



**Short-cut  
forage wagon  
Mega-Vitesse<sup>CFS</sup>**



**straumann**



# Next one please

## The programme is being boosted.

**Strautmann strengthens its already** versatile forage wagon programme by another model, the new Strautmann **Mega-Vitesse<sup>CFS</sup>**. A high-performance silage wagon which combines the technical innovations of the larger Giga-Vitesse<sup>CFS</sup> series and a compact design. Thus, Strautmann offers the appropriate solution for all customer requirements.

Customers have gained very positive experience when using the unique Strautmann conveying unit consisting of pick-up, CFS drum, rotor and cutting unit under any conditions.



This Strautmann system processes large, twisted swathes, swathes piling up as well as short, wet grass without any problems. Thus, the Mega-Vitesse CFS is also setting standards with regard to optimum charging, low power requirement and cost effectiveness in its class.

As regards discharging, the Mega-Vitesse CFS also excels by a particularly exact dosing unit insusceptible to wind, thus creating the conditions for optimum grass silage in the bunker silo.



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- Longer service life of knives



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- Low power requirement



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High-quality work up to the silo



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- Boogie chassis with optimum driving characteristics and interesting forage wagon features



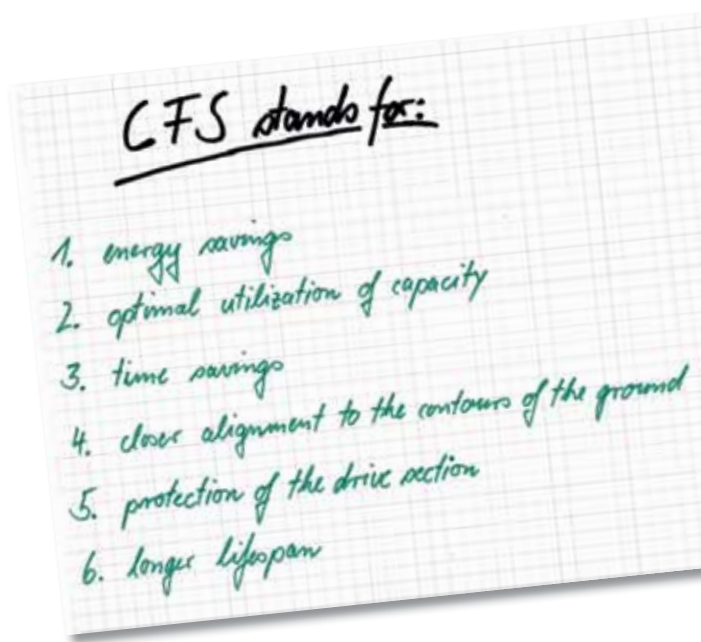
### Operation

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Everything under control thanks to clearly arranged terminals

# CFS - the system is making its presence felt!

**Strautmann forage wagons** have a lower drag resistance than those of the competitors. „CFS“ increases this advantage as experience has shown during the past years. It is the continuous material flow „Continuous Flow“ which makes the difference. Another good reason to present customers a new CFS forage wagon.



## 1. Low power requirement

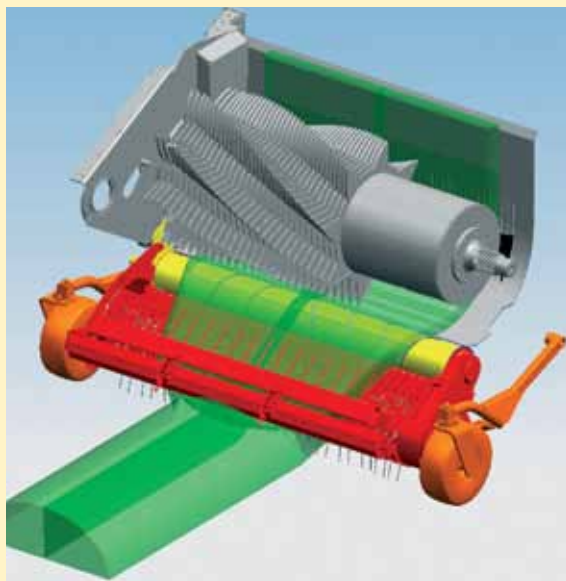
The unique unit consisting of the uncontrolled pick-up and the CFS drum disperses the swathe (spreading-out effect) and feeds it over its total width to the rotor and the cutting unit. The rotor which is mounted by 100 mm higher conveys the pre-wilted green fodder through the correspondingly shortened conveyor duct into the cargo space thus saving energy and reducing the power requirement by approx. 10%.

