



Cable Alley Scrapers and Cross Gutter Cleaner

Reliable and durable free-stall
barn cleaning systems



EFFICIENT AND GENTLE CLEANING

GEA's cable alley scraper systems are silent, safe for cows, and operate without disturbing the normal behavior of the herd.

Clean alleys. Productive cows.

Quality milk production begins long before the cows enter the milking parlor.

Animal well-being

Undoubtedly, well-treated, comfortable cows will produce a greater volume of high-quality milk. GEA is committed to providing its clients with installations that offer maximum cow comfort through its diversified line of equipment including: ergonomic and spacious stalls, comfortable mats and manure fiber bedding separators promoting rest time, cow brushes, waterers and drinking troughs, lighting devices providing improved brightness, high-performance ventilation equipment, and manure management systems enabling efficient cleaning of manure alleys.

The importance of clean alleys

Efficient cleaning carried out regularly every day helps to:

- Maintain traction
- Improve hoof health
- Increase overall animal cleanliness
- Reduce emissions of ammonia and improve air quality, both for the animals and the farm operators

A strong and robust scraping system designed for efficient, frequent cleaning of any length of alleys

Several models of cable alley scrapers are available to cover almost any barn configuration. GEA scrapers, drive units and corner wheels are designed to last and to excel even under the most difficult conditions. GEA's cable alley scraper and cross gutter cleaner systems perform well with limited regular maintenance to keep your barn clean and comfortable for you and your cows.

Our diverse product line allows you to manage manure in your own way

Chain and hydraulic alley scraper and cross gutter cleaner systems are offered, as well as a flush cleaning system to clean the alleys and holding area.

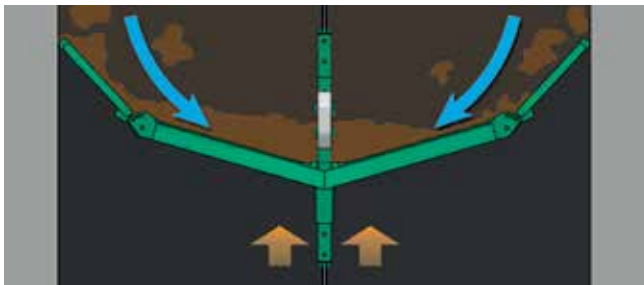
Please don't hesitate to contact the GEA representative closest to your area; they will know how to advise you in organizing the overall layout of your installations and choosing the most suitable cleaning system for you.

Cable alley scrapers

GEA scrapers are robust and high-performing, equipped with adjustable steel or urethane wear blades suitable for all types of flooring. They can also be adapted to operate with or without a guiding groove.

16° scraper

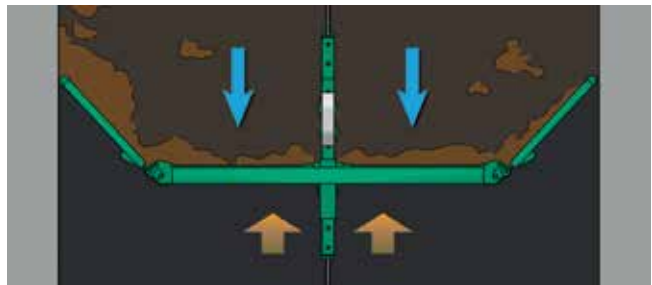
The angle of the 16° scraper makes it possible to direct the manure towards the centre of the scraper where the draw bar pull is applied. This stabilizes the scraper stroke and prevents system components from being subjected to excessive stress.



On the return stroke of the scraper, toggling blades pivot upwards to avoid bringing the manure back to the starting point. The folding ends fold towards the inside of the alley to leave sufficient space alongside the rest area and to avoid disturbing the cows.

Straight scraper

The straight scraper takes up less space than the 16° scraper and represents the best option for installations where space is limited at the very beginning of the stroke. It is designed to operate only in alleys with a guiding groove.

