



**strautmann**



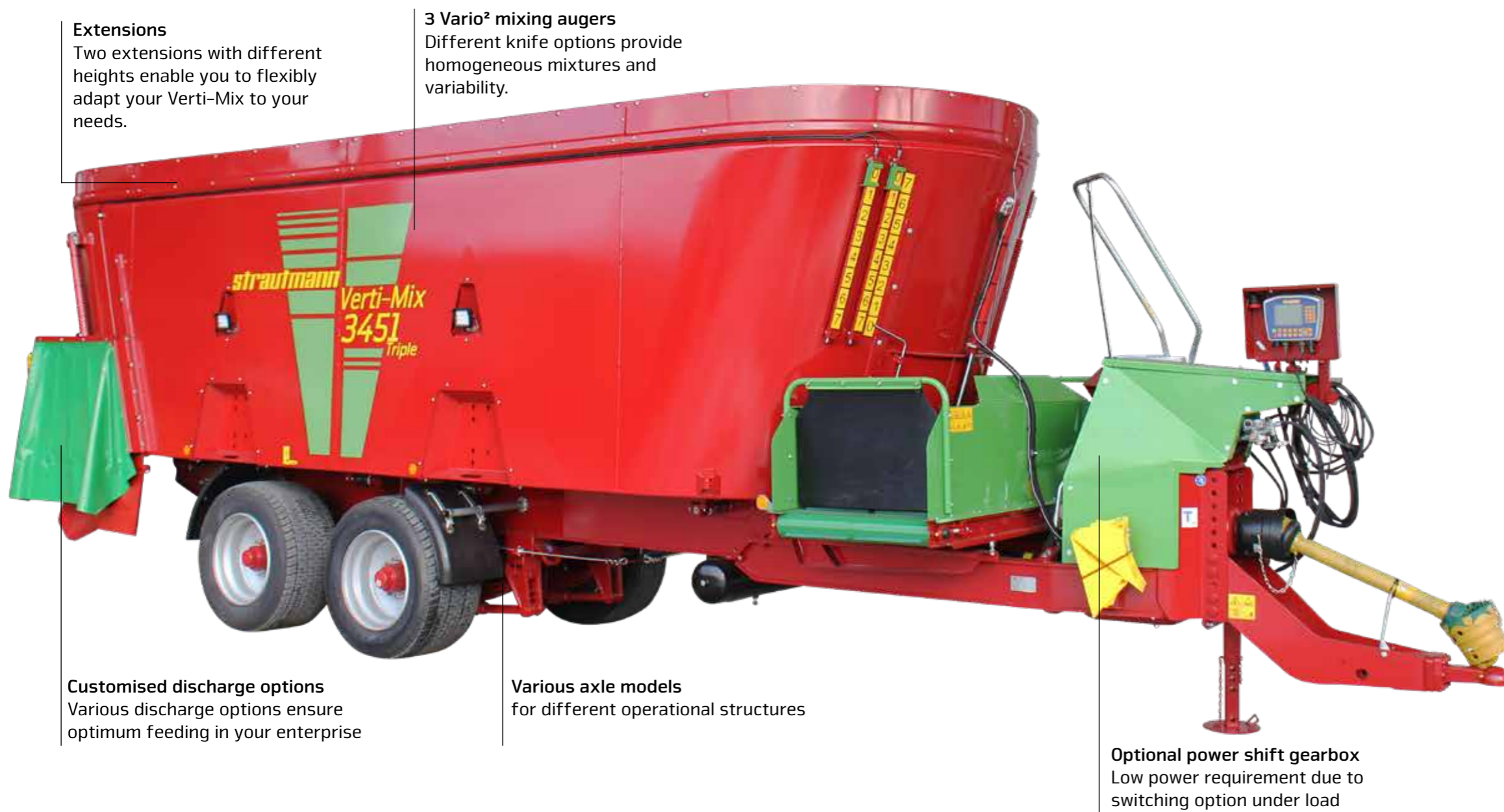
Fodder mixing wagon

## Verti-Mix Triple



# Verti-Mix Triple

– Better at mixing with 3 Vario<sup>2</sup> mixing augers



**Extensions**

Two extensions with different heights enable you to flexibly adapt your Verti-Mix to your needs.

**3 Vario<sup>2</sup> mixing augers**

Different knife options provide homogeneous mixtures and variability.

