



The dairy cow's barn is older size and crowded with more cows than stalls. The front part was built in 2000, the middle part in 1977 and the back part in 1988.



Jentje 323 (Palmer x Celcius x Ugela Bell) had success last year in the best farm cow competition. She has produced 138.867 kg milk with 4.18% fat and 3.31% protein to date. She always has a low cell count and needed only one insemination this year to become pregnant.



Evert and Koop are perfectionists, an example is the cleanliness around the silage belt.

Hoorn Brothers showcase tremendous herd of commercial cows

'There are no high backs anymore'

Evert and Koop Hoorn, two brothers from Ruinerwold in the Netherlands, have made an art of breeding exceptional commercial cows. They have created a Holstein herd with a distinctive form that can function easy in their outdated barn. Imagine a somatic cell count of 54.

There is a video circulating on the internet that shows a herd of remarkably good cows – commercial cows with a lot of width and a bit of muscling, the majority of which are Holsteins. Most of the video is shot at the entrance to the milking parlor, where correctly built cows enter with great strides. The cows are extremely uniform and there is not a bad one among them. Cows shown milking in the

side-by-side parlor stand squarely and have well-formed udders. The herd is owned by brothers Evert (53) and Koop (54) Hoorn from Ruinerwold, NL. The cows shown were not specially selected for the video assures Evert from his office next to the stable. He and his brother have never felt the need to promote their cattle. It was only by chance that recently approved aAa

analyzer Tracey Zimmerman visited the herd while touring in the Netherlands, and was so impressed she made a video – now available to watch on Melkvee.nl.

Jentje 323

Loyal readers may know the Hoorn brothers from the best farm cow competition organized

by Melkvee last year. Competition judge and aAa analyzer Jurjen Groenveld visited the farm with Zimmerman and was so impressed by Jentje 323 (Palmer x Celcius x Ugela Bell) that he suggested the brothers enter the cow in the competition. They would not have entered the cow on their own, modest as they are. Jentje went on to become a competition finalist and placed third in the old cow category. The now 15-year-old with 10.000 kg fat and protein has produced 140.000 kg of milk so far, and her highest cell count in 7 milk tests was 63. Jentje is pregnant again, after needing only one straw of "good old" Kian, and will calve in April for the 14th time. Despite her exceptional performance she does not get preferential treatment. She just maintains herself with the rest of the herd. That is a feat in itself in a herd of 230 cows and 200 free stalls. Evert thinks this will probably be her last calving. "She is becoming a bit older now and we feel she might have more trouble if we try to keep her going." The brothers have five daughters from Jentje, three sired by Kian, a Classic daughter and one by the Montbéliarde bull Triomphe. "Fine animals," is the answer from Evert when asked how they function. "I prefer a trouble-free animal who does her job and produces on herd average level over a cow who is above herd average but stands with her hocks against each other in the milking parlor."

Older size

Indeed, anyone looking around the Hoorn brothers' barns sees only well-functioning cows. The cows, without exception, are able to stand up easily even though the depth of the free stalls is only 2.30 meters long. They lie on sawdust-topped rubber mats with a rail behind to assist in standing. The barn consists of three sections. The middle part was constructed in 1977, the back part in 1988 and the front part in 2000. In the front section, the cows lie in free stalls filled with straw. "We first had car tires in it but that did not work well," says Koop. "Now we put horse manure underneath and every day I

add a wheelbarrow of straw on top." Despite the less than ideal circumstances of an old size barn, high occupancy, and the fact that cows have not gone outside for many years, average lifetime production for cows when they leave the herd is between 40.000 and 45.000 kg milk. In the present herd there are 46 cows who have a lifetime production above 50.000 kg of milk. Leader for lifetime production is (of course) Jentje 323, but she is in good company with 16-year-old Beitske 52 (Alibaba x Ronald). Beitske produced 123.037 kg so far with 4.34% fat and 3.32% protein, and given her good condition she should be able to equal the performance of her mother who produced over 10.000 kg fat and protein. Beitske 52 would become the fourth cow in the herd to reach this milestone.

Bringing our own approach

"We have an old barn and our free stalls are not very big, so don't want cows with really long legs", Evert says. To breed cows the way they like them, they have used the Triple-A system for 20 years. In the past they used a lot of Tops, Ideal and Cleitus. "It went wrong with the bull Jabot", muses Evert. "But actually the cows became narrower after Tops." The Hoorns used a lot of type bulls in the past and were successful at shows. "But we realized that our best cows were from bulls who did not have great linear figures, bulls like Linde Alfred and later Ronald. "Triple-A is a nice, simple system", Evert finds. "We use it and bring our own approach to it." Hoorn says he knows the system pretty well and takes it a step further. He explains what he means by that using old Jentje 323 as an example. "She is analysed aAa 612, but on top she is still sharp. When I look at her I think she can still use some '5' (aAa 5 – Smooth) for width. Some bulls analysed with '5' still sire narrow cows. Delta Persuader is an example of a '5' bull with aAa 534. But he is out of the combination Mascol x Dustin, and looking at his pedigree he may not be a great source of '5'. Kian is a really good source of '5', but you can see that when you

milk them. Kian is a bull who can correct a lot, Persuader is also but somewhat less so. But Persuader is still an interesting bull with slightly less than average milking speed, good cell count, good feet and legs, and longevity."

