

A young man with short dark hair, wearing a blue denim jacket over a light-colored t-shirt, is smiling and leaning on a metal railing in a dairy barn. He is surrounded by black and white cows in stalls. The background shows more stalls and a large window with a view of the outdoors.

spinder

DAIRY HOUSING CONCEPTS

Renovation

“ Smart choices
guarantee a
maximum return on
your investment ”

The benefits of comfort | spinderdhc.com



Table of Contents

- Renovating dairy housing
- Renovation route
- The right cubicle dimensions
- Waved neckbar
- In practice: waved neckbar
- Nico Vreeburg, Vetvice
- Dual waterbed
- Waterbeds in combination with existing dividers
- In practice: reuse of cubicles on waterbeds
- Providing roughage
- Highline feed front
- In practice: increasing walking and eating space
- Water supply
- Pingo renovation drinking trough
- Renovating for youngstock and dry cows
- Bert Jan Westerlaan, Vetvice
- Cuddle box
- Arena calf pen
- Minimum dimensions youngstock housing
- Product Overview



Comfort for the cow



Comfort for the farmer



Made in Holland



Customisation



Nearby & fast service

Renovating dairy housing

An investment in a comfortable, safe and clean living environment for your cows will always pay for itself. In both animal wellbeing and production. A well thought-out renovation of your barn will not only increase cow comfort, but also reduce your labour. The return on your investment will come in two ways: an increase of milk and revenue and a decrease in costs.

The choices you make during renovation depend on the condition of your existing dairy housing equipment and your budget. Of course there is no need to replace all the equipment immediately, but you can choose to include only outdated or broken parts in your plan. Smart choices guarantee a maximum return on your investment, as well as more job satisfaction.



Start of the renovation project:

With proper preparation and a good start, the project will run smoothly. Will you assemble everything yourself? On our website there is a short video to get you started.

5

Enjoy the results

If your renovation project is successful, your investment will pay off in higher milk yields, lower costs and above all, more work satisfaction.

6



4

Making the right choice:

After this thorough preparation, discuss the quotation with your Spinder dealer. Are all your requirements and wishes met? If you have made your choice, also make clear agreements about delivery time, planning and implementation.

3

Input

Discuss your plans specifically with colleagues and advisors. Good and sometimes surprising solutions often come from practical experience. Dealers are not only trained by Spinder, they also are in contact with dairy farmers on a daily basis.

2

Make a design

Translate your wish list into a functional design. We hope the renovation ebook helps you on your way. For details on Spinder products, please consult the product catalogue on our website.

1

Wish list

Where are the opportunities to increase cow comfort? Which tasks recur daily and can be organized more easily? A successful renovation increases comfort for the cow and for you as a dairy farmer.



The right cubicle dimensions

Existing barns often have outdated dimensions that no longer match with the size of current dairy cows. The cubicles are often too small in both length and width, so that cows experience difficulties when lying down and standing up, but also lie less comfortable and consequently fewer hours. This while each extra hour of resting is proven to be associated with a higher milk yield.

The width of the cubicle can be possibly adjusted by reducing the number of stalls in your barn. Obviously this is only possible if the number of cows permits. The application of a waved neckbar is always a possibility!

“ With a waved neckbar you can increase the height at the withers by up to 30 cm. ”



Waved neckbar

By replacing the regular neckbar with a waved neckbar you can give the cow considerably more space when lying down and standing up. The height at the withers of the divider can be increased up to 30 cm. An additional advantage is that the shape guides the cow to the center of the cubicle and the cow lies straight.

Due to the guiding effect of the waved neckbar less manure will end up on the bedding. Depending on the type of bedding this will save sand, litter or other bedding materials.

In practice: waved neckbar

If cubicles are too small, cows will have problems lying down and standing up. A simple renovation with great results is the replacement of the straight neckbar with a waved neckbar. This is universally applicable, even on older types of cubicles. Clamps and brackets can be reused.

Before renovation



After renovation





“The better laid out a barn is, the smaller the differences become between the best cows and the rest of the herd.”

Nico Vreeburg
Vetvice

Dairy farmers often talk about their best cows giving lots of milk. “It is actually interesting to look at the differences in lactation numbers. The genetic differences in the herd are often small because many are bred from the same lines. That means every cow has the same great genetic potential. So where does that difference arise?” The cows are kept in the same barn and offered the same feed.

