



SPIRMIX

VERTICAL AUGER DIET FEEDER

Your LUCAS G. dealer



LUCAS G
focus on performance

Head Office
22, Rue du Stade, 85130 La Verrie, France
T : +33 (0)2 51 65 41 36 // F : +33 (0)2 51 65 41 51
lucasg@lucasg.com // www.lucasg.com

YouTube : Lucas G

boom • images d'entreprises - bicom.fr LucasG - atelier agricole 2 597 000 € - 547 150 730 PMS La Roche-sur-Yon - Photos, weights and technical specifications are only indicative, not binding.



www.lucasg.com

LUCAS G
focus on performance



FOCUS ON PERFORMANCE

Over the years, mixing bowls have become essential tools for caring for livestock. These machines are used all the time to ensure the well-being of your herd day after day.

The SPIRMIX range offers a wide choice of models to suit your work habits and the configuration of your farm. Designed and assembled in the west of France, these reliable & robust machines help you in your daily work.

LUCAS G. EXPERT IN LIVESTOCK BREEDING FOR MORE THAN 50 YEARS

In the heart of a French breeding region, **we design and manufacture high-performance machines for the needs of modern agriculture.** Our experience and skill have enabled us to become a leading brand of livestock breeding. We are proud to be constantly innovating to bring you solutions to meet your requirements. We are committed to testing 100% of our machines to guarantee you functionality and reliability through years of intense use.

Our products are distributed throughout the world by breeding expert partners. These distributors are present to bring you assistance and advice on a daily basis. On our side, we are always committed to remain close to our distributors to provide them with help and support throughout our collaboration.

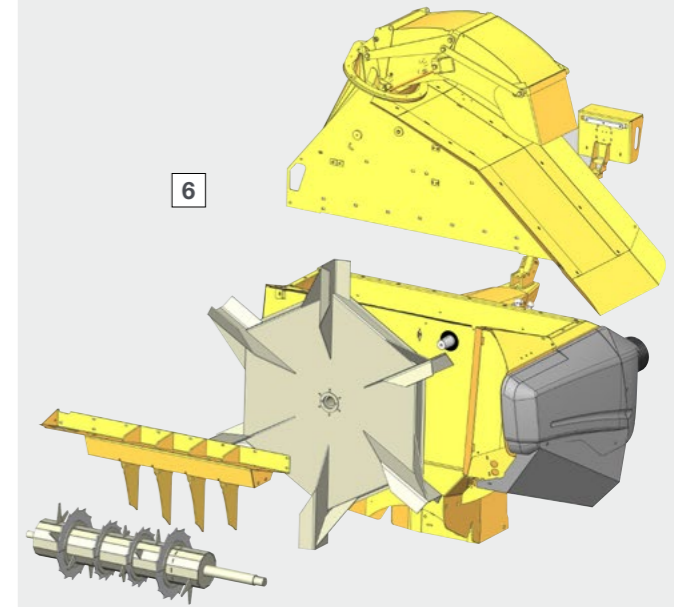
We are determined to serve you with reliable products and quality so that LUCAS G. may bring you success in your performance goals.



A robuste and reliable design



SPIRMIX



3D drawing of a SPIRMIX Jet straw distribution unit.

6 The most efficient straw bedding / distribution assembly on the market.

Block from the CASTOR range of straw feeders recognized for its reliability and performance, for straw bedding over more than 18 meters.

Mechanical bale separator with teeth combined with a fixed comb which feed the material with regularity into the turbine.

Welded flywheel Ø 1.6 m 6 blowing paddles.

Chute cut-off plates, ensuring regular distribution, avoiding jamming problems and enabling you to distribute in the troughs.