**Customised discharge options**

Various discharge options ensure optimum feeding in your enterprise

**Various axle models**

for different operational structures

**Optional power shift gearbox**

Low power requirement due to switching option under load

## Verti-Mix Triple

What you are going to appreciate ...

**1. Mixing quality**

...because only cows enjoying optimum nutrition are healthy and deliver a good milk yield!

**2. Easy towing**

...because your diesel consumption is reduced!

**3. Efficiency/Speed**

... because you achieve a homogeneous mixture!

**4. Flexibility**

... because machines should adapt to your enterprise!

**5. Reliability**

..... because your cows must be fed on 365 days a year!

Be among those who benefit from more than 25 years of experience in fodder mixing technology and become one of our approx. 20,000 reference enterprises!

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# Vario<sup>2</sup> mixing auger in stepped flight design

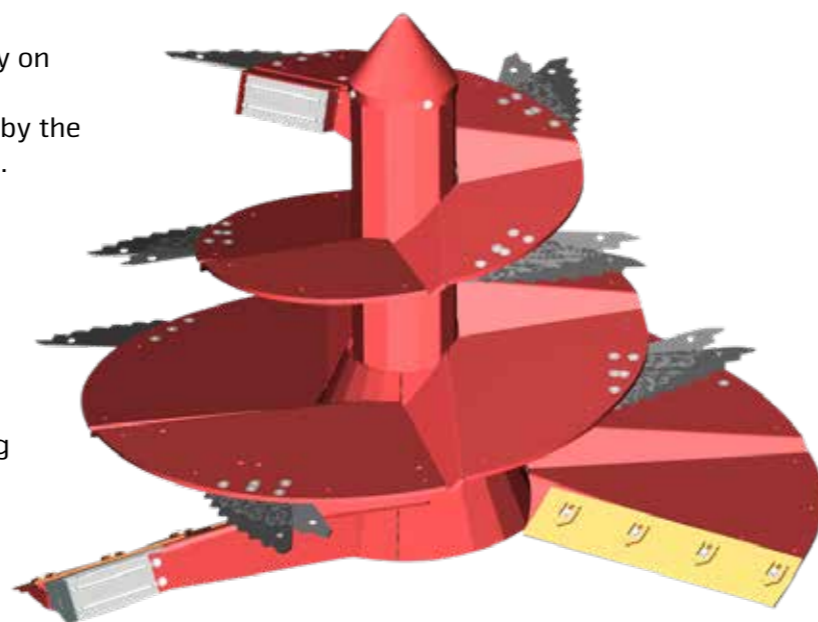
## – The allround talent

**Strautmann fodder mixing wagons Verti-Mix** substantially contribute to increase productivity on modern dairy farms. The perfect geometry of container and Vario<sup>2</sup> mixing auger is supported by the newly developed auger in stepped flight design. This ensures:

- Low power requirement
- Optimum fodder structure
- Homogeneous mixing
- Energy-saving short mixing times

Excellent mixing quality and proven easy towing guarantee absolute cost effectiveness for any kind of application.

**The Vario<sup>2</sup> mixing auger in stepped flight design – Variability and strength for any purpose**  
Due to the patented knife adjustment system, the Vario<sup>2</sup> mixing auger in stepped flight design can be perfectly adapted to your specific conditions of use. The robust and low-maintenance angular gear ensures a long service life even under challenging conditions.

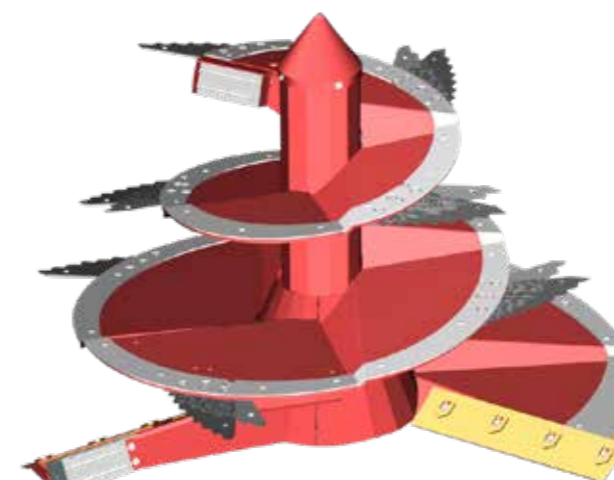
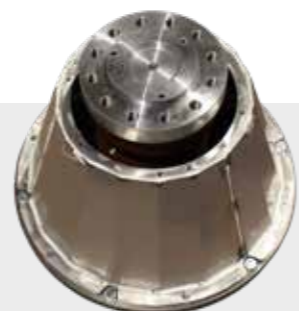