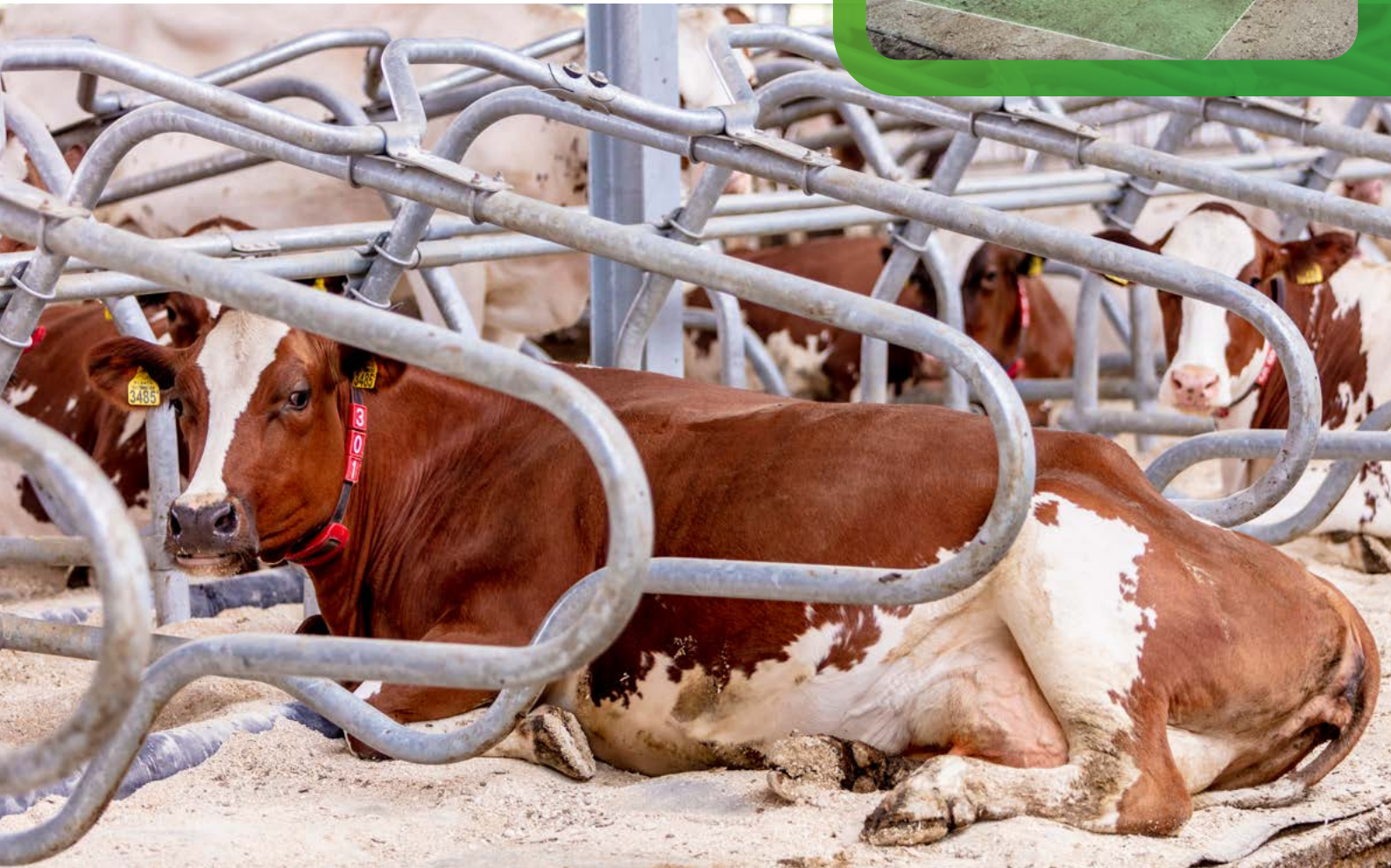
To give all cows the right conditions for a higher milk yield, the competition between the animals in the barn must be reduced, Nico Vreeburg concludes. In an older barn, a few stalls can be sacrificed in favor of better access to feed and water for all cows. Although there is then room for a fewer number of cows, the efficiency goes up. “The better equipped a barn is, the smaller the differences become between the best cows and the rest of the herd.”