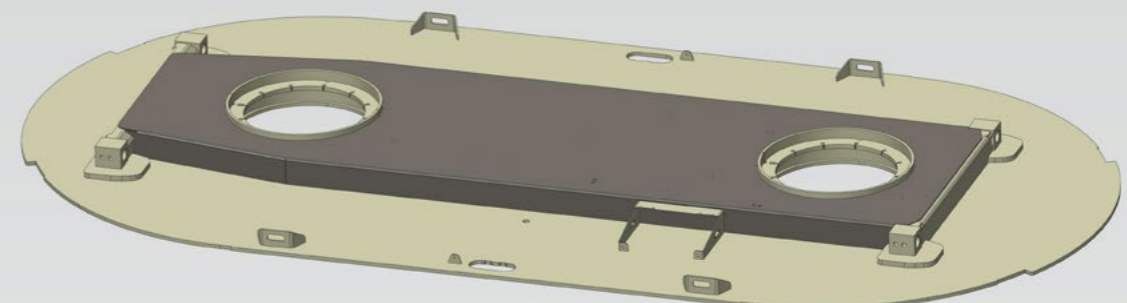
Lucas G enriches its straw bedding offer by proposing 3 different types of chute : Lateral, Universal or SMART.

LUCAS G. SKILLS

- 1 A smooth rolled tank.** LUCAS G. has a unique industrial skill. The tanks are rolled and flared to allow a homogeneous and fast mixture.
- 2 A reliable kinematic.** Each auger is driven by a planet unit suited to heavy use and independently protected by a safety bolt to ensure long service life.
- 3 Height raiser and anti-overflow ring.** These component hold the ration when mixing to avoid losses of matter.

- 4 SYSTEM X.** The new LUCAS G. weighing system range. It guarantees extremely accurate weighing via the load cells that are protected and distributed at strategic places under the tank.
- 5 Suited distribution systems.** The LUCAS G. trapdoors and conveyors are wide and allow jam-free distribution regular spreading along the feed tables.

- 7 High durability of the tank.** All the vertical auger diet feeders are equipped with tank reinforcement which prevents the deformation of the bowl. This reinforcement limits pressure on the planetary units and the load cells during displacement and loading phases.



3D drawing of the SPIRMIX tank bottom.

SPIRMIX and SPIRMIX L

a complete range of 8 to 26 m³

In the design of machines, LUCAS G. takes all the needs and issues related to livestock breeding into account, to propose high performance products in relation to the needs of present-day agriculture. Lucas G. developed two distinct models to give the most suitable response to different farms.



SPIRMIX

Model shown above : SPIRMIX 220 with conveyor.

The SPIRMIX bowls are designed for intensive and daily use. These mixers are adaptable depending on the configuration of the farm, the type of livestock, and can be compatible with the JET function (straw bedding turbine). These bowls are robust and have undergone different test phases to be able to obtain approval to travel on the road.

	Spirmix 120	Spirmix 130	Spirmix 140	Spirmix 160	Spirmix 170	Spirmix 180	Spirmix 200	Spirmix 220	Spirmix 240	Spirmix 260
	60 - 75	65 - 80	70 - 90	85 - 105	90 - 110	95 - 120	105 - 135	110 - 140	120 - 150	135 - 160
	1	1	1	2	2	2	2	2	2	2
	2 760	2 920	3 090	2 800	2 925	3 050	2 800	2 960	3 130	3 270

number of dairy cows fed in a single pass number of augers overall height (mm)



SPIRMIX L

Model shown above : SPIRMIX 110 L Trapdoor.

The SPIRMIX L bowls have been developed for farms where machine size is an important factor. These bowls are compact and manoeuvrable. Indeed, the rear axle has been placed to provide a very low overall height and perfect behaviour during the manoeuvre phases. These low bowls are easily placed on farms with a low height under the ceiling.

	Spirmix 80 L	Spirmix 90 L	Spirmix 100 L	Spirmix 110 L	Spirmix 120 L	Spirmix 130 L	Spirmix 150 L	Spirmix 160 L	Spirmix 170 L
	40 - 55	45 - 60	50 - 65	55 - 70	60 - 75	65 - 80	80 - 105	85 - 110	90 - 115
	1	1	1	1	1	1	2	2	2
	2 480	2 640	2 806	2 560	2 720	2 890	2 600	2 755	2 850

