State-of-the-Art Chicken Houses

by Wendy Komancheck

Innovation meets technology at Kreider Farms



Tom Beachler on the platform at one of Kreider's new state-ofthe-art chicken houses. PHOTOS BY WENDY KOMANCHECK.

"There's an ongoing national debate about egg-laying hens and whether they should live in caged or cage-free environments,' said Ron Kreider, president and CEO, and the third-generation family leader of Kreider Farms [in Manheim, Pa.]. 'Instead of arguing about cages versus cage-free egg production, the industry and consumers need to focus on a realistic compromise. Kreider Farms' new chicken house is our vision of what a 'next generation' egg production facility should consist of—a best practice that offers enhanced animal welfare as well as increased food safety," according to a Kreider Farms' press release at www.newsguide.us/technology/industrial/Eco-friendly-Kreider-Farms-Announces-New-State-of-the-Art-Chicken-Houses/.

These innovative chicken houses are called "state-of-the-art" chicken houses at Kreider Farms, says Dave Andrews, vice president of sales and marketing at Kreider Farms. They incorporate tunnel air ventilation, a daily manure removal system, larger, stainless steel cages, a stainless steel packing line and are certified by notable auditing agencies.



Dave Andrews, vice president of sales and marketing, left, and Tom Beachler, vice president of operations, right, in front of the ventilation system of the new state-of-the-art chicken houses at Kreider Farms in Manheim, Pa.

Kreider Farms

Kreider Farms (www.kreiderfarms.com) is a Lancaster County family business that started in 1935. Like many other central Pennsylvania agricultural businesses, it is diversified in order to keep its revenue streaming in with each generation. It's considered one of Pennsylvania's largest dairy farms with niche markets in eggs, milk, drinks and ice cream. The corporation's home base is in Manheim, and is a family-owned and operated company with more than 2,500 acres, 4 million egg-laying chickens, 2,000 cows, milk bottling and ice cream plants and 225 employees.

Kreider Farms looks for ways to improve the quality of their chickens and egg production. Andrews says, "Ron Kreider reach[es] out to know about the latest and greatest in egg production. Each time he plans a capital expansion, he seeks out the latest and best in the newest technology. Ron has traveled around the world looking at all different types of equipment and buildings and selects the best he can find."

According to Andrews, there are six of these new chicken houses at their Mount Pleasant Complex, located in Lebanon, Pa. "Those versions, built in 2003, have 250,000 birds in each house. The new ones we are opening have over 400,000 in each house."

Specifics on the state-of-the-art chicken houses

Some of the technological advances in these chicken houses:

- Tunnel Air Ventilation to provide fresh air to each cage and take out the hot air during the spring, summer and early fall months of the year. This ventilation system also fluffs the chickens' feathers.
- Daily Manure Removal System to take out manure on a daily, rather than a yearly, basis like traditional houses do when new hens are introduced to the facilities.
- Larger, stainless-steel cages to allow chickens to move around and flap their wings.
- Stainless-steel packing lines to increase food safety. Stainless steel is easier to clean than traditional painted surfaces.
- Quality and Auditing Programs. The Association of Registered Professional
 Animal Scientists has audited the state-of-the-art chicken houses. Kreiders also
 seeks out certifications from the USDA, Hazard Analysis and Critical Control
 Point (HACCP) and Pennsylvania Egg Quality Assurance Program. Additionally,
 they're working toward receiving their Safe Quality Food (SQF) certification,
 "which will make Kreider Farms the second egg producer in the country to
 achieve SQF certification," according to their press release.

Kreiders decided to design this particular style of chicken house because "Kreider Farms has always been a leader, and so it's in our business plan and mission statement to be the best egg producer in the Northeast U.S.," Andrews says.

Kreiders plans to transform 75 percent of their chicken houses into these new state-of-the-art houses. They plan to have all of their chicken houses converted into this new style, but that will take some time, though, as Andrews explains, "Our ultimate goal is to eventually transition to 100 percent of our caged production into these new state-of-the-art facilities. As for when, we probably will not know the answer to that question for a couple of more years. We will absorb this latest expansion and recalculate at that time."



