in the 7x7 pen (including creep) for nine additional days before being moved into the nursery. Two litters are generally combined in the nursery.

In the SS system, sows have less problems with breeding back again, teats being pulled off, being constipated, losing weight with large litters, and almost all udder sections are used because of the extra pigs nursing. The sows tend to eat more feed (about 4 pounds/day), which helps them milk heavier.

The creeps are hovered so the room temperature can be lowered to increase sow appetite and keep pigs in the creep. In cool weather, curtains can be hung around the hover to trap more heat. The flooring material should be metal and not plastic so pigs are attracted to the creep. Almost any creep can be modified to open one side. The crates are run parallel to the alley so the manager can look at the two most important things -- the feed trough and the sow's rear end to check for discharges.

With the animal rights views we have around, this SS system will eliminate many of their concerns. It also appears to perform better than just the crate. The building is about 40% larger because of the 7-foot width versus the 5-foot width. Note: feeders do stick out up 6 inches beyond a crate but "future" crates should keep the feeder inside, since sows are only in there three days.

All-In/All-Out Systems
"Pork '90" magazine has run

several articles on all-in/all-out systems. Producers who are implementing this production system point to her health as the main reason behind the change.

Resulting production gains and competitiveness are among other reasons for making the switch.

To justify the investment in making the change, you need to be committed to stay in the business for the long term to be able to afford the new technology.

Advances in flooring, feeding equipment ventilation systems, and building design make it a good time to convert your farrowing house and nursery units.

Remodeling is often more cost-effective than building new if you have the fundamentals in line. Production gains will influence how fast the building pays for itself. If you have a chronic herd health problem or constantly push facilities to their limit, you will see the most gain from all-in/all-out.

Before you make any decision, you need to examine your current records. Check efficiencies and use the records to establish pig flow. A pig flow will tell you what your facilities and your management can handle and what changes you will need to make.

Mycotoxins

A common symptom which causes a producer to suspect mycotoxin contamination is the animals refusal to eat the feed. Diarrhea may also be an associated symptom.

In one case, the sows rejected the feed but the feeder pigs consumed it. The sows consumed the unground, whole kernel. Testing is reasonable in price and producers should send a sample to a laboratory for interpretation and diagnosis. The plant disease clinic, 218 Buckout Lab., Penn State, University Park, PA 16802 and

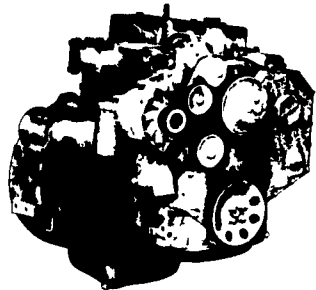
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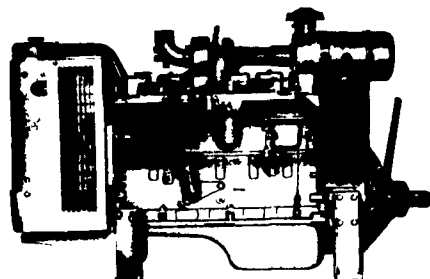
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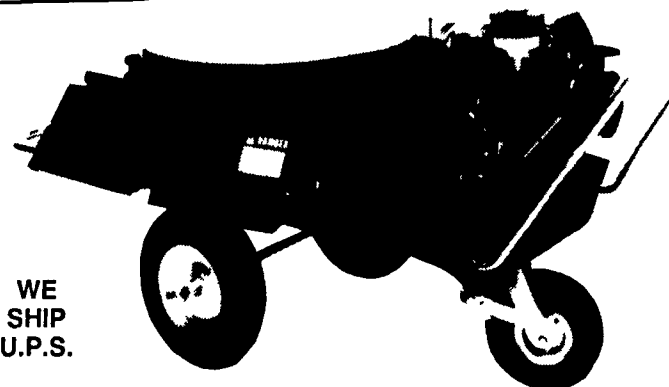
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