Maniac

It is clear the brothers focus more on width than on stature. "Triple-A is multi-faceted, you have to know what you are doing", Evert says. He describes another effect of the way the cows are built: "We often hear the reaction to the video that our cows are so clean, but they are not washed at all. Apparently because they have width and good feet and legs, they shit behind their legs and not between or on top. You like to have space between the hind legs, not only when you have a robot, but also in the milking parlor so the teats don't touch each other. That is why I don't like strong central ligaments." As a result of their approach to breeding, the brothers once bought 600 straws of Kian. They milk 42 Kian daughters and are very satisfied with the bull. "His daughters stand up really easy, are never lame and get ▶



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Evert always milks with help of a fellow worker. The cows are milked in a 2 x 20 side by side rapid exit parlor from DeLaval, with triangular fittings and head aeration from Milkrite.



The youngstock barn was built in 1993 and is located 200 meters behind the head location. At this location there are two houses. Koop lives in one house, and his parents live in the other.



The youngest calves are housed close to the milking parlor. They get inoculated colostrum for the first few days after birth.

better every year." Another bull with more than 50 daughters in the herd is the relatively unknown Maniac van de Peul (s. Royalist), a grandson of Kian with a breeding value of 94 (black and white bases) for stature and aAa 516. "The bull came to the attention of aAa analyzer Jan Schilder in particular because of his really good feet", Evert notes. "The Kians and the Maniacs are from the same kind. Maniac was at the bottom of the bull chart and he did not cost much."

Look at the cow

Evert does not understand why farmers only look at the top of the bull chart. "If you milk your cows twice a day, look at what the cow needs in a mating. Be honest with yourself." Hoorn knows that Holsteins on many farms are frail and understands why a breed like Fleckvieh could become popular. "But why don't these farmers use Maniac or Kian or a good MRIJ bull?" The brothers feel free to use old bulls when they are good and still available. "Besides, they are not expensive. We don't touch bulls like Bouw Finder for 34 Euro", Evert says. "A lot of good bulls fall back later; what about Lucky Mike? When he was popular, we used Hidden Future, and in hindsight we are happy about it. He only costed 5 Euro and had already dropped to the bottom of the list," recalls Evert as he

nudges a 10-year-old Future daughter up. She stands up easily – "She still walks like a young girl." They prefer to use bulls without too much stature, with good feet and legs, low cell count and average milking speed. "A bit slower is better for udder health than fast milking". Besides Kian and Maniac, "bulls you could really trust, they don't make them like that anymore," Evert and Koop use bulls like Topgear, Brandy, Malki, Zar, Solero, Mandela, Stellando, Spell, Persuader, Vitality and Jerudo. "We never looked at genomic bulls before, but now we do if there is a good one among them. We use a bull like De Vrendt Brandy, aAa 153, and presumably he has enough '5' because the '2' is in last place and he has 106 for front end." Brandy is a daughter-proven bull but for Evert he is a trial bull. "We try a couple straws and if the calves and heifers are good, we decide if we are really going to use him."

Robots out again

The focus on udder health hasn't hurt the operation. The average cell count of the last tank was only 54. Only four animals on the last milk test had a cell count higher than 250 and the highest was 506. Evert and Koop are very satisfied with their 2x20 rapid-exit DeLaval milking parlor, in use for 12 years already.

They use Milkrite triangular fittings with head aeration. "We can milk with a higher kPa of 47 and have fewer problems with teat end callosity." Their udder health has not always been at such a high level, reaching its lowest point at the beginning of 2000. In the summer of 2001 the family installed three Lely robots. It turned out to be a disappointing choice and after 2.5 years they took them out again. "We had more trouble with mastitis and the bacterial count was too high", Koop says. "In addition, a cow with e-coli mastitis does not go to the robot." Evert adds, "There were often failures with concentrate delivery. And when a cow was not 'read' correctly, because the laser was a little bit dirty, she had to go out with a full udder when she had already let down her milk."

