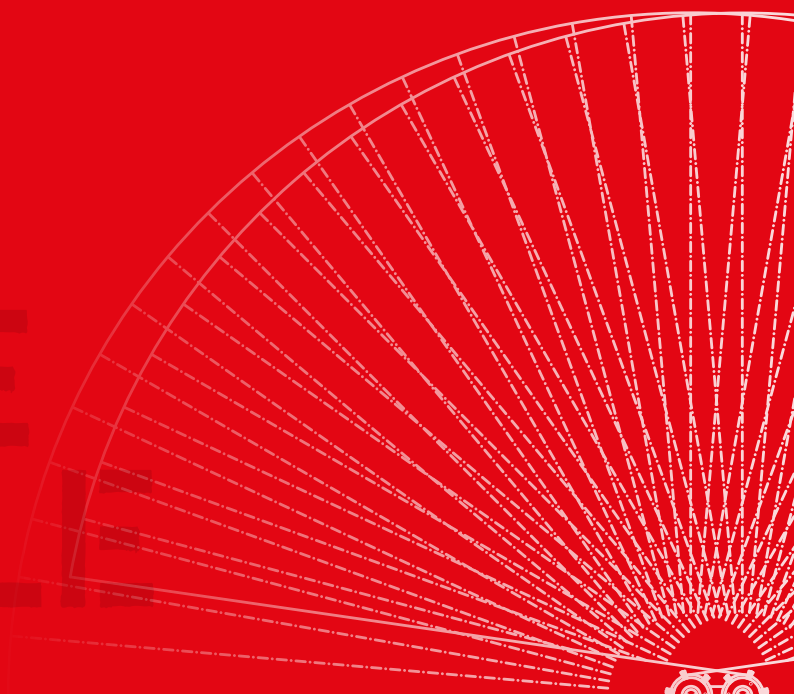




K SERIES 

SIMPLE
PRECISE
RELIABLE







CONTENTS

K-spreader.....	2
Construction.....	4
Spreading of lime	9
Spreading of fertilizer	12
Headland spreading.....	13
Testing	16
Standard equipment.....	18
Tyres	23
Additional equipment.....	24
Computer/ISOBUS	36
K45	38
K62	39
K65	39
K82	40
K85	40
K102.....	41
K105.....	41
K105 Bogie.....	42
K135.....	42
K165.....	43
Hitches	46
Equipment overview	48

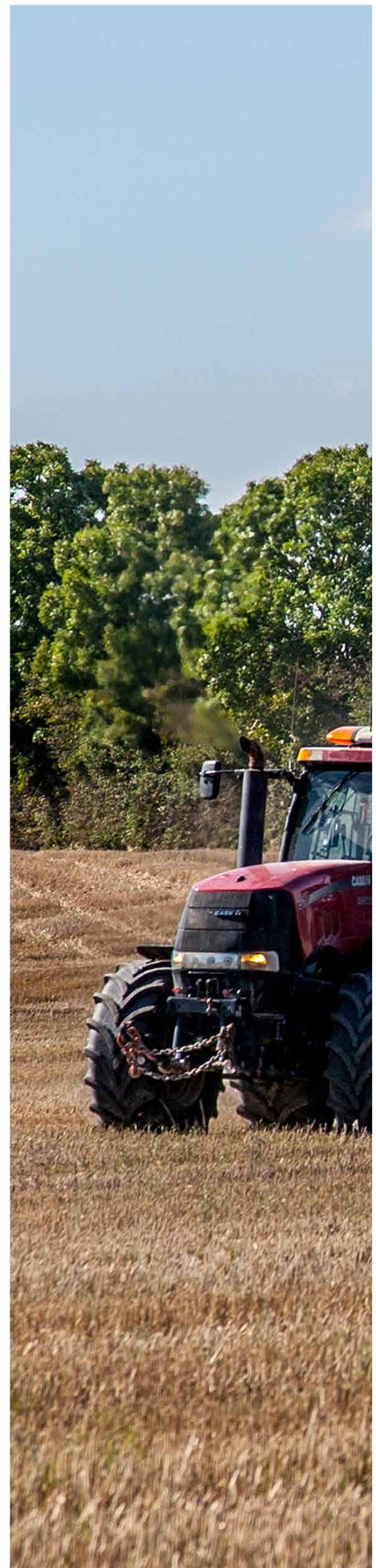
K-SPREADERS ARE PRODUCED IN VERSIONS K45 - K165 WITH A CAPACITY FROM 3,5 UP TO 19 M³.

The spreaders are always mounted with a 12-16 m lime kit, as an option it can also be mounted with a fertilizer kit for spreading 12-36 m. Equipped with the correct spreading kit, Bredal spreader can spread various materials including :

- Lime
- Fertilizer
- Sand (Top dressing)
- Compost
- Ashes
- Powdered materials (with auger)
- and other types of materials

In the K-series there are 6 different models. The models K45, K65 & K85 have a single axle, the models K105 can have single or bogie axles. The two largest models (K135 & K165) are always produced with a bogie axle.

Among this wide range of sizes and variations, there is always a Bredal model to suit individual requirements.





CONSTRUCTION

Bredal spreaders have a robust construction and are designed for professional use. Bredal is constructing every component of each machine with optimal reliability and strength to ensure the longest possible working life.

> CONSTRUCTION

All Bredal K-spreaders are equipped with 10 hole hubs. The axles can be chosen in different widths to suit the required track width.

The construction of the whole machine is designed to resist heavy loads that occur under practical conditions in the field.

Bredal always tests meticulously before launching products onto the market and also carries out comprehensive spreading tests with different products. Customers can therefore be confident in the performance of the machines as they will have been thoroughly tested under a wide range of conditions before being introduced to the market. All single axled Bredal spreaders are built with a heavy constructed chassis and a very durable axle.

The spreaders are available with a choice of hydraulic or pneumatic brake systems or without brakes.

In construction priority has been given to simplification of daily maintenance to minimize downtime. An example of this is the rollers in the floor belt frame, which are made of plastic with a central axle of stainless steel, bearings are made of plastic and are fully maintenance free. The spreading floor belt support frame and all guarding around the spreading unit are made of stainless steel to prevent corrosion ensuring a long working life.

The frame is built of heavy profiled metal and is reinforced at all exposed areas, the hopper is built of 3-4 mm plate and is equally reinforced at exposed areas. The robust construction results in very good durability of the spreader.

The stainless steel spreading vanes are made of strong reinforced stainless steel and are coated with a wolfram carbide wear layer.

> POWDER COATING

All painted parts on Bredal spreaders are painted with 2 layers of powder paint which gives a strong surface, a good corrosion protection and a beautiful finish.

Bredal spreaders are designed as high-quality machines with longest possible working life, and in this context qualitative paint finish is vitally important.

Bredal has made a huge investment in painting process and the facilities required for that, which includes shot-blasting of all parts and powder painting of both primer and top coat layers before assembly. The Bredal painting facilities are one of the most modern of its kind.