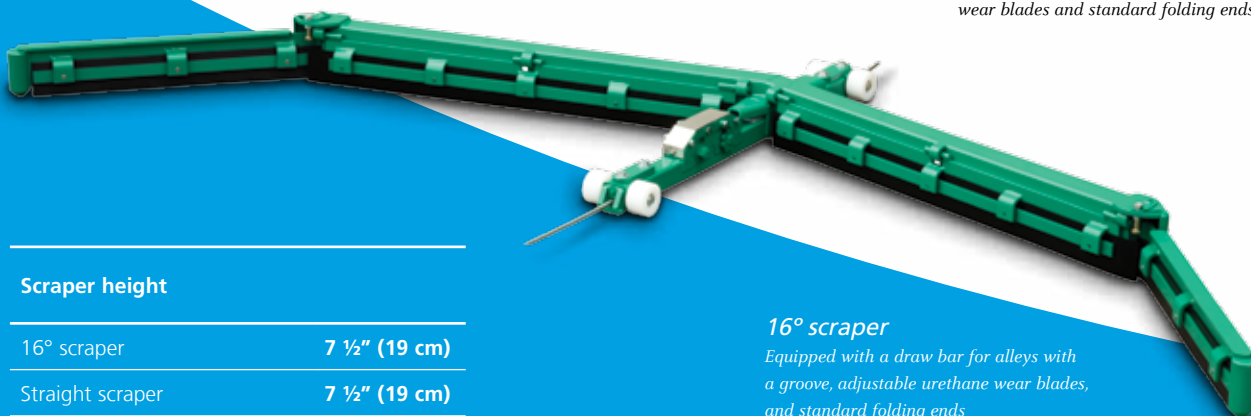


The draw bar for use in alleys with a groove enables the scraper to operate with stability even if the manure load is not distributed equally on each side of the scraper.



Straight scraper

Equipped with a draw bar for alleys with a groove, adjustable urethane wear blades and standard folding ends



16° scraper

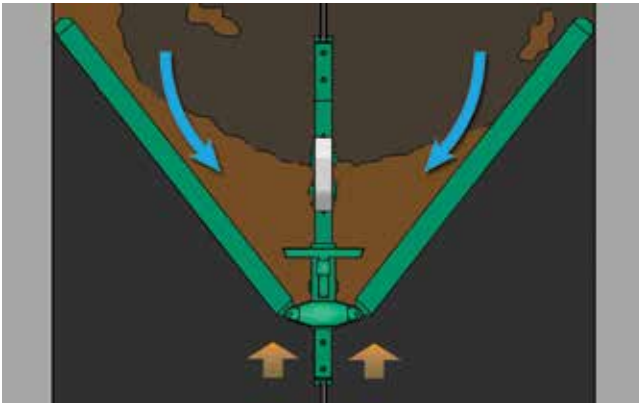
Equipped with a draw bar for alleys with a groove, adjustable urethane wear blades, and standard folding ends

Scraper height

16° scraper	7 ½" (19 cm)
Straight scraper	7 ½" (19 cm)

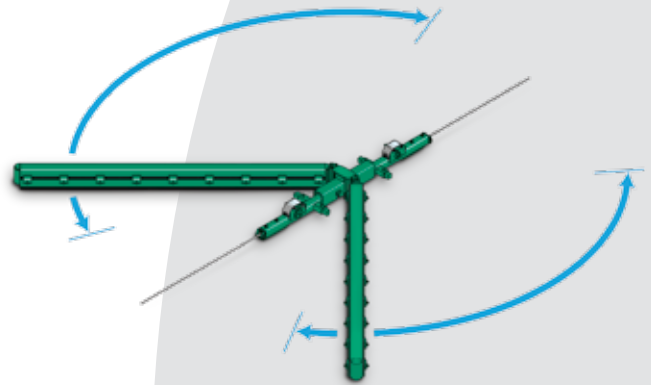
V-Shape scraper

The V-Shape scraper is substantial and built heavy, which gives it the advantage of being able to efficiently scrape alleys where the manure dries quickly. It is perfectly suited for narrow as well as variable-width alleys.