compactness, versatility, performance

A quality mixture in record time

THE ADVANTAGES OF A ROLLED TANK

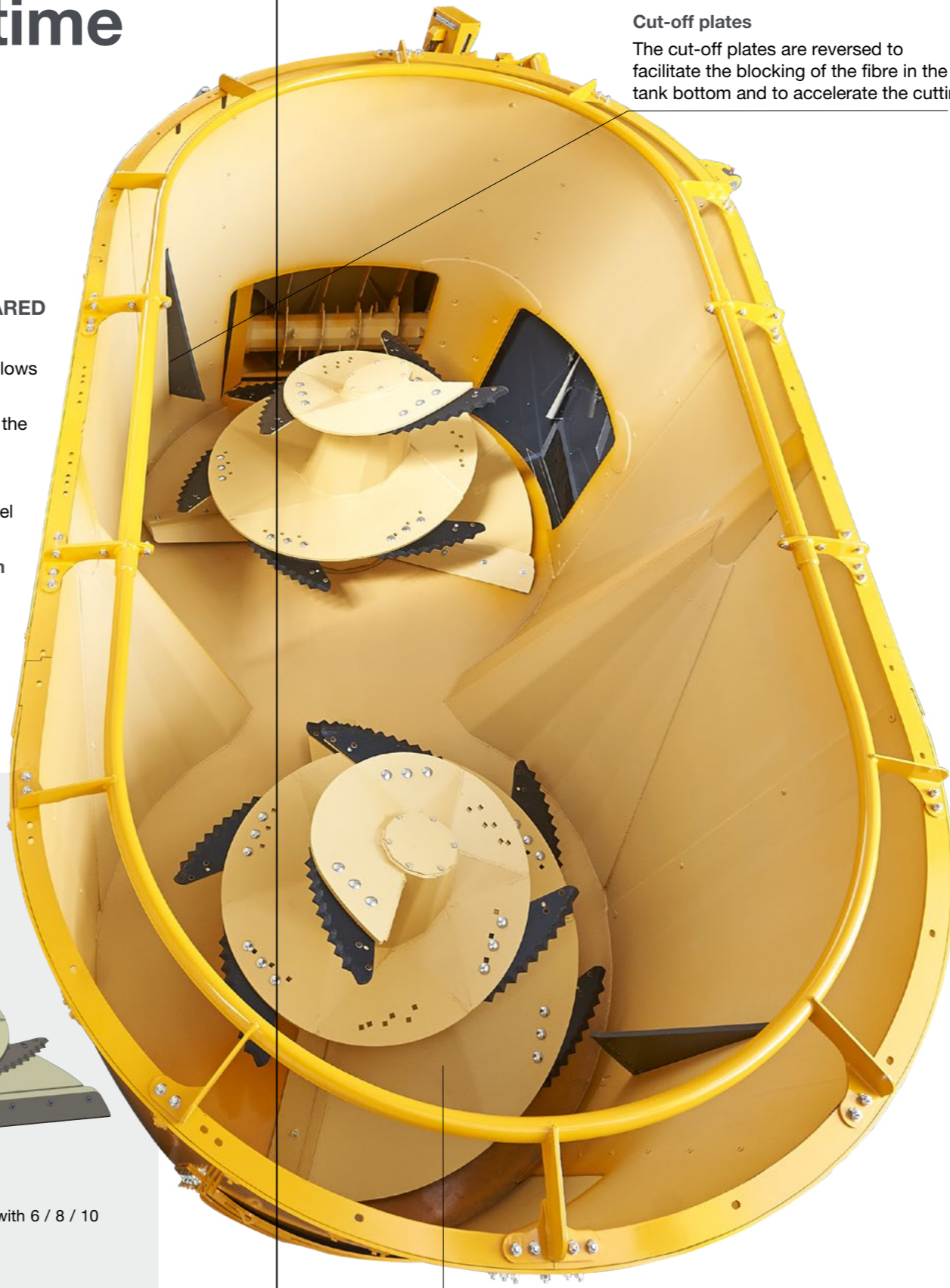
TO KEEP THIS COMMITMENT, THE SRPIMIX ARE DESIGNED WITH A ROLLED AND FLARED TANK GIVING IT VARIOUS ADVANTAGES :

The material moves better in a smooth rolled tank because it is not subjected to various constraints. It follows that the ration is mixed naturally and the expansion effect is amplified.