The powder painting system has been specially developed to provide the highest corrosion and wear resistance, necessary for tough

environment, with particular attention to an equal thickness of paint over all surfaces including around corners or sharp edges.

> MECHANICAL DRIVE WHEEL

The mechanical drive wheel system on the Bredal spreader is the most simple and reliable way to provide ground related dosing when electronics is not required. The drive wheel is by heavy spring pressure pressed onto the spreader wheel to guarantee that the forward speed is accurately transferred via 3 shaft gearbox to the floor belt without risk of slip and thereby controls the dosage.

The system is constructed in the way that makes it possible to switch to another wheel mounting without influencing the precision of application rate.

A strong 3-shaft gearbox provides a wide range of application rate.

The dosing system on all Bredal spreaders is by volume, a method which means that simply by knowing the material bulk density (kg/l) and the required application rate (kg/ha), the spreader can be quickly set to give the precise application rate.

The Bredal system means that there is only one spreading chart for any material to be spread – a simple, precise and totally reliable solution. It is not necessary to perform outflow tests or similar to set the dosing.

> MODULE-BUILT SPREADERS

As a new solution the K spreaders chassis is built in a more flexible way.

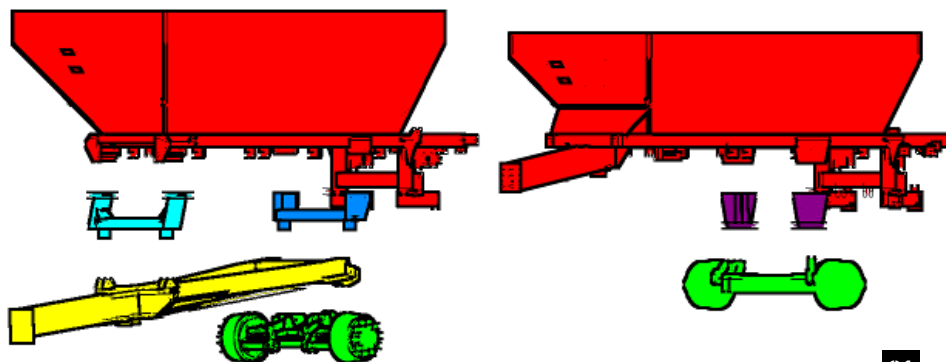
The construction consists of individual linkage stands in front and rear, these are made in various heights, to give the height on spreading discs and drawbar as wanted. These stands are bolted together with the chassis which in its turn is bolted together with the axle. This ensures flexibility in construction and makes it possible e.g. to order a machine with the height of discs of 100 cm in case a machine with higher clearance is required.

The axles are stocked in different widths which allows ordering a spreader with a desired track width. For example, for K85-K115 the axles at stock are of following track widths: 1950, 2050 and 2150 mm; for K40-K65: 1900 and 2000 mm.

> HIGH CLEARANCE SPREADERS

All single axle spreaders are also made in a high clearance version which offers more space under the spreader. Such spreaders are made with a high drawbar. This construction is mainly made for the German and Austrian markets. Note that it is not possible to mount weighing cells onto spreaders with high clearance.

- Hopper
- Linkage, front (Standard)
- Linkage, rear (Standard)
- Linkage (High drawbar)
- Chassis
- Axle



01



02



03



04



05



06

1 > CONSTRUCTION DRAWING SHOWING main components of a K-series spreader **2 > CONVEYOR FRAME IN STAINLESS STEEL** with plastic bearings **3 > MECHANICAL GEAR** drive dependant dosing **4 > K-SPREADER WITH CHASSIS** WHICH IS BOLTED TO THE FRAME **5 > K-SPREADER WITH HIGH CLEARANCE** which is welded directly onto the frame **6 > BREDAL K-SPREADER WITH HIGH CLEARANCE** (without chassis)





The spreaders and all the parts mounted are painted with 2 layers of powder, which gives a strong surface and a beautiful finish.



SPREADING OF LIME



Bredal strongly dimensioned spreading unit allows to spread up to 1600 kg/min. With the help of lime spreading equipment it is possible to spread common agricultural lime at working width of up to 16 m.

The spreading system is built in 2 versions, SPC 4500-1 with a strong V-belt used for smaller machines, and SPC 4500-2 with 2 strong V-belts used for larger machines.

The belts are tightened by a strong spring, so there is always the right tensioning under the driving process.

The spreading unit is mounted onto 2 support arms which can be shifted back and forth. This construction allows pushing the whole spreading unit, so the optimal settings can always be achieved.

The spreading unit is designed to spread very big amounts. The unit is formed in the way that spreaded material goes out with a slight increase to provide wider and more precise spreading.

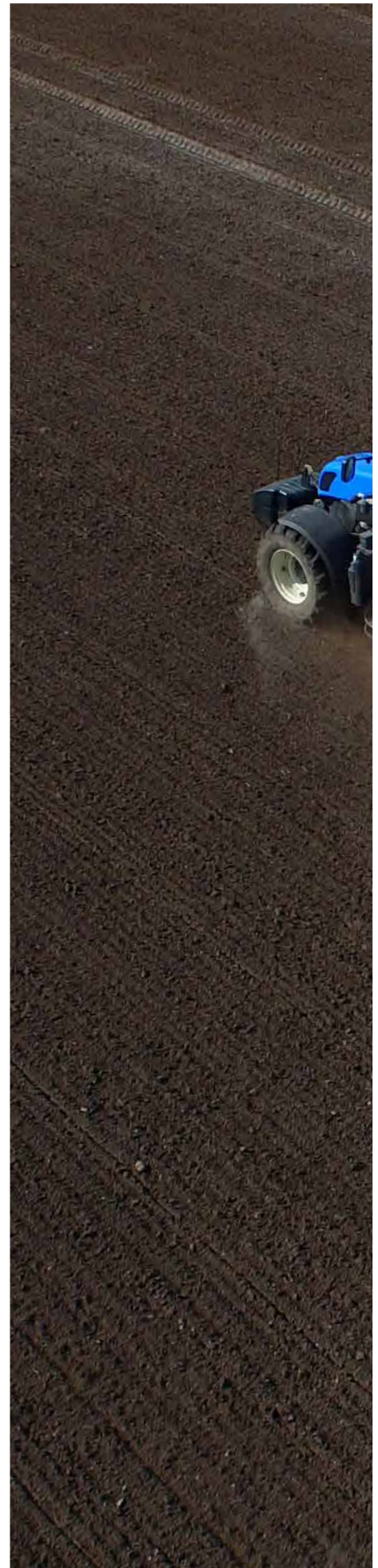
The vanes are reinforced to resist heavy loads when spreading up to 1600 kg/min.

For materials of a specifically sticky nature, when flow to the discs can be restricted, Bredal offers a reverse drive spreading unit. This spreading system is distinguished by bigger distance from the floor-belt up to the spreading discs.