Dual waterbed

The dual waterbed with two water compartments, on which the cow floats, provides an optimal lying comfort. The extra firm knee compartment allows the cow to lie down without contacting the hard surface below. Once resting there are no pressure points and her blood circulates unobstructed, which prevents bald or swollen hocks. The water transfers the heat from the cow and reduces the risk of heat stress in summer.

The bed stays hygienic and dry thanks to the rounded shape that helps any leaked milk run off. The costs of bedding material is low. A waterbed is durable, long-lasting and maintains its properties unchanged.





Waterbeds in combination with existing dividers

If your cow mattress is at the end of its life and needs to be replaced, you do not need to automatically invest in new cubicle dividers too. You can reuse your existing cubicle dividers, even if these are an older type of mushroom divider or R-divider. When reinstalling older dividers you should of course consider adjusting the dimensions to your dairy cows.

A Waterbed offers excellent possibilities for renovation purposes. By reusing the existing dividers, you can limit your investment and still enjoy maximum cowcomfort with low maintenance costs.

“ Your existing mushroom or R-dividers can be reinstalled on a waterbed ”

In practice: reuse of cubicles on waterbeds

Many old type cubicles are still in use to full satisfaction. When renovating with a Dual waterbed, these cubicles can be placed back on the waterbed. A costeffective solution that provides a maximum in lying comfort.

Before renovation



After renovation



“ After a couple of days, we saw all of our 150 dairy cows lying contentedly ruminating ”

Reitsma | Dairy farmer from Broeksterwolde (NL)

Providing roughage

A cow must be able to take in unlimited amount of roughage and eats up to 10 times a day. Ideally all animals can eat at the same time, ensuring low-ranking animals have sufficient opportunities to feed. The feeding place width per cow depends on the breed and age but is most likely 70 cm for a modern adult dairy cow and even 75 cm for a dry cow.

If it is possible to move the feed front slightly forward with renovation, and thereby increasing the free space behind the feed front, this will have a positive effect on cow traffic in the barn. Sacrificing a small part of the feeding alley to give your cows more space often also yields more milk.

The feed front is an important tool in dealing with livestock; **securing and releasing, in groups or individually.** An investment in a feed front gives you new opportunities to organize your work conveniently.



Highline feed front

The **Highline** feed front has generous head openings above and below, giving the cow plenty of room to eat. The operating mechanism is fully integrated in the top rail and is safe for humans and animals. Operate 20 meters of feed fencing with a single action in various positions so that you can work efficiently with herd treatment or individual treatment. The **Highline** feed front is virtually silent thanks to the use of plastic components in the locking mechanism.

With the **Highline** feed front you have the following operating options:

- Open position: the animals can move their head freely in and out of the feed front
- Self-closing position: the animals lock themselves during feeding
- Closed position: the feed front can be completely closed with one action
- Individual release at the press of a button
- Individual separation



In practice: increasing walking and eating space

There are still many barns in which the walking-eating area behind the feed fence is actually too narrow. This restricts the cows' movement and leads to less feeding and more stress, specifically for heifers and low-ranking animals. Fortunately, space can often be found by moving the feed fence up the feed alley. This allows 2 cows to pass each other behind the feeding cows.

Only a little extra space is needed for this. The feeding cows don't mind their front legs standing on a solid floor and as an added bonus the manure scraper doesn't bother them as much when feeding. With a newly poured concrete wall under the feed fence, this solution is very robust! This way the old barn fits the current livestock again!

