LINE







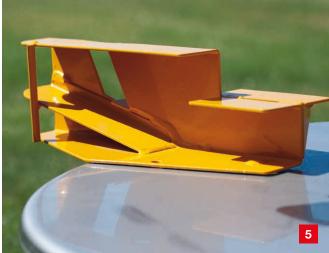
13 had-ditting benefits (1-7)	4	13 hard-hitting benefits		
General information Perfect spread pattern with 4-double overlapping 8 3 ways to accourate quantity setting 10 Product range L2W plus 14 L2 plus 16 L1 plus 18 L1 base 20 L-Trail + BXL 1300 Control units - a world of opportunities CALIBRATOR ZURF CALIBRATOR ICON 24 ISOBUS Controller 24 CALIBRATOR FREE 26 GPS assisted controllers 26 Specifications The company behind the world's best fertiliser spreader	w =	13 hard-hitting benefits (1-7)	4	
Perfect spread pattern with 4-double overlapping 3 ways to accurate quantity setting 10 Product range L2W plus 14 L2 plus 18 L1 plus 18 L1 base 20 Control units - a world of opportunities CALIBRATOR ZURF 24 CALIBRATOR FREE 26 GPS assisted controllers 26 Specifications The company behind the world's best fertilliser spreader				
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L2W plus L2 plus L1 plus L1 plus L1 base L20 22 L-Trail + BXL 1300 24 Control units - a world of opportunities CALIBRATOR ZURF CALIBRATOR ICON LSOBUS Controller CALIBRATOR FREE CALIBRATOR		3 ways to accourate quantity setting	10	
L2 plus L1 plus L1 base L20 22 L-Trail + BXL 1300 23 Control units - a world of opportunities CALIBRATOR ZURF CALIBRATOR ICON SOBUS Controller CALIBRATOR FREE GPS assisted controllers 26 GPS assisted controllers 27 28 Specifications The company behind the world's best fertiliser spreader	13			
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CALIBRATOR FREE GPS assisted controllers Specifications The company behind the world's best fertiliser spreader		CALIBRATOR ICON	24	
Specifications The company behind the world's best fertiliser spreader		CALIBRATOR FREE	26	
The company behind the world's best fertiliser spreader		GPS assisted controllers	26	
	28	Specifications		
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Detection of irregularities by Intelliger





13 hard-hitting benefits (1-7)

The perfect spread pattern

The In-Centre system is used for normal in-field spreading; spreading discs are rotating towards each other to the centre of the spreader. In this way we achieve a perfect "4-double overlap" which results in a perfect spread pattern with practical in-field tolerance.

Optimum headland spreading

On headlands we use the Off-Centre system. The only adjustment is a change of disc rotation direction. This system ensures a perfect fertiliser application to the border as well as in the field. The spreading system fulfils the European environmental standard EN 13739-1 and is standard on all spreaders.

Thoroughly tested weighing system

Since 1988 the weighing technique has ensured a high level of precision. The weighing technique register changes in the flow and adjusts the shutters automatically on the move. Therefore the amount of fertiliser used is precisely controlled ensuring optimum use of inputs and control of costs.

Perfect pass

Thanks to the automatic shutters, the fertiliser is always placed at the right position on the disc. This keeps the spread pattern in perfect shape no matter fertiliser flow, forward speed or working width.

One spreading vane

The same vane is used for in-field and headland spreading. Simultaneously the vane also covers more working widths with one and the same setting. To ensure a long lifetime we produce the vanes of manganese steel.

Easy setting

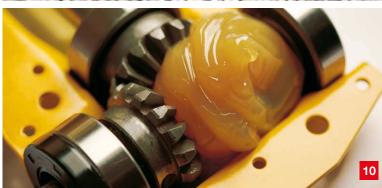
One setting and the spreader is ready for work. If you choose a spreader with weighing technique and intelligent control, the only setting that must be done is to set the tilt angle to achieve the required spread width. The risk of incorrect setting is therefore minimal.

Intelligent Control

Our weighing spreaders with integrated Intelligent Control constantly make intelligent measurements on the move - also under hilly conditions. The intelligent software is working non-stop with the weighing signals monitoring the hopper contents and from this information fully automatic calibrations are carried out on-the-move. In this way we achieve optimum accuracy and precise quantity.