Bidirectional V-Shape scraper

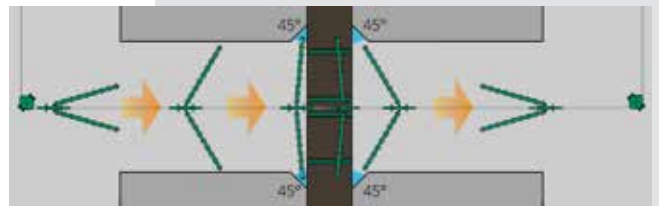
The bidirectional option on the V-Shape scraper makes it possible to use a single scraper per alley when the cross gutter is arranged in the center of the barn. The alley must be grooved and must have corners cut at 45° at the intersection of the alley and the cross gutter to allow full extension of the scraper.



Available heights

V-Shape and
Bidirectional V-Shape scrapers

6" (15.2 cm) 8" (20.3 cm)



During the forward stroke, the scraper opens to clean the first half of the alley. Thanks to corners cut at 45°, the scraper extends fully and carries out its return stroke in the second half of the alley. The scraper proceeds the same way when carrying out its reverse stroke.

V-Shape scraper

Equipped with a draw bar for use in alleys with a groove and adjustable urethane wear blades



Keep your alleys drier for the well-being of the herd

A slight slope towards the center of the manure alley allows excess liquid and material to naturally drain inside of a deeper groove or a channel underneath the manure alley. Material is pushed towards the cross gutter as the scraper is cleaning the alley.

Deep Groove Scraper

The deep groove scraper consists of a draw bar equipped with an integrated toggling steel blade to direct excess liquid and push solids contained in the groove towards the cross gutter. This draw bar is specially designed for grooves with a depth of 4" to 10" (10.2 to 25.4 cm) and is available on the 16°, Straight and V-shape scraper models.

- **A cleaner and healthier herd** — this system eliminates liquid accumulation in the alleys faster and keeps the cow hooves drier.
- **Affordable** — this scraper partially offers the same advantages as the under floor channel scraper, without having to install a channel underneath the cleaning alley.

Under Floor Channel Scraper

The raised design of the draw bar allows liquid manure to drain into a channel installed underneath the manure alley. During the cleaning stroke of the scraper, material contained in the channel is pushed towards the cross gutter by the integrated stainless steel paddle at the same time as the scraper is collecting manure in the alley. This draw bar is available on the 16°, Straight and V-shape scraper models.

- **Adaptable** — the channel can be made of concrete, circular or rectangular, or corrugated PVC pipe. The paddle can be configured according to the shape and dimensions of the channel and be installed in front or at the back of the draw bar.



Tube Scraper System

This system is designed to direct as much manure as possible into a prefabricated concrete form installed underneath the free stall alley. With each cleaning stroke, the paddle directs manure from the previous stroke towards the cross gutter.

- **A cleaner and healthier herd** — this system removes a maximum amount of manure and liquid in order to keep the cow hooves drier.
- **Efficient design** — the V-Shape scraper allows manure to be directed towards the center of the alley. A serrated wheel at the rear of the scraper pushes the material inside the tube, keeping the groove free from any obstruction.
- **Heavy-duty scraper** — available with two arm lengths suitable for alley widths between 96" and 132" (244 and 335 cm), and between 133" and 168" (338 and 427 cm).
- **Quick installation** — thanks to the use of prefabricated concrete forms.
- **Installed with steel cable only.**



Serrated wheel at the rear of the scraper



Accessories and options

16°, Straight and V-Shape scrapers can be equipped with a variety of accessories and options to provide maximum efficiency, no matter what type of installation you have.

Scraper models	Alley widths
16° scraper	between 73" (1.85 m) and 204" (5.18 m)
Straight scraper	between 73" (1.85 m) and 209" (5.31 m)
V-Shape scraper	between 73" (1.85 m) and 174" (4.42 m)

