

BalleMax⁺

Simple and efficient feeding



Time-saving
made easy!

SWISS
MADE

Challenges facing the dairy industry

Future demands

Increased competition will continue to have an impact on the dairy industry in the years ahead. Dairy farmers must be aware of the risks they are facing and take advantage of the opportunities presented to them. The total cost per kg of milk delivered must be kept as low as possible. Simply increasing the size of the herd won't guarantee higher profits. You must also look at your feed – is it being used to its full potential? To increase profits, you need optimum yield from your cows, and for that you need optimum feed.

The proven way

Our popular BalleMax selfdrive round bale processor and feed distributor is the ideal machine for farms that make round bales. Self-propelled machines are proving to be quite successful. Their advantages include being easy to manoeuvre, easy to handle and having low operating costs, just to name a few. That means less work at lower cost to you. The success of the BalleMax selfdrive led to the development of the BalleMax **diet feeder** in 2006. Today, there are over 200 BalleMax **diet feeders** being employed to feed thousands of animals across Europe. The BalleMax **diet feeder** provides feeding efficiency at a low cost.

A unique solution

The BalleMax **diet feeder** is a compact and agile self-propelled mixer TMR feeder with a weighing system that lets you mix the perfect menu for your live stock.

Ideal for TMR (total mixed ration) or PMR (partly mixed ration) feeding, especially if a major part of the ration consists of your own crops, such as corn or grass.

The advantage here is the ability to mix different components into a homogeneous mix; the animals can no longer feed selectively and will consume well-balanced, ruminant-friendly feed with each bite. With the BalleMax **diet feeder**, all your livestock are properly fed.

The BalleMax **diet feeder** can be filled from a stationary BalleMax unit with conveyor belt as well as from a farm loader, crane or silo.

agile ■ efficient ■ modular



BalleMax⁺ *Diet feeder*

With unique advantages

The BalleMax diet feeder makes for easy mixing of the various components of your feeding plan. It is equipped with an integrated weighing system for an optimum TMR (total mixed ration). This prevents your animals from sorting out their feed.

- **Self-propelled**
Autonomous diet feeder (tractor not required)
- **Propulsion system options**
Diesel, petrol or electrical (with rechargeable battery pack)
- **All-wheel drive (optional)**
Main drive always on loaded axle
- **Superb handling**
Handles tight turns, requires minimum clearance of just 4 metres
- **Modulable et flexible**
Tub capacity from 3.3 m³ to 10.0 m³
- **VarioMix and VarioMix+ NEW** **NEW**
 - The VarioMix and VarioMix+ systems operate the mixing screw at an optimum speed so that no torque occurs between chassis and tub.
 - Precision load cells weigh the mixing tub only for exact measurement and correct display every time.
- **Appetising ration**
Calmer animals, no sorting
- **Comfort standing position on control platform**
Discharge chute in direct line of sight, less work time
- **100% "Swiss made" quality**
Simple maintenance can be done yourself

BalleMax⁺

Mixing screw drive:

VarioMix and

NEW VarioMix+

Product details

Operates at a single speed to turn the mixing screw at an optimum 30 rpm. This design has the power and ability to chop through tough vegetation and loosen hardened clumps and tight bales. 60 to 120 hp tractors needed for 5 to 10 m3 mixers.

VarioMix and VarioMix+

The mixing screw of the VarioMix or VarioMix+ operate at an optimum speed of 30 rpm. The diesel engine runs in fuel-saving mode rather than at “full throttle”. The models sd470 to 500 are equipped with 3 hydraulic pumps, the model sd900 has a large axial piston pump. In the VarioMix or VarioMix+, a mixing screw overload (torque too high) will automatically reduce the amount of hydraulic oil in the circuit before the mixing screw jams or engine overloads. In this case, the engine drive (petrol, electric or diesel) will «recover», with the mixing screw handling the high load at low speed but with full torque (like a car going uphill 1st gear). As soon as the larger chunks of fodder are processed, the VarioMix or VarioMix+ returns to using the full amount of hydraulic oil and the mixing screw operates again at optimal speed (30 rpm).