1. The power required for a mixture is reduced to its minimum. The flared and smooth shape makes the mixture homogeneous more rapidly.
2. The design of the tanks by rolling naturally reinforces the tank, giving it longer service life.

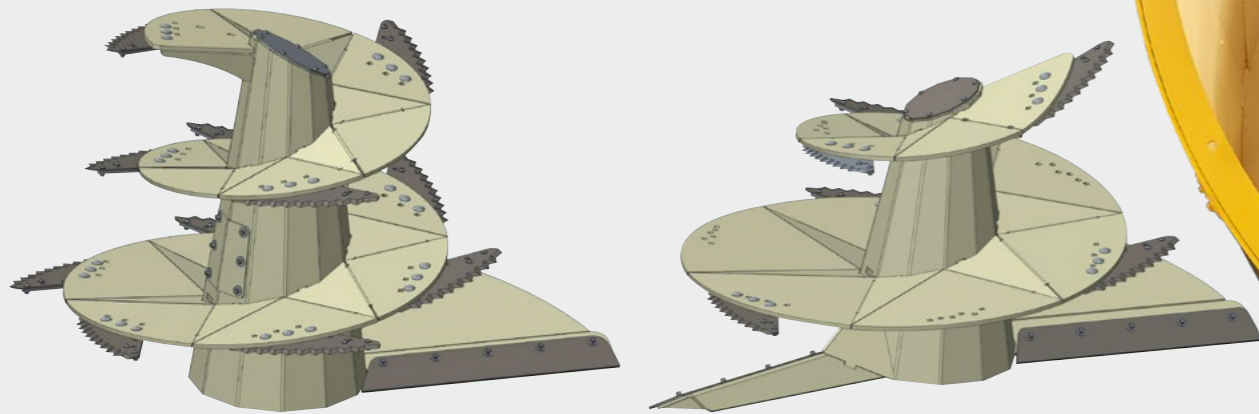
Aware of the intensive use of mixing machines, the tanks are made from HEL (High Elastic Limit) steel absorbing the stresses related to loading, mixing and to moving the laden machine.

To prevent premature deformation of the tank bottom, the SPIRMIX machines are equipped with reinforcement which prevents the deterioration of the load cells and wear to the tank.



Cut-off plates
The cut-off plates are reversed to facilitate the blocking of the fibre in the tank bottom and to accelerate the cutting.

AN AUGER SUITED TO THE TYPE OF PREPARED RATION



Single thread "Fibre" auger for cutting of hay, straw & bales, equipped with 11 reversible knives.

Single thread "Mixture" auger, equipped with 6 / 8 / 10 reversible knives.

Two-speed planetary gearbox

	Slow	Fast
Spirmix 120 - 140	18.6 rpm	36 rpm
Spirmix 160 - 180	15.4 rpm	29.5 rpm
Spirmix 200 - 260	16.4 rpm	29.5 rpm
Spirmix L 80 - 100	18.6 rpm	36 rpm
Spirmix L 110 - 130	18.6 rpm	36 rpm
Spirmix L 150 - 170	15.4 rpm	29.5 rpm

- Tungsten carbide reversible knives
- Knives adjustable in two positions
- Knife reinforcement in Creusabro
- Bolted scraper



OPTIMIZING THE MIXTURE FOR AN OPTIMUM NUTRITIONAL QUALITY

LUCAS G. knows that it is with quality raw materials that we achieve high nutritional goals and production. The mixture speed should be right, to avoid any risk of overheating and grinding that could cause decreases in goals.

Each SPIRMIX is equipped with a two-speed unit allowing the mixing machine to adapt to tractor powers, even the weakest.

The bi-speed unit, the rolled tank and the mixing auger form a complementary set guaranteeing an optimized mixing time and therefore reduced power consumption in use. The ration is ready to be distributed as quickly as possible, whilst respecting the raw materials.



