MANURE SPREADERS
SIP is the biggest producer of agricultural machinery in Slovenia based in Šempeter v Savinjski dolini. We draw on our experience and tradition to produce robust and quality machines.

Our core program consists of:

- mowers,
- tedders, and
- rakes.

A part of SIP product range are also manure spreaders which like all other SIP products are very robust and of high quality.

**Our vision** is to produce quality machines, which meet the demands of all our end users.

SIP machinery is distinguished by its simplicity of use and unique robust construction which offers excellent durability.

Our state of art product range offers sophisticated solutions for two main types of customers:

- **professional contractors**, and farmers who work on large expanses of land and need one hundred percent efficiency.
- **farmers**, land land owners with small pieces of hard to reach mountainous land, who need small and light weight machinery.

We export more than 80 percent of our products to 55 countries worldwide.

**WE ARE EXPERTS FOR MANURE SPREADERS**

**WE HAVE ACCUMULATED MORE THAN 60 YEARS OF EXPERIENCE AND KNOWLEDGE IN TO OUR MACHINES.**

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**By choosing our machines you opt for a robust, simple to use, tried and tested solution, which is appropriate for both flatlands and mountainous terrain.**

With the intent of developing the most reliable and durable machines, we contacted our end users and let them test our machines in all kinds of terrain. With the feedback from our clients we were able to implement this knowledge in to producing new and simple to use solutions.

The result is a palate of excellent machines renowned for their reliability and adaptability to all kinds of terrain from wide open fields to mountainous terrain.

We only use parts from the most recognised manufacturers because we insist that the most crucial components must work flawlessly.

We have a quick reaction time and are open to all kinds of suggestions. We provide you with spare parts in the shortest possible time or repair the problem and in this way do not impede your work.

**COMPUTER AIDED DESIGN**

Computer aided design and development are crucial for the manufacturing of high-end machines. A thorough analysis of the production process is important to ensure that all components fulfil the highest standard of quality.

**FIELD TESTS**

We leave nothing to chance. Before our machine is launched on to the market a few of our most demanding clients test them out on their farms.

Our users are also our R&D team. Their personal input is combined with the knowledge and experience of the whole company to make improvements where it is necessary.

If you wish to take part in our research process you can sign up to our testing program.
OUR PHILOSOPHY: ROBUST

In this word you can find three attributes that define SIP machinery:

**DURABILITY**
Our machines are extremely durable. They are appropriate for all types of terrain even the harshest conditions.

**EFFICIENCY**
Our machines are simple to use so you can shorten the preparation period and prolong your working time. With our machines you can do more in less time.

**USEFULNESS**
Easy maneuvering, very adaptable, simple transport and storage are just some of the benefits that help you concentrate more on your work.
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MANURE SPREADERS

Our range of manure spreaders is suitable for most farms. They are distinguished by their excellent maneuverability and even distribution.
ORION 40 and ORION 60 H are excellent manure spreaders for users who require a simple and reliable machine.

They are equipped with four vertical beaters, which ensure even spreading. Despite their gross weight of 5.3 and 6 tones they are not far behind their larger counter parts. Their lower weight offers excellent maneuverability however, they are still capable of completing the toughest jobs.

The vertical beaters finely grind up the manure which allows an even spread.
ORION 80 has a gross weight of 8 tones and is highly robust and simple to use. Continuously variable hydraulic drive of floor conveyor allows complete control over the amount of manure spread. Other elements can be controlled from the tractor cabin as well.

The beater segments are made of high quality HARDOX steel which offers fine grinding of material and is therefore appropriate for spreading on meadows.

It features a cleverly designed hydraulic system which offers a height adjustable hydraulic manure dosing wall and hydraulically controlled spreading unit protection.
The model **ORION 100 T** has four vertical beaters fitted with easily replaceable segments made of wear-resistant HARDOX steel. The model **ORION 100 TH** is equipped with a wide angle spreading device.

They are equipped with two graded horizontal beaters fitted with replaceable segments made of wear-resistant HARDOX steel and two spreading plates fitted under the beaters which enable fine and even spreading up to 24 m.

The hydraulic system is designed so that the manure spreader can be controlled from the tractor cabin.
**MANURE SPREADER**

**ORION 120 T, 120 TH**

**ORION 120 T/TH** is a heavyweight professional and robust manure spreader with a monocoque chassis and a gross weight of 12 tones. Despite its large proportions, it is manoeuvrable and simple to use. Forward and backward motion of the floor chain conveyor and other functions can be controlled from the tractor cabin. The easy to use support leg enables the manure spreader to be raised or lowered safely when attaching it to the tractor.

The spreading unit has a special central lubrication system for easy maintenance of the machine.

**ORION 120 T** version has four vertical beaters fitted with easily replaceable segments made of wear-resistant HARDOX steel. The wide-angle spreading version **ORION 120 TH** has two graded horizontal beaters fitted with replaceable segments made of wear-resistant HARDOX steel and two spreading plates fitted under the beaters which enable fine and even spreading up to 24 m.

It features a cleverly designed hydraulic system which offers a height adjustable hydraulic dosing wall and hydraulic controled spreading unit protection. Both come as standard.