After renovation



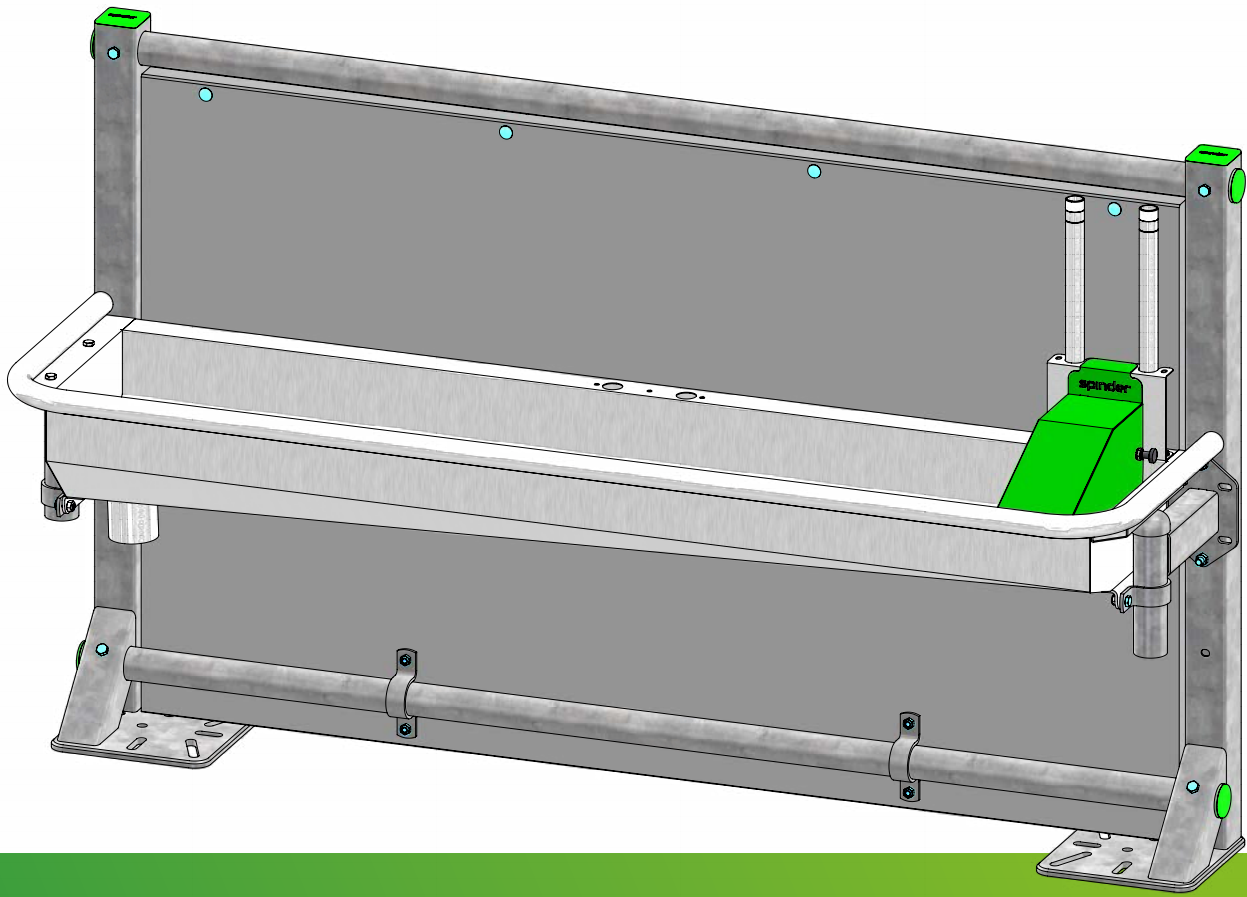


Water supply

The main component of milk is water, as much as 88%. It is therefore important that the cow has sufficient and above all clean and fresh drinking water. A high-yielding cow drinks as much as up to 150 liters per day. The animals are especially thirsty immediately after milking. A cow can drink up to 20 liters of water per minute, so a fast supply of fresh water is very important.

Older types of drinking troughs generally can't meet the water need of fast drinking cows; the water pressure is simply too low. In addition, these older troughs are often difficult to clean, which compromises the quality of the water. Food residues left in the water are a source of bacterial growth.

“ A bulk drinking trough supplies many cows with sufficient fresh water in a short amount of time ”



Pingo renovation drinking trough

The Pingo renovation drinking trough fits in every barn and offers comfort for the cow and for the farmer. The bulk drinking trough offers a natural supply of water with a large drinking surface and also has an integrated stainless steel protection bar. Due to the sloping bottom and the large outlet, cleaning is done easily and quickly. The float cover is easy-to-remove and equipped with a handle and closures so that the float can also be cleaned.