Result after 14 days of using our magnets (wedding ring as reference in the bottom right of the photo)

**Highly effective magnetic separation of metallic foreign objects**  
Each silage and any kind of purchased fodder might contain metallic foreign objects which might harm your dairy cattle. The **Strautmann magnetic system** (optional extra) directly mounted on the mixing auger offers optimum health protection for your high-yield cows. The system is mounted such that it is in direct and close contact with the mixed fodder, thus working very effectively, without the foreign objects being able to be removed from the magnet again by the following fodder.

**Stainless steel protective cover** between mixing auger and coaxial gearbox

- Recommended for compact mixture (compact TMR) or for addition of larger quantities of water
- Minimised fodder deposits between auger and gearbox

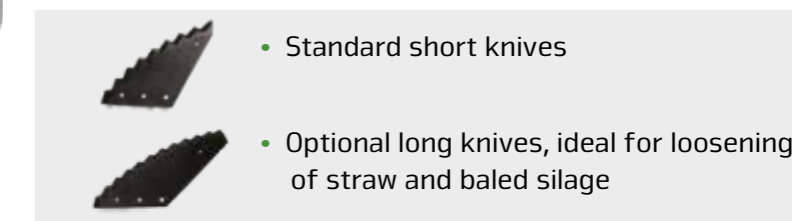


Innodur

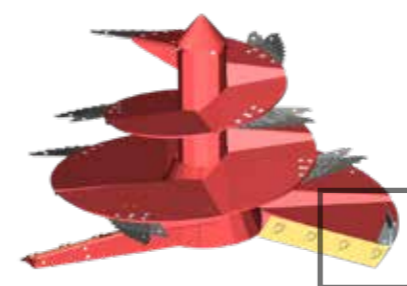
### Innodur

Optional „**INNODUR**“ wearing elements significantly extend the service life of the Vario<sup>2</sup> mixing auger in stepped flight design.

- 5 mm thick and 100 mm wide stainless steel elements
- Screwed to the auger windings with an overlap
- Subsequent mounting also possible

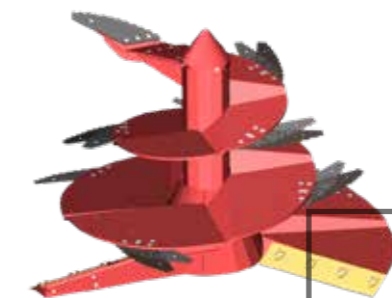


Special knife options help you to adapt your Vario<sup>2</sup> mixing auger in stepped flight design even better to your needs:



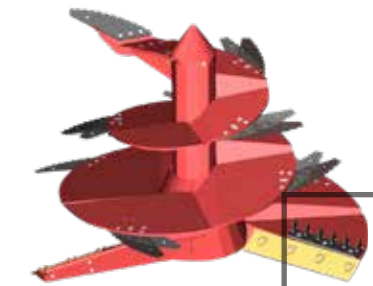
Scraper

„**Scrapers**“ especially developed for very poorly structured feed rations (compact TMR) ensure an additional mixing effect and an improved fodder movement.



Bale knife

The **bale knife** is perfectly suitable for cutting round bales.



Root crop knife

For fodder rations containing e.g. beets or potatoes, the **root crop knife** ensures better mixing and additional crushing of the ingredients.

Ask for our **heavy-duty version** of the Vario<sup>2</sup> mixing auger in stepped flight design with 20 mm strong windings for a 50 % longer service life (= 50 % less wear costs).

#### Assumption:

Residual thickness before replacement of the mixing auger 5 mm, i.e. 15 mm wear material in case of heavy-duty compared to 10 mm in case of the standard mixing augers.



#### Robust heart

The heart of the Vario<sup>2</sup> mixing auger in stepped flight design is the very robust and durable gearbox. Stability and long maintenance intervals are achieved by means of a large-sized pair of tapered rollers, double sealing and a large grease chamber.