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th></th>
<th>ORION 120 T</th>
<th>ORION 120 TH</th>
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<tbody>
<tr>
<td>Reference No.</td>
<td>648510000</td>
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<tr>
<td>Gross weight (kg)</td>
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<tr>
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<td>3800</td>
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<td>8200</td>
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<td>Max. width (m)</td>
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<tr>
<td>Max. height (m)</td>
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<tr>
<td>Height of sides (m)</td>
<td>0.90</td>
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<tr>
<td>Spreading unit</td>
<td>4 vertical beaters</td>
<td>2 horizontal beaters + 2 spreading plates</td>
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<tr>
<td>Sides</td>
<td>steel - fixed</td>
<td>steel - fixed</td>
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<tr>
<td>Spreading unit protection</td>
<td>hydraulic door</td>
<td>hydraulic door</td>
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<td>Loading surface (m²)</td>
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<td>8.9 (4.7 x 1.9)</td>
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<td>Loading volume (m³)</td>
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<td>Drawbar load (kg)</td>
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<td>Required tractor power (kW/HP)</td>
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<td>Track width (m)</td>
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<td>Tyre size</td>
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<td>PTO rotations (rpm)</td>
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<td>Floor conveyor</td>
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<tr>
<td>Chains</td>
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<td>13 x 36 mm</td>
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<tr>
<td>Drive</td>
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</table>

**STANDARD EQUIPMENT**

<table>
<thead>
<tr>
<th>Attachment</th>
<th>Drive</th>
<th>Drawbar for speeds up to 40 km/h</th>
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</thead>
<tbody>
<tr>
<td>Drive</td>
<td>Wide angle PTO shaft with friction safety clutch 1400 Nm (ORION 120 T) and 1650 Nm (ORION 120 TH)</td>
<td></td>
</tr>
<tr>
<td>Brake</td>
<td>Pneumatic</td>
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<tr>
<td>Hydraulic connection</td>
<td>1 x two-way hydraulic connection (120 kW)</td>
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<tr>
<td>Other standard equipment</td>
<td>Hydraulic floor conveyor drive, two-way air brake system with ALB, tandem axle, hydraulic manure dosing wall, hydraulic spreading unit protection, spreading unit - central lubrication system</td>
<td></td>
</tr>
</tbody>
</table>

The tandem axle with parabolic springs and a wide track enables speeds of up to 40km/h.
Sloped terrain requires a special kind of manure spreader, like the **ORION 35 ALP**.

With its low center of gravity and wide track, it is stable enough to work on steep terrain.

The manure is pushed forward by a chain floor conveyor that has a four-speed mechanical drive via a PTO shaft and a cogwheel.

The rear panel is standard. It can be fitted if the spreading unit is taken off, and the spreader is used as a standard trailer.
MANURE SPREADER
ORION 50 ALP

Adjustable drawbar for different attachment heights
Continuously variable hydraulic drive of floor conveyor
"V" shaped chassis for better stability
Four vertical spreading beaters
Low centre of gravity and wide track with 17" tractor profile wheels.

STANDARD EQUIPMENT
 Attachment: Drawbar for a speed of 25 km/h
 Drive: Wide-angle PTO shaft with friction safety clutch 900 Nm
 Brakes: Mechanical
 Hydraulic connection: 1 x one-way hydraulic connection (1EW), 1 x two-way hydraulic connection (2EW)
 Other standard equipment: Hydraulic drive of the conveyor floor, tires with tractor profile 15/55-17 10 PR AS

The spreading unit with four vertical beaters fitted with easily replaceable wear-resistant spreading segments (HARDOX). The spreading unit is easily removable.

A greater stability is achieved with a low centre of gravity and wide track with 17" tractor profile wheels.

The manure spreader has a central lubrication system for easier and quicker maintenance.

The automatic chain tensioner offers constant tension of the floor conveyor chains.

ORION 50 ALP with a gross weight of 5 tones performs equally well on levelled or sloped terrain.

Excellent stability is provided by its wide track and low centre of gravity. The hydraulically driven floor conveyor and other systems can be controlled from the tractor cabin. The drive via a safety clutch offers additional protection against overloads. The spreader has a RINNER six screw axle with drum brakes.

Like all the others the ORION 50 ALP has four vertical beaters fitted with easily replaceable segments made of wear-resistant HARDOX steel.

The steel sides can be removed on both sides or side extensions can be attached. To make the manure spreader even more useful the spreading unit can be taken off and the spreader can be used as a standard trailer.

The drawbar is screwed on the main frame and can be fitted on the lower or upper trailer linkage of the tractor.
SIP Strojna industrija d.d. is situated in the heartland of Savinjska dolina. With more than 60 years of experience in research and development we are known for our simple solutions and unique robust construction, which is built to last.

The production program includes:
• hay harvesting equipment
• manure spreaders
• maize harvesting equipment

With our efficient and high performance machinery we guarantee our customers the work is done flawlessly and in the shortest possible time.

We keep improving and upgrading our machines. We provide machines for both small scale farmers as well as for professional contractors and large scale farmers.

We offers a wide range of solutions to problems which farmers come in contact with daily. In the mower segment these solutions are for instance hydraulic ground pressure relief and swath wheels that offer uninterrupted forage flow. With the tedders we focused mainly on smaller rotor diameter, height adjustment and optimal angle of spring tines. We have equipped the rakes with a SIP patented tandem axle which offers excellent ground contour following, greater working speeds and less impact loads on the machine. All rotors have height adjustment and side tilt adjustment.

Maize cob pickers ensure high performance and quality husking without damaging the cob. These economical machines are agile also on small surfaces. Maize picked by the maize cob picker can be dried naturally which lowers production costs and is more energy efficient.

Traditional SIP manure spreaders are recognised for their simple use, easy maintenance and long life span. They come in all sizes perfect for all users. By removing the spreading unit the machine can also be used as an ordinary trailer.

We keep original parts on stock for machines for up to 10 years. We have on stock more that 10,000 different spare parts of both new machines and machines that have gone out of production.

Our service engineers are always ready to help.
Robust hay harvesting