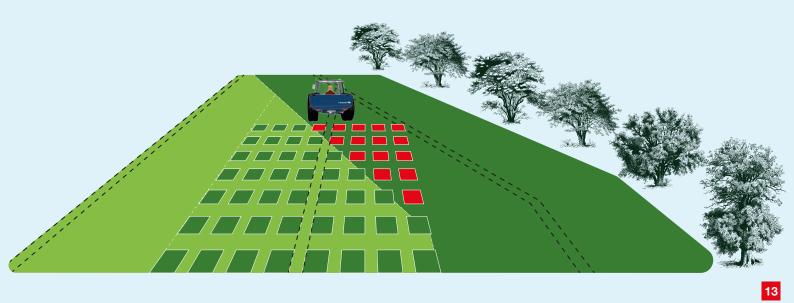












13 hard-hitting benefits (8-13)

Powder paint - first class protection against corossion

After a thorough 7-step cleaning of each component, we are powder painting with the sturdy "Flexi Coat" finish. Spreading discs, guards and hopper base are made of stainless steel. This results in first class protection against corrossion and longer life.

Hopper base with pressure equalising cone

At full load the fertiliser pressure from the hopper load above is heavy on to the hopper base. At the bottom of the hopper base an integrated pressure equalising cone ensures an even material flow to the outlets and prevents crushing of fertiliser, as the agitator is protected from direct pressure.

Maintenance-free transmission

The transmission is a closed system, filled with a special grease with perfect lubrication characteristics at all working temperatures. Beside this the transmission is fitted with an overload clutch that protects against extreme stress.

From oil seed rape to rice

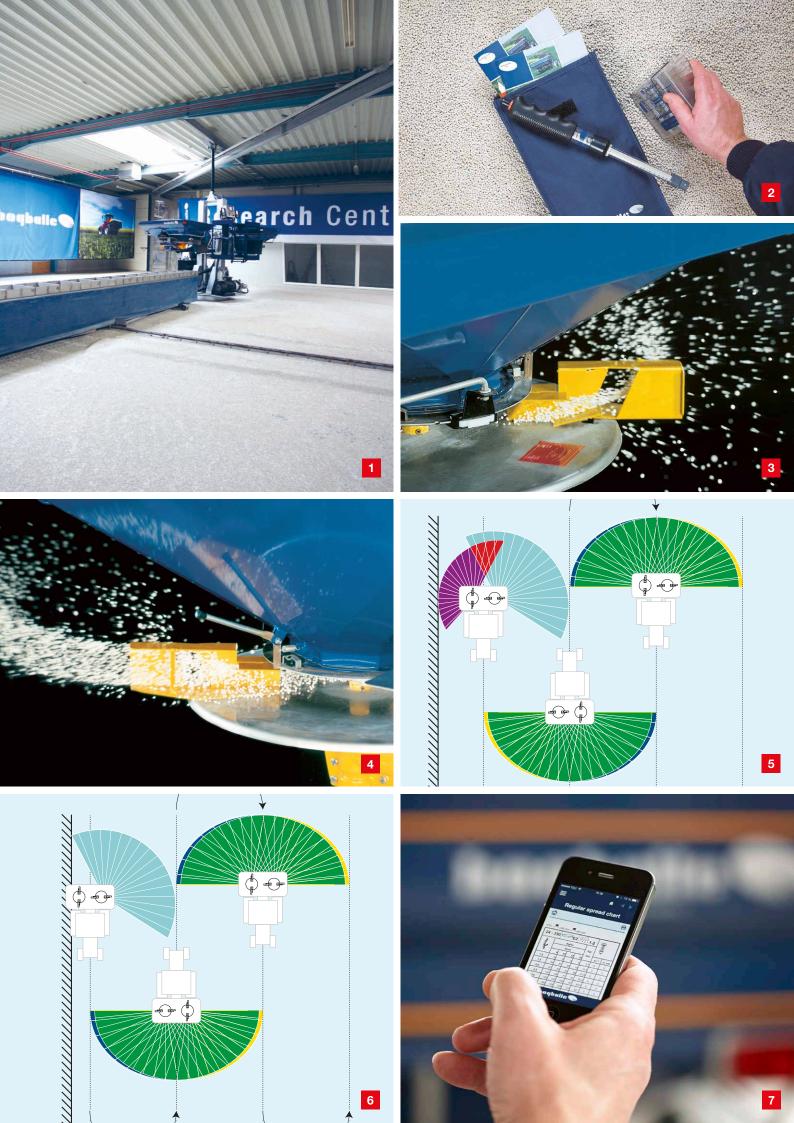
Utilize the spreaders impressive spreading capabilities for a wide range of crop seed and slug pellets. On www.bogballe.com we offer a wide range of spread charts e.g. for rice.

