ROTARY RAKES
STAR 700|22 T

STAR 700|22 T is a double rotor rake designed for one double side swath. It has modular dust-free rotors with 22 individually replaceable spring tine arms. Each arm holds four pairs of double spring tine.

- Hydraulic lift of rotors
- Pivoting tandem axle
- Modular rotor
- 3D pivoting rotor
- Robust steering mechanism

Pivoting linkage connected with the robust steering mechanism offers a 55° turning angle.

Successive folding of the rotors with a single-line hydraulic connection. The guided folding of the rotors ensures better manoeuvrability and good start and end to the work.

Robust steering mechanism makes it possible for the machine to follow the tractor while turning despite the greater length of the machine.
Rotary rakes – STAR 700|22 T

Ideal for professional contractors and large scale farmers with large fields.

STAR 700|22 T double rotor rake has a robust construction and is made of high quality materials. This combination offers excellent performance and a long lifespan.

Double left hand side swath form 7.00m.
Swath width: 0.70m - 1.30m.

Flexible walking tandem axle on the rotor for excellent ground contour following and higher operating speeds. A wide track with 4- or 6- wheel rotor chassis positioning close to the tines produces even and clean raking across the entire working width.

Adjustable cam track ± 15° - according to the quantity and humidity of forage.

A modular rotor with a 3D pivoting linkage to the frame allows better ground contour following capabilities.
2 year warranty
Years of testing, 100% quality controlled, robust design and reliable suppliers.

SIP Patent
Clever, innovative, thought-through innovations, which are the main advantage on the field.

SIP Walking Tandem
Intelligent walking tandem axle system enables 50% less rotor oscillation when crossing bumps and higher working speeds.

SIP 3D rotor
Multi-way adjustable rotor ensures smooth running on the sloping terrain.

Modular rotor
Robust design of the rotor with each part detachable enables easy maintenance.

Hydraulic adjustment of working width
Working width is easily adjustable using the tractor hydraulics.

Adjustable cam track
Cam track is adjustable ± 30° for optimal swath formation.

Transport locking
Special locking systems for the safety of the machine during transport. Any rotation or oscillation of the rotor is prevented.
SIP offers a wide range of rakes that ensure better quality of forage. Our rakes make airy and light swaths which ensure better drying and an easier pick up.

Advanced technology, simple use and maneuverability are essential for high quality work. Combination of robust construction and high quality materials offers excellent performance and a long lifespan.
ROTARY RAKES TECHNOLOGIES
MODULAR ROTOR

Rakes with SIP’s innovative solutions like modular rotors and tandem axles, ensure fast work and forage with increased energy value.

1. Individually replaceable spring tine arm holders
2. Low maintenance and long life span
3. Low weight due to high-quality materials
4. Large module on the gear pairs
5. Large hardened and tempered cam track made of ductile cast iron.
6. Cylindrical roller bearings mounted in the cam track ensure smooth and quiet running.
7. Vertical rotor shaft with two ball bearings.

Individually replaceable spring tine arm holders.

Spring tine arm with teflon bushes and cam follower roller.

Robust gear housing.

Large module on the gear pairs.

Individually replaceable spring tine arm holders with two teflon bushes and nipple.

3 bolts are holding the spring tine arm in rotor.

Large hardened and tempered cam track.

Large module on the gear pairs.

Low maintenance and long life span.
SIP WALKING TANDEM

Rakes with SIP walking tandem axles (patented) follow the ground as much as 50% more smoothly and evenly than rakes with standard tandem axles.

Serial tandem walking axle for the best ground tracking.

The graph shows the difference in the movement of pivoting points on SIP walking tandem axle (blue) and standard axle (orange).

The difference between movement of pivoting points on SIP walking tandem axle and standard tandem axle.
JOCKEY WHEEL

With the jockey wheel on the rake you are able to work faster on even terrain without possibility of damaging spring tine arms. Cleaner output of swath is also ensured.

With the jockey wheel the machine follows the ground one step ahead. This ensures that the working depth is always set correctly. Like this you are able to drive faster also cleaner output of spread or swath can be achieved. The swath is protected and the spring tines last much longer additional jockey wheel is especially recommended for working on slopes.

3D TRACKING

Free movement of the rotors is a feature providing a high quality and clean fodder regardless od the unevenness in the ground.

Special cross shaped hinges on the rotors enable perfect 3D ground countour following independetly of the chassis. Tines always stay parallel to the ground which ensure clean work at any speed.