In difference from a standard spreading unit, the discs of a reverse spreading unit spin in the opposite direction.

This type of spreading unit is not designed for spreading fertilizer.

**K105 IS THE SMALLEST
BOGIE AXLE SPREADER MADE BY
BREDAL WITH A CAPACITY
OF 9,0 - 14,0 M³.**





SPREADING OF FERTILIZER

For spreading fertilizer all Bredal spreaders can be quickly converted from lime spreading by simply changing the downchute and the two spreading discs.

Bredal spreaders work according to the 4-double overlap principle, when each disc is spreading the double working width. This principle ensures achieving good spreading results.

Bredal spreaders are designed to send the fertilizer grains out at high exit speed. This rapid acceleration combined with a low exit angle (7°) minimizes the risk of wind sensitivity in field conditions.

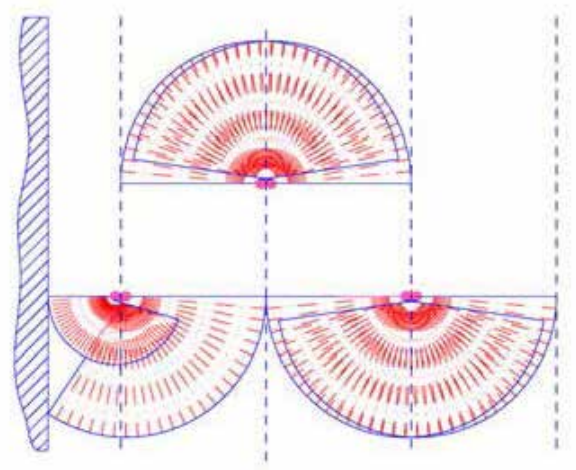
Fertilizer is delivered to the centre of each disc without touching the vanes, where it is then accelerated even before contacting the vanes. This reduces considerably the risk of damaging fertilizer in the process of spreading.

The 6 vanes mounted on each disc provide that fertilizer is being sent out in smaller portions hence securing the spreading process.

The large diameter ($\varnothing 72\text{cm}$) of spreading discs provides a high rate of acceleration for fertilizer grains just before they leave the disc. At PTO speed of 1000 rpm fertilizer grains accelerate up to 250km/h which considerably reduces wind sensitivity.

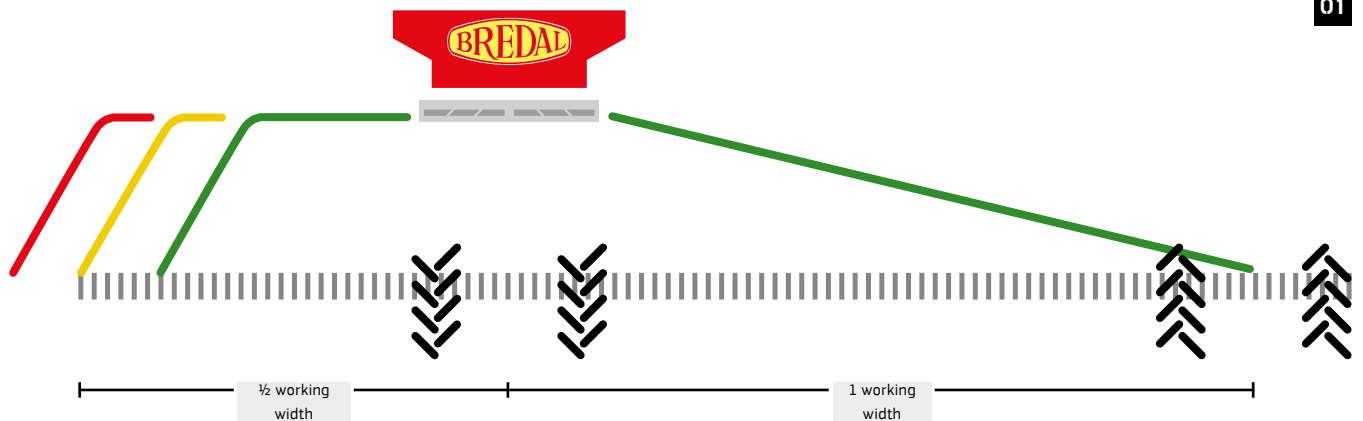
> H-DISCS

For spreading products such as Granular Urea, Potash or Ammonium Sulphate, Bredal can supply a kit of special discs for working width of 24-36 m.



HEADLAND SPREADING

01



02



The unique headland system on a Bredal spreader works by reducing the speed on one disc only, resulting in a reduced spread distance towards the headland. The disc on the field side is not affected and retains the optimum spread towards the next track and ensures the full overlap.

Due to Bredal system of headland spreading a neat boundary at the division line will be achieved at the same time with preserving the actual spreading pattern towards the field.

Gear downshift is made inside the V-belt transmission, so it is fully protected by a safety clutch in the event of blockages. Downshift is available on all models of K-series.

If the spreader is TeeJet 500 computer or ISOBUS controlled, as an option the headland system can be controlled hydraulically directly from the tractor cab.

03



04



1 > HEADLAND SPREADING PRINCIPLE 2 > FERTILIZER SPREADING EQUIPMENT 3 > SPREADING SYSTEM SPC 4500-1 HEADLAND "closeup" of the gearing 4 > SPREADING SYSTEM 4500-2 HEADLAND "closeup" of the gearing





SPREADING TESTS

> TESTED SPREADERS

All Bredal spreaders are regularly tested with a wide range of fertilizer types at the independent spreading test centre at Bygholm (part of Aarhus University).

Test results are based on weighing cells technique, according to which it is the actually spread amount collected in each tray which is taken for results evaluation, not a theoretical calculation.

Bredal uses this very testing centre because the surrounding conditions here are as close to practical farming conditions as possible.

> BREDAL SPREADING PRINCIPLE

Bredal K spreaders use the 4-double overlap system. Here both discs cover double working width, i.e. when spreading on the width of 24 m the left disc covers 24 m to the right and 24 m to the left. Accordingly, the right disc is a mirror image in its turn covering 48 m in total. Thus a 4-zone distribution mode is achieved which provides high precision and minimal risk of making spreading errors.

Bredal spreaders are designed to send the fertilizer grains out at high exit speed. This rapid acceleration combined with a low exit angle (7°) minimizes the risk of wind sensitivity in field conditions.

> BREDAL TEST KIT

Bredal test kit is used to perform practical spreading tests for the purpose of optimizing the spreading pattern.

The kit consists of test plastic trays incl. dividers, measuring tubes with holders, a funnel, a granule strength tester and a sieve box to check the granule sizes.

> SETTINGS

The few settings, that shall be chosen in the machine before starting the spreading, are easy.

Spreading settings for various fertilizer types can be downloaded from Bredal homepage.