Rapid discharge – emptying

Manually activating the 3rd hydraulic pump will quickly discharge the feed and empty the tub completely.

Restart after jamming or clogging

If the mixing screw gets jammed or clogged, the hydraulic pump can be activated manually to free the outlet.

Advantages of the VarioMix and VarioMix+

- Rapid mixing (no shredding)
- Powerful processing and cutting
- Automatic load-dependent switching
- “Overdrive” function for fast emptying
- Reduced power consumption

Compact self-propelled diet feeder

BalleMax⁺

Diet feeder sd 470



Diesel

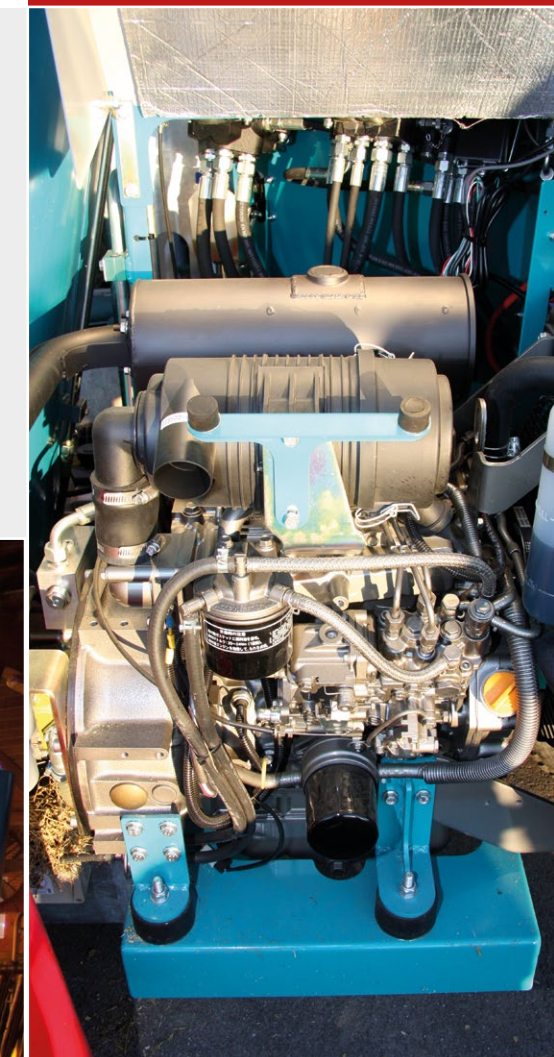
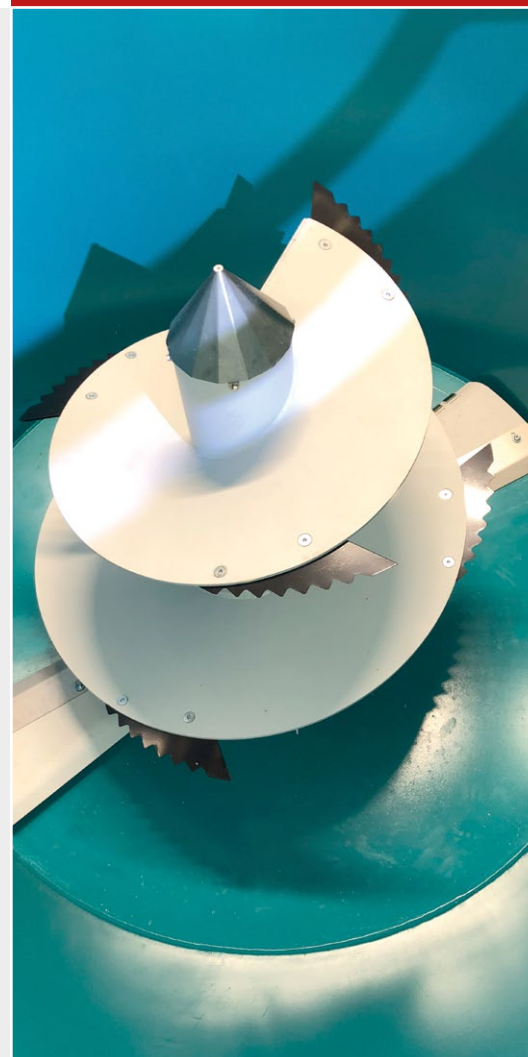
Power 24 hp