## 2. Optimum filling degree

The material is loaded into the cargo space over its total width thus improving the filling degree. We measured 10% more weight per cubic metre several times. The tonnage is important, not the volume of the cargo space.

## 3. High acreage performance

A better filling degree also involves a higher acreage performance. The areas to be harvested can be cleared more quickly and the fodder is taken faster into the silo. After all, time is money.



## 4. Optimum adaptation to soil

Due to the design of the CFS drum, the pick-up is in a very flat position, such that the pressure exerted on the roller feelers is very low which enables the pick-up to better adapt to the soil structure. Furthermore, the green fodder is continuously and gently picked up due to the V-shaped helical arrangement of the pick-up tines.

## 5. Protection of drives

Due to the homogeneous and continuous flow of material, the CFS conveying unit runs very smoothly, such that there are hardly any peak loads. And if there are no peak loads, the complete drive will be exempted from „suffering“ thus ensuring a long service life of the conveying unit and therefore of the entire forage wagon.

## 6. Longer service life of knives

Grinding of knives: Only if it's worth doing! The spreading-out effect ensures a more even load of the knives. „CFS“ allows considerably longer grinding intervals. Grinding all knives is worth doing if all knives are blunt. Grinding all knives if only the central knives were blunt? ... grinding only the central ones? ... interchanging the exterior and interior ones?





#### Pick-up

With its six helically arranged tine rows, the uncontrolled pick-up with a pick-up width of 2 m ensures gentle picking-up of the material. Furthermore, the helical form makes sure that the green fodder is dispersed and fed to the accelerator drum. For better adaptation to the soil, additional roller feelers can be mounted behind the pick-up as an optional extra.



#### CFS drum

Like the pick-up, the accelerator drum mounted between the pick-up and the rotor ensures a spreading-out effect and thus equal feeding of the rotor and the cutting unit. Due to the rotor being mounted at a higher level, the power required when conveying the loaded material into the cargo space will be considerably reduced. Loaded material coming to a stop between pick-up and rotor is now a thing of the past - under any conditions!



#### Pick-up, CFS drum drive

The accelerator drum is powered via a low-maintenance angular gear. The standard slip clutch is equipped with an overload protection. Thus, risk of damage to the conveying unit caused by foreign objects is reduced to a minimum. The pick-up is powered via the accelerator drum by means of a reinforced  $\frac{3}{4}$ " roller chain.



# „Mega“ details for optimum fodder

## Rotor and cutting unit

**Optimum silage is influenced** by many factors. When using Strautmann forage wagons for harvesting, the important details make the difference. As the heart of the forage wagon, the conveying unit is of major importance, above all the rotor.

High silage quality is reached by gentle charging and optimum cutting which is already promised by the perfectly adjusted geometry between rotor and cutting unit. This also saves costs already during harvesting. If the fodder is treated gently, harvesting requires less power - less diesel - less money!



### Rotor drive

The stressless powering via the drive shaft positioned in the middle of the drawbar pipe ensures a long service life of all drive components. The laterally attached, large-scale gearbox with a rotor support of 110 mm in diameter is completely maintenance-free, thus ensuring optimum power transmission to the rotor.



### Rotor

The strong tines are attached helically in 8 tine rows. The tine plates made of Hardox steel armoured at the end are extremely low-wear and due to its width, they ensure easy, clean and exact cutting. The interaction of conveying tines and strippers guarantees maximum fodder protection and a high flow rate.

### Advantages:

- No mushy wet crops
- High cutting quality
- Easy and gentle transport into the wagon



### Strippers

The strippers are also equipped with welded-on Hardox holders for a long service life.