1 > A SIEVE TO MONITOR GRAIN SIZES 2 > MEASURING TUBE TO CONTROL SPREADING TEST RESULTS 3 > CALIBRATION KIT 4 > SPREADING TEST IN THE FIELD WITH Bredal K-spreader and Test kit (trays positioned on the field)

STANDARD EQUIPMENT

MECHANICAL WHEEL DRIVE >

Mechanical wheel drive on single axle spreaders, 100% forward speed related application rate.



< WEIGHT RELIEF AND OVERVIEW PANEL

All hydraulic hoses are gathered at the front of the machine and suspended through a weight relief swivel ring over to the tractor. The hoses can be hung up onto a crossbar when the machine is disconnected from the tractor.

On spreaders with various hydraulic functions the hydraulic hoses are colour coded for function. A related overview panel is attached to the machine.



FRONT LADDER >

All spreaders are equipped on the frontal part with a ladder for inspection purposes and easy access to the hopper.



WINDOWS >

Hopper windows are fitted to monitor hopper contents.



< GEAR (KB3 & RT)

There is a KB3 gear on single axled machines, an RT500 on K105 bogie and an RT800 on K135/165.

STAINLESS STEEL REAR DOOR >

The rear door is in stainless steel, with nylon guidance runners for easy adjustment, long life and minimal possible maintenance.



STANDARD EQUIPMENT

PTO SHAFT >

All spreaders are supplied with a wide angle 6z PTO shaft. Alternatively an 8z, 20z or 21z can be specified.



< LED LIGHTS

Rear mounted LED lights with side markers are fitted to a stainless steel frame.



LIME KIT >

The Bredal K spreading unit is fitted with a kit for lime spreading.



SPRING LOADED TIGHTENER >

Spring loaded firming of V-belts ensures their proper tightening.



< SPREADING UNIT

K45 - K65 is delivered with a SPC4500-1 belt transmission, K85-K165 is delivered with a SPC4500-2 belt transmission for spreading discs operation.

PARKING JACK >

There is a screw (mechanical) parking jack on K65 and smaller models. On K85 and larger models the parking jack is hydraulic.





> WHEELMOUNTING

There is a number of possibilities when it comes to wheel equipment on a Bredal spreader. The spreaders are used in a variety of different situations and under different practical conditions.

It is often a matter of protecting the soil against compaction and this is mainly achieved by having a large carrying surface area. This can be obtained by having a larger wheel diameter or using a wheel with a wider width. It is also important to choose the tyre pattern that fits best to actual practical conditions of use.

When it comes to pattern, size and shape, Bredal offers many different solutions, so there is always a solution to match individual needs.



ADDITIONAL EQUIPMENT

CALIBRATION KIT >

Stored conveniently on the spreader, the calibration kit can be used to quickly and accurately check the bulk density of the material to be spread.

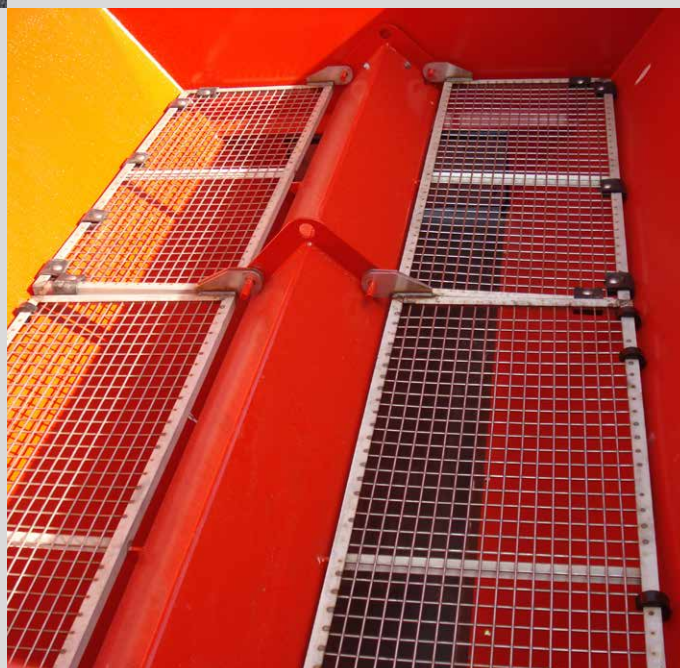


< TEST KIT

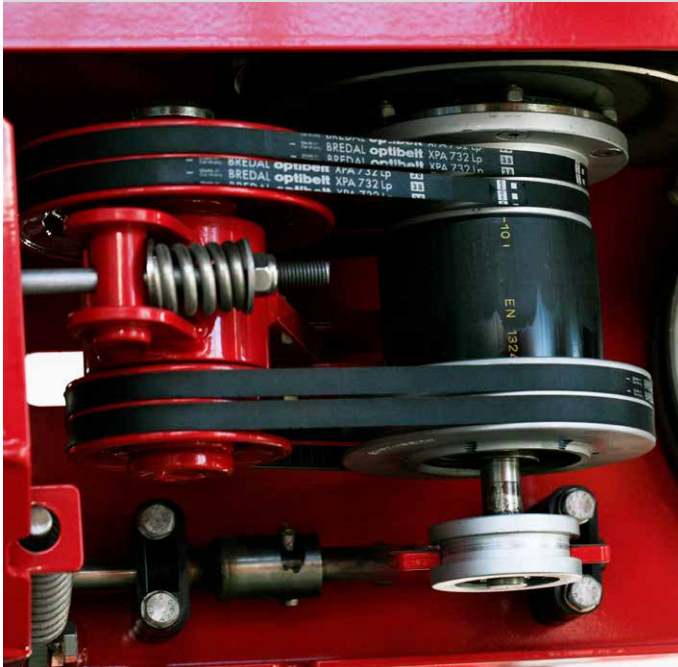
Testing kit is used to perform spreading test in the field. The kit contains test trays with dividers, measuring tubes, granule strength tester, a funnel and a sieve box.

HOPPER SCREEN IN STAINLESS STEEL >

When spreading fertilizer it is important to have a screen inside the hopper to avoid lumps, mud etc. affecting the application rate. The screen is made of stainless steel.



Bredal offers equipment for spreading fertilizer on the width of 12-36 m. This equipment ensures precise and reliable spreading for wider working widths.



Headland gear for headland spreading reduces revolutions on the left disc. The gear can be specified both for 12-28 m and 24-36 m spreading systems to spread to the field border without waste.



Hydraulic headland gear can be specified for a convenient switch between headland and in-field spreading.

ADDITIONAL EQUIPMENT

HOPPER IN STAINLESS STEEL >

To simplify cleaning tasks and maintenance it is possible to specify a hopper in stainless steel.



< WHEEL MUDGUARDS

Plastic mudguards protect the spreading unit and spreading discs from any material being picked up by the wheels.

COVER OVER SPREAD UNIT >

A tarpaulin cover provides protection of the spreading unit and dosing system.



MANUAL HOPPER COVER >

To protect hopper contents during road transport and spreading process, a hopper cover with manual opening and closing option can be specified.



