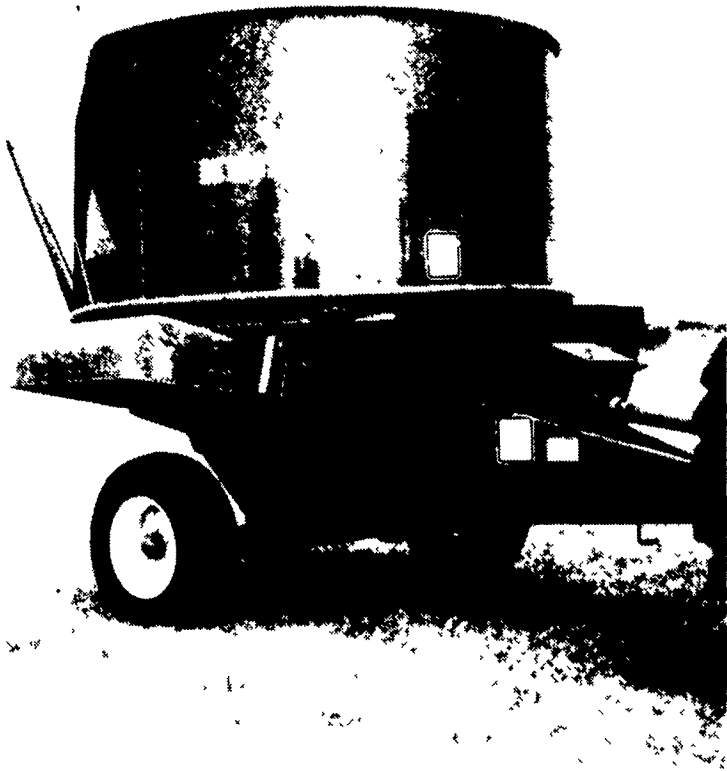




## BUSINESS NEWS...



Hesston has developed new Tilt-Tub Round Bale Processor.

## Tilt-Tub bale processor announced

HESSTON, Kan. — Hesston Corporation is revolutionizing bale processing with its new Model BP-20 Tilt-Tub Bale Processor. Designed after the proven and popular tub grinder concept, this self-loading processor handles nearly any type and shape of round bales.

Featuring a tub width of 7 1/2 feet, the BP-20's exclusive 90-degree tilting tub gives fast, easy self-loading bale pickup. And, whether there's a need to handle smaller bales in the dairy belt or process large round bales, this new processor can handle it all.

Fixed shredding knives combined with the rotating tub utilize the weight of the bale when processing, instead of "fighting" the bale's weight like some designs. Speed of the 49-inch deep container can vary for desired

crop length, and it will feed bales at a rate of four to six minutes per bale, depending on crop and feeding conditions. The Processor will also vary chop length for different feeding operations.

"Our Tilt-Tub Processor incorporates speed of operation, reliability even under extreme conditions, and considerable flexibility," said Product Sales Manager Bob Granaas. "This model does the job even when the bales aren't perfect."

The BP-20 requires 540 rpm and can be operated on 60 horse-power tractors. Because of its high ground clearance, it allows feeding in wet or snowy conditions. It will range feed or feed into bunks up to 48 inches high, and the feeding mechanism will also "blow" straw up to 15 feet for making bedding.

## Case gives cold weather tips

RACINE, Wisc. — According to J I Case, several procedures can be observed to make sure construction equipment and off-road vehicles will start and run properly in colder weather.

Keep the battery at full charge. Cold engine and transmission oil greatly increase cranking power requirements on a battery. Also, the liquid in a badly discharged battery can freeze in extremely cold temperatures.

Use lighter weight oils in the engine, manual transmissions and differentials to reduce the starting load on the batteries.

Use a solution of ethylene glycol and water in the cooling system, varying the amounts of each as required by the climate.

Operate the engine at speeds high enough to keep the engine coolant temperature at the correct level. When the engine is operated at idle speed, the coolant is not circulated sufficiently, and the engine can overheat, even in colder climates.

When finished for the day, park

the machine on a hard, level surface, out of mud or water that can freeze the tractor to the ground. Then cover the end of the exhaust pipe to prevent moisture from entering.