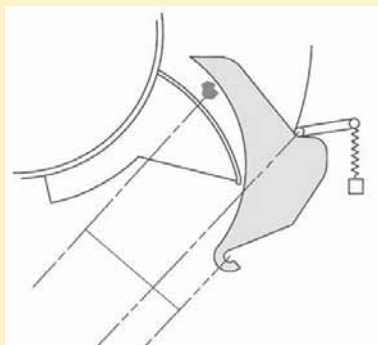
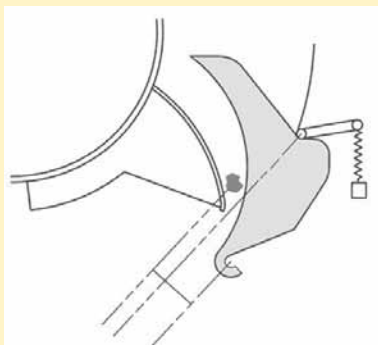
A large angle between rotor tines and strippers ( $> 90^\circ$ ) prevents the fodder from being damaged and favours a low power requirement.





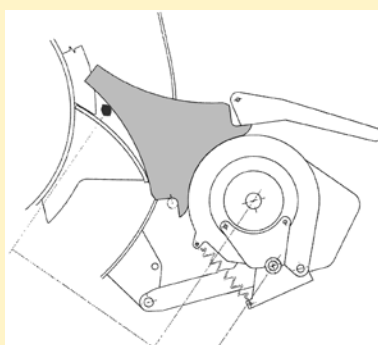
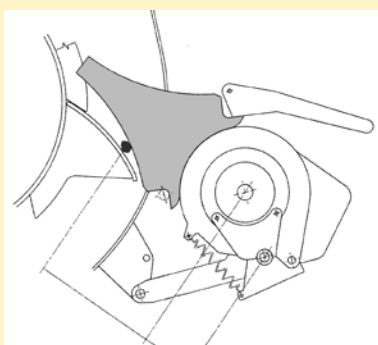
### Cutting unit

Exact and clean cut, special fodder protection, high power, low power requirement and easy handling with a long service life of the knives. These are the most important performance characteristics of the Straumann cutting unit incorporated in the Mega-Vitesse <sup>CF</sup>. 40 knives which can be used on both sides and are mounted at one level ensure exact cutting over 39 mm. Each knife can be easily turned over - thus doubling the grinding interval. If the knife tips wear out after several grinding procedures, the knife frame can be readjusted by means of upper links. The entire cutting unit can be hydraulically extended to its full extent in a quick and easy way to eliminate blockages.



### Competitor knife protection systems

In knife protection systems that work by means of spring counter-pressure the triggering force in case of an obstacle occurring varies at each point of the knife. A foreign object hitting the knife at its bottom pushes itself along the edge up to the point where the force is great enough to trigger the protection mechanism thus causing damage to the complete knife edge.



### Straumann knife protection system

In the unique Straumann knife protection system, the triggering force is almost identical at any point of the knife and the knife triggers the protection mechanism even if a foreign object hits the bottom of the knife edge. Thus, the service life of the knives is increased many times over, depending on the operating conditions.



# An expert in its field

## Body and transport floor

In use, the **Mega-Vitesse<sup>CFS</sup>** impresses by its power and uncompromising equipment. Due to its solid body, equipped with brackets and ropes above the cargo space, this forage wagon ensures effective load-securing which excludes the loss of loaded green fodder and thus makes transport safe.

A characteristic Strautmann feature is the quick discharge by means of an aggressive transport floor driven by two powerful oil motors. A complete forage wagon with a powerful conveying unit should also be discharged in a powerful way.



### Transport floor

A robust wooden floor ensures a long service life for use as a forage wagon.

Handy profile strips with U-shaped cross-section and high-strength scraper floor chains with a diameter of 11 mm and a breaking load of 15 t each ensure homogeneous feeding of the loaded material. Automatic chain tensioners guarantee appropriate chain tension at all times, thus minimizing maintenance and wear.



### Ease of maintenance

Time is tight! This principle applies anywhere, particularly to seasonal peak periods. Therefore, it is Strautmann's task to create optimum conditions for the maintenance of the machines, such that there is no economizing at the wrong end. Easily accessible lubrication points such as the bearings and chains of the transport floor are just one example. Furthermore, all drives are equipped with automatic chain tensioners or maintenance-free gearboxes.