Volumes 3,3 m³
4,4 m³
5,2 m³

5 km/h

Compact, powerful, quiet

Our compact **sd470 diet feeder** is equipped with a 26 hp Yanmar diesel engine and is everything you need in a self-propelled diet feeder. 3.3 to 5.2 m3 capacity and just 1,610 mm wide – fits even in narrow feed lanes. Only 1860 mm high – fits into barns where you could only feed manually before. The **BalleMax sd470** is ideal for optimized live-stock feeding even in older barns with narrow lanes. Another advantage of the diesel model is that you can drive it to other buildings and feed storage structures around the farm with no problem. The all-wheel drive model can take up to 20% inclines up or downhill.



Diet feeder sd 480



Quiet ecologist with power

The model **sd 480 diet feeder** is equipped with the same powerful electric motor as the larger versions. In combination with the compact mixing tubs with a capacity of 3.3 - 5.2 m³, the largest mixing capacities can be achieved with the most compact dimensions. With a minimum outside width of 1,610 mm, they feed in any feed aisle. With the emission-free drive, you can easily leave the **diet feeder** in the barn for mixing. The low noise level and exhaust-free operation also ensure a pleasant working environment in the barn for both people and animals. Economical power consumption and significantly lower maintenance costs than with classic mixers ensure affordable operating costs.



Electric

Power

15 KW
11 KW (optional)

Volumes

3,3 m³
4,4 m³
5,2 m³

5 km/h

Diet feeder sd 490



Electric professional

The **sd 490 diet feeder** with a 15 kW electric motor and hopper sizes of 5.0 - 8.0 m³ is designed for mixtures weighing up to 2,500 kg. This allows optimal feeding of even large herds. Its powerful hydraulic oil cooler also enables several mixtures to be mixed in succession. Power is supplied by a cable drum that allows ranges of up to 120 m. Another advantage of the electric drive is that it operates completely emission-free in the barn, ensuring a pleasant barn climate, especially in winter. The low noise level provides for more peace and quiet in the barn. The unique electro-hydraulic drive developed by BalleMax provides high performance, yet can be easily plugged into any Euro-32 socket.



Electric

Power

15 KW

Volumes

5,0 m³
6,0 m³
7,0 m³
8,0 m³

6 km/h

Diet feeder sd 480/490 eco

Stationary electric professional

The **sd 480/490 eco diet feeder** with a 15 kW electric motor and hopper sizes of 3.3 - 8.0 m³ is designed for mixtures weighing up to 2,500 kg. With the proven BalleMax VarioMix technology, even large herds can be fed optimally.

It has height-adjustable feet at the back and front and features a floor-mounting option as standard.