< HOPPER EXTENTION

Hopper extension in 23 cm or 50 cm (only K105 and 105 Bogie) can be specified for providing bigger capacity.

HYDRAULICALLY OPEATED HOPPER COVER >

To protect hopper contents during road transport and spreading a hydraulically operated hopper cover can be specified. Easy to operate for filling .



ADDITIONAL EQUIPMENT

DISCS KIT >

Specially designed equipment for spreading such fertilizers as Granular Urea, Ammonium Sulphate and Potash at wider working widths.



< MICRO DOSING EQUIPMENT

Micro dosage equipment is used for applying very low rates, such as slug pellets, rape seed or microfertilizers. It is possible to spread at rates as low as a few kg/ha. The equipment consists of plastic rails with a scale for rear door and new roundells for spreading discs.



LATE APPLICATION EQUIPMENT >

When applying fertilizer late in the season, Bredal offers a special bounce plate equipment to adjust the spreading to a higher throwing angle, reducing the risk of damage for sensitive growing crops.



540-1000 OR 100-540 GEARBOX >

For those tractors with only 1000 or 540 rpm, Bredal offers a gear box to increase or reduce speed on the spreading unit.

There can also be specified a version on 750-1000 rpm or 670 – 1000 rpm (Eco gear). The 1000-540 rpm gearbox is standard on all bogie models.

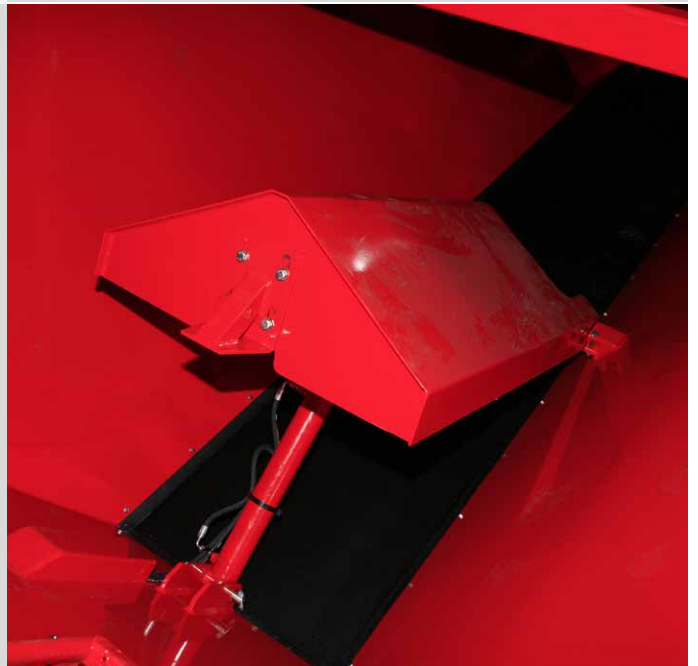


< BELT LOAD REDUCER

For especially heavy materials with high bulk density a belt load reducer can be applied. It is used together with the screen.

HYDRAULIC BELT LOAD REDUCER (K105-K165) >

Hydraulic belt load reducer (K105-K165) makes part of hopper contents lay right in the front end, which adds much weight to the tractor's wheel drive by the time the hopper is emptied.



ADDITIONAL EQUIPMENT

WEIGHING CELLS >

Weighing cells provide 100% control over fertilizer distribution.
Can not be specified for bogie and high clearance hoppers.



< TEEJET 500 COMPUTER

Fitting Teejet 500 computer control provides fingertip control of the spreader settings right from the tractor cab. Operation is simple, interface is user-friendly.

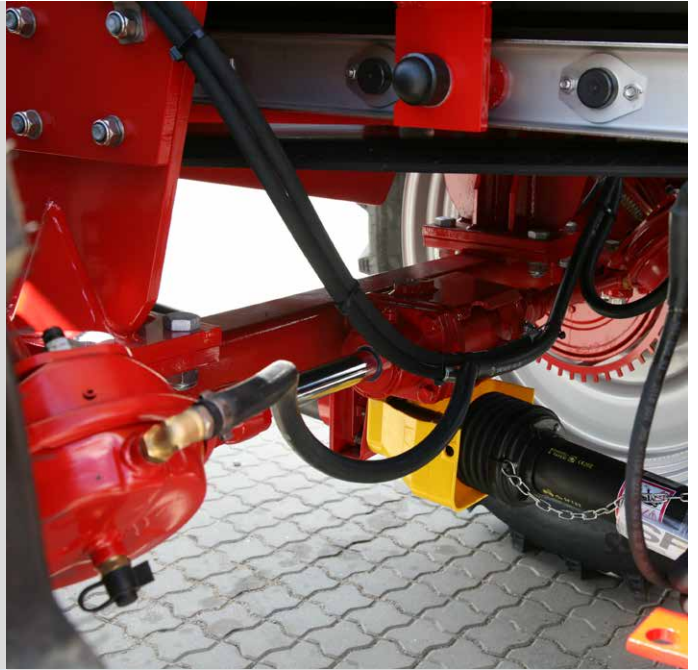
ISOBUS OPERATION >

New developed software with a variety of new functions, among others support of switching on and off of spreading at headland, along with controlling the tiltsensor which corrects dosing when driving in hilly terrain.



PNEUMATIC BRAKES >

Instead of hydraulic brakes which are standard (additional equipment on K45) pneumatic brakes in 1 or 2 circuits can be specified. Besides there can be offered combined hydraulic and pneumatic brakes.

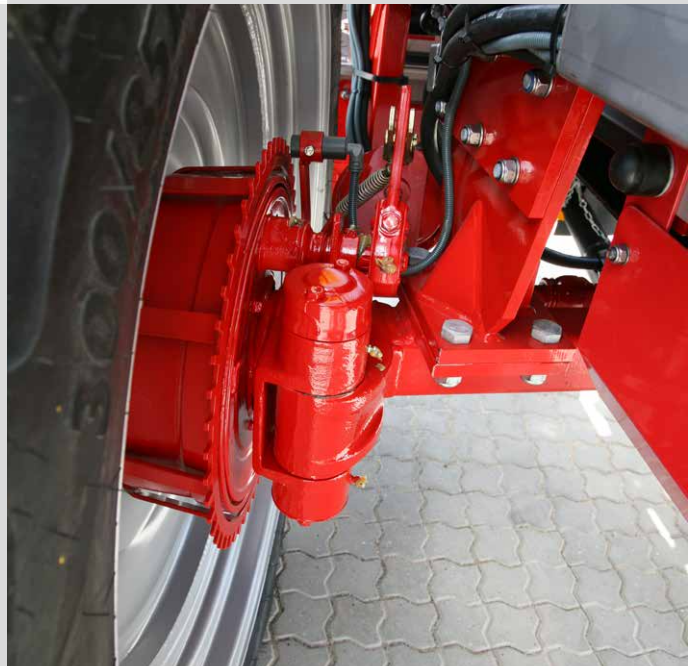


< HAND BRAKE

Hand brake secures a spreader with hydraulic brakes at parking.