### Transport floor drive

All Mega-Vitessen<sup>CFS</sup> models are equipped with a double-sided transport floor drive. The two-level switching function, available as an optional extra, doubles the discharge speed which is particularly helpful for complete emptying. In addition, the drive shaft at the rear of the wagon is equipped with a central bearing and support. The standard scraper floor drive motors are fitted with a bumper buffer.







### Body design

The body of the Mega-Vitesse <sup>CFS</sup> is designed continuously up to the top and is supplemented by an attachment. Brackets positioned above the cargo space provide additional stability. Ropes tightened lengthwise ensure the necessary securing of the loaded material. In their front section, the Straumann forage wagons are equipped with an additional inner lining to make charging easier.



### Loading frame

The standard loading frame directs the fodder into the cargo space in the best possible way. In addition, a higher compression is achieved which increases the power of the Mega-Vitesse CFS. The automatic charging system available as an optional extra is integrated in the loading frame.



### Automatic charging system

The optional automatic charging system substantially reduces the operator's stress because the forage wagon controls its own filling degree. The scraper floor is automatically switched on when the tines in the automatic charging system are lifted. Due to the almost infinitely variable presetting of the filling degree, the automatic charging system is helpful and can be used under any conditions to obtain a high filling degree at any times.

# Strong in many fields!

## Tailgate and dosing unit

A powerful forage wagon not only excels by its high loading performance but also by quick and effective discharge at or on the silo. For discharge in front of the silo, the forage wagon model without dosing drums will do. If discharge on the silo is intended while keeping the effort for distribution and compression as low as possible, we recommend the forage wagon model with dosing unit and two standard or three optional distributing drums. Very shortly cut grass and even discharge on the silo provide the conditions for optimum compression of the silage.



### Forage wagon tailgate

The solid tailgate can be opened very widely by means of two double-acting hydraulic cylinders thus completely uncovering the opening. An electrical pressure switch for the level indicator is integrated in the tailgate. If the wagon is full, the green fodder presses against this switch thus initiating the operating terminal on the tractor to generate an acoustic and a visual signal.



### Safe locking

A mechanical locking mechanism of the hydraulic tailgate (only for models without dosing unit) ensures proper transport of the loaded material. Two hydraulic cylinders vertically move the tailgate upwards until it is lifted out of the locking mechanism, and then swivel it to the rear.





### Dosing unit

The Mega-Vitesse<sup>CFS</sup> DO forage wagon models are equipped with two dosing drums. The hexagonal drums loosen the forage and ensure even discharge in the silo. A third dosing drum is available on request.

The tailgate on the machines equipped with a dosing unit can be hydraulically opened in 2 positions. In the first position, only the bottom part of the tailgate is opened, thus permitting discharging not impacted by the wind. In the second position, the entire tailgate can be swivelled up to the top. In combination with the dosing unit, a crossover conveyor for fresh grass feeding is available.



### Dosing drum drive

The bottom dosing drum is powered via a maintenance-free drive shaft and an angular gear which is directly attached to the bottom dosing drum. The second and third drum are alternately powered via 1" roller chains. This drive solution keeps the body width low. When the wagon is full, the bottom drum is able to evade to the rear thus stopping the transport floor feed via a sensor. The dosing drums can now freely start to run during discharge.





# Safe use under any conditions

## Chassis



### Boogie tandem chassis

All standard Mega-Vitesse <sup>CFS</sup> models are equipped with a boogie tandem chassis with parabolic suspension for an admissible axle load of 18 t. Due to the low pivot point of the chassis, the vehicle can easily be towed over uneven terrain and also onto the bunker silo (roll-over effect). Furthermore, the standard forage wagons are fitted with a rear axle with follow-up steering. The chassis are designed for 22.5" and for 26.5" tyres. Furthermore, an additional 60 km/h version is available.



### Automatic axle locking with follow-up steering

This special, optional feature in combination with the ISOBUS control makes the handling of the Mega-Vitesse <sup>CFS</sup> easier. Sensors detect forward or reverse travel and automatically lock the steering axle during reverse travel. Thus, the driver can fully concentrate on manoeuvring the vehicle and is relieved from another function.