SPIRMIX

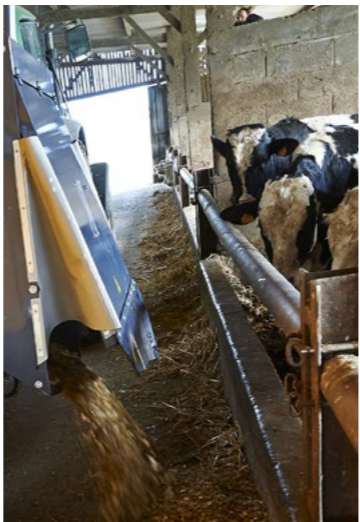
3 distribution modes

TRAPDOORS

Distribution by trapdoor is the most simple solution to use. It is perfectly suited to rations consisting mostly of silage. To facilitate distribution, the mixture slides on a flap located under the trapdoor to offset it from the axis of the wheel. This process thus limits the contact of the tyre with the distributed ration. LUCAS G. has developed two types of trapdoor to distribute in all building structures.

The front right trapdoors can be equipped with elevating conveyor ensuring an even more regular distribution.

	Width (mm)	Height (mm)
Front right trapdoor	1 000	700
Rear-left trapdoor	1 000	700

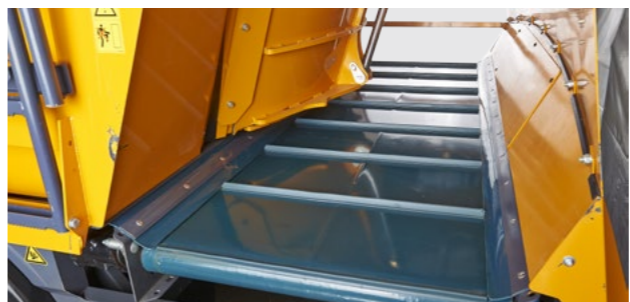


CONVEYORS

Distribution by conveyor is ideal for fibrous rations. The transversal conveyor ensures regular and quick distribution to right or left regardless of the prepared ration. The width of the conveyor prevents jamming problems and gives an even spread along the feed table. The conveyor can be offset manually by 300 mm or hydraulically by 375 mm to the right or left. They are fitted to the front or the rear of the machine to be able to distribute, even in dead-end corridors.

All conveyors can be equipped with right and / or left elevating conveyors for distributing in the troughs. There are 3 different sizes with different distribution heights of 0.9 m / 1.2 m / 1.5 m.

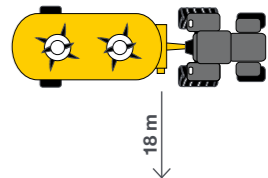
SPIRMIX	Height of distribution (mm)	Tank / conveyor offset (mm)
Elevating conveyor 0.9 m	1 180	730
Elevating conveyor 1.2 m	1 340	920
Elevating conveyor 1.5 m	1 600	1 230
SPIRMIX L		
Elevating conveyor 1 m	1 070	920



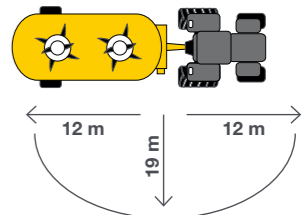
STRAW BEDDING TURBINES

Lucas G has designed this machine to make the diet feeder a versatile tool good enough for present-day agriculture. The turbine accurately distributes the ration and strawbeds the breeding buildings efficiently. The straw bedding assembly comes from the CASTOR range, recognized for its performance and reliability. The shredder is mechanical to ensure a steady supply of the material. The chute cut-off plates have been kept to avoid turbine jamming. LUCAS G. offers 3 types of different chutes adapted to the configuration of any farm :

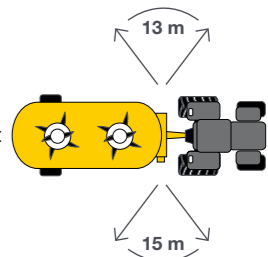
Lateral chute
Straw bedding at 18 m



SMART chute
Straw bedding at 19 m
Straw bedding at 12 m along the tractor / machine coupling



270° universal chute
Straw bedding at 15 m to the right
Straw bedding at 13 m to the left



systemX

THE EFICIENT WEIGHING SYSTEM

To have production yields to match set objectives, you need an accurate and efficient monitoring system, the SYSTEM X. Each machine is equipped with protected 3 or 4 load cells ensuring maximum stability and accuracy of the preparation of the ration. SYSTEM X will enable you to prepare an identical ration throughout the year, ensuring

the good health of your livestock, thus improving your productivity. This simple and intuitive solution will allow you to programme your income quickly via its 2 screens. The X Management monitoring software will give you the possibility to manage your stock of raw material and calculate your feed costs.