#### Effective mixing

The perfect matching of the mixing auger with the container ensures quick and homogeneous mixing.

## You want your business to grow – Your Verti-Mix adapts to your growing needs

The patented container embossing at the top container edge provides the Strautmann mixing container additional strength and stability. It serves as the basis for variable container extensions enabling you to adapt the capacity of the mixing container to your operational requirements.

### Your advantages:

- Flexible customised extension of the capacity
- Highest stability of the container due to embossing
- Design of all components for maximum possible container capacity

without extension



Optimum use of container capacity. Depending on the space available in the enterprise, different extension options are at your disposal.

180 mm extension



Inner overflow ring for optimum container use in case of low overhead clearances.

360 mm extension



If extensions are added, continue to use the overflow ring. Only the supports are changed.

### Higher extensions enable more volume



## The right Verti-Mix – For your needs...

Basic machine	Basic capacity	Capacity with 180 mm extension	Capacity with 360 mm extension
<b>Three-auger mixer</b>			
Verti-Mix 3451 Triple	28,5 m³	31,5 m³	34,5 m³
Verti-Mix 4501 Triple	38,0 m³	41,5 m³	45,0 m³

- Feeding of 6-8 cows per m³ when feeding once a day (depending on the ingredients/ TS content)
- Volume adjustment possible by means of container extensions
- Basic machine model is always designed for maximum capacity



# Discharge options – adapted to your enterprise

In the case of side discharge, the eccentric position of the discharge openings ensures **optimum fodder discharge**.

- Loose and homogeneous fodder swathe
- Discharge position at optimum location at the fodder mixing wagon, relative to the flow of material in the container
- No travelling over the fodder
- No fodder deposits at the gate

Select the right fodder mixing wagon for your enterprise from a multitude of discharge options.



### Fodder-protecting discharge via adjustable side chutes

At the side discharge devices, adjustable chutes support the fodder discharge. The side chute mechanically operated by the side gate

- moves to rest position with the gate closed – Fodder residues move onto the swathe and do not fall onto the drive path
- ensures fodder discharge beyond the lane – The wheels do not roll over the discharged fodder

The side chutes can be equipped with an optional hydraulic actuating mechanism.



### Discharge in narrow dead-end feeding passages

- For comfortable feeding even in narrow dead-end feeding passages, side gates behind the wheels are being used.
- The fodder is loosely discharged on one or both sides behind the wheels. \*



### Rear centre discharge

- For central fodder discharge on the feeding table
- Ideal for the dosing of premixtures in silo units

### The Strautmann crossover conveyor

Easy discharge within the field of view. The Strautmann crossover conveyor proven in ten thousands of applications discharges the mixed feed (in case of front discharge) – due to the open design easily visible for the driver on the right-hand or left-hand side in the direction of motion. Variable conveyor speeds achieved by means of different motors or direct adjustability enable the fodder discharge width to be adapted as far as right up to directly in front of the feed fence. The crossover conveyor drive is equipped with a standard floating oil motor, such that the conveyor runs particularly smoothly and there is no risk of bearing distortions.



The proven **lattice bar roller** ensures high tractions of the driving roller and slip-free power transmission. It prevents material from piling up on the roller and increases the service life of the conveyor thanks to the gentle return of the conveyor.



### Front crossover conveyor

- Clean and homogeneous fodder discharge
- Optimum view of the fodder discharge from the tractor seat
- Variable discharge width due to optional speed adjustment via hand-operated regulator or E-control
- Optional 2nd hydraulic motor for two-sided drive



