Amity Technology gives you **profit with three** using the **power of three**. As the world leader in sugar beet harvesting equipment, Amity has engineered each piece of sugar beet equipment for **ease of adjustment, low maintenance, and resale value**. When you group **Amity Defoliators, Harvesters, and Carts**, your operation will give you **more beets, cleaner beets, and maximum efficiency**. The partnership between the **Grower, the Dealer, and Amity Technology** gives you unmatched response when you need **sales, parts, or service**. If you want to Profit with Three, follow the leader – Amity Technology!
## 50 Series Defoliators

Amity 50 Series defoliators can easily work up to 30 percent faster due to 66 percent more second drum flail pins compared to its predecessor. Proper defoliation removes leaves without requiring excessive scalping, leaving more beets.

## Harvesters

With their easy adjustments, Amity lifting struts pull more taproot in dry conditions and less mud in wet conditions. Active Depth Control (ADC) further maximizes root yield by regulating digging depth.

## Sugar Beet Cart

The Amity sugar beet cart has a 35-ton load capacity with a 7-foot-wide elevator. The solid floor and drag chain do not damage the roots like some competitive models, therefore putting more beets in the truck. An optional scale tells you just how much.
## Cleaner Beets

Engineered to stay ahead of the harvester, with the 50 Series defoliators you won’t have to defoliate acres ahead – taking advantage of the natural insulation provided by the crop canopy and delivering a high-quality product at a reduced cost. These leaf-free sugar beets increase yield and store better and longer for more profit.

## Maximum Efficiency

12-row defoliators became an efficiency item when harvesters were commonly 6-row units – that was 30 years ago. With today’s equipment and the lessons we have learned about beet storage, matching defoliator and harvester size, as well as operating speed and quality performance are a natural. The 50 series defoliator can match the speed of your harvester and increase the quality of production. This translates to maximum efficiency.

## Amity Harvesters

Amity harvesters lift clean, whole beets and separate dirt during the process. Match options of hook vs. belted apron chain, steel vs. poly grab rolls, extended jump chain vs. rear grab rolls, and rear wheel vs. rear scrub chain and the result is cleaner beets, no matter your conditions.

## Amity Technology Harvesters

Amity Technology harvesters are available in sizes from 4 to 12 rows, with row spacings of 20, 22, 24, 26, 28, and 30 inches commonly harvested in America. No matter your spacing or your acreage, Amity has a combination to enable maximum efficiency for your operation, utilizing the power you have. The power you use for harvest can be used for other operations as well. Now that is efficiency!

## In the Amity Sugar Beet Cart

In the Amity sugar beet cart, the transition from the floor chain to the boom and the tumbling of beets in the transition area further shed dirt that may have made it this far. This provides cleaner beets with less damage.

## Capable of Unloading

Capable of unloading 6 to 30 tons per minute, the sugar beet cart keeps your operation moving! Reducing cart unloading time and decreasing the damage to your crop puts your trucking investment where it is most efficient, no matter the field conditions, on the road!
Amity 50 Series defoliators work up to 30 percent faster than their predecessor to match harvester speed. Engineered to stay ahead of the harvester, you won’t have to defoliate acres ahead – taking advantage of the natural insulation provided by the crop canopy – delivering a high-quality product at a reduced cost.
The heart of the 50 Series defoliators is the Amity shrouded, combination steel front drum. It removes and finely sizes the foliage and distributes it evenly between the rows. Combined with a 10-pin second drum and a height-adjustable third drum, 50 Series defoliators give you the ability to match your harvesting speed and increase quality.
00 Series Defoliators

Amity Technology sugar beet defoliators lead the way with their simple, efficient design and innovations that are proven to clean the green from the sugar beet and add it to your bottom line.
Three-drum Amity defoliators are available with a variety of flail configurations to match your operation.
Active Height Control (AHC) is a major advancement on Amity defoliators. The ever-changing field dynamics during sugar beet harvest can create challenges, AHC helps you get an advantage!

During operation there are a number of changing dynamics at play – ground level, sugar beet height, uneven beets, sprayer tracks, and mud build up on the tires. Amity AHC system is constantly monitoring the beet height in comparison to the ground level and adjusting the height of the defoliator – up and down, as well as side to side. Active Height Control gives full defoliation with less damage to the sugar beet crop.
Sensors mounted on the rear of the machine, either on a skid or a scalper (depending on your operation), monitor the average beet height in comparison to the ground level, adjusting the defoliator to compensate.