Gentle agitator

The agitator guides the fertiliser to the outlet in gentle manner. Depending on the fertiliser density and flow characteristics, the agitator rpm is adjusted automatically to keep the fertiliser undamaged.

SC Standard – Intelligent spreading in wedges

While spreading in wedges the working width is adjusted according to field shape and conditions. Simultaneously the quantity is adjusted to minimize under, and over dosage in the wedge. The adjustment is done on both sides of the spreader at the same time and can be controlled either manually via CALIBRATOR or automatically via GPS.

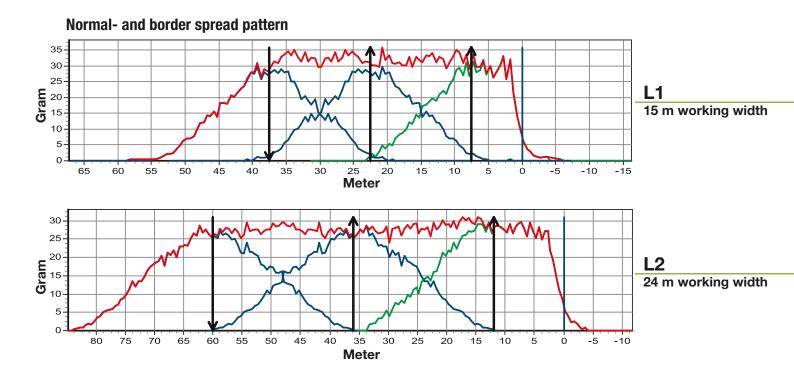


Perfect spread pattern with 4-double overlapping

We achieve the perfect spreading result during normal and headland spreading by utilizing the possibility of rotating the spreading discs to the centre (In-centre) or away from the centre of the spreader (Off-centre).

The In-Centre system is used for normal in-field spreading; spreading discs are rotating towards each other and distribute the fertiliser in 4 applications. In this way we achieve a "4-double overlap" which results in a perfect spread pattern with practical in-field tolerance.

The Off-Centre system is used for spreading on the headlands; spreading discs are rotating away from each other and distribute the fertiliser in two individual spread patterns respectively to right and left side. This system ensures a perfect fertiliser application to the border as well as in the field.



- BOGBALLE testhall 2D and 3D test of spread pattern
- 2 Testset for control of fertiliser
- 3 Headland spreading
- 4 Normal spreadning
- Spreading system overview to border
- 6 Spreading system overview from border
- 7 App for spread charts







3 ways to accurate quantity setting

Weighing technique

Choosing weighing technique, you get fully automatic calibration and 100% ground speed relation. The spreader constantly make intelligent measurements on the move and automatically adjust the shutters according to required quantity and forward speed.

100% ground speed relation

Choosing a spreader with ground speed relation, the quantity is adjusted either by keying in a calibration value directly from the spread chart or by carrying out a calibration directly on the spreader.

Remote or manual control

Choosing a spreader with remote or manual control, the quantity is set by use of the spread chart, by carrying out a calibration directly on the spreader or by use of S-Indicator.

Fully automatic calibration switched on for spreader with weighing technique and 100% ground speed relation