The Pingo renovation drinking trough set is a complete set with a plastic back panel to the floor. The trough can be installed on a slatted floor as well as on the concrete cubicle floor. The solid plastic back splash panel prevents water from spilling into the cubicles and replaces any present concrete end walls.



Renovating for youngstock and dry cows

When a new barn for dairy cows has been built, often the old barn is converted into a barn for young stock and dry cows. It goes without saying that it is very important to look at the dimensions of the old barn equipment when doing so: it will be too spacious for the young stock and too small for the dry cows, so adjustments have to be made.

To make the most of the possibility it is important to make a good plan. A well thought-out renovation and conversion increases capacity and ease of work. Pay special attention to the calving process and the first phase of the new dairy cow's life. Good hygiene is important! With a relatively small investment you can create the right conditions for cow and calf, and also invest in your own work-comfort



“It starts with the careful rearing of your calves”

Bertjan Westerlaan
Vetvice

In recent years there has been a lot of investment in building for the expansion of dairy cows. This has not always included investment in the young stock barn, even though the calf is the dairy cow of the future. “For the youngest calves we recommend individual pens. Every dairy farmer should have 15% pens available for his dairy cows. These can be placed outside under a roof. The same goes for the first straw pens as group housing. From about 5 months of age, calves can be housed in cubicles. When doing so, invest in a good calf mattress. “For a relatively small additional cost, mattresses offer a big difference in comfort over a simple rubber mat. Regular dusting of the mattresses gives the dairy farmer visibility of the animals, makes the calves calmer and has a positive influence on the later udder health of the adult dairy cow,” says Bertjan.

For the smallest calves, a tumbstone feedfront is the right choice. It is available in the right size for each group. The calves already learn to put their heads through the feedfront and, even when dehorned, they experience the comfort of a large head opening. From about 7 months onwards, but especially with pregnant heifers, a self-Locking feedfront is recommended.



Cuddle box

The Cuddle box creates the optimal conditions during the calving process. For dairy farmer, cow and calf! All tasks concerning calving can be carried out safely, hygienically and with minimal stress for the cow and calf.

The cuddle box consists of a calf- and a cow section. The calf section is surrounded by detachable lightweight plastic panels that are easy to clean. The cow has easy access to the calf and is able to lick the calf dry and eat roughage. The telescopic and rotating side rails provide an easy entrance for the cow. The farmer simply closes the gate by pulling the locking cord.

When placed in line with the side gate of the calving pen the farmer can easily milk the fresh cow; safely and from the clean side.



Arena calf pen

A good start in life is essential in order to grow into a productive and healthy dairy cow. For many years the single calf pen has been seen as the best solutions to provide the calf with a hygienic and protected living environment for the first few weeks. Invest in additional individual calf pens so that they can be disinfected between occupancy and remain empty for a period of time.

The Arena calf pen, with plastic walls and a plastic floor, is easy to clean. Due to the use of standard castor wheels you can easily move the pen outside for cleaning. Both the inside and outside surface are smooth so that dirt does not stick. The one-piece floor has a number of drainage holes and weighs only 7 kg. Easy to remove for cleaning.



Minimum dimensions young stock housing

Age category (months)

	0,5 - 3	3 - 6	6 - 12	12 - 18	18 - 22
Cubicle width (cm)	60	70	80	90	100-110
Cubicle length - outside row (cm)	130	160	180	200	220
Cubicle length - inner row (cm)	130	160	180	190	210
Walking- eating space (cm)	175	200	220	275	350
Feeding width per animal (cm)	35	40-45	45-50	50-55	55-60

*Minimum dimensions of young livestock housing: source Handboek melkveehouderij 2020/2021 (Wageningen Livestock Research - WUR)



Quality

Spinder products are easy to mount and offer decades of reliability. Spinder distinguishes itself by using extra strong constructions. As an example: Our fastening clamps are made of thicker steel, making our clamps the strongest clamps available.

Custom products

Another of Spinder's distinguishing values is the capability of offering tailor-made; custom solutions based on the requirements of the farmer. We have in-house engineers who can translate your requirements into a workable and feasible plan and who can produce a draft for the workshop to work from. Non-regular sizes and shapes are no problem and can be supplied within a few weeks.



