

**MATS** 

# AGRICLÉ



At Agriclé, quality is crucial.
Our responsibility is to offer solutions
that meet high standards of compliance
and sustainability. We currently offer over
3,000 quality products from the world's
leading European and international brands.

We work closely with reliable and experienced suppliers to build long-term partnerships that earn our customers' trust. No planned obsolescence here! This responsible and transparent approach enables us to offer quality products, selected for their longevity and performance, at affordable prices.

Our team of experts supports each project as if it were their own: we understand that every reality is different, and we tailor our solutions to meet unique and custom needs.

### **Our vision of mats**

# The best comfort, for as long as possible

Our approach is based on a simple principle: provide the best comfort, for as long as possible.

We understand that installing cow mats on a farm, whether for stalls or alleys, represents a major investment.

With the multitude of options available, varying in prices and quality, it can be confusing. But this investment isn't just about the equipment: it has a direct impact on the welfare and productivity of your herd.

Cows that feel confident enough to stand up, lie down and move around freely contribute to better feed intake, optimal rumination time and improved overall health, which promotes longevity, fertility and helps prevent injuries. Ultimately, this translates into higher milk production.

That's why we select durable and reliable products designed to withstand the test of time. We know you have better things to do than replace your mats - our priority is to provide you with lasting peace of mind, so you can focus on what really matters: your herd and farm's productivity.



Discover Huber Technik manufacture









- 4 generations of family owned business.
- World-renowned manufacturer specializing in rubber for 100 years.
- Their agricultural mats are installed for over 40 years, and since 2015 in Québec with Agriclé.
- All products are made at the head office in Germany from the best raw materials.
- All mats are DLG tested, an independant german company, which certifies product quality.
- The plant itself has been certified for the excellence of its raw materials.

- Family owned business with 4 production plants in Poland.
- Another world-renowned player in rubber production, recognized for the reliability and consistency of its products in 12 sectors, including automotive, maintenance and agriculture.
- With 80,000 tons of rubber produced per year, they are one of the leaders in rubber manufacturers in Central Europe.
- Poland's Public Health Department has certified the quality of the rubber used by their factories.

# **GLOSSARY**

The cow mats market has evolved considerably in recent years. With the variety of models and a terminology that is often complicated, it's easy to get lost. Thanks to this glossary, no need to guess: choose what's right for your herd.

#### **DLG** and its main standards

#### **Definition**

DLG is an independent German company specializing in the evaluation of agricultural products. It sets standards that reflect the latest scientific knowledge on welfare and quality, drawing on an international network of experts from academia and agriculture. The products or manufacturers tested must be continuously audited to maintain their seal of approval.





#### DIN 3763 Certification

This certification defines product quality standards (resistance to acids, abrasion, etc.) as well as criteria that a mat intended for dairy cows should meet: elasticity, deformation, penetration depth, anti-slip properties, etc.

When a product receives the DIN 3763 Certification, it means that all criteria have been met. More specifically, for the deformation criterion, a class from 1 to 4 is awarded for lying mats, 4 being the best score.



#### Penetration depth (in mm)

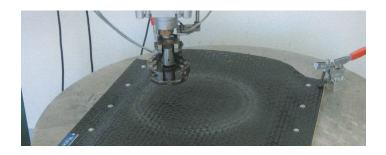
This index measures the ability of a mat to compress under the simulated weight of a cow's foot (250 kg), and to return to its original shape once the pressure is released. It indicates, in millimeters, the depth of penetration in a new mat under this pressure.

The higher the index, the softer and more comfortable the mat. A low index means the mat is firmer and offers less comfort. But beware: softness and penetration do not necessary mean durability or performance!



#### **Deformability index (in mm)**

The result is presented with 2 data points, i.e. the penetration depth **BEFORE** and **AFTER** a certain number of compressions: 100,000 compressions at 10,000N for lying areas and 250,000 compressions for walking areas. The durability of a product is assessed by the very slight variation between the two measurements.





#### **DIN 3762 (PAHs) Certification**

Polyclinic aromatic hydrocarbons (PAHs) are the result of the incomplete combustion process of organic matter and are found in the majority of low-quality rubber products, whether vulcanized or not. These molecules remaining in the rubber can be carcinogenic and toxic and can be transferred to animal milk or blood through skin contact.