L2W plus

Legend

Spreader characteristics



Working width in metres



Capacity in litres



Capacity in kilo

Control units



CALIBRATOR ZURF



CALIBRATOR ICON



ISOBUS Controller



CALIBRATOR FREE via iZURF



Hydraulic remote



Cable remote



Manual control

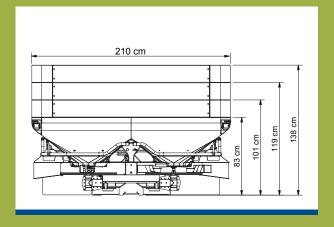
Product range

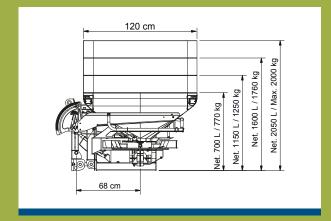
	L2W plus	L2 plus	L1 plus	L1 base
Working width *				
M Metres	12-24	12-24	10-18	10-18
Capacity				
Litres	700-2.050	700-2.050	700-1.600	500-1.050
KG Kilo B	770-2.000	770-2.000	770-1.600	500-1.155
Net weight				
Kilo (min. / max.)	330/426	268/364	210/274	198/246
Control unit				
CALIBRATOR ZURF	•	0	_	
CALIBRATOR ICON	_	0	<u>-</u> 0	<u>-</u>
ISOBUS Controller	•			_
iZURF WIFI module °	0	 O		_
Hydraulic	_	0	0	0
Cable	_	0	0	0
Manual	_	0	0	0
Control of spread pattern				
Section Control Dynamic Ready	_	_	_	-
Section Control Standard Ready	•	•	•	•
External GPS Ready ^D	•	•	•	•
Quantity control				
Weighing system	•	_	_	_
Manual calibration	_	•	•	•
Fully automatic calibration	•	_	_	_
ntelligent control	•	_	_	_
Speed relation	•	0	0	0
ntegrated headland spreading				
To border	•	•	•	•
From border	0	0	•	•
To and from border	0	0	0	0
Page	14-15	16-17	18-19	20-21

- Depending on model
- Extra
- Not available

A Can depend on fertiliser type
B Density 1,1 kg pr. litre. Axle load on public roads must comply with national restrictions
C Can only be used for spreaders with CALIBRATOR ZURF
D Can only be used for spreaders with CALIBRATOR or ISOBUS Controller

L2W plus





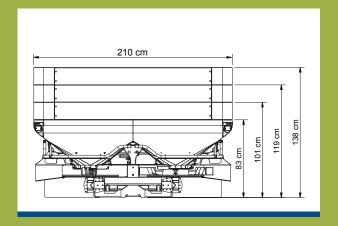


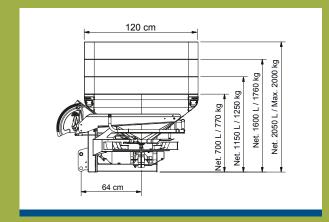
STANDARD

CALIBRATOR ZURF or ISOBUS Controller • Fully automatic calibration • Headland spreading to border • Intelligent control • Eccentric agitator • Flexi-coat powder paint • Water resistant slip clutch • Extra wide guards



L2 plus







STANDARD

Headland spreading to border • Eccentric agitator • Flexi-coat powder paint • Water resistant slip clutch



Control units











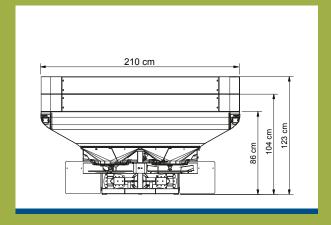


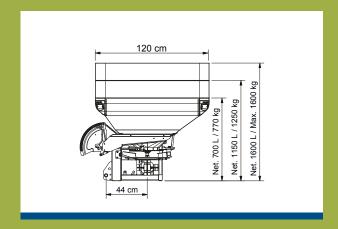




2.000 kg

L1 plus







STANDARD

Headland spreading to/from border • Eccentric agitator • Flexi-coat powder paint • Water resistant slip clutch



Control units







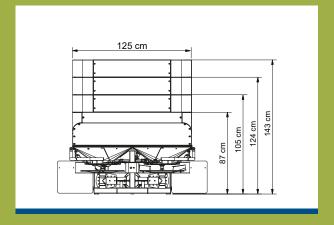


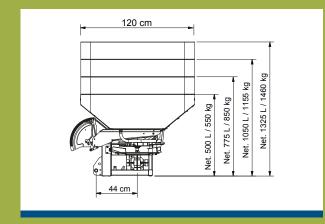




KG 1.600 kg

L1 base







STANDARD

Headland spreading to/from border • Eccentric agitator • Flexi-coat powder paint • Water resistant slip clutch







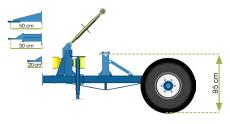


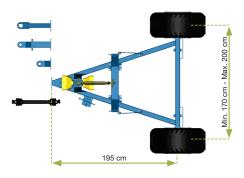


L-Trail + BXL 1300

L-Trail

Our range of trailers is the perfect solution for using a large spreader with a small tractor. Common for both variants is adjustable wheel track width. Naturally the spreader can also be used for late application on the 3-point linkage. The range of trailers fits M-line spreaders and L2 (except M60W).