### Rear crossover conveyor

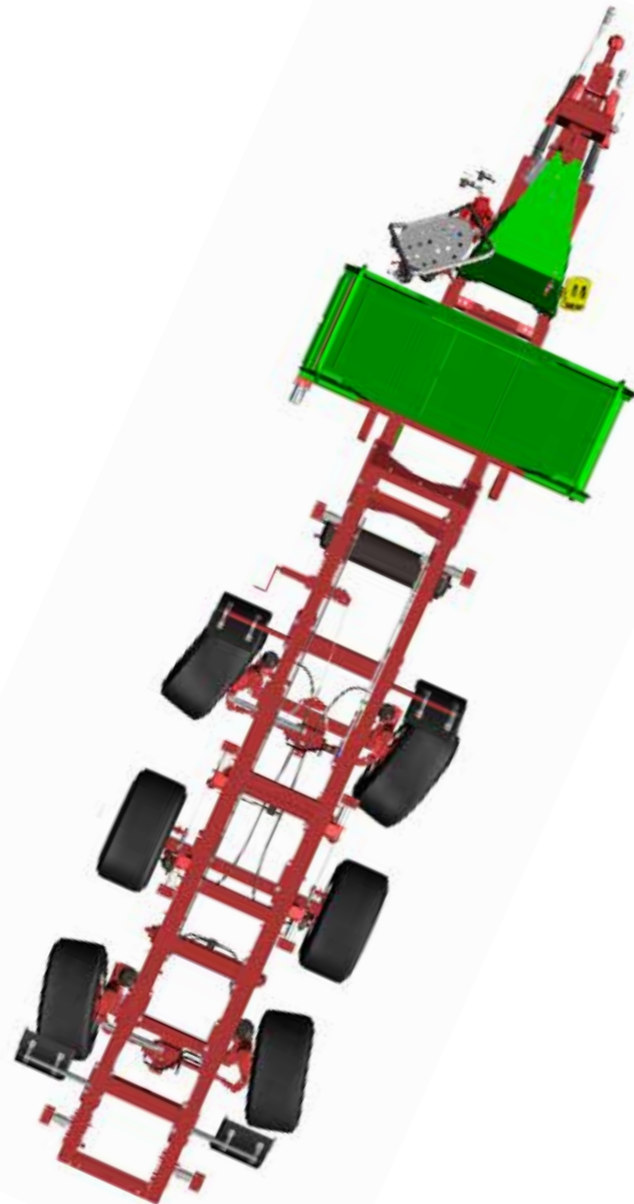
- Clean and homogeneous fodder discharge ideal for discharge in dead-end feeding passages
- Optimum view to the rear due to optional rear-view camera
- Variable discharge width due to optional speed adjustment via hand-operated regulator or E-control



### Crossover conveyor with hydraulically folding conveyor extension

- Clean and homogeneous fodder discharge
- Enables the charging of elevated troughs and feeding tables
- Despite increased discharge width, compact dimensions due to hydraulic swivel mechanism
- Variable discharge width due to optional speed adjustment via hand-operated regulator or E-control

# Chassis, steering & gearbox



### Chassis

- Verti-Mix 3451 Triple:
  - Standard rigid tandem axle
- Options:
  - Tandem axle with passive steering
  - Tridem axle with passive steering
  - Tridem axle with forced steering