New hectic period

The automatic milking system caused the brothers mainly frustration. In retrospect it turned out the valves that shut down the tank when flushing were the wrong ones, a situation that created much of the frustration. "The result was that a lot of waste collected at key points. A robot is also much rougher than a milking parlor, you can work a lot cleaner in a parlor", finds Evert, perfectionist that he is. Evert always milks himself along with various relief milkers. "Sometimes our sister helps with

the milking." Koop feeds the calves and helps with milking and chores, like cleaning the free stalls. He also breeds the cows. With his large hands Koop finds breeding heifers difficult, so for that he calls the AI company. The brothers don't breed their cows too soon after calving because they already have too many heifers. They average 2.3 inseminations per pregnancy, and their calving interval averages 405 days. Another hectic period for the farm occurred ten years after the robots were removed. Three years ago a neighbor quit farming and they bought his farm, including a barn with space for 45 cows where they now house dry cows and maiden heifers. Shortly afterward their youngest brother decided to leave the farm. "Adding a new location while buying out a brother at the same time was not easy financially", Koop says. They now have 138 hectares in total, with 85 hectares surrounding the farm. They own three locations – in addition to the newly purchased neighbor's farm there is another location about 200 meters behind the main farm. Koop lives there with parents Bertus (83) and Henny (81), while Evert lives at the main farm where the milk cows and calves are housed.

Perfectionist

Although Evert and Koop clearly work long hours, everything is clean and orderly. The

brothers admit to being perfectionists. They feel this is why the cows clean up their feed. "The cows eat everything because the feed is not contaminated", Evert says. "Once a day they get a mixed ration of 2.5 kg brewer's grain, 2 kg potato fiber, 2 kg soda grain (treated wheat), 20 kg corn, and the rest is grass silage. The amount of grass silage is variable, when it is cold they get more. Besides that the cows get measured concentrates, the heifers a maximum of 5.5 kg and the older cows 6.5 kg. The amount is determined by the milk meters. 1.5 months before calving it is reduced to zero." They feed 24 kg concentrates per 100 kg milk. The brothers feel it is not possible to feed everything in the mixer wagon because they cannot make groups in their existing barn. Chalk is spread daily in the free stalls and they dry off all cows with antibiotics. "Because our antibiotic use is very low we can dry off all cows with antibiotic and still keep antibiotic allowances low enough", Koop says. Both brothers agree job satisfaction is more important than highest production. "We doubt the animals would stay trouble-free for many years if we pushed production harder."

High backs

"We have good cows and we find it difficult

to sell cows to comply with the phosphate reduction scheme", Evert says. "We also feel it is a pity to breed dairy cows with beef bulls", adds Koop. They have no objection to other dairy breeds and they have some Montbéliarde and Brown Swiss crosses. "We tried Brown Swiss bulls, the first bull we used was Etvei. He had aAa 654 and we used him during a time when those numbers were hard to find in Holsteins", says Evert. For the same reason there are some heifers by Solaris, a brown Swiss bull with aAa 564. They find the crossbreds in general are little-to-no worse than the purebreds. "A cow should walk easily and go easily to the feed alley. That does not work for her", Evert says as he points to the worst cow in the herd. "She is a daughter of Olympic and we haven't had good experiences with him. Daughters have rear legs that hock in and they don't have enough heel depth, which causes problems with the feet like 'foot rot'." This Olympic daughter indeed stands out beside her average-statured herd mates. "There are no high backs anymore", Koop says. "You can buy a lot of expensive semen, but why? It is all about making matings. The important thing is that a cow's body is formed well", Evert says. "It is unfortunate in regard to cattle breeding that only a small group of people decide the kind of animals that we, as farmers, have to milk." ■



Herd information

Hoorn brothers Evert (left, 53) and Koop (54) milk 230 head of primarily Holsteins in Ruinerwold, NL. The average age of the milking herd is 5 years, 2 months and average annual production per cow is 10.037 kg milk with 4.33% fat and 3.53% protein. Despite crowded conditions with more cows than free stalls in a barn of outdated size, the udder health of the herd is exceptional. Cell count in the most recent tank was only 54 and bacterial count only 3. Average cell count for 2016 was 85. The herd is impressively functional with over Kian 42 daughters and over 50 Maniac van de

Peul daughters, "and now the first daughters of the German bull Zar are coming." The brothers milk well-functioning daughters of Jerudo, Leko, Prince, Linfield, Survivor, Fiction and Royalist. Bulls currently in use include Brandy, Topgear, Malki, Solero, Mandela, Stellando, Spell, Zar, Persuader and Vitality. The aAa system has played an important role in the Hoorn brothers' breeding program for over 20 years. From 2001-2004 the brothers tried milking with 3 Lely robots, but found frustration with the robots overshadowed the benefits. In 2004 they constructed a 2 x 20

rapid-exit DeLaval parlor with Milkrite fittings. Since 2001 the cows have been exclusively inside and fed a year-round a ration of grass silage, corn silage, brewer's grain, potato fiber and soda grain. In addition, concentrate is delivered via the feeding contender which is determined by the milk meters. Dry cows get older, harvested silage. The brothers own 138 hectares of land, with 85 hectares surrounding the farm. Corn is grown on 30 hectares and potato fiber is added to the corn silage for a better conservation.



Evert lives at the head location, where the cows are housed. 200 meter behind the head location (right out of sight) is the young stock barn. On the left side of the farm (out of sight) the brothers bought the neighbours barn with space for 45 head. It now houses the maiden heifers and dry cows.