HEIGHT ADJUSTMENT

Working height of the spring tines can be adjusted so that during the work the turf stays undamaged.

Working height of the spring tines can be adjusted so that during the work the turf stays undamaged. Properly set spring tines working height ensures high quality of the fodder.
SWATH WIDTH ADJUSTMENT

The width of the swath and amount of fodder can be adjusted according to the width of the pick-up behind the rake.

**STAR 430I112 and STAR 430I12 T**
Swath width: 0.60m - 1.40m.

**STAR 400I111**
Swath width: 0.70m - 1.40m.

**STAR 360I110**
Swath width: 0.70m - 1.30m.

Hydraulically manipulating the rear rotor set for two single swaths (1) or for double left hand side swath (2). Swath width: 0.60m - 1.20m.

**STAR 470I113**
Swath width: 0.60m - 1.40m.

Double left hand side swath form 7.00m.
Swath width: 0.70m - 1.30m.

Adjustable double central swath
Swath width: STAR 650I20 - 0.90m - 1.60m
STAR 720I22 - 1.30m - 1.85m,
STAR 850I26 - 1.15m - 2.15m;
STAR 1000I30 - 1.38m - 2.50m.
# Rotary Rakes

## Technical Data

<table>
<thead>
<tr>
<th></th>
<th>600</th>
<th>20 T</th>
<th>700</th>
<th>22 T</th>
<th>650</th>
<th>20 T</th>
<th>720</th>
<th>22 T</th>
<th>850</th>
<th>26 T</th>
<th>1000</th>
<th>30 T</th>
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<tbody>
<tr>
<td><strong>Working width (m)</strong></td>
<td>3.40-6.20 / 6.00</td>
<td>6.88</td>
<td>6.04-6.58</td>
<td>6.60 - 7.15</td>
<td>7.24 - 8.30</td>
<td>8.82 - 9.94</td>
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<tr>
<td><strong>Swath width (m)</strong></td>
<td>0.60 - 1.20</td>
<td>0.70 - 1.30</td>
<td>1.38 - 1.90</td>
<td>1.30 - 1.85</td>
<td>1.15 - 2.10</td>
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<tr>
<td><strong>No. of tine arms per rotor (machine)</strong></td>
<td>10 (20)</td>
<td>10 and 12</td>
<td>2 x 10</td>
<td>2 x 11</td>
<td>2 x 13</td>
<td>2 x 15</td>
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<td><strong>No. of spring tines per arm</strong></td>
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<tr>
<td><strong>Rotor diameter (m)</strong></td>
<td>2.85</td>
<td>3.25</td>
<td>2.86</td>
<td>3.15</td>
<td>3.55</td>
<td>4.26</td>
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<tr>
<td><strong>PTO rotation speed (rpm)</strong></td>
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<td>540</td>
<td>540</td>
<td>540</td>
<td>540</td>
<td>540</td>
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<tr>
<td><strong>Recommended PTO rotation speed (rpm)</strong></td>
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<td>400 - 500</td>
<td>400 - 500</td>
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<td><strong>Weight (kg)</strong></td>
<td>1480</td>
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<td>1520</td>
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<td><strong>Required tractor power (kW/HP)</strong></td>
<td>30/40</td>
<td>37/50</td>
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<td><strong>Capacity (ha/h)</strong></td>
<td>7.00</td>
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<td>8.00</td>
<td>9.00</td>
<td>9.00</td>
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<td><strong>Safety clutch (Nm)</strong></td>
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<td>600 left/900 right</td>
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## Equipment

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<th>Standard Equipment</th>
<th>Additional Equipment</th>
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<tr>
<td><strong>Transport</strong></td>
<td>Lift link drawbar</td>
<td>Transport frame with 2-point linkage</td>
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<tr>
<td><strong>Rotor</strong></td>
<td>Modular rotor</td>
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<td><strong>PTO shaft</strong></td>
<td>Wide angle PTO shaft with safety clutch</td>
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<td><strong>Hydraulic connection</strong></td>
<td>1 x one-way hydraulic connection (1EW)</td>
<td>1 x two-way hydraulic connection (1DW)</td>
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<td><strong>Height adjustable spring tines</strong></td>
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<td><strong>Tandem axle (standard)</strong></td>
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<td><strong>Swath curtain</strong></td>
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<td><strong>Road safety equipment</strong></td>
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<td><strong>Lighting equipment</strong></td>
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<td><strong>Hydraulically adjustable working width</strong></td>
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<td><strong>Tandem axle kit (rear)</strong></td>
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