Folding ends

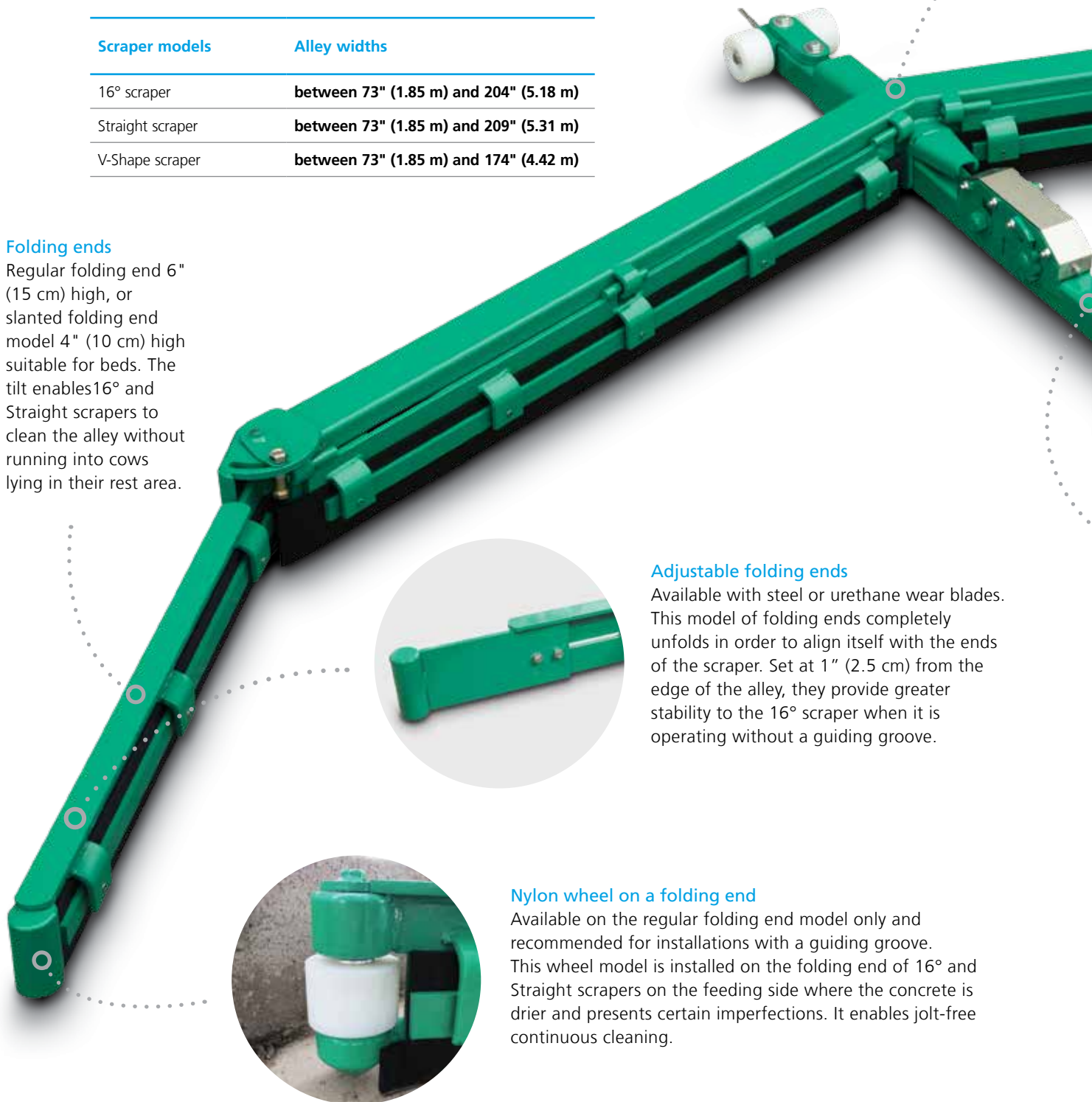
Regular folding end 6" (15 cm) high, or slanted folding end model 4" (10 cm) high suitable for beds. The tilt enables 16° and Straight scrapers to clean the alley without running into cows lying in their rest area.

Adjustable folding ends

Available with steel or urethane wear blades. This model of folding ends completely unfolds in order to align itself with the ends of the scraper. Set at 1" (2.5 cm) from the edge of the alley, they provide greater stability to the 16° scraper when it is operating without a guiding groove.

Nylon wheel on a folding end

Available on the regular folding end model only and recommended for installations with a guiding groove. This wheel model is installed on the folding end of 16° and Straight scrapers on the feeding side where the concrete is drier and presents certain imperfections. It enables jolt-free continuous cleaning.





