Spend your time wisely 02

By ensuring feed accessibility for your cows through automated feed pushing, you have more time to focus on what matters most to you.

Healthy milk production 05

Increasing the feed pushing frequency has multiple benefits for you and your cows.

It works in every barn 11

The Lely Juno pushes feed in all types of barns and has the versatility to move from one barn to another.

Lely Juno

Automatic feed pushing

Increasing feed intake has never been easier.

www.lely.com

Maxime
Châteaubriant, France

"Two years ago, we used a tractor with a blade to push the feed every morning, afternoon and evening. With the arrival of the Juno automatic feed pusher, we doubled the feed pushing frequency and have more time to take care of the cows. Additionally, the cows eat better because the Juno also pushes feed during the night. I think the sound of the Juno lures cows to come to the feed fence more often. We have less rest feed and even the visits to the milking robot have increased."

Your feeding strategy has a significant impact on your results

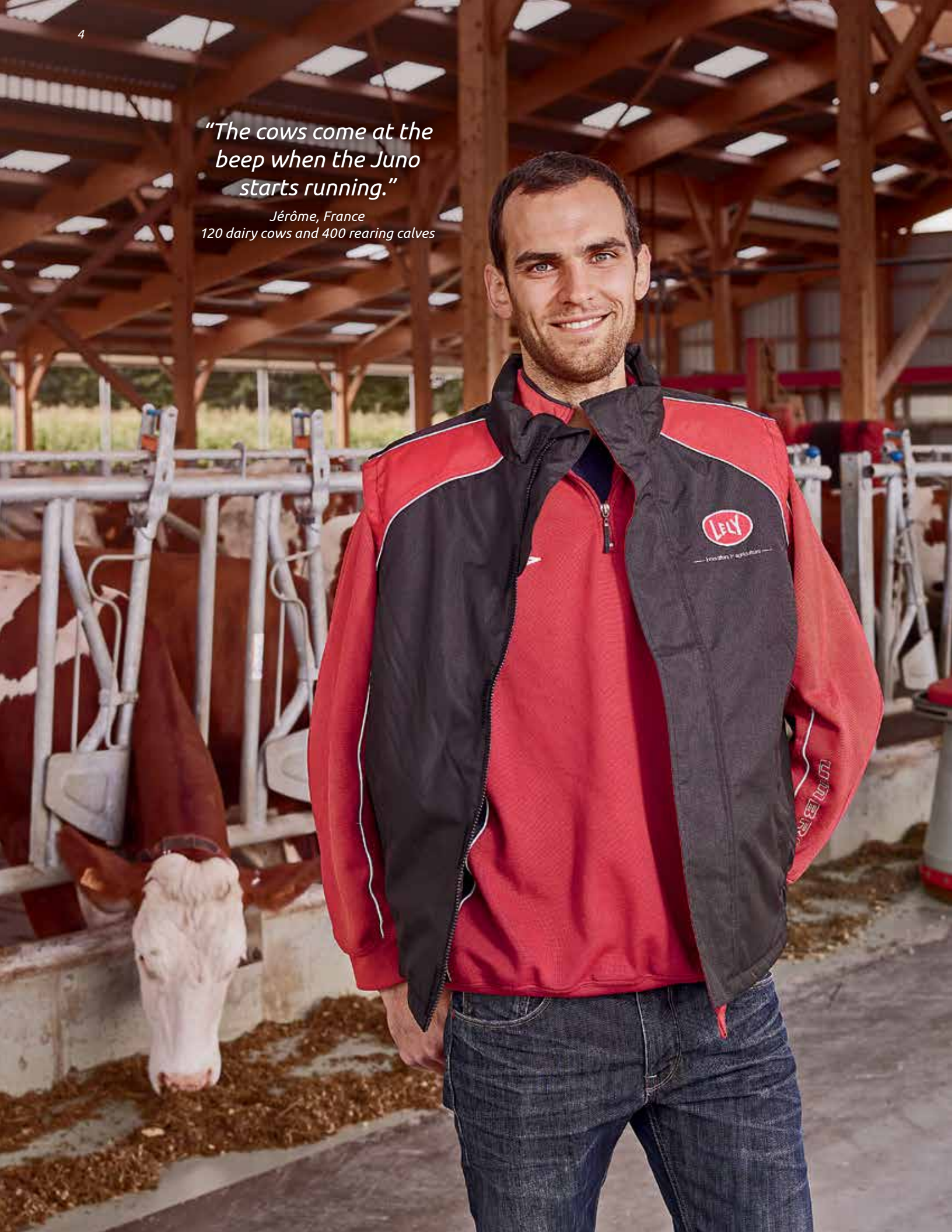
Increasing the feed pushing frequency really pays off. It stimulates frequent consumption of feed throughout the day and night, resulting in a higher feed intake for the herd. This has a positive effect on animal health, fertility, production and also on your finances.