Two results are possible following the test: **Passed or Failed.** 

#### Myth or reality?

Thickness = comfort? Short answer: No.

In fact, many people think that the thickness of a mat is the main criterion to guarantee comfort. However, it's the quality of the raw materials and their combination that determine the long-term comfort of an installation. A premium-quality rubber retains its natural elasticity and is more resistant to trampling, even with reduced thickness. Conversely, thicker mats made from lowerquality materials, such as recycled rubber, quickly loses their elasticity, leading to progressive deformation.

#### Rubber

#### **Definition**

Rubber is a raw material that can be used for many purposes. Elastic and waterproof, it contains several types of additives that vary its properties. Products made from less expensive formulas do not contain stabilizing agents, and therefore become more easily brittle in contact with light and air.

#### From tires vs Made of tires

Mats made from **new tire rubber** retain their original components and durability properties.

A mat made of **tire rubber** refers to a mat made from **recycled material**.

#### **Vulcanization**

Vulcanization is the process of heating and molding to transform rubber into a product. When a product is vulcanized for a second time (recycled), the molecular composition loses its original components, altering its quality and resistance.

#### Recycled

After its first life cycle, the rubber product is mechanically ground and then re-vulcanized by the addition of binders, which can harden and break down over time. These binders may also contain PAHs.

#### **Mattress**

#### **Definition**

The transition from mat to mattress occurs when foam is used to add comfort and density to a rubber covering (commonly known as cover sheet).

Four elements largely determine the quality of a mattress: **rubber** (cover sheet), foam material, density and binders.

Depending on the combination of these components, the results will vary: more or less comfortable, durable or costly.

#### Foam material

The material used to manufacture the foam will have a major impact on the deformation and elasticity of the mattress.

**Latex:** Used for its elasticity and ability to return to its original shape. In fact, compression tests show that latex retains its shape 4 times more than polyurethane<sup>1</sup>. Naturally, like rubber, latex is harvested from the sap of the rubber tree and has strong antibacterial properties.

**Polyurethane:** In a foam mattress, it's a malleable synthetic material used mainly to add immediate comfort and remove pressure points. It's also used for its quality/price ratio.

#### **Density**

Equivalent to the weight in kilograms of each cubic metre of foam. The higher the density, the more durable the foam, while still being slightly firmer.

#### **Binders**

They bind the molecules of different raw materials together. If they are of good quality, they greatly reduce the risk of deformability and crumbling over time.

<sup>&</sup>lt;sup>1</sup>4 mm deformation for polyurethane after 50 000 compressions vs 1 mm for latex.

# How to choose the best suited mat to your needs?

With our expertise and personalized approach, we want to support you in your custom made project according to the criteria you really need.







#### Use

se Comfort

#### **Durability**

Lactating cows in tie stall



Here, comfort is a balancing act: a mat that is soft enough to provide well-being when the cow is lying down, but firm enough to guarantee optimal stability when she's standing, eating or milking, for example.



Since the cow is always in its stall, **the mat must have** a **superior firmness and strength** to support the weight and constant trampling of the animal.

A poorly durable mat in this area will tend to create pockets of deformation over time, which can lead to an accumulation of fluid and bacteria and even infect the teats.

Lactating cows in free stall



Lying area is specially provided to encourage cows to lie down.

The addition of a foam mattress adds comfort and

allows the cow's weight to be evenly distributed,

reducing the pressure on sensitive points.



Cows spend less time in the stalls, which makes it possible to opt for a **slightly softer and deformable mat** that focuses on comfort in the lying position. That said, a mat that is too soft could make it more difficult to get up and lie down.

Replacement animals in free stall



Replacement animals typically require a slightly lower level of comfort than lactating cows, as their physiology and needs are different. However, comfort remains crucial to support their development, joint health, and overall well-being.



Mats offering a good compromise between durability, grip and flexibility are suitable to avoid problems such as lameness, while minimizing the costs associated with mats intended for high-producing cows.

Walking areas (alley, alley scrapers, waiting room)



Here, we are looking for a surface that allows the hoof to penetrate slightly, a bit like the soil of a pasture. The texture of the surface is also important, as it influences the grip of the hoof. With these criteria, cows move with confidence, which reduces the risk of slipping.

Pay special attention if your cows are transitioning from tie stalls to free stalls! The legs are not used walking on concrete. Hoofs wear down quickly and can cause significant lameness problems.