Fill the fuel tank at the end of each day to prevent water condensation from forming in the tank.

If liquid ballast is used in the tires, check for correct solution to prevent freezing.

A local Case dealer can recommend other products to use while operating equipment in cold weather. These include dipstick heaters, ether starting aids, and battery and coolant heaters.



**THINK AHEAD...**  
Read Futures Markets on Page 3.

# Intensive care hospital developed for baby pigs

COLFAX, Ill. — There are many types of hospitals: people hospitals, women's hospitals, children's hospitals, cat and dog hospitals, to name a few. But up to now, no baby pig hospitals.

Why baby porker hospitals? To increase profit for large scale hog growing operations.

Some hog breeding/marketing complexes are so large that they annually market upwards of half a million porkers each. Thus, even the smallest improvement in hog raising translates into thousands of dollars in additional profit.

Where do newborn baby pigs figure in this picture? It is because too many have not been surviving the first few days of their lives, even under the best management and feeding conditions.

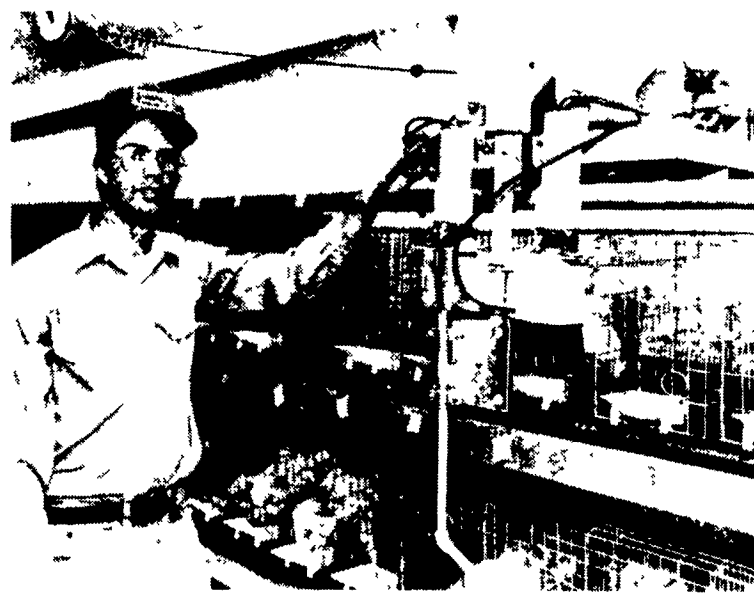
One typically large hog producer expressed it graphically when he said, "I found that I was carrying out an average of 20 dead piglets a week and that was costing me around \$30,000 profit a year in pigs that I wasn't able to grow to market weight."

The underlying reason in the past has been that even under the best conditions, Mother Nature produces some runts in almost every litter born. They are the newborn porkers that start life a bit smaller and weaker than their litter mates. In the very important first hours of life they must scramble and compete to get to their mother sow's teats and drink some of the life-giving colostrum and then manage to get their share of the milk every few hours. In addition to competition with their more energetic siblings, they must adjust to temperature, ventilation and other conditions in the farrowing crate in which they were born. Then they must start gaining weight and vitality. In a comparatively few days, they must adjust to weaning with solid food.

What could be done with the baby pigs that were failing and would die soon? Too many did die, even under the most efficiently-operated facilities. Many of the leading scientists in the industry have pondered the problem for years without reaching a solution that was satisfactory.

Several years ago, two men got together to see if they and their organizations could develop a successful solution. They divided their research into four categories:

1. Better environment for failing baby pigs



Baby pig hospital unit provides intensive care for new-born swine.

2. Better foods
3. Removal of sibling competition for food
4. Improved handling and care methods.

One of these two men was a feed expert: Don Meiners, President of Protein Plus Laboratories of Colfax, Ill., a long-time, well-known feed manufacturer.

The other was Gerry L. Underhill, head of Underhill Industries, Inc., of Delphi, Ind., a leading manufacturer of hog raising equipment used principally in hog confinement buildings. This firm also manufactures completely-equipped factory-built hog confinement buildings of all types which are hauled to the purchasers' sites by truck.