Poor feed accessibility that is caused by infrequent and inconsistent feed pushing can cause fluctuations in rumen pH and lead to sub-clinical rumen acidosis, damaging the rumen wall. The feed passes through the rumen too quickly and the bacteria that ferment the crude fiber are ineffective at a low pH. This causes a poor utilization of the feed. Cows should eat 10 to 14 meals every 24 hours to maintain a stable pH level and thus a more efficient use of the feed.

Additionally, increasing the feed pushing frequency encourages cows to come to the feed fence more often and fill up the rumen again. By automating this recurring work, you can increase the feed pushing frequency while reducing your labor requirements and fuel costs.

The Lely Juno automatic feed pusher makes your days more flexible, your feeding process more efficient and your business more successful.

Smart feeding works



“The cows come at the beep when the Juno starts running.”

Jérôme, France
120 dairy cows and 400 rearing calves

Increasing the feed pushing frequency has multiple benefits for you and your cows

The benefits of automatic feed pushing

24/7 availability of ration

By pushing feed regularly, every cow is able to eat the ration she needs for optimal rumen health. Feeding and feed pushing stimulates cows to walk and encourages them to the feed fence and fill up the rumen again.

Optimal feed intake

Feeding is the best motivator for cows to come to the feed fence. When you feed with a feed wagon, feeding two to three times a day achieves the optimal balance between the amount of work and feed intake. This means that you have to push the feed six to eight times per day.

Labor-saving

Quite often, labor is a limiting factor in keeping the feed within reach of the cows. Based on three, 10-minute feed pushing rounds each day, an automatic feed pusher can save you up to 180 hours a year. This is more than a month's wages of a full-time employee per year. If you switch to six feed pushes per day, this amount doubles!

More flexibility

By automating feed pushing, you give yourself the flexibility needed for other important management activities on the farm. Herd health, forage harvesting and feeding calves can all be done knowing that the feed pushing is still being handled.

Additional benefits of automatic

More frequent use of the milking robot

When combined with a milking robot, the Lely Juno has proven that it increases the visiting rate of the robot. Increased visits result in higher milk production, especially for lower-ranking cows. In addition, the milking robot is used more efficiently and less cows need to be collected for milking.

Sorting and rest feed

Pushing the feed more frequently stimulates the feed intake and reduces the amount of rest feed. The cows have less opportunity for sorting, making the eaten ration almost equal to the fed ration. Aim for three percent to five percent feed refusals. If feed refusals are above or below that amount, rations should be evaluated and may need adjustment.

feed pushing

Improved animal health

50 percent to 70 percent of the dairy cows' energy requirements come from volatile fatty acids, which are residuals from the fermentation of carbohydrates. The rumen microbes that ferment the crude fiber are ineffective at a low pH. Many small meals result in a higher and more stable pH, which enables cows to make better use of the feed they eat. Frequent feed pushing encourages the cows to eat more frequently and helps them get the most out of the feed.

Less stress

Cows eat, lie down and walk in groups. Unnecessary competition at the feed fence occurs when feed is limited or difficult to access. The cows lower in rank will wait until the main group is resting. They eat less often and can have lower dry matter intake, increasing the risk of metabolic issues. If there is always sufficient and palatable feed available, you limit the chances of metabolic issues occurring.

Peace of mind

Peace of mind is important throughout day-to-day activities. Being able to rely on employees, machinery and a steady partner in service and support can be invaluable. It's good to know that behind your Lely Juno is an organization you can trust.

Certified technicians

You'll have full access to Lely's certified technicians through your local Lely Center. They ensure a perfect installation, set the desired routes and provide the right service for a long and trouble-free life span.

Milking and feeding experts in your region

The Lely Center in your area is a dairy automation partner you can rely on. Over the years, Lely has built a comprehensive network of specialists, combining experience in dairy automation with local knowledge. Their main goal is to help you maximize the benefits of your Lely equipment.

Regional knowledge & experience

You can also rely on knowledge, help and support from the Farm Management advisors of your local Lely Center. They ensure that your Juno plays its role in optimizing the productivity and profitability of your farm.

Dairy farming is in our blood

Many of Lely's staff members come from a farming background themselves. They understand how farms work and are trained and tested on their knowledge. The reliability and expertise to assist both new and existing customers is always on hand. Because the local technicians and advisers have a lot of experience with other systems installed in your area, they are up to speed.

Most experienced in dairy automation

Lely is the market leader in dairy automation. In regards to automatic feed pushing, we have gained more than 10 years of experience with the Juno and five years with the Lely Vector automatic feeding system. All this knowledge was used to develop this third-generation Juno.

Low energy consumption

The charging station, which can be mounted on the wall or floor in the feeding alley, serves as the point of departure and arrival for each feeding route. The Juno charges quickly and easily, and the extremely energy-efficient motor requires only 102 kWh per year. This saves a lot of fuel costs when compared to a tractor and has a positive effect on CO_2 emissions in the barn.