STEERING AXLE >

K-series can be specified with a steering axle trailing to follow the front axle when turning at headland.







ADDITIONAL EQUIPMENT

> **BOGIE AXLE**

For larger Bredal K-models it is possible to specify a model with a bogie axle.

The construction used here has no chassis but it has an exceptionally strong drawbar going through whole vehicle's structure. This strong construction ensures that the machine is kept down in its own weight without compromising with a well-known robust Bredal construction.

Using a bogie hopper significantly reduces pressure from axle and leaves less pressure damage on the field. Furthermore it is possible to achieve a higher maximum load for road transport.

Rear axle is a trailing axle that can be blocked hydraulically when reversing and driving on the road. Axles are offered within the frames of Bredal products program for machines K105.

Axles are suspended and can be supplied with hydraulic or pneumatic brakes. On bogie axles with pneumatic brakes there is an ALB regulator for optimal braking.

Spreaders with bogie axle system can be alternatively fitted with an active steering axle.

> **STEERING AXLE**

To prevent damaging the crop, especially when driving late in the season, Bredal offers an active steering axle for models with single axle.

When fitted, the spreader will automatically follow the tractor wheel tracks, so there is only one set of wheel marks when turning at headland.



1 > K65 FERTILIZER SPREADER IN STAINLESS STEEL with a hopper cover, a gable, a cover over the spreading unit and a steering axle 2 > BOGIE WITH WHEEL MUDGUARDS 3 > STEERING AXLE 4 > BOGIE WITH PNEUMATIC BRAKES 5 > BOGIE spreader without a chassis, with a drawbar 6 > SPREADING OF LIME with K165 limespreader

COMPUTER/ISOBUS



> COMPUTER CONTROL (TEEJET 500)

Bredal computer control system is based on the Bredal principle of user-friendliness and simplicity for the operator. The TeeJet 500 electronic control provides in-cab setting of the spreader and monitoring of functions including application rate, forward speed, disc speed, area coverage etc. There are about 10 sensors to count the area, quantity and time spent. In combination with weighing technique it is possible to control the dosage to avoid spreading errors. By connecting TeeJet matrix to GPS, it is possible to make automatic start/stop function.

The computer can be linked to a wide range of third part GPS units to provide variable rate application (VRA).

For communication with GPS systems the TeeJet 500 uses the LH5000 port through RS232 serial connection.



> CONTROL OF DOSAGE VIA ISOBUS

Just like the TeeJet 500 computer the ISOBUS system is designed to be simple and user-friendly, with a new developed software and several new functions. The most relevant of these functions are adjusting the dosage when driving into wedges and residual areas and automatic start/stop function at headland turning (when the tractor's terminal has section control). Another new feature is the tilt sensor correcting the dosage, driving in steep conditions, and correcting the signals from the weighing cells, provided the spreader is mounted with weighing technique. A new and simplified interface has been worked out to make daily encoding easier.

The ISOBUS standard used by Bredal is the ISO 11783, so it is compatible with all monitors working on this standard.

If there is no ISOBUS monitor in the tractor, Bredal offers a terminal from Müller with necessary software, so that all relevant functions could be used in the most optimal way.

> KEY FEATURES OF THE TEEJET 500 COMPUTER CONTROL

- Quick and simple setting of rate (kg/ha), working width, bulk density (kg/l) and rear door scale setting.
- Monitoring weight of material spread (only on spreaders with weighing cells).
- GPS ready through RS232 serial connection.
- Connecting to N-sensor through RS232 serial connection.
- Manual variation of application rate +/- %.
- Easy change of working width (if narrow working widths remain).
- Automatic start/stop in the field (if connected to TeeJet Matrix GPS or similar computer).

> MONITORED ON THE DISPLAY (SELECTION)

- PTO speed
- Forward speed (km/h)
- Area spread (ha)
- Working width (meter)
- Kg spread in total
- Kg left in the hopper (only with weighing cells)
- Headland spreading on/off



K45

> K45 TECHNICAL SPECIFICATIONS

Capacity:	3,50 m ³
with hopper extension:	4,70 m ³
Netto weight:	1600 kg
Total length:	5600 mm
Std. spreading unit:	SPC4500-1

Hopper length:	2876 mm
Hopper width:	1800 mm
Loading height min:	2020 mm
Loading height max:	2520 mm
Min. width outside of wheels:	1700 mm
Max. width outside of wheels:	2600 mm
Largest possible tyre dia.:	Ø1600 mm



K62

> K62 TECHNICAL SPECIFICATIONS

Capacity:	4,5 m ³
with hopper extension:	5,7 m ³
Netto weight:	2000 kg
Total length:	5600 mm
Std. spreading unit:	SPC4500-1

Hopper length:	2877 mm
Hopper width:	1800 mm
Loading height min:	2290 mm
Loading height max:	2890 mm
Min. width outside of wheels:	1750 mm
Max. width outside of wheels:	2700 mm
Largest possible tyre dia.:	Ø1850 mm



K65

> K65 TECHNICAL SPECIFICATIONS

Capacity:	5,00 m ³
with hopper extension:	6,36 m ³
Netto weight:	2000 kg
Total length:	5600 mm
Std. spreading unit:	SPC4500-1

Hopper length:	2976 mm
Hopper width:	2000 mm
Loading height min:	2215 mm
Loading height max:	2815 mm
Min. width outside of wheels:	1750 mm
Max. width outside of wheels:	2700 mm
Largest possible tyre dia.:	Ø1850 mm



K82

> K82 TECHNICAL SPECIFICATIONS

Capacity:	6,00 m ³
with hopper extension:	7,75 m ³
Netto weight:	2800 kg
Total length:	6850 mm
Std. spreading unit:	SPC4500-2

Hopper length:	3800 mm
Hopper width:	2000 mm
Loading height min:	2475 mm
Loading height max:	2975 mm
Min. width outside of wheels:	2250 mm
Max. width outside of wheels:	2800 mm
Largest possible tyre dia.:	Ø2100 mm



K85

> K85 TECHNICAL SPECIFICATIONS

Capacity:	6,60 m ³
with hopper extension:	8,40 m ³
Netto weight:	2800 kg
Total length:	6850 mm
Std. spreading unit:	SPC4500-2

Hopper length:	3916 mm
Hopper width:	2000 mm
Loading height min:	2385 mm
Loading height max:	2885 mm
Min. width outside of wheels:	2250 mm
Max. width outside of wheels:	2800 mm
Largest possible tyre dia.:	Ø2100 mm



K102

> K102 TECHNICAL SPECIFICATIONS

Capacity:	7,60 m ³
with hopper extension:	9,40 m ³
Netto weight:	3200 kg
Total length:	6850 mm
Std. spreading unit:	SPC4500-2

Hopper length:	3916 mm
Hopper width:	2000 mm
Loading height min:	2704 mm
Loading height max:	3254 mm
Min. width outside of wheels:	2350 mm
Max. width outside of wheels:	2900 mm
Largest possible tyre dia.:	Ø2100 mm