### Hydropneumatic chassis

For further improvement of the driving comfort when travelling on the road at high speeds, a spring-suspended hydropneumatic chassis is available for the Mega-Vitesse <sup>CFS</sup> 3801. On the field, the hydraulic axle compensation distributes the load even better onto all four wheels and provides considerably safer driving characteristics when traversing hills. Due to the wheelbase of > 1800 mm, a maximum total weight of 23 t is allowed.





#### Bottom hitch

The Mega-Vitesse <sup>CFS</sup> models can be equipped with an optional bottom hitch with coupling head which is already part of the standard equipment for the 3801 model.

This allows a tongue load of up to 3 t (depending on the tractor model) and ensures low-maintenance linkage free of clearance and safe road grip of the combination of tractor and wagon.



#### Hydraulic folding drawbar

For travelling over silos, all Mega-Vitesse CFS models are equipped with a hydraulic folding drawbar with two double-acting cylinders. An optional hydraulic drawbar suspension ensures an even smoother ride of the Mega-Vitesse <sup>CFS</sup> during road travel.



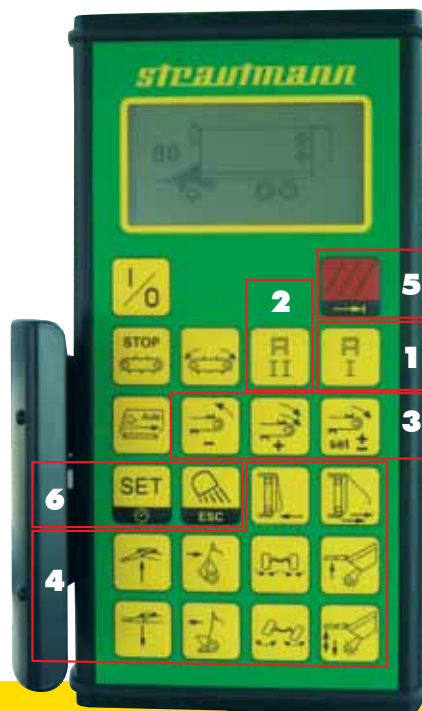
#### Electronic forced steering axle for tandem chassis

The new „Straumann Electronic Steering“ (SES) steering system represents a new generation of forced steering axle systems. The forage wagons are provided with more safety and intelligence. In combination with the ISOBUS control, the steering axle locks on the silo - dangerous swerving at the silo edge is avoided. Furthermore, the manoeuvrability is considerably improved due to the fact that the drawbar remains slim and that there are no steering rods limiting the steering angle. On the road, the improved driving stability due to speed-dependent adjustment of the steering angle is a great advantage.

# All functions under control

## Operation

The standard electro-hydraulic easy-to-use control system consists of a clearly arranged control unit where the hydraulic functions are actuated by means of toggle switches. Among others, control lamps for some of these functions as well as the infinitely variable speed adjustment for the scraper floor are integrated in this terminal. This control system makes the use of the machine very simple and safe, even for inexperienced drivers. The machine can be equipped with an ISOBUS-based control unit as an optional extra.



### ISO operation dosage wagon

1. Unloading process before driving over the silo (A I)
  - Lock steering axle
  - Lift hydraulic drawbar
  - Drawbar suspension off
2. Discharge procedure on the bunker silo (All)
  - Open tailgate
  - Switch gearboxes and clutches
  - Scraper floor on when metering rotors are running, the scraper floor is switched off if the speed falls below the admissible limit.
3. Manual scraper floor control
4. Operation of additional functions
  - PU, knives, hydraulic drawbar . . .
5. Road travel
  - Lock all functions
  - Lower hydraulic drawbar
  - Hydropneumatic suspension on
6. Set key
  - Setup menu
  - Work lights on/off

## ISO terminals

which can be used for control of the forage trailers according to the Straumann ISO control.



### ISO 11783

The ISO control crucially contributes to reduce the stress of the operator, as functional sequences can be combined in work flows (AI and All) and sensors permit a better control of the machine. Thus, information about the steering axle, the tailgate and the position of the knives is provided by means of status indicators.