Dave Andrews and Tom Beachler inside one of Kreider's state-of-the-art chicken houses during the construction phase.

Pluses and minuses of the new chicken houses

Kreiders has faced challenges in the designing, constructing and implementing of these new state-of-the-art chicken houses. "We have been mixing and matching the best building, cage systems, ventilation systems and processing lines to create these new hybrid houses. Since we are mixing building and equipment that has never been paired up in this same combination and scope [before], we have had to overengineer to make sure we never came up short. Even after we build one of these facilities, there are always little tweaks and adjustments that need to be made. It has been a very fruitful learning process because,

through the process, we have gained a lot of knowledge that few egg producers have. Hopefully, this will give us a competitive edge for awhile," says Andrews.

He also says that the innovativeness in these new advances in chicken houses are rewarding. "We are out ahead of the average egg producer. While most egg producers are still operating out of 30-year-old facilities, we are emerging with new state-of-the-art production and processing centers. It feels good to offer our customers a value-add rather than simply offering the same as everybody else," he says.

"This is particularly rewarding these days when there is so much attention being given to animal welfare. We have set ourselves apart from the rest of the industry as taking substantive measures to improve both animal welfare and food safety," Andrews continues.

Andrews explains that it took a lot trial and error before they were satisfied with the emerging house design. "We are constantly improving our designs. We learn from each other and each house we build [is] a small to significant improvement over the previous one. Our first, new technology facility was built in 2003. Since then, we gathered many additional ideas and technology to put into our latest chicken houses. Even after we complete one, we still tinker and improve," he says.



Dave Andrews and Tom Beachler checking the ventilation system at Kreider's Farm.

Myths exposed and business advice

A few years ago, Kreiders was targeted by a small, militaristic animal rights' group who broke into one of their chicken facilities and falsely accused the company of animal cruelty. Related to the break in, there has been a lot of hype that caged-free eggs are superior in health and hen well-being compared to traditional egg production. Yet, experts have debunked that, and have found that most egg producers take good care of their hens. For more information, see www.uepcertified.com/faqs/ and www.uepcertified.com/program/myth-fact/.

Andrews concurs, "We started planning these new state-of-the-art facilities long before the animal rights

activists started attacking the egg producers. Trying to appease the animal rights activists would have been a no-win strategy, anyway, because they will never be happy until all cages are eliminated and all animal agriculture is eliminated, and we become vegetarians."

Andrews also negates the animal activists' position that caged birds are trapped in their cages. He says, "Quite frankly, we feel that their rhetoric about caged birds not being

able to 'turn around' or 'extend their limbs/wings' is false and misleading. We have video on our Web site [www.kreiderfarms.com/index.php?id=562] that clearly demonstrates our birds moving about and flapping their wings when they want to. The average consumer is being misled by irresponsible rhetoric, and we will all pay the price for that in the end in the form of higher food costs and by taking a big step backward in food safety if caged egg production would ever be eliminated. We can always make cages larger, and we can continue improving the caged environment, but going back to a cage-free system is the wrong way to go for the birds, for food costs and for food safety. New, improved, state-of-the-art caged egg production facilities with larger cages, tunnel air ventilation and daily manure removal belt systems is the best way to raise the bar versus eliminating cages and taking a big step backwards 50 years into the past."

Andrews does have some solid advice for other egg producers and farmers. He says, "The world is changing at an accelerated pace and no one operates in a vacuum anymore. You need to be thinking about the future in many dimensions, such as the Internet; consumer and consumption trends; competitive consolidation; the environment; animal welfare; climate change; foreign competition; regulatory changes; and geography, just to name a few."

Kreider Farms is heeding their own advice as demonstrated through their state-of-the-art chicken houses. With their new design, hen welfare is taken in consideration, as well as food safety and egg production.