K105

> K105 TECHNICAL SPECIFICATIONS

Capacity:	9,00 m ³
with 23 cm hopper extension:	11,00 m ³
with 50 cm hopper extension:	14,00 m ³
Netto weight:	3200 kg
Total length:	6850 mm
Std. spreading unit:	SPC4500-2

Hopper length:	4016 mm
Hopper width:	2200 mm
Loading height min:	2627 mm
Loading height max:	3447 mm
Min. width outside of wheels:	2350 mm
Max. width outside of wheels:	2900 mm
Largest possible tyre dia.:	Ø2100 mm



K105 BOGIE

> K105 BOGIE TECHNICAL SPECIFICATIONS

Capacity:	9,0 m ³
with 23 cm hopper extension:	11,0 m ³
with 50 cm hopper extension:	14,0 m ³
Netto weight:	5500 kg
Total length:	7200 mm
Std. spreading unit:	SPC4500-2

Hopper length:	4016 mm
Hopper width:	2200 mm
Loading height min:	2750 mm
Loading height max:	3136 mm
Min. width outside of wheels:	2750 mm
Max. width outside of wheels:	2850 mm
Largest possible tyre dia.:	Ø1475 mm



K135

> K135 TECHNICAL SPECIFICATIONS

Capacity:	12,00 m ³
with hopper extension:	14,90 m ³
Netto weight:	6500 kg
Total length:	8695 mm
Std. spreading unit:	SPC4500-2

Hopper length:	5696 mm
Hopper width:	2200 mm
Loading height min:	2800 mm
Loading height max:	3000 mm
Min. width outside of wheels:	2750 mm
Max. width outside of wheels:	2900 mm
Largest possible tyre dia.:	Ø1675 mm



K165

> K165 TECHNICAL SPECIFICATIONS

Capacity:	15,60 m ³
with hopper extension:	18,95 m ³
Netto weight:	6800 kg
Total length:	8695 mm
Std. spreading unit:	SPC4500-2

Hopper length:	5846 mm
Hopper width:	2500 mm
Loading height min:	2950 mm
Loading height max:	3000 mm
Min. width outside of wheels:	2750 mm
Max. width outside of wheels:	2900 mm
Largest possible tyre dia.:	Ø1675 mm







HITCHES

The Bredal ring hitch has an eye drawbar, so that side movement is always adapted to the towing tractor.

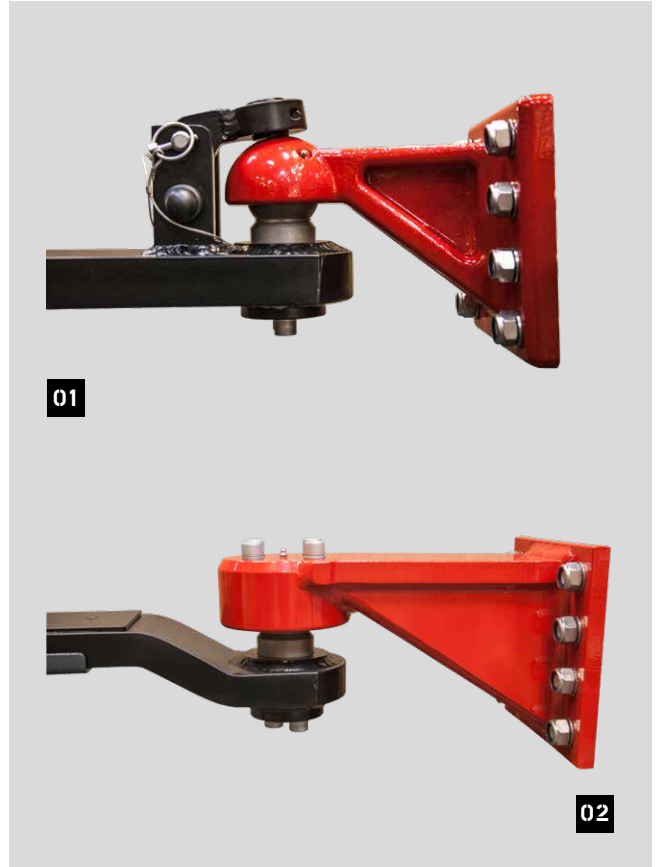
The eye drawbar is easily changed, so the actual wear part can easily be replaced.

To minimize wear of the ring hitch in a clevis drawbar, a nylon wear ring is available.

Bredal also offers a ring hitch for automatic connection.

Bredal's weight transfer system stabilizes both the tractor and the spreader in the field and on the road, improving driver comfort and protecting the machine and tyres against damage. The kit effectively transfers weight from the spreader to the tractor front axle, thus improving traction in the field, weight distribution across the tractor and spreader axles and preventing "pitching" on uneven surfaces.

Instead of the standard Bredal ring hitch, it is possible to specify one of the two Bredal ball hitches which is available both in high and low versions. Choose either the heavy duty version type 4000 with an encapsulated ball and hitch, or the type 6000 which is suitable for use with other major producers of 80mm tractor ball hitches.



1 > BREDAL TYPE 6000 ring hitch in high and low versions **2 > BREDAL TYPE 4000** ring hitch in high and low versions **3 > BREDAL TYPE 2500 EYE DRAWBAR FOR AUTOMATIC CONNECTION** **4 > BREDAL TYPE 5000** eye drawbar for larger machines with very heavy loads **5 > WEIGHT TRANSFER**



EQUIPMENT OVERVIEW

SINGLE AXLED VERSIONS

EQUIPMENT	K45			K62			K65		
	Standard	Option	Not possible	Standard	Option	Not possible	Standard	Option	Not possible
Wheel drive	o			o			o		
Hydraulic parking jack		o			o			o	
Mechanical parking jack	o			o			o		
Hydraulic brakes		o			o			o	
Pneumatic brakes		o			o			o	
LED light kit fitted to a stainless steel frame	o			o			o		
12-16 m lime equipment	o			o			o		
12-36 m fertilizer equipment		o			o			o	
24-36 m spreading discs 'H'		o			o			o	
Spreading discs for turf dressing (rubber covered)		o			o			o	
Power transfer, 6z PTO shaft with wide angle	o			o			o		
SPC4500-1 spreading unit	o			o			o		
SPC4500-2 spreading unit		o			o			o	
Headland gear for headland spreading		o			o			o	
TeeJet 500 computer, operation system		o			o			o	
Weighing cells		o			o			o	
TeeJet 500 Computer, weight display		o			o			o	
ISOBUS operation system		o			o			o	
Calibration kit		o			o			o	
Hopper extension on 23 cm		o			o			o	
Hopper extension on 50 cm			o			o			o
Hopper screen (stainless)		o			o			o	
Cover, rolling, manual incl. gable		o			o			o	
Cover, hydraulic incl. 23 cm hopper extension		o			o			o	
Cover, hydraulic incl. 50 cm hopper extension			o			o			o
Cover, over spreading unit		o			o			o	
Wheel mudguards (plastic)		o			o			o	
540-1000 gear		o			o			o	
1000-540 gear		o			o			o	
750-1000 gear, economical		o			o			o	
Hopper, in stainless steel		o			o			o	
Rear door, in stainless steel	o			o			o		
Hydraulic belt load reducer			o			o			o
Micro dosing equipment		o			o			o	
Late application		o			o			o	
Inspection window on front	o			o			o		
Ladder on front	o			o			o		
Step inside the hopper	o			o			o		
Steering axle		o			o			o	
Bredal Hitch (select from listed below)									
- Bredal 5000 draw eye 35/50 mm drilled	o			o			o		
- Bredal 2500 tow bar	o			o			o		
- Bredal 4000 ball hitch	o			o			o		
- Bredal 5000 ball hitch	o			o			o		
Weight transfer kit		o			o			o	
12 meter auger			o			o			o
Side loading hatch			o			o			o
Sand conveyor		o			o			o	
Horizontal sand conveyor		o			o			o	