2 control units



**SPIRMIX JET
Electrical Control**

For easy control of the fan, the swivelling of the chute and the activation of the cut-off plates.



**SPIRMIX Conveyor belt
Electrical Control**

To activate the offset of the distribution conveyor and to regulate its forward speed. Control of the trapdoor opening and the activation of the cut-off plates.

A selection of options



SMART chute

Innovative straw bedding / distribution system to spread in parallel with the tractor / machine coupling.



SYSTEM X programmable weighing

X 500 programmable weighing to prepare accurate rations throughout the year.



Hydraulic cut-off plates

For an even quicker cutting process.



270° universal chute -U-

Swivelling straw bedding / distribution system to spread both sides in a single pass.



Distribution conveyor with hydraulic offset

375 mm of offset to the right or left to avoid the tyres touching the ration.



Anti-overflow ring

Contains the material to avoid losses and stiffens the tank.



SPIRMIX TRAP DOOR Standard Equipments

- Mixing auger with 6 knives
- Front right trap door
- Two-speed gearbox
- Not programmable weighing box X400
- 2 manual cut-off plates
- Manual control (1 hydraulic function)

Modèle	120	130	140	160	170	180	200	220	240	260
Capacity (m³)	12	13	14	16	17	18	20	22	24	26
Equivalent dairy cows	60 - 75	65 - 80	70 - 90	85 - 105	90 - 110	95 - 120	105 - 135	110 - 140	120 - 150	135 - 160
Distribution height (mm)		530			600			650		
Number of auger		1					2			
Overall height (mm)	2 760	2 920	3 090	2 800	2 925	3 050	2 800	2 960	3 130	3 270
Overall width (mm)		2 610			2 500			2 610		
Width at wheels (mm)		2 210			2 050			2 280		
Overall length (mm)		4 950			6 320			7 440		
Tractor power (HP)		75			90			100		
Oil flow min/max					25/40					
Hydraulic distributor					1					
Pressure					160/200					
Unladen weight (kg)	3 710	3 830	3 890	6 110	6 210	6 310	6 860	7 050	7 140	7 500
Tyres	12,5/80 - 15,3 • 16PR • ø875 mm			445/45 • R19,5 • ø895 mm			385/55 • R22,5 • ø996 mm			285/70 • R19,5 • ø895 mm



SPIRMIX CONVEYOR Standard Equipments

- Mixing auger with 6 knives
- Front feeding conveyor (right-left)
- Two-speed gearbox
- Not programmable weighing box X400
- 2 manual cut-off plates
- Manual control (2 hydraulic functions)
- Hydraulic stand
- Manual conveyor offset (300 mm)

Modèle	120	130	140	160	170	180	200	220	240	260
Capacity (m³)	12	13	14	16	17	18	20	22	24	26
Equivalent dairy cows	60 - 75	65 - 80	70 - 90	85 - 105	90 - 110	95 - 120	105 - 135	110 - 140	120 - 150	135 - 160
Distribution height (mm)		770			775			830		
Number of auger		1					2			
Overall height (mm)	2 830	2 990	3 160	2 800	2 950	3 050	2 800	2 960	3 130	3 270
Overall width (mm)		2 500			2 460			2 500		
Width at wheels (mm)		2 210			2 050			2 280		
Overall length (mm)		5 530			6 860			8 000		
Tractor power (HP)		75			90			100		
Oil flow min/max					30/100					
Hydraulic distributor					2					
Pressure					160/200					
Unladen weight (kg)	4 400	4 560	4 650	6 350	6 450	6 550	7 710	7 880	7 980	8 480
Tyres	12,5/80 - 15,3 • 16PR • ø875 mm			445/45 • R19,5 • ø895 mm			385/55 • R22,5 • ø996 mm			285/70 • R19,5 • ø895 mm