Hinges

Make it possible to fold the 16° and Straight Scraper arms towards the center of the alley to facilitate farm vehicle traffic over the top of the scraper.



Cables and ropes

Galvanized or stainless steel cable, 3/8" (9.5 mm) or 1/2" (13 mm) in diameter. Strong and durable, it is perfectly suited to very long manure alleys.



HTS-716 rope, light and flexible, 7/16" (11 mm) in diameter. It is suitable for manure alleys less than 300' (91 m) in length. The HTS-716 rope is designed only for grooved alleys, and must be kept in a frost-free and sand-free environment.



REPLACEABLE WEAR BLADES

Replaceable wear blades on the 16°, Straight and V-Shape Scrapers are offered in steel or in urethane. Urethane blades are required for alleys with a rubber mats.

The Combi-rope has a diameter of 0.551 inches (14 mm) and offers all the advantages of both steel cable and nylon rope. It is required only for the portion of the circuit that runs through the Fit R-300 drive unit.

RW ROLLER

The RW roller is made out of a heavy-duty composite material and a chrome-plated steel ring to provide excellent resistance to abrasion. The roller's efficient design limits friction over all the scraper components.



Draw bars

Available either with a double cable tensioner or with front or rear single cable tensioners, when two scrapers are connected by a flat bar to carry out the shuttle stroke cleaning of the alley.



Several draw bar models are available to suit floor mount installations, with a guiding groove, a deep guiding groove or an under floor channel.



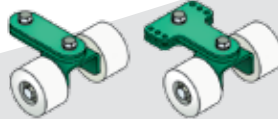
Draw bar accessories

The draw bars on 16°, Straight and V-shape scrapers require two accessories at each end.

Set of heavy-duty RW rollers recommended for collecting manure that contains sand.



Nylon roller kit recommended for cleaning manure alleys with a rubber mat.



Steel half-moon recommended for concrete barn floor with guiding groove.



The SW Series cable drive units work around the clock



MICHEL BLANCHET

BOUSQUET BLANCHET FARM

“No moving parts, no stress and no friction. Wear is reduced to a minimum, and I am not required to keep replacement parts, which represents a good savings...”

A durable design that will make your life easier

The new SW Series cable drive units were designed to make your life easier. They give more freedom with regard to installation, provide efficient operation, and require minimal maintenance. This unique design allows lateral movement of the drive as the cable is being wrapped around the rotating drum. The coiling is done without stress or excessive friction on the cable.

- **Lateral movement of the drive unit** — is done by means of an extremely durable rolling mechanism on a track. This movement allows the cable to remain well aligned when it is being coiled, and eliminates the stress and excessive pressure caused by the cable guide found on other drive units on the market.
- **More freedom regarding the configuration** — since the corner wheels can be installed as close as allowable to the drive unit. The SW drive unit can also be mounted on a lifting base with vertical wheels, similar to the Fit R-300, for situations where existing conditions make a standard installation challenging; elevation differences, installation next to an existing curb or other obstacles.
- **Protective hood made of light plastic that is resistant and durable** — allows for easy handling when necessary.
- **Open and raised drive unit base** — facilitates cleaning of manure accumulations on the ground.
- **Double motor option DD** — on SW-300 and SW-450 models. Standard on the SW-650 model.



SW-300



SW-450



SW-650

Cable drive unit models for free stall alley scrapers

Timing chain

- 1 Easy management and adjustment of the #40 timing chain from the outside of the main body of the cable drive unit.

Cable tie downs

- 2 Two cable tie downs on opposite sides of the drum can be accessed from outside of the rotating drum for easier and safer fastening of the cable.

Strong, durable roller bearings

- 3 The drum drive shaft of the SW Series cable drive units is mounted on high quality roller bearings for smooth rotation of the drum and years of worry-free operation.

Rolling mechanism

- 4 The lateral movement of the SW cable drive unit is done by means of a track rolling mechanism designed with extremely durable components. The thread bar and lateral movement guide are installed at 12" (30.5 cm) above the floor for easier access.





EASE OF INSTALLATION

The lateral movement of the drive unit allows the cable to remain aligned without applying excessive stress. This makes it possible to install corners much closer to the drive unit when necessary.