AHC has an easy to operate monitor that allows automatic and manual adjustments with a touch screen from the cab.
Another Amity Technology exclusive is the all gearbox drive on all defoliator models. Engineered to the power required, these boxes efficiently transfer low-maintenance power. No belts here!

Hydraulic front and rear doors are standard on 50 series. Optional hydraulic doors are available on 00 series.

Optional stabilizer wheels for narrow stance rear strut assembly.

The optional row finder mounts either on the frame or the scalper bar and will please the harvester operator by keeping the removed foliage between the rows.

Amity defoliators are available with a number of rear strut options, like steerable or non-steerable, cylinders for ease of height adjustment, and offset to defend against pivot tracks.

- 7.6 x 15 with 22-inch spacing
- 11.2 x 24 with 22-inch spacing
- 11.2 x 24 with 30-inch spacing
- 11.2 x 24 with 44-inch spacing

The optional row finder mounts either on the frame or the scalper bar and will please the harvester operator by keeping the removed foliage between the rows.

Castering hydraulic stabilizer wheels reduce rocking over ruts and irrigation tracks. This allows the defoliator to follow curved rows. Also available in non-castering option.

Another Amity Technology exclusive is the all gearbox drive on all defoliator models. Engineered to the power required, these boxes efficiently transfer low-maintenance power. No belts here!
Amity Technology offers many flail options, including L-knife, cup knife, tapered rubber, and Amity’s exclusive split flail and patented studded flail.

### Defoliator Specifications:

<table>
<thead>
<tr>
<th>Defoliators</th>
<th>3750</th>
<th>3700</th>
<th>3550</th>
<th>3500</th>
<th>3450</th>
<th>3300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Rows</td>
<td>8 to 12</td>
<td>8 to 12</td>
<td>6 to 8</td>
<td>6 to 8</td>
<td>6</td>
<td>4 to 6</td>
</tr>
<tr>
<td>Row Spacing</td>
<td>20-30” (51-76 cm)</td>
<td>20-30” (51-76 cm)</td>
<td>20-30” (51-76 cm)</td>
<td>20-30” (51-76 cm)</td>
<td>20-24” (51-61 cm)</td>
<td>20-30” (51-76 cm)</td>
</tr>
<tr>
<td>Total Weight</td>
<td>15,200 lbs (6.9 MT)</td>
<td>13,600 lbs (6.2 MT)</td>
<td>13,200 lbs (6.2 MT)</td>
<td>12,000 lbs (5.4 MT)</td>
<td>11,500 lbs (5.2 MT)</td>
<td>10,000 lbs (4.5 MT)</td>
</tr>
<tr>
<td>Hitch Weight</td>
<td>6,050 lbs (2.7 MT)</td>
<td>5,000 lbs (2.3 MT)</td>
<td>5,000 lbs (2.3 MT)</td>
<td>4,400 lbs (2 MT)</td>
<td>4,400 lbs (2 MT)</td>
<td>3,800 lbs (1.7 MT)</td>
</tr>
<tr>
<td>Length w/o scalpers</td>
<td>19’ 6” (5.9 M)</td>
<td>19’ 6” (5.9 M)</td>
<td>19’ 6” (5.9 M)</td>
<td>19’ 6” (5.9 M)</td>
<td>13’ 4” (4.1 M)</td>
<td>19’ 6” (5.9 M)</td>
</tr>
<tr>
<td>Width</td>
<td>23’ 11” (7.3 M)</td>
<td>23’ 11” (7.3 M)</td>
<td>16’ 0” (4.9 M)</td>
<td>16’ 0” (4.9 M)</td>
<td>13’ 4” (4.1 M)</td>
<td>13’ 4” (4.1 M)</td>
</tr>
<tr>
<td>Height</td>
<td>7’ 0” (2.1 M)</td>
<td>7’ 0” (2.1 M)</td>
<td>7’ 0” (2.1 M)</td>
<td>7’ 0” (2.1 M)</td>
<td>6’ 6” (2.0 M)</td>
<td>7’ 0” (2.1 M)</td>
</tr>
<tr>
<td>Recommended Working Speed</td>
<td>3-6 mph (4.8-9.6 kph)</td>
<td>2-4 mph (3.2-6.4 kph)</td>
<td>3-6 mph (4.8-9.6 kph)</td>
<td>2-4 mph (3.2-6.4 kph)</td>
<td>3-6 mph (4.8-9.6 kph)</td>
<td>2-4 mph (3.2-6.4 kph)</td>
</tr>
<tr>
<td>Maximum Road Travel Speed</td>
<td>25 mph (40.2 kph)</td>
<td>25 mph (40.2 kph)</td>
<td>25 mph (40.2 kph)</td>
<td>25 mph (40.2 kph)</td>
<td>25 mph (40.2 kph)</td>
<td>25 mph (40.2 kph)</td>
</tr>
</tbody>
</table>