Waved neck bar

Characteristics:

- Universally applicable
- Steering effect on the cow
- Stability freestall dividers
- Dimensions adjustable
- One wave for two cubicles

Available for cubicle width:

- 110 cm
- 112,5 cm
- 115 cm
- 120 cm
- 122 cm
- 125 cm
- 131 cm

Dual waterbed

Characteristics:

- Two water compartments
- Extra comfort knee compartment
- Universally applicable
- Stainless Steel fitting
- Delivery on a roll

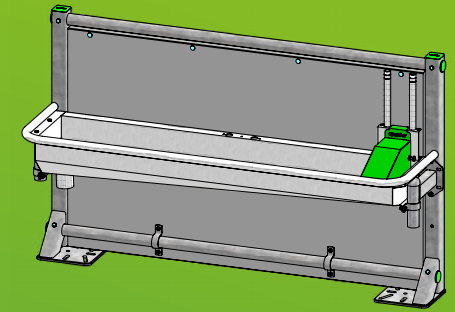
Available for cubicle width:

young stock:

- 86,3 cm
- 96.5 cm
- 107 cm

Livestock:

- 110 cm
- 112.5 cm
- 115 cm
- 120 cm
- 125 cm
- 130 cm



Pingo renovationset

Characteristics:

- Pingo and plastic back panel in one set
- Plastic back splash panel to the floor
- Replaces concrete end wall
- Install on slatted or on concrete floor

Models:

- **Pingo 100:** drinkingsurface 82x38 cm, capacity 50 liters
- **Pingo 200:** drinkingsurface 182x38cm, capacity 100 liters
- **Pingo 300:** drinkingsurface 282x38cm, capacity 150 liters



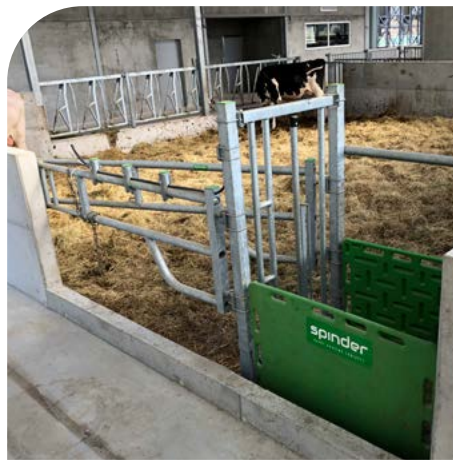
Arena calf pen

Characteristics:

- Plastic calf pen
- Lightweight plastic floor
- Galvanised front gate with movable bars
- Easy to clean
- Movable through castor wheels

Models:

- 91 x 150 cm
- 101 x 160 cm
- Mono
- Stereo (double version)
- Various fittings available



Cuddle box

Characteristics:

- Securing the cow by one person
- Hygienic, dry and draught-free place for the calf
- Intake of roughage immediately after calving

Models:

- Calf section; lightweight plastic panels
- Telescopic and rotating side gates
- Feeding fence with locking functionality



Highline feed front

Characteristics:

- Sufficient room to feed
- Easy operation with multiple options
- Operating mechanism integrated in top rail
- Safety feed front

Models:

- Feeding place width: **65, 70** of **75** cm
- Gows: 105 cm hoog, head opening 42 cm
- Heifers / Jersey: 97 cm hoog, head opening 38 cm
- Elements of 2 - 7 feedopenings

Strong international network of Spinder dealers

Spinder serves the Dutch as well as the international market via dealers throughout all of Europe and Canada. This requires a strong dealer network which brings Spinder and the end user closer together.

Don't hesitate to contact our Spinder dealers for:

- Any questions you may have about the Spinder range
- Professional advice and information
- Sales, service and warranty matters
- Solutions to suit your specific needs

Custom products

Another of Spinder's distinguishing values is the capability of offering tailor-made; custom solutions based on the requirements of the farmer. We have in-house engineers who can translate your requirements into a workable and feasible plan and who can produce a draft for the workshop to work from.



spinderdhc.com

spinder

DAIRY HOUSING CONCEPTS

Address:

Zeppelinlaan 3
9207 JG Drachten

☎ 00 31 (0)512 - 237800

✉ salesteam@spinderdhc.com

🌐 www.spinderdhc.com