The walking areas are the most busiest places in a farm. It is therefore here that mats must be as durable as possible.

Choosing a quality mat means ensuring that it stays in place, withstands repeated pressure and saves you to replace it quickly. DLG confirms this notion by adapting the amount of compressions and force applied during deformation tests for mats in alleys or areas with greater traffic. We are then talking about 250,000 compressions (instead of 100.000 for stall mat tests).

### **Profitability assessment**

Buying durable mats for the comfort of your cows must be seen as an investment: their cost-effectiveness is an important criterion to take into account!

At Agriclé, every product is selected to meet our commitment: to offer the best comfort, for as long as possible and at the right price. We do not give in to novelty; a product is added to our range only if it represents a profitable long-term investment for the customer.

#### Before making your final choice, just compare:

#### **Warranties**

Often seen as a powerful sales tool, remember that warranties only cover the product. They do not include removal or installation costs, and are degressive according to the life of the mat. Choose a reliable manufacturer to avoid broken warranties, lack of after-sales service or supply issues.

### Installation under similar conditions

New products frequently arrive on the market, but ask yourself: how long has this mat been installed in our Quebec conditions? What kind of after-sales service have your neighbors whom installed this product received?

## Maintenance, cleaning and buying bedding

Consider cleaning time as well as the impact of the mat on reducing litter needs. These factors directly influence the costs associated with your choice of mat.

## Real performance versus mat durability

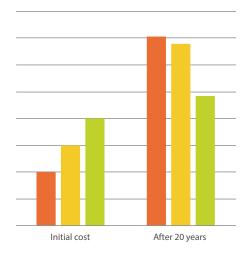
A mat that has been in place for a long time is not necessarily efficient! A worn or sagging mat loses comfort, which can directly affect cow welfare and production, not to mention pockets of deformation that can accumulate dirt and bacteria, increasing the risk of teats infection and compromising animal health.

#### What is the cost of a mat over 20 years?\*

Based on 3 hypothetical scenarios, it's interesting to note that several factors influence the actual cost of a mat.

CHOSEN MATS	SCENARIO 1	SCENARIO 2	SCENARIO 3
Cost (\$) / stall	\$200	\$300	\$400
Performance valued at	6.7 years	10 years	20 years
Number of installation / unsinstallation	2 times	1 time	None
Cost after 20 years Cost (\$) / stall	\$705	\$678	\$483

#### **REAL COST PER STALL**



<sup>\*</sup>In the spirit of comparing 3 different potential investment projects, we created 3 realistic scenarios based on hypothetical disbursements over a 20-year timescale.

The following criteria were considered in our analysis: the cost of purchasing one mat per stall, an annual interest charge of 3%, an installation fee of \$45 per stall, and a removal fee of \$25 per stall.

# OVERVIEW OF FLOOR COVERINGS



#### Lying areas

	P.10	P.10	P.12	P.12	P.12	P.12
	8GS	6GS	N33	N25	N20	N15
Brand	Huber Technik					
nstallation						
Comfort						
rorated basis varranty	15 years (free stall) 5 years (tie stall)	10 years (free stall) 5 years (tie stall)				