SPIRMIX JET Standard Equipments

- Mixing auger with 6 knives
- Right straw-bedding / distribution chute
- Two-speed gearbox
- Not programmable weighing box X400
- 2 manual cut-off plates
- Electric control
- Hydraulic stand

Modèle	120	130	140	160	170	180	200	220	240	260
Capacity (m³)	12	13	14	16	17	18	20	22	24	26
Equivalent dairy cows	60 - 75	65 - 80	70 - 90	85 - 105	90 - 110	95 - 120	105 - 135	110 - 140	120 - 150	135 - 160
Distribution height (mm)			1 400					1 460		
Number of auger		1					2			
Overall height (mm)	2 830	2 990	3 160	2 800	2 950	3 050	2 800	2 960	3 130	3 270
Overall width (mm)		2 550			2 500			2 550		
Width at wheels (mm)		2 210			2 050			2 230		
Overall length (mm)		5 740			7 080			8 200		
Tractor power (HP)		80			90			110		
Oil flow min/max					30/100					
Hydraulic distributor					2					
Pressure					160/200					
Unladen weight (kg)	4 950	5 105	5 150	7 300	7 400	7 500	8 580	8 820	8 980	9 350
Tyres	12,5/80 - 15,3 • 16PR • ø875 mm			445/45 • R19,5 • ø895 mm			385/55 • R22,5 • ø996 mm			285/70 • R19,5 • ø895 mm



SPIRMIX L TRAP DOOR Standard Equipments

- Mixing auger with 6 knives
- Front right trap door
- Two-speed gearbox (except 80 L - 100 L)
- Not programmable weighing box X400
- 2 manual cut-off plates
- Manual control (1 hydraulic function)

Modèle	80 L	90 L	100 L	110 L	120 L	130 L	150 L	160 L	170 L
Capacity (m³)	8	9	10	11	12	13	15	16	17
Equivalent dairy cows	40 - 55	45 - 60	50 - 65	55 - 70	60 - 75	65 - 80	80 - 105	85 - 110	90 - 115
Distribution height (mm)		380			385			440	
Number of auger				1				2	
Overall height (mm)	2 480	2 640	2 806	2 560	2 720	2 890	2 600	2 755	2 850
Overall width (mm)		2 297			2 520			2 550	
Width at wheels (mm)		1 946			1 900			2 490	
Overall length (mm)		4 460			4 810			6 220	
Tractor power (HP)		60			75			90	
Oil flow min/max					25/40				
Hydraulic distributor					1				
Pressure					160/200				
Unladen weight (kg)	2 900	3 060	3 090	3 600	3 700	3 790	5 700	5 800	5 900
Tyres	11,5/80 - 15,3 • 14PR • ø844 mm			30x11,5 - 15,5 • 26PR • ø710 mm			315/80 • R22,5 • ø1 074 mm		



SPIRMIX L CONVEYOR Standard Equipments

- Mixing auger with 6 knives
- Rear feeding conveyor (110 L - 130 L)
- Front feeding conveyor (150 L - 170 L)
- Two-speed gearbox
- Not programmable weighing box X400
- 2 manual cut-off plates
- Manual control (2 hydraulic functions)
- Manual conveyor offset (300 mm)

Modèle	110 L	120 L	130 L	150 L	160 L	170 L
Capacity (m³)	11	12	13	15	16	17
Equivalent dairy cows	55 - 70	60 - 75	65 - 80	80 - 105	85 - 110	90 - 115
Distribution height (mm)		500			600	
Number of auger		1			2	
Overall height (mm)	2 560	2 720	2 890	2 600	2 755	2 850
Overall width (mm)		2 470			2 550	
Width at wheels (mm)		1 900			2 490	
Overall length (mm)		5 185				
Tractor power (HP)		75			90	
Oil flow min/max				25/40		
Hydraulic distributor				2		
Pressure				160/200		
Unladen weight (kg)	4 050	4 175	4 300	6 160	6 260	6 360
Tyres	30x11,5 - 14,5 • 26PR • ø710 mm			315/80 • R22,5 • ø1 074 mm		