The research project took several years of study, first in laboratories and finally on farms raising 5,000 or more hogs a year.

The result was a specially-built and equipped "baby pig hospital" which was named Intensive Care Nursery after the intensive care wards in regular hospitals. From a physical standpoint, it is a unique 12 x 48-foot factory-built structure which is hauled by truck to the location where it will operate.

At one end inside is a room containing 54 small individual cages, each nine inches x 24 inches, each one to hold one baby pig patient. At the front end of each cage, there is a unique individual feed cup for a specially-developed liquid food. This food is a combination of special feed, synthetic sow's milk and medication.

An overhead machine automatically distributes measured amounts of feed to the cups every 90 minutes, night and day.

At the opposite end of the building, there is a nursery room with larger cages containing the pigs which have "graduated" to the weaning stage, eating a specially-formulated solid food. After these little pigs have gained enough weight in this nursery, they are taken back into the farm's regular nursery pens where they rejoin piglets of the same weight.

The room in the center of the Intensive Care Nursery building contains a furnace, ventilation system, heat recovery unit, water heater, water softener (in areas where needed) and automatic controls grouped together on one panel. There is a specially-designed dish washer to clean and sterilize the feeding cups every day.

This building is entered by a door in the side of the building, into the center room, through an air lock. This minimizes drafts and temperature/humidity changes. Drafts are prevented by extra-tight construction. All of this is especially important because the interior of the building is maintained at 90 to 92 degrees F., with 70 percent humidity.

How well have the Intensive Care Nurseries accomplished their purpose? There are now 10 of these nurseries in operation in three States, and operators state that

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## IH gives tractor maintenance tips

CHICAGO — A good tractor maintenance program should start with a tip of the cap — its radiator cap, says Vaughn Allen, director of product support for International Harvester.

Allen says maintenance is crucial to extending a tractor's life span and efficiency, whether it's a 20- or 200-horsepower model. Most maintenance costs easily can be recouped through extended service life, increased fuel efficiency and decreased downtime during the important planting and harvesting seasons, Allen points out. He says a good tractor maintenance checkup doesn't cost, but pays many dividends.

Before tipping the radiator cap, clean the entire machine, especially the engine area where accumulated grime can sharply reduce the tractor's efficiency.

"After a good cleaning, start by checking the operator's manual for cooling system maintenance recommendations for your equipment. If necessary, drain and fill the radiator with new coolant, and service the cooling system filter if so equipped," Allen points

out. "While you're at it, check for possible leaks or loose hose clamps."

Clean air is important to proper engine function, Allen emphasizes. The air cleaner body should be inspected for any damage, and the primary element replaced if required. Also, inspect the muffler, manifold, pipes and clamps.

Proper engine lubrication is the best insurance against unexpected breakdowns, Allen says. "Operators should review the operator's manual for proper classification of all lubricants used in their tractors," he adds. "We also suggest owners utilize the Oil Laboratory Analysis (OLA) available at IH dealerships to monitor engine and drive train condition."

Oil should be checked and changed if necessary. At that time, operators should take an oil sample to check for anti-freeze, fuel, water or dirt contamination, he advises.

Condensation can pose a threat to the fuel system, Allen says, so be aware of possible water presence. Watch your fuel tanks — both

tractor and storage tanks — for condensation.

If needed, the transmission fluid also should be drained and refilled along with a filter change.

Electrical malfunctions can be one of the most time-consuming problems to track during the busy planting and harvesting season, Allen says.

Start by checking the battery, and clean all terminals and posts. Inspect wires for cracks, frays or corroded connections and damaged hold-down clips. Don't forget to inspect the alternator and air conditioner belts for tightness, and replace if necessary.

Finally, Allen says, inspect all tires, wheels and steering linkage for excessive wear, then lubricate all main points noted in the operator's manual.

"A good way to top off a tractor inspection is to make sure the slow-moving vehicle sign is clean and in place before taking the tractor on the road," Allen notes. "After all, safety is a primary factor in your maintenance program."