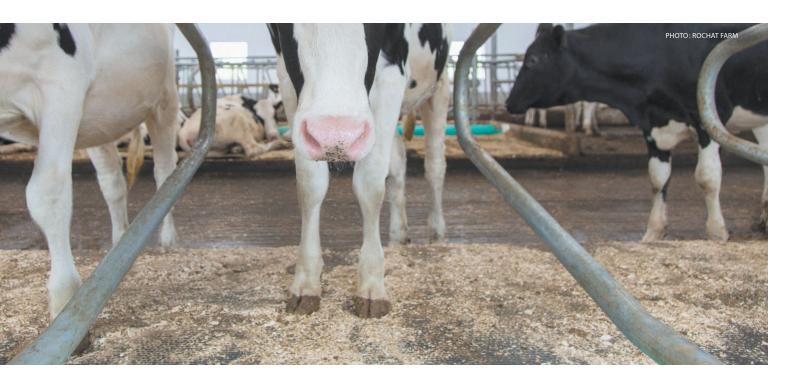
Legend





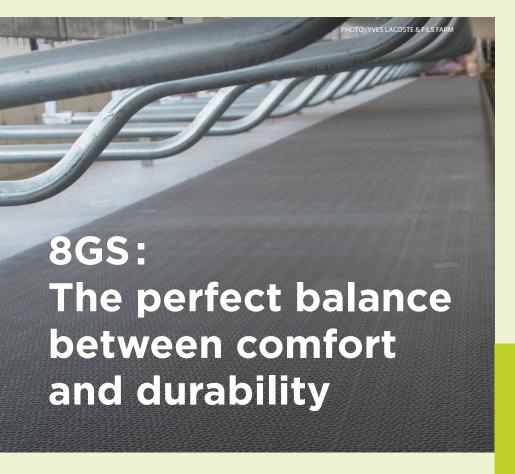






### Alley scrapers and walking areas

P.16	P.16	P.16	P.14	P.15	P.15
		======			
SUPERIOR33	1.4	1.2	2.7	N26	GH-S
Geyer & Hosaja	Geyer & Hosaja	Geyer & Hosaja	Geyer & Hosaja	Huber Technik	Geyer & Hosaja
10 years (free stall) 5 years (tie stall)	10 years (free stall) 5 years (tie stall)	10 years (free stall) 5 years (tie stall)	5 years	10 years	5 years





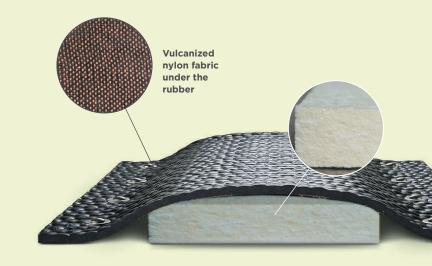
# The rubber covering, combined with our foam, is the undisputed champion to recreate the comfort of the pasture, for a long time.

Made from non-vulcanized new tire rubber, it is reinforced with vulcanized nylon fabric. This ingenious design guarantees a durable mattress, especially to limit deformation over time while providing optimum comfort.

## A unique latex foam for an unmatched comfort and durability

Agriclé has developed a foam that redefines the standards of comfort and durability. This exclusive recipe combines natural and synthetic latex, as well as polyurethane, to slow down the aging process in an exceptional way. The best of both worlds, built to last.

Thanks to this ingenious blend, the foam achieves an optimized density, offering superior comfort while retaining its shape over time. With a maximum deformation rate of just 1.5% and a recess of 0.8 mm, the problems of pocket deformation are eliminated. Deformations can trap dirt and bacteria, increasing the risk of teats infection and compromising animal health: let's avoid them!

















### The N series: Simplicity, comfort and durability

### Made from new tire rubber with vulcanized nylon fabric

These mats combine the robustness of new tire rubber with a vulcanized nylon fabric at the heart of the mat. This unique reinforcement guarantees exceptional strength, limiting the risk of deformation and ensuring long-term durability.

#### No joints: less wear, less dirt

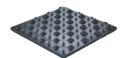
The seamless roll design eliminates areas of dirt buildup, while reducing premature wear and simplifying cleaning.

#### **Easier installation**

Roll installation is quick and easy, with dimensions adaptable to different cubicle lengths. A practical and efficient solution for custom installations.

#### **Effortless maintenance**

The non-porous hammered surface is easy to clean. In addition, clean litter tends to stay in place on the mat.









N33	N	25

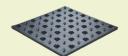
Rubber	Non-vulcanized new tire rubber	Non-vulcanized new tire rubber	
Comfort			
Penetration depth	16.2 mm	11.6 mm	
We choose it for	The ultimate solution in comfort, thanks to its great thickness and reinforced studs.	Combine flexibility and strenght, ideal for a versatile use.	
Recommended application	Cow stalls	Cow stalls	
Total thickness	33 mm (17.2 kg/m²)	25 mm (16.1 kg/m²)	
	Mat 13 mm	Mat 13 mm	
	Studs 20 mm	Studs 12 mm	
Dimensions	<b>Lenght</b> 115'(35 m)	<b>Lenght</b> 164'(50 m)	
	<b>Width</b> 75" (190.5 cm)	<b>Width</b> 71" (180 cm)	
	Light slope each side of the mat	Light slope each side of the mat	
Conception	Hammered profile on top (non-smooth surface)	Hammered profile on top (non-smooth surface)	
	Soft and reinforced with a vulcanized nylon fabric inside the mat	Soft and reinforced with a vulcanized nylon fabric inside the mat	
	Conical shaped studs under the mat for more comfort	Conical shaped studs under the mat for more comfort	
Underside	Flexible studs of 12 mm and 20 mm	Flexible studs of 12 mm	
Prorated basis warranty	10 years (free stall) 5 years (tie stall)	10 years (free stall) 5 years (tie stall)	
Installation			



A 2013 DLG survey on 17 farms that have been using N20 flooring for the past year confirms laboratory testing:

«All those interviewed commented on the ease and convenience of installation. Lying stalls were well accepted by the animals on all farms. 100% of respondents rated the flooring as good to very good, with 100% of these indicating they would buy again.»











