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# FIBERCUT




ASABE AE50 outstanding innovations AWARD

**AE50 Award-Recognized Engineering Innovation**




# Product Overview

The **FiberCut** is a high-speed, precision-engineered cutting system designed for hemp, and other tall biomass crops that are difficult to rake and bale due to excessive stalk length. While it is specifically designed for farmers who already own hay equipment and want to **minimize costs** by integrating their existing machinery, **it also fits into a variety of farming operations due to its tractor-pulled design**.

The FiberCut’s **hydraulic drive system** is a major advantage over traditional belt-driven systems, reducing maintenance, improving reliability, and **lowering overall power consumption**. With cutting widths of **8’, 10’, 12’, and 14’** FiberCut offers **greater efficiency** than competitors, meaning **fewer field passes and reduced fuel consumption.**

# Why We Built the FiberCut

Traditional sickle mowers exist, but they are often **too narrow, inefficient, and incapable of handling the unique challenges of biomass crops**. We designed the multi-height sickle mower to solve these industry-wide problems and revolutionize the way farmers harvest fiber crops.

One of the biggest challenges in harvesting hemp and other fiber crops is **raking, tedding, and baling stalks that are too long**. Conventional cutting methods leave **8’ to 10’ stalks**, which are incredibly difficult to handle and can cause significant damage to rakes, tedders, and balers. The FiberCut **eliminates this problem** by cutting stalks into **manageable sections under 48 inches (our standard is 30 inches, but it can be adjusted down to 24 inches if needed**). This **dramatically improves handling, reduces equipment wear, and increases efficiency in raking, tedding, and baling**.

Beyond just cutting, **the FiberCut optimizes the entire drying and retting process**. Unlike windrowing, where **moisture gets trapped inside the pile, leading to uneven drying**, FiberCut **lays stalks flat on the ground**, allowing for **uniform exposure to air and moisture**. This method **accelerates retting, improves fiber quality, and prevents processing delays.**

For farmers who prefer **immediate windrowing**, FiberCut comes **standard with a tow-hitch,** allowing a rake to be **attached and pulled directly behind the harvester**. This flexibility **ensures that every farmer can optimize their harvest process according to their unique operational needs.**