SINGLE AXLED VERSIONS

K82			K85			K102			K105			EQUIPMENT
Standard	Option	Not possible	Standard	Option	Not possible	Standard	Option	Not possible	Standard	Option	Not possible	
o			o			o			o			Wheel drive
o			o			o			o			Hydraulic parking jack
	o			o			o			o		Mechanical parking jack
o			o			o			o			Hydraulic brakes
	o			o			o			o		Pneumatic brakes
o			o			o			o			LED light kit fitted to a stainless steel frame
o			o			o			o			12-16 m lime equipment
	o			o			o			o		12-36 m fertilizer equipment
	o			o			o			o		24-36 m spreading discs 'H'
	o			o			o			o		Spreading discs for turf dressing (rubber covered)
o			o			o			o			Power transfer, 6z PTO shaft with wide angle
		o			o			o			o	SPC4500-1 spread unit
o			o			o			o			SPC4500-2 spread unit
	o			o			o			o		Headland gear for headland spreading
	o			o			o			o		TeeJet 500 computer, operation system
	o			o			o			o		Weighing cells
	o			o			o			o		TeeJet 500 Computer, weight display
	o			o			o			o		ISOBUS operation system
	o			o			o			o		Calibration kit
	o			o			o			o		Hopper extention on 23 cm
		o			o			o		o		Hopper extention on 50 cm
	o			o			o			o		Hopper screen (stainless)
	o			o			o			o		Cover, rolling, manual incl. gable
	o			o			o			o		Cover, hydraulic incl. 23 cm hopper extention
		o			o			o		o		Cover, hydraulic incl. 50 cm hopper extention
	o			o			o			o		Cover, over spreading unit
	o			o			o			o		Wheel mudguards (plastic)
	o			o			o			o		540-1000 gear
	o			o			o			o		1000-540 gear
	o			o			o			o		750-1000 gear, economical
	o			o			o			o		Hopper, in stainless steel
o			o			o			o			Rear door, in stainless steel
		o			o			o		o		Hydraulic belt load reducer
	o			o			o			o		Micro dosing equipment
	o			o			o			o		Late application equipment
o			o			o			o			Inspection window on front
o			o			o			o			Ladder on front
o			o			o			o			Step inside the hopper
	o			o			o			o		Steering axle
												Bredal Hitch (select from listed below)
o			o			o			o			- Bredal 5000 draw eye 35/50 mm drilled
o			o			o			o			- Bredal 2500 tow bar
o			o			o			o			- Bredal 4000 ball hitch
o			o			o			o			- Bredal 5000 ball hitch
	o			o			o			o		Weight transfer kit
		o			o			o		o		12 meter auger
		o			o			o			o	Side loading hatch
	o			o			o			o		Sand conveyor
		o		o				o		o		Horizontal sand conveyor

BOGIE VERSIONS

K105			K135			K165			EQUIPMENT
Standard	Option	Not possible	Standard	Option	Not possible	Standard	Option	Not possible	
		o			o			o	Wheel drive
o			o			o			Hydraulic parking jack
	o			o			o		Mechanical parking jack
o			o			o			Hydraulic brakes
	o			o			o		Pneumatic brakes
o			o			o			LED light kit fitted to a stainless steel frame
o			o			o			12-16 m lime equipment
	o			o			o		12-36 m fertilizer equipment
	o			o			o		24-36 m spreading discs 'H'
	o			o			o		Spreading discs for turf dressing (rubber covered)
o			o			o			Power transfer, 6z PTO shaft with wide angle
		o			o			o	SPC4500-1 spread unit
o			o			o			SPC4500-2 spread unit
	o			o			o		Headland gear for headland spreading
o			o			o			TeeJet 500 computer, operation system
		o			o			o	Weighing cells
		o			o			o	TeeJet 500 Computer, weight display
	o			o			o		ISOBUS operation system
	o			o			o		Calibration kit
	o			o			o		Hopper extention on 23 cm
	o				o			o	Hopper extention on 50 cm
	o			o			o		Hopper screen (stainless)
	o				o			o	Cover, rolling, manual incl. gable
	o			o			o		Cover, hydraulic incl. 23 cm hopper extention
	o				o			o	Cover, hydraulic incl. 50 cm hopper extention
	o			o			o		Cover, over spreading unit
	o			o			o		Wheel mudguards (plastic)
		o			o			o	540-1000 gear
o			o			o			1000-540 gear
		o			o			o	750-1000 gear, economical
	o			o			o		Hopper, in stainless steel
o			o			o			Rear door, in stainless steel
	o			o			o		Hydraulic belt load reducer
	o			o			o		Micro dosing equipment
	o			o			o		Late application equipment
o			o			o			Inspection window on front
o			o			o			Ladder on front
o			o			o			Step inside the hopper
		o			o			o	Steering axle
									Bredal Hitch (select from listed below)
o			o			o			- Bredal 5000 draw eye 35/50 mm drilled
o			o			o			- Bredal 2500 tow bar
o			o			o			- Bredal 4000 ball hitch
o			o			o			- Bredal 5000 ball hitch
	o			o			o		Weight transfer kit
	o			o				o	12 meter auger
	o			o			o		Side loading hatch
	o			o			o		Sand conveyor
	o				o			o	Horizontal sand conveyor



SIMPLE PRECISE RELIABLE

For more than 50 years Bredal has been specializing in production of high-quality lime and fertilizer spreaders for agricultural purposes. The company's goal is to build reliable machinery, precise in exploitation, simple in operation and maintenance. In recent years Bredal product line has been expanded to include winter equipment in the form of sand and salt spreaders.

The company's interests in most of the countries importing Bredal machinery are represented by local importers who sell Bredal spreaders and provide technical support and service.

Bredal is located in Vejle, Denmark, where it has top modern production facilities with latest equipment used for producing the high-quality machines.