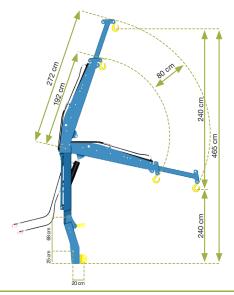




BXL 1300

Place big bags directly in the field where they are needed and achieve an increase in spreading capacity of 3-5 ha/h. Our Big Bag Lifter BXL 1300 is mounted in the spreader's 3-point linkage. The extending lift arm can pick up bag directly from the ground or from a trailer. With fully extended lift arm the Big Bag lifter can lift 1.300 kg.

The hydraulic cylinders are fitted with anti drop valves for optimum safety during work. BXL 1300 fits spreaders with a capacity up to 3.300 litres.



- 1
- L2-Trail
- BXL 1300













5 Control units - a world of possibilities (1-3)

CALIBRATOR ZURF

The spreading work is done in an efficient and flexible way with CALIBRATOR ZURF. Fitted with weighing technique and CALIBRATOR ZURF the spreader is 100% speed related and fully automatic. This ensures high precision and quality in the spread pattern, as the quantity will be accurate no matter forward speed and field conditions.

A user friendly logical layout and function is supported by a help function and operating instructions in the display. Before spreading work begins planned field work can uploaded via USB connection. After having finished the work, recorded data can be downloaded and used for a complete documentation of field work.

CALIBRATOR ICON

CALIBRATOR ICON is the intelligent solution for controlling L2 and L1 spreaders without the weighing system. Operation is by easy to understand icons. CALIBRATOR ICON contains all necessary functions required for a professional spreading result. Field data for different fields can be downloaded to a PC and imported to Excel. Average rate (Kg/ha), total spread area (ha) and total kg applied for each field is recorded.

ISOBUS Controller

All spreaders with weighing technique is also available with ISOBUS. This super professional solution, which makes it possible to operate the spreader via the tractors ISOBUS terminal. The ISOBUS controller fulfils the ISO 11783 norm and controls all functionality of the spreaders electrical components. The ISOBUS controller is equipped with a break-away plug for easy connection with the tractors ISOBUS network. With the ISOBUS solution we offer high precision and quality in spread pattern no matter forward speed or field conditions. The ISOBUS solution can be controlled automatically by GPS depending on the tractor terminal and software.

- 1 CALIBRATOR ZURF
- Upload of settings
- 3 Recorded field data
- 4 CALIBRATOR ICON
- 5 RS232 connection
 - ISOBUS Controller





5 Control units - a world of possibilities (4-5)

FREE Concept – Automatic headland and section control

With the FREE Concept it is possible to control the spreader wirelessly via a standard Android tablet for intergrated automatic headland and section control. This solution is working independently of 3rd party systems and tractor manufacturers.

The spreader is controlled via an iZURF communication module which works as "point of contact" between spreader and CALIBRATOR ZURF. The commands coming from the tablet are either manually operated via the touch screen or automatically operated based on GPS signal. Beside the user-friendly interface, the FREE solution offer full utilisation of the tablets well known user-interface such as internet connection, direct access to spread charts, manuals, navigation, email, weather report etc.

The spreading work is diplayed on the screen all the time and simultaneously there is access to all functions. Recorded field data can forwarded directly from the tablets email system.

Android is a trademark of Google Inc.

GPS assisted controllers

We offer the possibility for connecting CALIBRATOR ZURF to a standard GPS system for automatic section control in wedges and automatic start/stop on headlands. This only requires an interface between for instance Trimble, Teejet, TopCon or Patchwork etc.