### Verti-Mix 4501 Triple

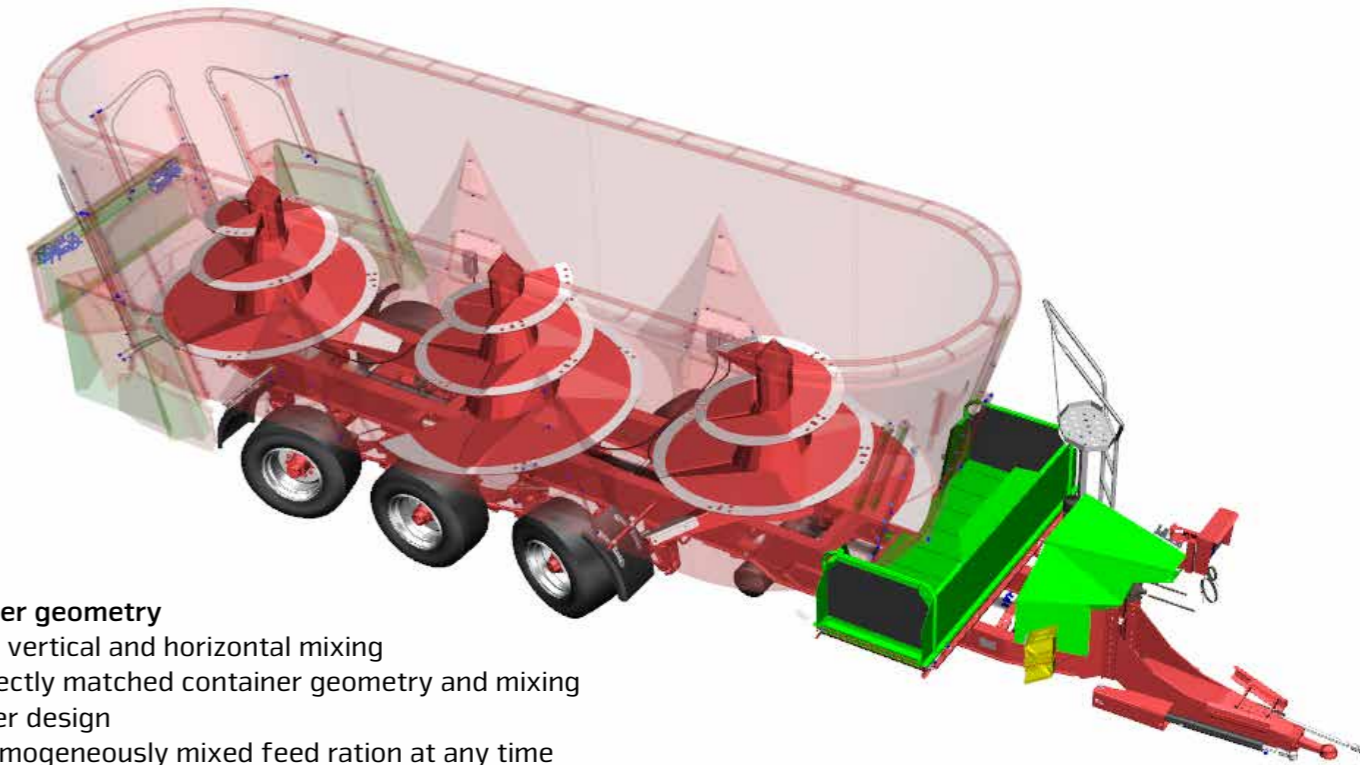
- Standard tridem axle with passive steering
- Option:
  - Tridem axle with forced steering

### Forced steering axle system

- Mechanical-hydraulic forced steering axle system optional (only in combination with tridem axle assembly)
- Simple, robust and safe in use
- Particularly easy to manoeuvre, enables comfortable reverse travel
- Minimised tyre wear

### Power shift gearbox

- Optional 2-level or 3-level power shift gearbox
- Less power required compared to the mechanical switchgear due to the fact that switching under load is possible
- Equipped with standard continuous oil cooler



### Container geometry

- Ideal vertical and horizontal mixing
- Perfectly matched container geometry and mixing auger design
- A homogeneously mixed feed ration at any time



# Operating and weighing – Take your choice

## The Strautmann operating options

Strautmann responds to individual customer demands also with regard to the kind of operating device. The selection of the operating option depends on the user's requirements.



**1. Direct tractor connection**  
Precondition:  
One double-acting control device for each function

Reasonable if:  
... the tractor is uncoupled only rarely  
  
... the fodder mixing wagon is only equipped with a side discharge



**2. Operation via Bowden cable**  
Precondition:  
One double-acting control device at the tractor or alternatively one single-acting control device with free return line

Reasonable if:  
... older tractors with only a few control devices are used



**3. Electrical control set**  
Precondition:  
One double-acting control device at the tractor or alternatively one single-acting control device with free return line

Reasonable if:  
... awareness of comfort is existent and an increase in efficiency is requested

## Weighing devices

The weighing device is an integral component of the fodder mixing wagon. Only an exact quantity determination of the individual ingredients ensures full use of the profitability of the fodder mixing wagon.



**1. PTM HL 50 – programmable weighing device without data transfer**  
The PTM HL 50 is the start model of the Strautmann weighing devices

- 50 recipes
- From 30 ingredients
- Assessment
- Acoustic/Visual signal



**2. PTM Advance Super USB – programmable weighing device with data transfer**  
A complete feeding control including time recording is of fundamental importance for cost optimisation on dairy farms.

- 150 recipes
- From 30 ingredients
- Multiline display
- Multi-Link compatible – several devices can be connected
- Optional: Read-out and management by means of included software
- Optional: Wireless communication with farm PC via WLAN antenna



**3. PTM AV 70 – Radio remote control**  
The PTM AV 50 is a radio remote control to fit HL 50 and PTM Advance Super USB.