**Ideal for Harvesting:**

**Hemp** – All varieties, suitable for fiber and hurd processing

**Kenaf** – Efficient for high-biomass row crops

**Other Tall Biomass Crops** – Designed for crops with long stalks that are difficult to bale



# Cut 64% More in Every Pass

*Maximize coverage.*
*Minimize time and fuel.*

# Competitive Advantages

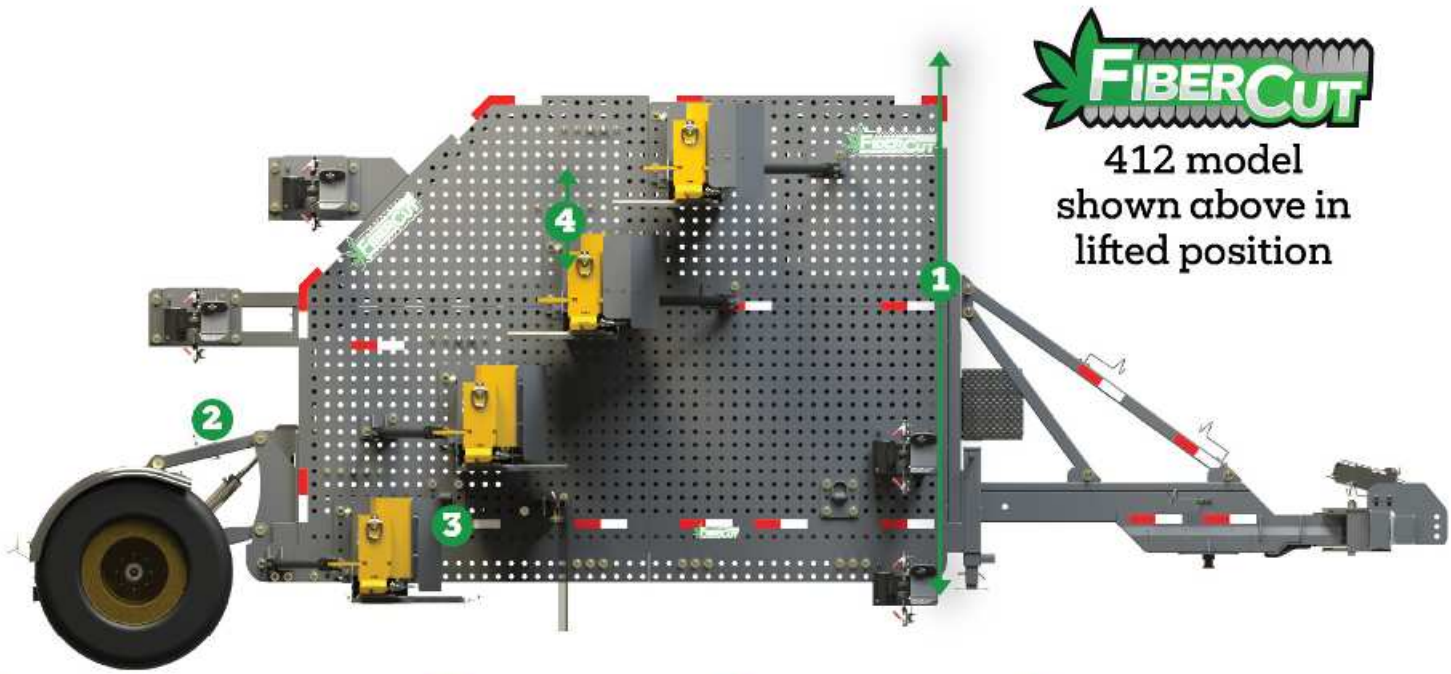
| Feature | Competitor | FiberCut |
|---|---|---|
| **Cutting Width** | 9’ 2” | 6’ – 14’ |
| **Drive System** | Belt Drive | Hydraulic |
| **Minimum HP** | 200+ | 80+ |
| **Speed** | 5 - 16 mph | 4 - 15 mph |
| **Adjustable Arms** | No | Yes |
| **Transport Width** | 8’ 2” | 8’ 5” |
| **3-Point Hitch** | Cat 3 & 4 | Cat 3 & 4 (Cat 5 optional) |
| **Tow Package** | Not Available | Available (HD Pickup Towable) |
| **Knife System** | Standard Sickle | Schumacher Easy Cut II + ProCut Hardened Sections |
| **Warranty** | 1 Year | 1 Year, 2 Years on Sickle Drive |





| Fiber Cut Wall Sizes | Walls Can Now Accommodate the Following Cut Height Ranges |
|---|---|
| Short Wall — for 1-2 arms — 5'3" tall<br>Medium Wall — for 1-4 arms — 9'3" tall<br>Tall Wall — for 1-4 arms — 12'6" tall | Short Wall — with 2 arms — range: 27" - 39"<br>Medium Wall — with 2 arms — range: 27" - 78"<br>Medium Wall — with 3 arms — range: 27" - 39"<br>Medium Wall — with 4 arms — range: 27" - with no adjustment<br>Tall Wall — with 3 arms — range: 27" - 57"<br>Tall Wall — with 4 arms — range: 27" - 39" |