How it works

The Lely Juno moves along the feeding alley automatically, following the feed fence. The ground driven, rotating surface on the lower part of the machine pushes the roughage toward the feed fence. A heavy steel block forms the 'body' of the feed pusher, ensuring that the machine has sufficient mass to push the fodder.

Lely Juno

Increasing feed intake has never been easier

Pushing feed yourself is now a thing of the past. Using the Lely Juno, you can increase feed pushing frequency while reducing your labor and energy costs.

Designed for any type of barn

Since the Lely Juno is a stand-alone machine, barn modifications are seldom required. The Lely Juno handles all types of feed fencing with ease, making it suitable for any type of barn - even barns with a small feeding alley.

Safety

The Lely Juno operates in the feeding alley, which is an easily accessible part of the barn. Therefore, safety is of paramount importance, which is why the feed pusher features a collision detector. This ensures that the feed pusher stops as soon as it hits an obstacle.

Working night and day

Drive various routes at every desired distance to the feed fence 24/7

Metal guiding strips
The Lely Juno uses an induction sensor to follow metal guiding strips when driving toward the charging station and, if needed, to other barns.

Ultrasound sensors
The Lely Juno uses ultrasound sensors to follow walls and feed fences at the desired distance, without changing the route.

Cleaning route
The Juno can also clean the feeding alley. For example, one hour before feeding time, a cleaning route starts on the outside of the feed alley and pushes everything towards the feed fence.

Dynamic pushing

Feed is rarely divided evenly over the entire feeding alley. Thanks to smart software, this does not matter. For each route, you can set the minimum distance to the feed fence, the pushing frequency and the feed type per group. Based on this data, the software determines the right resistance level and pushing force. The Juno measures the amount of feed at a certain spot and automatically adjusts for the optimal distance to the feed fence. This ensures that the Juno pushes the feed correctly over the entire length of the alley, no matter the situation.

Lely Control Plus

The Lely Juno can be controlled with the ‘Lely Control Plus’ app via a Bluetooth connection. This means you can operate the Lely Juno from one or more smartphones. Creating and adjusting a route can be done easily with pre-set actions. You can even steer your Juno using only your finger on your screen. Within one route per feeding alley you can enter multiple feeding routes and distances from the feed fence.

Lely Control Plus is available in the Google Play marketplace and Apple App Store. It can also control the Discovery manure scraper and Vector feeding system.

Build your own Juno

Many farms have grown over time and house their animal groups in different barns. It is good to know that the Juno works with all kinds of barn layouts and feed fences. However, when the Juno needs to push the feed in multiple barns, it can be customized with the following options:

Flex package

The Flex package includes all options except the barn door control (for opening and closing electric doors). You can also order the options individually or add them after installation.

To have the complete set of options integrated during the manufacturing process, order your Lely Juno with the Flex package. However, if you wish to choose selectively from our wide range of options, these will be integrated by your local Lely Center during the installation of the Lely Juno.

Skirt lifter

Thanks to the skirt lifter, the Juno can pass over small obstacles such as floor railings. It also provides sufficient ground clearance when driving on slopes with an incline up to 15 percent. The ground clearance also keeps the skirt free from mud and manure so that it does not pollute the feed.

Left and right pushing of roughage

Due to the bi-directional feed pushing feature, the Juno capacity is greatly increased and it is able is to follow walls on both the left and right hand side of the alley or feed passage.

Barn door control

In combination with the barn door control, the Juno is able to open and close electric doors automatically when driving from one barn to another.

LED light

An integrated LED light makes the Juno more visible in the dark. This increases yard safety when driving from one barn to another.

Electric bumper protection

The electric bumper protection is a metal strip with an electric pulse that is mounted on the bumper. The pulse does not harm cows or humans but prevents cows from stopping the machine by touching the bumper.

Technical specifications	Juno
Diameter (cm)	110
Height (cm)	110 - 177
Weight (kg)	620
Height (cm) of the push blade	63 - 67
Drive	Electric motor
Speed	12 (m/min)
Batteries	12V/55Ah
Determination of direction of movement	Gyroscope and ultrasound
Maximum slope	15% (8.5°)
Minimum width feed alley	1.25m + width of feed
Driving time without charging	1 hour
Max driving distance	1 km
Allowed working temp	-20°C to +50°C
Dynamic pushing	Standard
Left and right pushing	Optional
Electric bumper protection	Optional
LED light	Optional
Door control	Optional
Skirt lifting	Optional
Skirt tilting	Optional


LELY

"I prefer spending more time taking care of the cows than pushing the feed."

Maxime, France

Smart feeding works with the Lely Juno

Frequent feed pushing, throughout the day and night, stimulates the dry matter intake of the herd. This optimizes rumen health, feed efficiency and productivity. By automating this recurring work, you make your life easier, your production more efficient and your business more successful. Learn more about smart feeding at **www.lely.com/feeding**.

Bright Farming is yours by choice.

Start smart feeding with your local Lely Center

www.lely.com