**N20** 

Non-vulcanized new tire rubber

Non-vulcanized new tire rubber



10.6 mm

4.7 mm

N15

A great choice for controlled budgets, with a standard thickness.

20 mm (12.8 kg/m<sup>2</sup>)

Mat

Cow stalls

10 mm Studs

10 mm

Lenght 164' (50 m)

Width

63", 67" and 71" (160, 170 and 180 cm)

\*The 73" width is available on special order and has a light slope each side of the mat

Hammered profile on top (non-smooth surface)

Soft and reinforced with a vulcanized nylon fabric inside the mat

Conical shaped studs under the mat for more comfort

Flexible studs of 10 mm

10 years (free stall) 5 years (tie stall)

Economical option for heifers and calves.

Cow and heifer stalls

15 mm (12.4 kg/m²)

Mat 10 mm

Studs 5 mm

Lenght 164' (50 m)

Width

From 43" to 118" (110 to 300 cm)

Hammered profile on top (non-smooth surface)

Soft and reinforced with a vulcanized nylon fabric inside the mat

Conical shaped studs under the mat for more comfort

Flexible studs of 5 mm

10 years (tie stalls for heifers and calves)







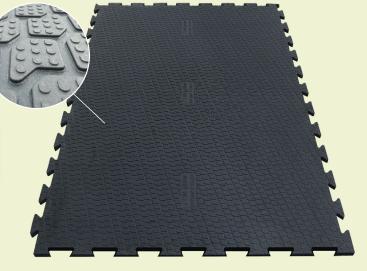
With a penetration depth higher than the competition, the 2.7 offers the best comfort without compromising the durability required for high-traffic areas.

Its three-level textured surface gives the cow confidence by allowing the hoof to rest firmly on the surface, whatever the angle. The small, rounded lanes ensure drainage without accumulation, as there are no corners.

Comfort	8.9*
Thickness	24 mm
Prorated basis warranty	5 years
Installation	
Certification	DIN 3762