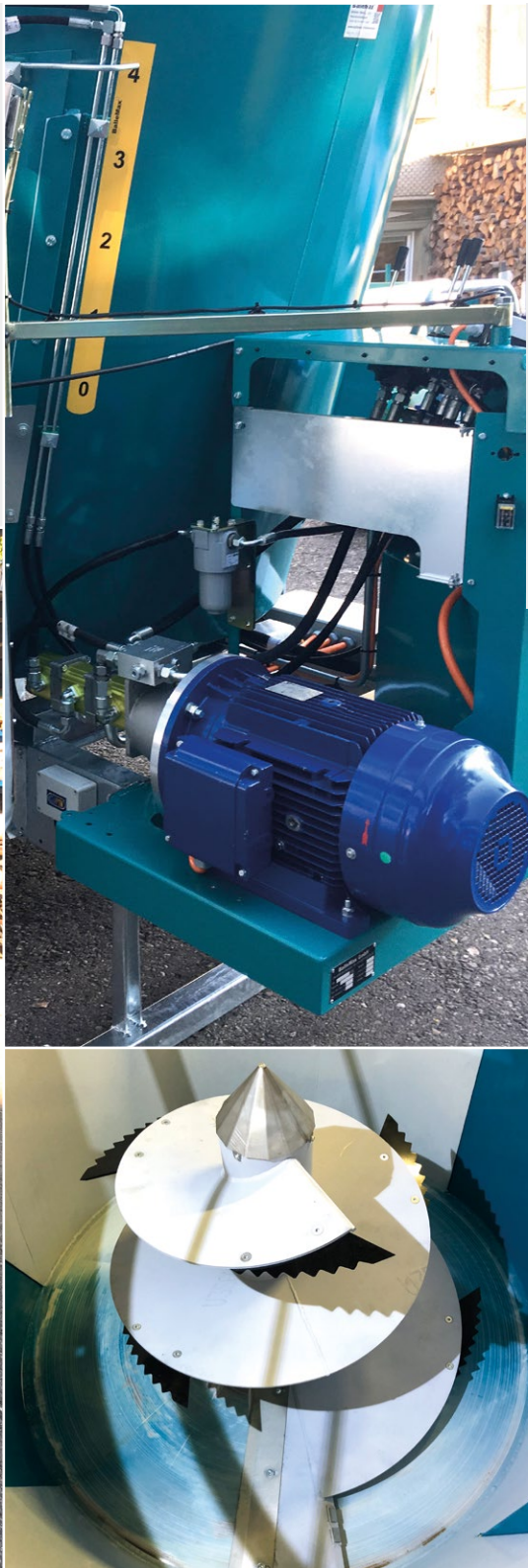
Ejection is possible from the side or rear - individually with a chute or conveyor belt.

The slim design (minus 400 mm compared to the self-propelled sd 480/490) offers many advantages in narrow barns.



Electric

Power	15 KW
Volumes	3,3 m ³ 4,4 m ³ 5,0 m ³ 6,0 m ³ 7,0 m ³ 8,0 m ³



Diet feeder sd 500 V



Sovereign in barn and outdoors

No feeding task is too difficult for the **sd 500 V diet feeder**, which is equipped with an all-wheel drive as standard. With its powerful 37 hp Yanmar diesel engine, it collects, for example, clamp silage from behind the yard, picks up bale silage and drives under the concentrated feed silo. With a total load of up to 2,500 kg, it now drives reliably over gradients of up to 16 % to the feed axis of the dairy cows or the fattening muni (male cattle). Thanks to the speed reduction of the diesel engine and the efficient load-dependent Variomix diet feeder control system, diesel consumption remains below 5 litres per hour. The clear operation does not pose any riddles. Anyone who feeds drives off right away with the **BalleMax diet feeder**. With our unique 3-wheel concept and compact design, you turn right inside your feed aisle. **That's how simple feeding is!**



Diesel

Power	37 hp
Volumes	5,0 m ³ 6,0 m ³ 7,0 m ³ 8,0 m ³
	8 km/h



Diet feeder sd 900 D



Maximum feeding efficiency at minimum cost

With the introduction of the 900 series, the diet feeder is now also used on farms with a herd size **of over 40 cows**. The self-propelled vertical feed mixer is available in **3 sizes between 8 and 10 m³** and a payload of 3 tonnes.

The feed mixer is powered by a 4-cylinder Yanmar diesel engine with a particulate filter and emission class 5.

The heart of the feed mixer is the **hydraulically driven MultiFlat mixing auger**. It's made of 8 mm special steel and can be **equipped with up to 9 blades**. The blades are coated with carbide and have a self-sharpening effect, which minimises blade wear. The 15° angle of attack of the blades guarantees optimal separation of the round bales and ensures faster feeding and cutting of hay, preventing overflow. **Depending on the load, the mixer automatically regulates the continuously variable speed**. New and unique - never before could the perfect feed ration be mixed with so little energy input.