JOHN DEERE



We are in close contact with other manufacturers. Please do not hesitate to contact us for any inquiries regarding compatibility.





### Short-cut forage / dosage wagon Mega-Vitesse <sup>CFS</sup> 3001, 3401, 3801 (DO)

Type Mega-Vitesse <sup>CFS</sup>		3001	3401	3801
Dimensions				
- Length (without/with metering unit)	m	8,49 / 8,75	9,29 / 9,55	10,09 / 10,35
Width of vehicle	m	2,55	2,55	2,55
Outside wheel width	m	2,81	2,81	2,81
Height	m	3,99	3,99	3,99
Loading cap. according to DIN 11741	m <sup>3</sup>	29,0	33,0	37,0
- with metering unit	m <sup>3</sup>	27,0	31,0	35,0
Loading capacity, medium compression	m <sup>3</sup>	52,2	59,4	66,6
- with metering unit	m <sup>3</sup>	48,6	55,8	63,0
Own weight, standard equipment	kg	8.300	8.800	9.200
- with metering unit	kg	8.700	9.200	9.600
Max. gross vehicle weight rating				
- high drawbar	kg	20.000	20.000	–
- low drawbar (up to 40 km/h)	kg	21.000	21.000	21.000
- hydraulic tandem chassis	kg	–	–	23.000
Power required from	kW	95	103	110
	hp	130	140	150
Dimensions of tyres		710/50 R 26,5	710/50 R 26,5	710/50 R 26,5

Figures, technical data and weights may change due to technical development and are not binding for delivery.

### Tyres



Vredestein Flotation Pro



Vredestein Flotation Trac



Alliance I 380



Nokian Country King



profi FAHRBERICHT

Strautmann Giga Vitesse CFS 4001 D3

## Teilchen-Beschleuniger

Agrotech-Test  
Exklusiv im Profi-Fahrbericht

CFS-Continuous Flow System – damit will Strautmann nicht nur die Schrittschwindigkeit verbessern, sondern auch die Durchsatzleistung seiner Silobehälter weiter steigern und den Kraftbedarf senken. Wir haben das System bereits in der Praxis erprobt.

**U**nter der neuen Giga-Vitesse steht, nicht eine ganz neue Maschine, sondern eine Weiterentwicklung der bekannten Giga-Vitesse. Die neue Giga-Vitesse ist ein Teilchen-Beschleuniger. Sie ist ein Teilchen-Beschleuniger, der die Schrittschwindigkeit verbessert und die Durchsatzleistung seiner Silobehälter weiter steigern und den Kraftbedarf senken will. Wir haben das System bereits in der Praxis erprobt.

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10/2009

# CFS - The press is praising:



## Turbolader

**Feldprobe** Strautmann hat dem Ladewagen Giga Vitesse mit einen Turbo verpasst. Was der kontinuierliche Materialfluss in haben wir an einem Giga Vitesse CFS 4001 mit 38 m³ Ladevolumen

**diz test**

Die CFS-Best des Systems

10/2010

## Bestes Schluckvermögen

Strautmann hat zur letzten Agrotech die Technik zur Erntegut-Aufnahme für seine Giga Vitesse-Ladewagen neu konstruiert. Das so entstandene CFS-System ist auf die Maximierung des Gutflusses ausgerichtet. Aber dieses Element ist nicht der einzige Vorteil, der für die neue Serie aus Bad Laer spricht.

**Agrotech-Test**

Die Wartungsfreie (s) erlaubt das schnelle Einsetzen des Ladewagens. Das so entstandene CFS-System ist auf die Maximierung des Gutflusses ausgerichtet. Aber dieses Element ist nicht der einzige Vorteil, der für die neue Serie aus Bad Laer spricht.

04/2011

**Program**  
**Strautmann**



B. Strautmann & Söhne GmbH u. Co. KG • Bielefelder Straße 53 • D-49196 Bad Laer  
Tel. +49(0)54 24/8 02-0 • Fax +49(0)54 24/8 02-76  
kontakt@straumann.com • www.straumann.com

3000/0912