**Tractor Requirements (minimum):**

| Recommended Power (PTO) | 215 hp (160.3 kW) | 160 hp (119.3 kW) | 160 hp (119.3 kW) | 130 hp (96.9 kW) | 130 hp (96.9 kW) | 100 hp (74.6 kW) |
| PTO Speed | 1,000 rpm | 1,000 rpm | 1,000 rpm | 1,000 rpm | 1,000 rpm | 1,000 rpm |
| Drawbar Vertical Load | 6,000 lbs (2.7 MT) | 5,000 lbs (2.3 MT) | 5,000 lbs (2.3 MT) | 5,000 lbs (2.3 MT) | 5,000 lbs (2.3 MT) | 4,000 lbs (1.8 MT) |
| Hydraulic Capacity | 30 gpm (113.6 lpm) | 30 gpm (113.6 lpm) | 30 gpm (113.6 lpm) | 30 gpm (113.6 lpm) | 30 gpm (113.6 lpm) | 30 gpm (113.6 lpm) |
| Hydraulic Pressure | 2,700 psi (18615.8 kPa) | 2,700 psi (18615.8 kPa) | 2,700 psi (18615.8 kPa) | 2,700 psi (18615.8 kPa) | 2,700 psi (18615.8 kPa) | 2,700 psi (18615.8 kPa) |

*Note: The specifications above are estimates and may vary with conditions.*
Amity Technology products have become the benchmark to which others strive. Built with innovative design, uncompromised engineering, and durability, Amity products are supported by the best parts supply through the widest network of excellent dealership partners.
The flagship of Amity Technology is the scrub tower harvester, available in models 2300, 2400, 2500, and 2700. The lifting strut is the cornerstone of all Amity harvesters. Engineered to lift whole beets, Amity lifting struts are adjustable to minimize unwanted mud or utilize lighter soils to ensure the root enters the harvester. With efficiency in mind, you can adjust the rest of the harvester to clean as required. Scrub tower models are an excellent choice for heavier soils that stick.
Amity wheel harvesters are most effective in areas with lighter soils. With the simple design that allows incredible visibility inside the machine, Amity wheel harvesters lift sugar beets with fewer wear parts. Choose 4, 6, 8, or 12-row models to maximize production in your operation.
Active Depth Control

Active Depth Control (ADC) on Amity harvesters is a major advancement in efficiency and profitability for your operation. As harvester widths increase, the need for leveling the harvester has become a key component in reducing tare and maximizing root yield.

During normal operation, harvester weight dynamics are constantly changing. As the tank and boom fill and empty and as field conditions go from wet to dry, ADC continuously monitors the digging depth and makes adjustments with the hitch and rear cylinders across the machine.

From the monitor in the tractor, the operator sets digging parameters on the circuit board. The sensors, or wands, advise the circuit board of the digging depth. The circuit board then instructs the valve block to make adjustments to the hitch and axle cylinders.
Amity harvesters utilize an apron chain between the lifter wheels and the grabrolls, transferring the crop through the harvester and removing a majority of the dirt.

The Amity row finder is a simple, effective tool to keep your harvester on the row. The row finder also has a backup feature that allows you to backup without lifting the machine or damaging the row finder.

Grabrolls on Amity Technology harvesters are designed to remove any remaining dirt or trash from the sugar beets before they are elevated to the tank. Grabrolls can easily be adjusted to be more or less aggressive, depending on field conditions.

2700 harvesters from Amity Technology are available in three different configurations.

**Standard**
Standard jump chain with rear grabrolls for heavier clay soils.

**Extended**
Extended jump chain without rear grabrolls for lighter soils. Extended jump chains offer gentler handling of sugar beets.

**Wheel**
Standard jump chain with wheel lifter for lightest soils or for operations that do not want chains.
Amity paddles effectively move the sugar beets from the lifter wheels into the harvester.

Tires available on the 2700 harvester:
• 710/70R38 non-steering
• 600/60R30.5 steering
Tires for the 2700 harvester are all ADC compatible

Dynamic Chain Management maintains proper scrub chain tension. This advancement in harvester design adapts chain to sugar beet volume for easier sugar beet flow through the harvester. Dynamic Chain Management can allow for higher scrub capacity and field speed. It also reduces scrub chain breakage and extends scrub chain life.

The chrome pins in the chain wear less, therefore reducing “stretching”. That leads to less play in the chain during harvest, and fewer stops to tighten it up. Overall, the stronger material ensures that it stands up to demanding conditions with less maintenance from you.

Easy pinch point adjustments on Amity harvesters help you pull more taproot in dry conditions and less mud in wet conditions.
2300/2400/2500 FEATURES

Amity harvesters are available with three different rear-carrying struts, including:
- 11.2 x 24
- 23.5/55 x 26
- 11.2 x 24 steering

Shield with gas shocks provides easy access to working components.
Harvester Specifications:

<table>
<thead>
<tr>
<th>Harvester Model</th>
<th>2700 Wheel</th>
<th>2700 Scrub</th>
<th>2500 Wheel</th>
<th>2500 Scrub</th>
<th>2400 Scrub</th>
<th>2300 Wheel</th>
<th>2300 Scrub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Rows</td>
<td>8 to 12</td>
<td>8 to 12</td>
<td>6 to 8</td>
<td>6 to 8</td>
<td>4 to 6</td>
<td>4 to 6</td>
<td>4 to 6</td>
</tr>
<tr>
<td>Row Spacing</td>
<td>20'-30’” (45-76.2 cm)</td>
<td>20'-30’” (45-76.2 cm)</td>
<td>20'-30’” (45-76.2 cm)</td>
<td>20'-30’” (45-76.2 cm)</td>
<td>20'-30’” (45-76.2 cm)</td>
<td>20'-30’” (45-76.2 cm)</td>
<td>20'-30’” (45-76.2 cm)</td>
</tr>
<tr>
<td>Total Weight</td>
<td>36,500 lbs (16.5 MT)</td>
<td>36,000 lbs (16.3 MT)</td>
<td>23,500 lbs (10.2 MT)</td>
<td>22,500 lbs (10.2 MT)</td>
<td>20,000 lbs (9.1 MT)</td>
<td>19,750 lbs (8.9 MT)</td>
<td>19,000 lbs (8.6 MT)</td>
</tr>
<tr>
<td>Drawbar Vertical Load</td>
<td>6,500 lbs (2.9 MT)</td>
<td>6,000 lbs (2.7 MT)</td>
<td>9,500 lbs (4.3 MT)</td>
<td>7,500 lbs (3.4 MT)</td>
<td>6,250 lbs (2.8 MT)</td>
<td>7,500 lbs (3.4 MT)</td>
<td>6,000 lbs (2.7 MT)</td>
</tr>
<tr>
<td>Length</td>
<td>26’ 6” (8.1 m)</td>
<td>30’ 6” (9.3 m)</td>
<td>22’ 6” (6.9 m)</td>
<td>20’ 6” (6.2 m)</td>
<td>20’ 6” (6.2 m)</td>
<td>22’ 6” (6.9 m)</td>
<td>20’ 6” (6.2 m)</td>
</tr>
<tr>
<td>Transport Width (with boom down)</td>
<td>24’ 6” (7.5 m)</td>
<td>24’ 6” (7.5 m)</td>
<td>19’ 6” (5.9 m)</td>
<td>19’ 6” (5.9 m)</td>
<td>16’ 2” (4.9 m)</td>
<td>15’ 10” (4.8 m)</td>
<td>15’ 10” (4.8 m)</td>
</tr>
<tr>
<td>Operating Width (with boom up)</td>
<td>31’ (9.4 m)</td>
<td>31’ (9.4 m)</td>
<td>25’ (7.6 m)</td>
<td>25’ (7.6 m)</td>
<td>20’ 10” (6.4 m)</td>
<td>20’ 6” (6.2 m)</td>
<td>20’ 6” (6.2 m)</td>
</tr>
<tr>
<td>Height</td>
<td>14’ (4.3 m)</td>
<td>14’ (4.3 m)</td>
<td>13’ 10” (4.2 m)</td>
<td>13’ 10” (4.2 m)</td>
<td>13’ 10” (4.2 m)</td>
<td>13’ 10” (4.2 m)</td>
<td>13’ 10” (4.2 m)</td>
</tr>
<tr>
<td>Tank Capacity</td>
<td>4.5 tons (4.1 MT)</td>
<td>4.5 tons (4.1 MT)</td>
<td>3.5 tons (3.2 MT)</td>
<td>3.5 tons (3.2 MT)</td>
<td>3 tons (2.7 MT)</td>
<td>3 tons (2.7 MT)</td>
<td>3 tons (2.7 MT)</td>
</tr>
<tr>
<td>Tractor Requirements (minimum):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommended Power (PTO)</td>
<td>250 hp (186.4 kW)</td>
<td>250 hp (186.4 kW)</td>
<td>200 hp (149.1 kW)</td>
<td>200 hp (149.1 kW)</td>
<td>170 hp (126.8 kW)</td>
<td>170 hp (126.8 kW)</td>
<td>170 hp (126.8 kW)</td>
</tr>
<tr>
<td>PTO Speed</td>
<td>1,000 rpm</td>
<td>1,000 rpm</td>
<td>1,000 rpm</td>
<td>1,000 rpm</td>
<td>1,000 rpm</td>
<td>1,000 rpm</td>
<td>1,000 rpm</td>
</tr>
<tr>
<td>Hydraulic Capacity</td>
<td>30 gpm (113.6 lpm)</td>
<td>30 gpm (113.6 lpm)</td>
<td>30 gpm (113.6 lpm)</td>
<td>30 gpm (113.6 lpm)</td>
<td>30 gpm (113.6 lpm)</td>
<td>30 gpm (113.6 lpm)</td>
<td>30 gpm (113.6 lpm)</td>
</tr>
<tr>
<td>Hydraulic Pressure</td>
<td>2,700 psi (18615.8 kPa)</td>
<td>2,700 psi (18615.8 kPa)</td>
<td>2,700 psi (18615.8 kPa)</td>
<td>2,700 psi (18615.8 kPa)</td>
<td>2,700 psi (18615.8 kPa)</td>
<td>2,700 psi (18615.8 kPa)</td>
<td>2,700 psi (18615.8 kPa)</td>
</tr>
</tbody>
</table>

Note: The specifications above are estimates and may vary with conditions.
Beet Cart

Capable of unloading 6 to 30 tons per minute, the Amity sugar beet cart quickly turns your trucks and gets them back on the road, no matter the field conditions. Whether your field is wet or dry, this cart reduces field compaction and beet damage to maximize your harvesting efficiency.
Solid floor and drag chains eliminate unacceptable beet damage in dry conditions.

The unloading elevator fold inside the sugar beet cart for narrower transport.

35-ton capacity will quickly and efficiently build a clamp or fill a truck.
During the fast pace of sugar beet harvest, efficiency is a key to success. The high capacity tank and unloading elevator of the Amity Sugar Beet Cart are fast enough to keep harvesters moving in the field and trucks out of the field and rolling on the road.

**Beet Cart**
The Amity Technology Sugar Beet Cart makes your harvest faster and more efficient. With a capacity of 35 tons and a boom width of seven feet, the Amity beet cart keeps your harvester moving in the field and loads trucks quickly for fast turnaround.

Optional wireless scales ensure your trucks leave the field full, but not overweight.

During the fast pace of sugar beet harvest, efficiency is a key to success. The high capacity tank and unloading elevator of the Amity Sugar Beet Cart are fast enough to keep harvesters moving in the field and trucks out of the field and rolling on the road.
## Beet Cart Features

### Beet Cart Specifications:

- **Unloading Speed**: 6 to 30 tons/minute (5.4-27.2 MT/M)
- **Capacity**: 35 tons (31.8 MT)
- **Power Required (PTO)**: 300 hp (223.7 kW)
- **Maximum Transport Speed**: 15 mph (24.1 kph)
- **Track Measurements**: 3’ x 11’ 4” (0.9x3.5 m)
- **Hydraulic Remotes**: 4
- **Hydraulic Capacity**: 45 gpm (170.3 lpm)
- **Hydraulic Pressure**: 2,700 psi (18615.8 kPa)
- **Field Position**:
  - Length: 35’ (10.7 m)
  - Width: 11’ 6” (3.5 m)
  - Height: 19’ (5.8 m)
- **Transport Position**:
  - Width: 11’ 6” (3.6 m)
  - Height: 12’ (3.7 m)
- **Discharge**: left or right

*Note: The specifications above are estimates and may vary with conditions.*

The Amity beet cart tracks have a 79-83% ground pressure reduction vs. tires.