VERSATILE TECHNOLOGY FOR PROFITABLE PRODUCTION

Protect your soil and maximize your resources with the innovative tilling technology of SMART-TILL®. From soil management to pasture/hay management, SMART-TILL®’s patented tines help optimize yield by fracturing rather than turning soil.

SMART-TILL®’s self-sharpening three-tine helical design:

- Creates a more extensive fracture force line both laterally and vertically
- Fractures soil more than 8” deep
- Reduces soil compaction
- Rejuvenates soil
- Improves pasture/hay, soil, and manure management
- Enhances no-till/minimum till
- 8-10 mph suggested operating speed
- Manages residue
Durable and reliable, SMART-TILL® offers adaptability few implements provide.

Its patented tines are adjustable from 0° to 10° depending on application. The optional rotary harrows—available only with SMART-TILL®—can be varied up to 30° at either standard or aggressive angles.

SMART-TILL®’s unique design allows it to fracture soil more than 8” deep, with little surface disturbance. This creates improved air and water exchange, which offers many benefits for different applications.

SMART-TILL®’s tines fracture soil more than 8” deep, allowing air (yellow) to be released and water (blue) to be absorbed more readily for healthier soil.

Available rotary harrows

Only SMART-TILL® is available with optional rotary harrows, increasing your potential to optimize your fields’ finish.

SMART-TILL®’s harrow tines create variable amounts of loosened soil depending on setting chosen. This adaptability also sets the depth of penetration for the rotary harrow, allowing for minute changes according to field conditions and crops.

Adjusting harrow angle and reversibility provides a full range of tillage options.

Decals show how to adjust the tine gangs and harrows.

Common SMART-TILL® Settings

<table>
<thead>
<tr>
<th>Season</th>
<th>Tine Gangs</th>
<th>Harrows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>5°</td>
<td>15° aggresive</td>
</tr>
<tr>
<td>Spring</td>
<td>2.5°</td>
<td>22.5° standard</td>
</tr>
</tbody>
</table>

The fracturing seems to be at the optimum at 5° tillage. The more aggressive the tillage angle, the more surface disturbance but also the larger the soft divot left behind. Zero degrees on the tillage gangs is never recommended.

In most situations, setting the harrows at 15° aggressive is a good starting point. A more aggressive setting than this could lead to ridging/windrowing unless the speed is fairly slow. The standard angle settings can be used in situations that call for a roller crumbler basket.


<table>
<thead>
<tr>
<th>Model</th>
<th>Tilled Width</th>
<th>Overall Length</th>
<th>Tine Spacing</th>
<th>Required Horsepower</th>
<th>Weight</th>
<th>Tire Size</th>
<th>Number of Tires</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST101</td>
<td>10’</td>
<td>16’ w/o harrows</td>
<td>7.5”</td>
<td>85-130 pto hp</td>
<td>3,350 lbs. w/o harrows</td>
<td>11L-15F1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23.5’ w/harrows</td>
<td></td>
<td></td>
<td>5,250 lbs. w/harrows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST151</td>
<td>15’</td>
<td>18.5’ w/o harrows</td>
<td>7.5”</td>
<td>130-200 pto hp</td>
<td>5,000 lbs. w/o harrows</td>
<td>11L-15F1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26’ w/harrows</td>
<td></td>
<td></td>
<td>7,850 lbs. w/harrows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST203</td>
<td>19’ 2”</td>
<td>18.5’ w/o harrows</td>
<td>7.5”</td>
<td>170-255 pto hp</td>
<td>7,500 lbs. w/o harrows</td>
<td>11L-15F1</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26’ w/harrows</td>
<td></td>
<td></td>
<td>11,400 lbs. w/harrows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST303</td>
<td>28’ 4”</td>
<td>18.5’ w/o harrows</td>
<td>7.5”</td>
<td>300-450 engine hp</td>
<td>10,500 lbs. w/harrows</td>
<td>11L-15F1</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26’ w/harrows</td>
<td></td>
<td>255-380 pto hp</td>
<td>16,000 lbs. w/harrows</td>
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<td></td>
</tr>
</tbody>
</table>
HOW IT WORKS

SMART-TILL®’s effectiveness comes from its two phases of tine action—ENTRY, or soil displacement, and FRACTURE, when force is applied. The recommended operating speed is 8-10 mph.

Tine shaft speed helps produce low torque and create a “ripping” effect that breaks through subsoil to allow more rapid air and water exchange. Water moves into the subsoil instead of resting in the plow layer, and roots easily penetrate the soil.

The soil surface receives only limited surface disruption, allowing for optimum performance from any field. Plus, SMART-TILL® offers the versatility to adjust the tine angle to suit the application and raise the harrows independent of the rest of the implement.

Effective in Many Fields

- Break up compaction with minimal surface disturbance
- Improve air and water exchange for healthier soil
- Expand available spring planting time
- Protect from winter elements
- Manage residue

- Improve soil’s ability to absorb liquid manure
- Allow rapid incorporation of manure into soil
- Reduce odor issues
- Decrease risk of runoff

- Reduce surface compaction
- Improve yields
- Encourage stronger roots and better emergence
- Enhance fertilizer and nutrient uptake
- Renovate and interseed
The new SMART-TILL®
3-point hitch adapter
lets you attach harrows
or other finishing tools to
the SMART-TILL® to optimize
productivity in your fields.

Endless Options

- **SMART-TILL® without harrows**
  For use on pasture renovation and interseed

- **SMART-TILL® with harrows**
  Manage and break down residue, plus flexibility to change angles

- **SMART-TILL® with H-frame 3-point adapter**
  Flexibility to attach other implements to suit your particular farming practice

The H.D. Hume pickup reel and Hart-Carter Products have long been associated with quality and innovation in harvesting. For over a century, HCC, Inc. has led the way with high-value products designed to optimize harvest efficiency and effectiveness. Today, HCC is the leading designer and manufacturer of pickup reels, sieves, chaffers, tillage equipment, and other components for OEM manufacturing and harvesting equipment.

**DEALER:**