- 30 m of range
- Multi-Link compatible
- Individual fixing on the charging vehicle by means of integrated magnet
- Can be easily carried by hand



**4. Digi Star EZ 3610**

- Programmable weighing device
- 150 recipes
- 99 ingredients
- With optional data transfer if software packages are available

## Individual equipment options



Drawbar lug 40 mm



Rear-view camera & headlights



Monitor for rear-view camera



Operation, power shift gearbox



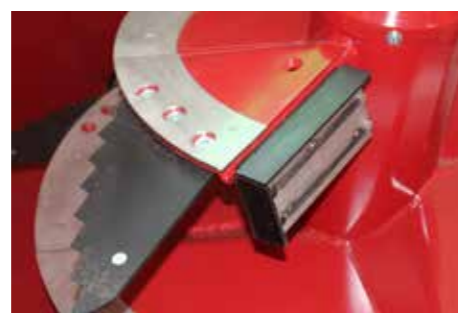
Mineral feed funnel



Lighting



Coupling head linkage K80



Magnetic system



Control set with potentiometer



Manual counter-cutter



Hydraulic counter-cutter



Hydraulic motors – depending on the application, you can select from a range of motors of different speeds

## Technical data

	Verti-Mix 3451 Triple 28,5 / 31,5 / 34,5 [m³]	Verti-Mix 4501 Triple 38,0 / 41,5 / 45,0 [m³]
<b>Dimensions</b>		
Length [m]	9,43	9,94
Width with cross conveyor [m]	2,28	2,42
Width with one discharge door [m]	2,38	2,52
Width with two discharge doors [m]	2,48	2,62
Outer wheel width [m]	2,17	2,36
Height of extension [m]	- / 0,18 / 0,36	- / 0,18 / 0,36
Length with cross conveyor front [m]	10,15	10,66
Discharge height [m]	1,10	1,05
Distance middle towing eye - middle axle [m]	5,86	6,00
Distance middle towing eye - middle axle with conveyor front [m]	6,59	6,72
<b>Tare weight</b>		
with two discharge doors [kg]	10.874 / 10.987 / 11.100	13.258 / 13.379 / 13.500
with cross conveyor [kg]	11.174 / 11.287 / 11.400	13.558 / 13.679 / 13.800
<b>Gross vehicle weight rating</b>		
Towbar load [kg]	2.000	2.000
Axle load [kg]	9.000	8.000
Technically permitted total weight 15 km/h tandem axle [kg]	26.000	-
Technically permitted total weight 15 km/h tridem axle [kg]	38.000	38.000
Permitted total weight 25 km/h (StVZO) tandem axle [kg]	20.000	-
Permitted total weight 25 km/h (StVZO) tridem axle [kg]	26.000	26.000
<b>Power requirement PS</b>		
with 2-speed gearbox 12,8/23 rpm	-	170 / 180 / 190
with 2-speed gearbox 14,4/26 rpm	140 / 150 / 160	-
with 2-speed gearbox 16,7/30 rpm	160 / 170 / 180	-
<b>Power requirement kW</b>		
with 2-speed gearbox 12,8/23 rpm	-	125 / 132 / 139
with 2-speed gearbox 14,4/26 rpm	103 / 110 / 117	-
with 2-speed gearbox 16,7/30 rpm	117 / 125 / 132	-
<b>Axle</b>		
Wheel track [mm]	1.730	1.800
Wheel base [m]	1.360	1.360
<b>Container</b>		
Thickness of container wall [mm]	8	8
Bottom plate [mm]	20	20
Length of container inside dimension incl. overflow ring [m]	7,48	8,09
<b>Height of vehicle (tandem axle) depending on size of wheels</b>		
435/50 R 19,5, wheel track 1930 mm [m]	2,94 / 3,12 / 3,30	-
235/75 R 17,5 twin tyres [m]	2,82 / 3,00 / 3,18	-
455/45 R 22,5 [m]	3,00 / 3,18 / 3,36	-
<b>Height of vehicle (tridem axle) depending on size of wheels</b>		
235/75 R 17,5 twin tyres, wheel track 1720 mm [m]	2,82 / 3,00 / 3,18	3,12 / 3,30 / 3,48
435/50 R 19,5 [m]	2,94 / 3,12 / 3,30	3,24 / 3,42 / 3,60
455/45 R 22,5, wheel track 1720 mm [m]	3,00 / 3,18 / 3,36	3,30 / 3,48 / 3,66

Technical modifications reserved





[www.strautmann.com](http://www.strautmann.com)

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