- Section Control via TeeJet
- Section Control via TopCon
 - Section Control via Trimble

Equipment



Equipment

		L2W plus	L2 plus	L1 plus	L1 base
Options	Photo				
·					-
Headland spreading to border (manual operation) Headland exceeding from border (manual exception)				-	-
Headland spreading from border (manual operation) Headland spreading to/from border (manual operation)				-	-
Cable remote control for headland spreading	15				
	15				
Headland spreading to border (electrical remote control)					
Headland spreading (electrical remote control)				Ц	
Headland spreading to/from border (electrical remote control)					
Pto excl. overrun clutch					
Pto incl. overrun clutch					
Water resistant slip clutch					
Sieves	17			•	
Late application attachment	_ 9				
Degreemeter for working width adjustment					
Mudguards					
Reduction outlet for slug pellets etc	14				
Reduction outlet for small amounts of fertiliser	10				
Section Control Standard					
iZURF communication module	20		-		_
Rear lights in stainless steel housing	8				
Safety guard EN14017					
Hopper cover, foldable with full opening	1				
Storage wheels	2				
Ladder, foldable	3			-	_
Extra wide guards, for use with twin or wide flotation wheels	4			_	_
Hydraulic motor, spreading discs driven by hydraulic	5				
Flow control, for tractors without adjustment of oil flow	6				
Reflector board	7				
Overrun clutch for pto					
Bracket for reflector board					
Row equipment, 2-rows	13	_	-		
Link pin extension, 100 mm cat I and II (max. 1.200 kg)	12	-	_		
Link pins cat. I (max. 1.200 kg)	11	-	-		
Agitator for grass seed	16				
Test Kit for fertiliser analysis, incl. D-indicator og F-indicator	22				
Speed cable, 7 pin ISO11786	19				
Speed sensor, inductive for CALIBRATOR	21				
Pilot counter valæve, prevent oil-leak off from hydr. remote	18	-			

- Standard
- Option
- Not available











The company behind the world's best fertiliser spreader

BOGBALLE is one of the worlds leading manufacturers of fertiliser spreaders. 365 days a year we work on developing technique for spreading of mineral fertilisers - a technique that through generations has been a passion.

In 1934 the founder of BOGBALLE, Anders Peter Laursen, started the production of equipment for poultry breeding in the village of Bogballe. Times changed and in the beginning of 1950's, focus was moved to the production of the first of our well-known blue fertiliser spreaders. Today BOGBALLE A/S is owned by the 4th generation, who have continued to maintain the original family traditions and philosophy.

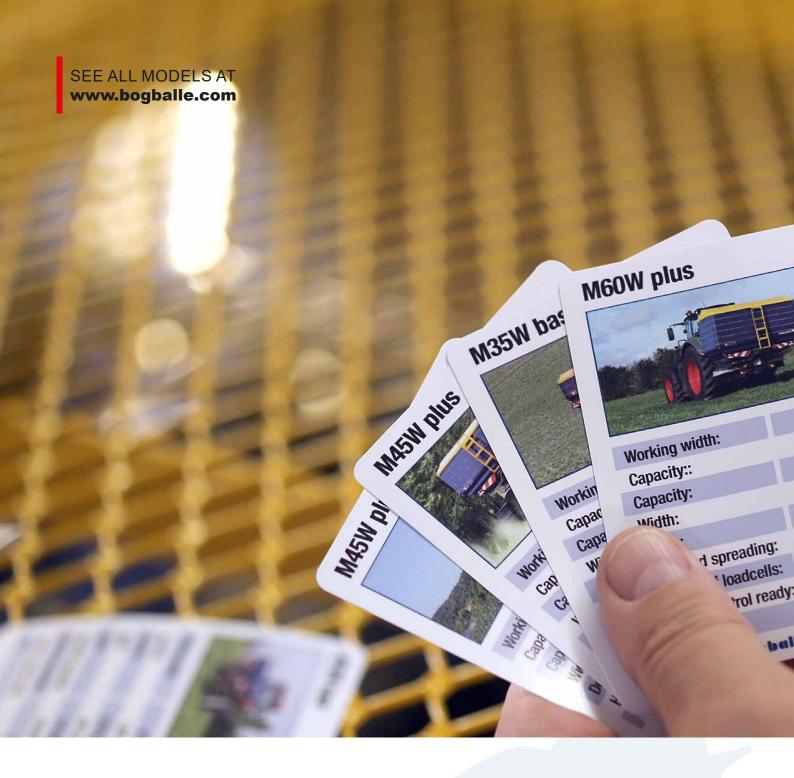
Design, optimum functionality and ease of use have been developed and evolved over many years of practical experience and in co-operation with farmers all over the world.

We have high-tech production, development and test facilities at our disposal as well as one of Europe's largest and most advanced test halls.

- 1 BOGBALLE A/S
- 2 Quality control of CALIBRATOR ZURF
- 3 Programming of welding robot
- 4 Powder paint
- 5 Press brake robot













Dealer: