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.

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

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.

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.

Suited distribution systems. The LUCAS G. trapdoors and conveyors are wide and allow jam-free distribution regular spreading along the feed tables.

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.

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.

3D drawing of a SPIRMIX Jet straw distribution unit.
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 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.

compactness, versatility, performance
A quality mixture in record time

THE ADVANTAGES OF A ROLLED TANK

TO KEEP THIS COMMITMENT, THE SPIRMIX 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.

AN AUGER SUITED TO THE TYPE OF PREPARED RATION

Two-speed planetary gearbox

<table>
<thead>
<tr>
<th>Model</th>
<th>Slow (rpm)</th>
<th>Fast (rpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spirmix 120 - 140</td>
<td>18.6</td>
<td>36</td>
</tr>
<tr>
<td>Spirmix 160 - 180</td>
<td>15.4</td>
<td>29.5</td>
</tr>
<tr>
<td>Spirmix 200 - 220</td>
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<td>28.5</td>
</tr>
<tr>
<td>Spirmix L 180 - 200</td>
<td>16.8</td>
<td>36</td>
</tr>
<tr>
<td>Spirmix L 150 - 170</td>
<td>15.4</td>
<td>29.5</td>
</tr>
</tbody>
</table>

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.

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.
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.

<table>
<thead>
<tr>
<th>Width (mm)</th>
<th>Height (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front right trapdoor</td>
<td>1000</td>
</tr>
<tr>
<td>Rear-left trapdoor</td>
<td>1000</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Width (mm)</th>
<th>Height of distribution (mm)</th>
<th>Tank / conveyor offset (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevating conveyor 0.9 m</td>
<td>1180</td>
<td>730</td>
</tr>
<tr>
<td>Elevating conveyor 1.2 m</td>
<td>1340</td>
<td>920</td>
</tr>
<tr>
<td>Elevating conveyor 1.5 m</td>
<td>1600</td>
<td>1230</td>
</tr>
<tr>
<td>Elevating conveyor 1 m</td>
<td>1070</td>
<td>820</td>
</tr>
</tbody>
</table>

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 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 15 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
The Efficient 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

**SPIRIMIX JET**
Electrical Control
For easy control of the fan, the swivelling of the chute and the activation of the cut-off plates.

**SPIRIMIX 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.

**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.

**Hydraulic cut-off plates**
For an even quicker cutting process.

**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)

<table>
<thead>
<tr>
<th>Model</th>
<th>120</th>
<th>130</th>
<th>140</th>
<th>150</th>
<th>160</th>
<th>170</th>
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<tbody>
<tr>
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<td>13</td>
<td>14</td>
<td>16</td>
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<td>18</td>
<td>20</td>
<td>22</td>
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</tr>
<tr>
<td>Equivalent dairy cows</td>
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<td>65 - 80</td>
<td>70 - 90</td>
<td>85 - 105</td>
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<td>95 - 120</td>
<td>105 - 125</td>
<td>110 - 140</td>
<td>120 - 150</td>
<td>130 - 160</td>
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<tr>
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<td>850</td>
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<td>100</td>
<td>120</td>
<td>140</td>
<td>160</td>
<td>180</td>
<td>200</td>
<td>220</td>
<td>240</td>
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</tbody>
</table>

#### SPLIRMIX 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)
- Manual conveyor offset (500 mm)

<table>
<thead>
<tr>
<th>Model</th>
<th>120</th>
<th>130</th>
<th>140</th>
<th>150</th>
<th>160</th>
<th>170</th>
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<td>18</td>
<td>20</td>
<td>22</td>
<td>24</td>
<td>26</td>
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</tr>
<tr>
<td>Equivalent dairy cows</td>
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<td>65 - 80</td>
<td>70 - 90</td>
<td>85 - 105</td>
<td>90 - 110</td>
<td>95 - 120</td>
<td>105 - 125</td>
<td>110 - 140</td>
<td>120 - 150</td>
<td>130 - 160</td>
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<tr>
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<td>4,130</td>
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<tr>
<td>Overall length (mm)</td>
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<tr>
<td>Tractor power (HP)</td>
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</tbody>
</table>

### 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

<table>
<thead>
<tr>
<th>Model</th>
<th>120</th>
<th>130</th>
<th>140</th>
<th>150</th>
<th>160</th>
<th>170</th>
<th>180</th>
<th>200</th>
<th>220</th>
<th>240</th>
<th>260</th>
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</thead>
<tbody>
<tr>
<td>Capacity (m³)</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>20</td>
<td>22</td>
<td>24</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Equivalent dairy cows</td>
<td>60 - 75</td>
<td>65 - 80</td>
<td>70 - 90</td>
<td>85 - 105</td>
<td>90 - 110</td>
<td>95 - 120</td>
<td>105 - 125</td>
<td>110 - 140</td>
<td>120 - 150</td>
<td>130 - 160</td>
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<tr>
<td>Overall width (mm)</td>
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</tr>
</tbody>
</table>

### SPIRMIX L TRAP DOOR
#### Standard Equipments
- Mixing auger with 6 knives
- Front right trap door
- Two-speed gearbox (except 80 L - 110 L)
- Not programmable weighing box X400
- 2 manual cut-off plates
- Manual control (1 hydraulic function)

<table>
<thead>
<tr>
<th>Model</th>
<th>120</th>
<th>130</th>
<th>140</th>
<th>150</th>
<th>160</th>
<th>170</th>
<th>180</th>
<th>200</th>
<th>220</th>
<th>240</th>
<th>260</th>
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</thead>
<tbody>
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<td>9</td>
<td>10</td>
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<td>12</td>
<td>13</td>
<td>15</td>
<td>16</td>
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<tr>
<td>Equivalent dairy cows</td>
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<td>45 - 60</td>
<td>50 - 65</td>
<td>55 - 70</td>
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<td>80 - 105</td>
<td>85 - 110</td>
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<tr>
<td>Overall width (mm)</td>
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<td>4,040</td>
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<tr>
<td>Tractor power (HP)</td>
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</tbody>
</table>

### 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 (500 mm)

<table>
<thead>
<tr>
<th>Model</th>
<th>110</th>
<th>120</th>
<th>130</th>
<th>140</th>
<th>150</th>
<th>160</th>
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<tr>
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<td>17</td>
<td></td>
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</tr>
<tr>
<td>Equivalent dairy cows</td>
<td>60 - 75</td>
<td>65 - 80</td>
<td>70 - 90</td>
<td>85 - 105</td>
<td>90 - 110</td>
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<td></td>
</tr>
<tr>
<td>Number of auger</td>
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<td>Pressure</td>
<td>160/300</td>
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</table>

### 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

### Pressure
- 160/200

### Oil flow min/max
- 25/40

### Manual control (1 hydraulic function)
- 2 manual cut-off plates
- Not programmable weighing box X400
- Electric control
- Hydraulic stand

### Manual control (2 hydraulic functions)
- 2 manual cut-off plates
- Not programmable weighing box X400
- Electric control
- Hydraulic stand

### Manual conveyor offset (500 mm)
- 2 manual cut-off plates
- Not programmable weighing box X400
- Electric control
- Hydraulic stand

### Tyres
- 11,5/80 - 15,3 • 14PR • ø844 mm
- 30x11,5 • 28PR • ø1,074 mm

### Tyres
- 11,5/80 - 15,3 • 14PR • ø844 mm
- 315/80 • R22,5 • ø1,074 mm

### Tyres
- 12,5/80 - 15,3 • 16PR • ø875 mm
- 445/45 • R19,5 • ø895 mm
- 385/55 • R22,5 • ø996 mm

### Tyres
- 12,5/80 - 15,3 • 16PR • ø875 mm
- 445/45 • R19,5 • ø895 mm
- 385/55 • R22,5 • ø996 mm