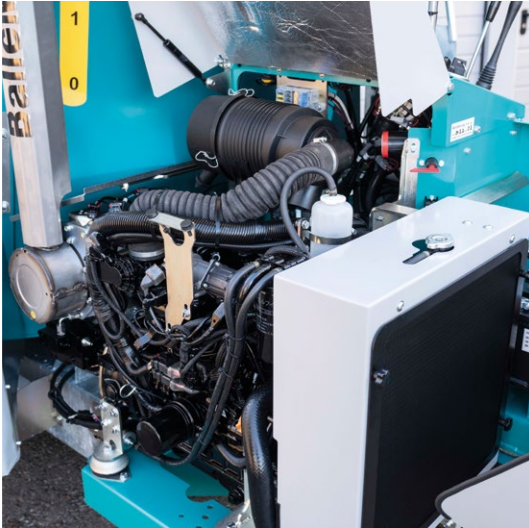


Diesel

48 hp

**8,0 m³
9,0 m³
10,0 m³**

6 km/h



Diet feeder sd 900 E



The environmentally friendly electric motor version

The sd 900 E diet feeder – the professional for herds of over 40 cows. Swiss quality that stands for efficiency and reliability. This electric self-propelled machine not only saves a tractor on the farm, it will also delight you by improving the climate in the barn without exhaust fumes and by reducing noise.

As with the diesel version, the heart of the feed mixer is the hydraulically driven Multi-Flat mixing auger. It is made of 8 mm special steel and can be equipped with up to 9 blades. Optimize your BalleMax diet feeder even further with the new longer, carbide-coated blades.

The SD 900 Series is operated using the **clearly marked control panel from the safe, non-slip operator's platform** on the left side. The hydrostatic steering and a steering angle of 150° enable the entire machine to be turned on the spot.

Thanks to the standard **all-wheel drive**, you're always safe on the road - even on unpaved surfaces. A platform with a grab handle guarantees optimum visual monitoring of the mixed material. **Maximum safety is ensured by the built-in reversing camera** with a 7" monitor, as well as automatic braking when the drive lever is not operated.



Electric

22 KW

**8,0 m³
9,0 m³
10,0 m³**

6 km/h



Practical accessories

1



2



3



3



9



4



4



11



5



5



6



7



8



10



Description 1 - 11

→ see „Technical data“ table on pages 14-15

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13

Model	470	500 V	900 D	480	490	900 E
Capacity						
Tub capacity m³	3,3	5,0	8,0	3,3	5,0	8,0
Optional tub capacity m³	4,4	6,0	9,0	4,4	6,0	9,0
Optional tub capacity m³	5,2	7,0	10,0	5,2	7,0	10,0
Max. load capacity in tub kg	1500	2500	3000	2000	2500	3000
Fill with entire round bales	-	●	●	●	●	●
Outlet at front right	●	●	●	●	●	●
Operation						
150° hydrostatic steering	●	●	●	●	●	●
Main switch	●	●	●	●	●	●
Drive						
Output of 400 V electric motor kW				15	15	22
Min-max travel distance with cable drum				40-120	40-120	40-120
Diesel engine stage 5 cylinder/hp	3/25	3/37	4/48			
Motor torque in Nm	65	102	140	97	97	142
Motor cooling	water	water	water	air	air	air
Tank capacity	30	40	65	-	-	-
No. of hydraulic pumps/liter output	3 / 90	3 / 115	2/170	3 / 90	3 / 90	2/170
Hydraulic system pressure in bar	200	250	320	250	250	320
Hydraulic oil cooler	●	●	●	●	●	●
Hydrostatic front-wheel drive	-	-	-	●	●	-
Hydrostatic all-wheel drive	●	●	●	o	o	●
Removable towing drawbar	-	-	-	●	●	-
Driving speed (stepless) in km/h	0-5	0-6	0-6	0-6	0-6	0-6
190LP-8 tires at front	o	-	-	o	-	-
195/50B10 tires at front	●	●	●	●	●	●
20x8.00-10 tires w/studs at front	o	o	o	o	o	o
23x10.50-12 tires w/studs at rear	-	●	● AW	-	●	● AW
20x8.00-10 tires w/studs at rear (low version)	●	o	-	●	o	-
Mixing						
Mixing auger max. no. of blades	6	7	9	6	7	9
Carbide-coated blades, self-sharpening	●	●	●	●	●	●
Mixing auger speeds	3	3	variable	3	3	variable
Max. auger rpm	40	40	45	40	40	45
Auger made of S355, Hardox blades	-	-	●	-	-	●
Auger made compl. of Hardox	●	●	o	●	●	o
Adjustable counter-blade	●	●	●	●	●	●
Planetary gear, 2-stage -> Nm	7000	7000	10000	7000	7000	10000
Danfoss hydromotor	●	-	-	-	-	-
Leduc axial piston motor		●	●	●	●	●
VarioMix automatic load control	2-stage	2-stage	variable	2-stage	2-stage	variable
Heavy start-up function	●	●	●	●	●	●
6 Foreign body magnet on mixing auger	●	●	●	●	●	●