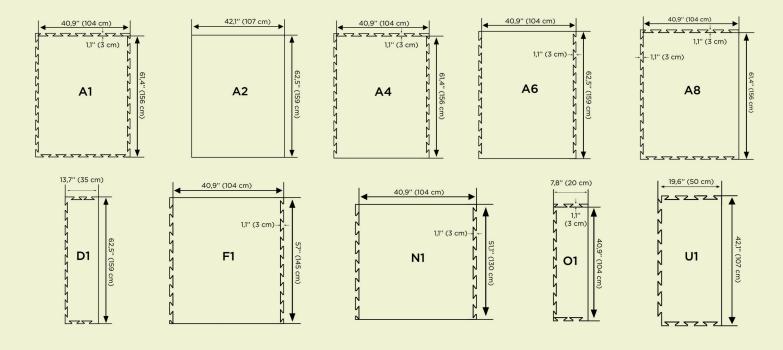


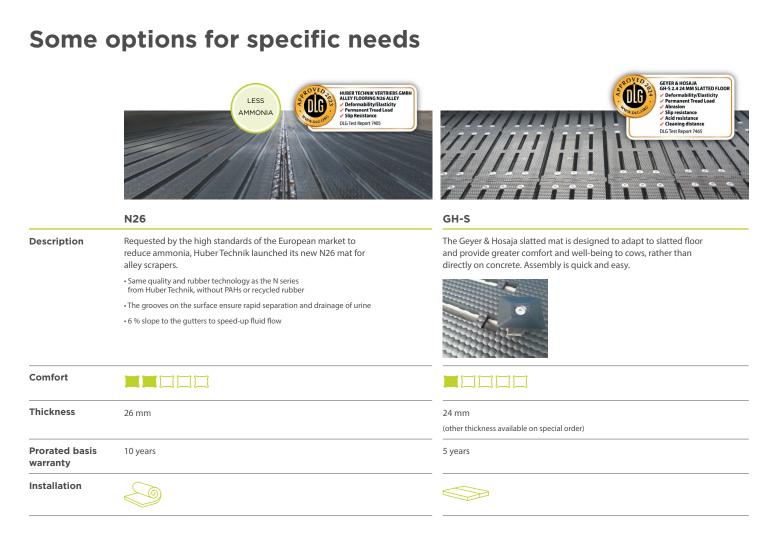


#### Myth or reality?

Be careful, not all puzzle mats are equal! Have you been disappointed with puzzle mats in the past? It's undoubtedly a question of quality, not shape! Our puzzle mats are easy to install and made from rubber that is 4 times more resistant to tearing (1,000 lbs of pressure tested in laboratory) compared to other brands of recycled rubber.

<sup>\*</sup>The penetration depth result is based on in-house tests carried out by Geyer & Hosaja.













#### SUPERIOR33

#### SOI EIGIONS

A unique innovation on the market, this rubber mattress has a 30 mm latex foam thightly sealed inside. The design and easy assembly save time and labour during installation: it's the only installation step required.

#### 1.4

Model 1.4 offers the best value for an individual mat. Its three-dimensional structure, with aligned pipings on the underside, ensures optimum comfort while increasing grip. The 0.5° slope over a third of the mat and the grooves facilitate drainage.

An economical and ideal solution for replacing a few individual mats, the 1.2 has been used worldwide in tie stall barns for many years. Available in two sizes (47" or 51"). Grooves on the back make it easy to cut to size.







Description







Penetration depth



20.9 mm



15.4 mm

**~** 

1.2

9.4 mm

Recommended application

Free and tie stalls for cows

Free and tie stalls

Tie stalls

Total thickness

50 mm
Foam

32 mm

28 mm

Dimensions of the mat

47" x 78" (120 x 200 cm)

Custom dimensions available on special order up to 110-130 cm x 170-200 cm

47" x 71" (120 cm x 180 cm)

47" x 71" (120 cm x 180 cm) and 51" x 71" (130 cm x 180 cm)

Prorated basis warranty

10 years (free stall) 5 years (tie stall) 10 years (free stall) 5 years (tie stall) 10 years (free stall) 5 years (tie stall)

Installation



The foam is integrated for greater ease and speed of installation!



Quick installation method with only three front fasteners and T-joints.





Quick installation method with only three front fasteners and T-joints.



Joints

DB-T-DB-1.5

DB-T-DB

DB-T-DB

### **Human comfort and milking parlour**







	GXY-3.1FI	GXY-3.11	GXY-3.1		
Description	Economical utility mat for a variety of needs and applications.  Anti-slip textured finish on top and grooved underside for easy drainage.				
Thickness	17 mm	17 mm	17 mm		
			(also available in 12 mm thick)		
Dimensions of the mat	1.2 m wide x 1.8 m long x 17 mm thick	1.2 m wide x 1.8 m long x 17 mm thick	1.2 m wide x 1.8 m long x 17 mm thick		
or the mat	(48" x 72" x 5/8")	(48" x 72" x 5/8")	(48" x 72" x 5/8")		
Prorated basis	3 years	3 years	3 years		
warranty					
Installation					



### **Related products**

## Brisket board for stalls AGRI-3035

Brisket board made of 1/4'' thick super tough polyethylene and 4' long (1.22 m). The smooth, rounded surface protects dew claws and permits natural leg extension.

- Cheaper and more hygienic than concrete, plastic does not cause splinters like wood and is ultra resistant to animal blows.
- The brisket boards fit perfectly into each other, thanks to its special joint design-extruded tongue, providing solid support and allowing ends to butt together to an overlap.



**Dimensions** 

4' long x 8.74" wide x 5.63" high (1.22 m x 22.2 cm x 14.3 cm)





It's the perfect timing to think about integrating your drinking waterers. Our vision of offering the best, for as long as possible, was born with the first product in our catalog: Suevia waterers. Unbeatable in quality, it's this DNA that has been anchored in our company since the beginning, which today drive us to expand our offering while remaining faithful to our sustainability criteria and values.

Find our more





AN AVENORD DIVISION



450 994-3130

ventes@avenord.com

agricle.com