Corners for alley scraper systems

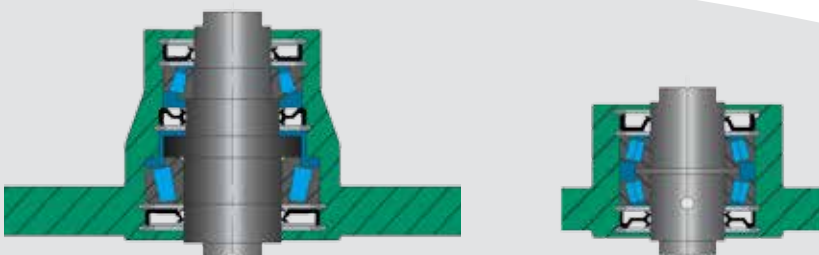
Durability and strength for worry-free operation

GEA corners are made of high-quality components; a sturdy frame and cover design, with wheel made of ductile cast iron and equipped with two greasable tapered roller bearings exclusive to GEA. All corner models are equipped with a built-in wheel cleaner to dislodge material that has accumulated in the groove of the corner wheel.

- 1 90° corner with wheel that is 21" (53.3 cm) in diameter
- 2 90° corner with wheel that is 16" (40.6 cm) in diameter, equipped with an optional cable cleaner
- 3 16" (40.6 cm) and 21" (53.3 cm) corners can easily be converted into 180° corners

Corner wheel shaft system with two greasable tapered roller bearings provides greater efficiency and increased durability

Lubricating the roller bearings helps to keep contaminants outside of the mechanism. In this way, the service life of the roller bearings is greatly improved, even if operating in an environment continually immersed in manure. The pressure exerted by the lubricant during injection expels the contaminated grease through the upper sealing joint.



The 21" and 16" (53.3 and 40.6 cm) corner wheels are equipped with a tandem roller assembly in order to increase rigidity and load capacity. For installations where the load to be transported is significant, the 21" (53.3 cm) corner wheel is required. The roller bearing at its base is stronger and more substantial, allowing for more efficient operation without excessive stress. The 21" (53.3 cm) corner wheel is also offered as an option for any installation.

Cross gutter cleaner

Simple and efficient cross gutter cleaning system requiring minimal maintenance.

Working principle

The system operates by directing the manure coming from the free stall alleys, into the cross gutter towards the reception pit by means of a gutter scraper. The drive unit pulls the scraper from one end to the other by means of a steel cable or a rope.

- Designed for cleaning cross gutters that are 36" (91.4 cm) deep with a maximum length of 540' (165 m).
- Double motor drive units available (SWR-300 DD and SWS-300 DD).

SWR-300 drive units installed in a recess



Gutter scraper

The heavy-duty GEA gutter scraper is equipped with replaceable wear plates to extend its service life and a sliding cable tensioner to facilitate in opening the door when reversing.

SWS-300 drive unit installed with a single drive unit wheel and mounted on two stands

This configuration offers the advantage of enabling the scraper to start its cleaning stroke closer to the end of the gutter since the drive unit is installed above the gutter wheel.



SWS-300 drive unit installed with two drive unit wheels and mounted on two stands

Suitable for layouts where installation in a recess is not an option.



Automated system to provide you with worry-free operations

Maximum safety for your herd

IVRpro Control Panel

The IVRpro is equipped with high-quality internal components and a state-of-the-art detection sensor offering greater resistance and more accuracy in load fluctuation readings, less unnecessary system downtime, less on-farm services... less worries.

Max@ccess Option

- **Simplified navigation** — larger high-resolution interface screen to facilitate navigation and adjustment of your parameter settings.
- **Multilingual interface** — many languages available for customized use.
- **Comprehensive and intuitive** — programming and operating parameters giving numerous options and a help menu if needed.
- **Remote starting** — a start button can be installed remotely from the control panel to facilitate restarting the system.





We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA is a global technology company with multi-billion euro sales operations in more than 50 countries. Founded in 1881 the company is one of the largest providers of innovative equipment and process technology. GEA is listed in the STOXX® Europe 600 Index. In addition, the company is included in selected MSCI Global Sustainability Indexes.

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