AW = sculpture code of tire

	470	500 V	900 D	480	490	900 E
Mass						
Machine width in mm	1750	1950	2150	1750	1950	2150
Machine width in mm with 2nd slider	1800	2000	2200	1800	2000	2200
Machine width in mm with transverse conveyor belt	1830	2030	2050	1830	2030	2050
Mach. width in mm w/additional discharge unfolded	-	2270	2370	-	2270	2370
Mach. width in mm w/add. discharge folded down	-	2650	2750	-	2650	2750
Mach. width in mm w/slider at rear centre	1610	1810	2030	1610	1810	2030
Machine length in mm	3310	3580	3880	3310	3580	3880
Wheelbase in mm	2093	2193	2320	2093	2193	2320
Track width at rear	1380	1380	1580	1380	1380	1580
Height with 3.3 m³ d1.6 m tub in mm	1860	-	-	1860	-	-
Height with 4.4 m³ d1.6 m tub in mm	2200	-	-	2200	-	-
Height with 5.2 m³ d1.6 m tub in mm	2450	-	-	2450	-	-
Height with 5.0 m³ d1.8 m tub in mm	-	2100	-	-	2100	-
Height with 6.0 m³ d1.8 m tub in mm	-	2350	-	-	2350	-
Height with 7.0 m³ d1.8 m tub in mm	-	2600	-	-	2600	-
Height with 8.0 m³ d2.0 m tub in mm		2770	2250		2770	2250
Height with 9.0 m³ d2.0 m tub in mm			2425			2425
Height with 10.0 m³ d2.0 m tub in mm			2600			2600
11 Lowering chassis low (option) in mm	-	- 80	-	-	-80	-
Height of floor panel from ground in mm	520	600	600	520	600	600
Max. height of cable duct	-	-		2420	2500	2600
Min. ground clearance under vehicle in mm	170	200	130	130	200	130
Height of platform from ground	300	370	370	300	370	370
Min. required width for turning	3400	3600	3900	3400	3600	3900
Thickness of floor panel/wall in mm S355	12 / 5	12 / 5	15 / 6	12 / 5	12 / 5	15 / 6
Weight empty in kg	1600	1900	2500	1600	1800	2500
Options						
3 Scales with recipe function	o	o	o	o	o	o
Remote control with remote display for scales	o	o	o	o	o	o
Backup camera, 7" colour monitor (waterproof)	●	●	●	●	●	●
2 Overflow ring	o	o	o	o	o	o
9 Additional slide at rear left	o	o	o	o	o	o
8 LED work light	o	o	o	o	o	o
4 High conveyor for feeders	-	o	o	-	o	o
5 Transverse conveyor belt at rear	o	o	o	o	o	o
10 On/Off of auger with remote control	o	o	o	o	o	o
7 Feed slider	o	o	o	o	o	o
1 Platform for folding down	o	o	o	o	o	o

Photos **1** - **11** on pages 12-13

● Standard equipment o Additional equipment - not available

The photos may show optional equipment. Subject to technical changes at any time.

Additional products of the BalleMax Series

Selfdrive Round Bale Processor

- Self-propelled
- Effortless loading of bales
- Appetising presentation
- High manoeuvrability
- Low fuel consumption
- Modularly expandable

www.ballemax.ch



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