# FiberCut™ 412 model

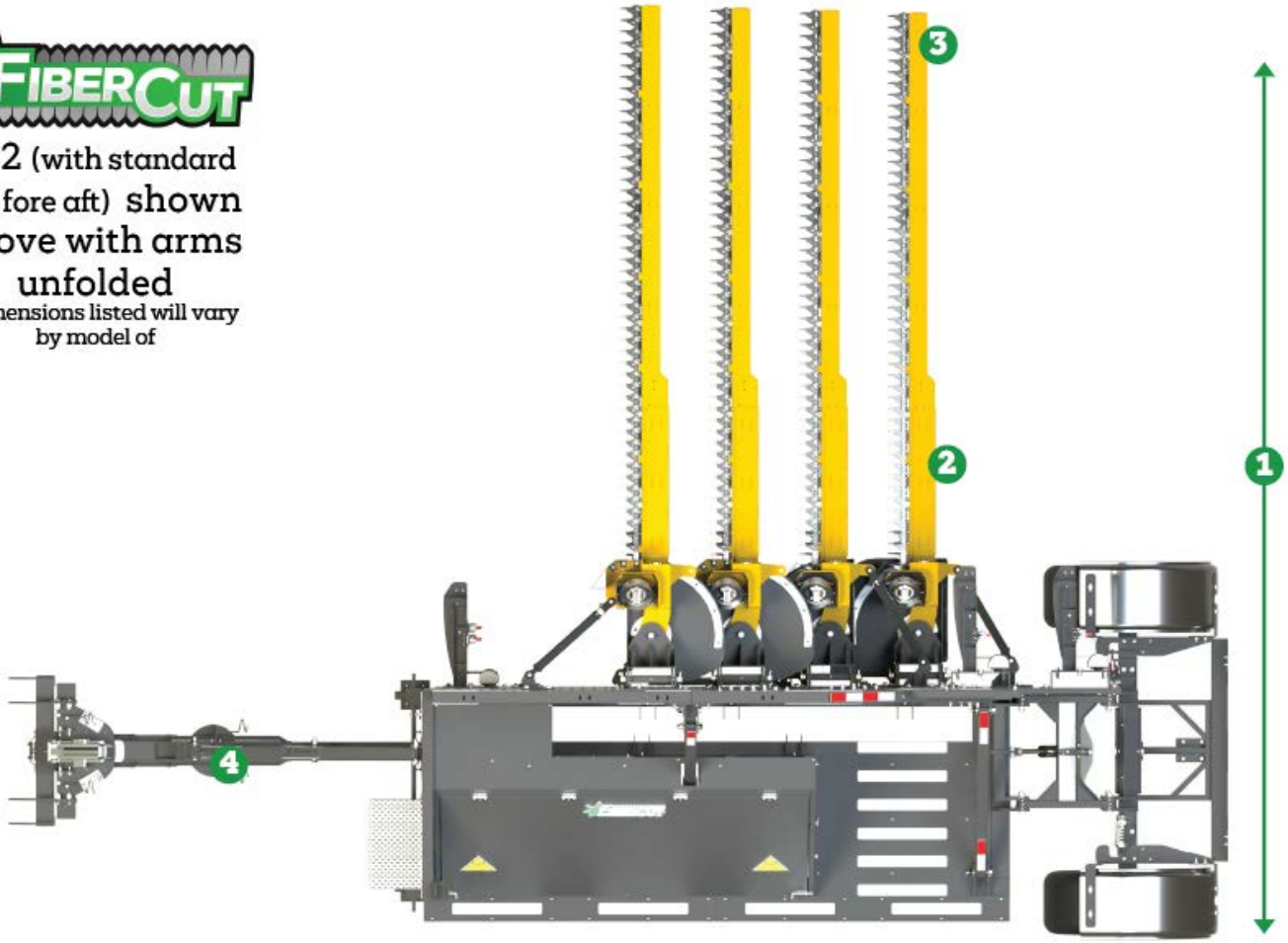



1. Lowerd Position Height 116 11/16" ; Raised Position (for Transporting) 130 11/16"
2. Hydraulic controlled lifting cylinder
3. As low as 3" Distance of knife edge to ground
4. 24" - 39" Vertical range between knife edges

# FiberCut™ 412 model

412 (with standard 24" fore aft) shown above with arms unfolded

*Dimensions listed will vary by model of




1. 20'- 8" Overall width
2. 0"-15" Horizontal (Fore Aft Range)
3. 12'-2 3/4" Overall Cut Length
4. Lateral Tilt

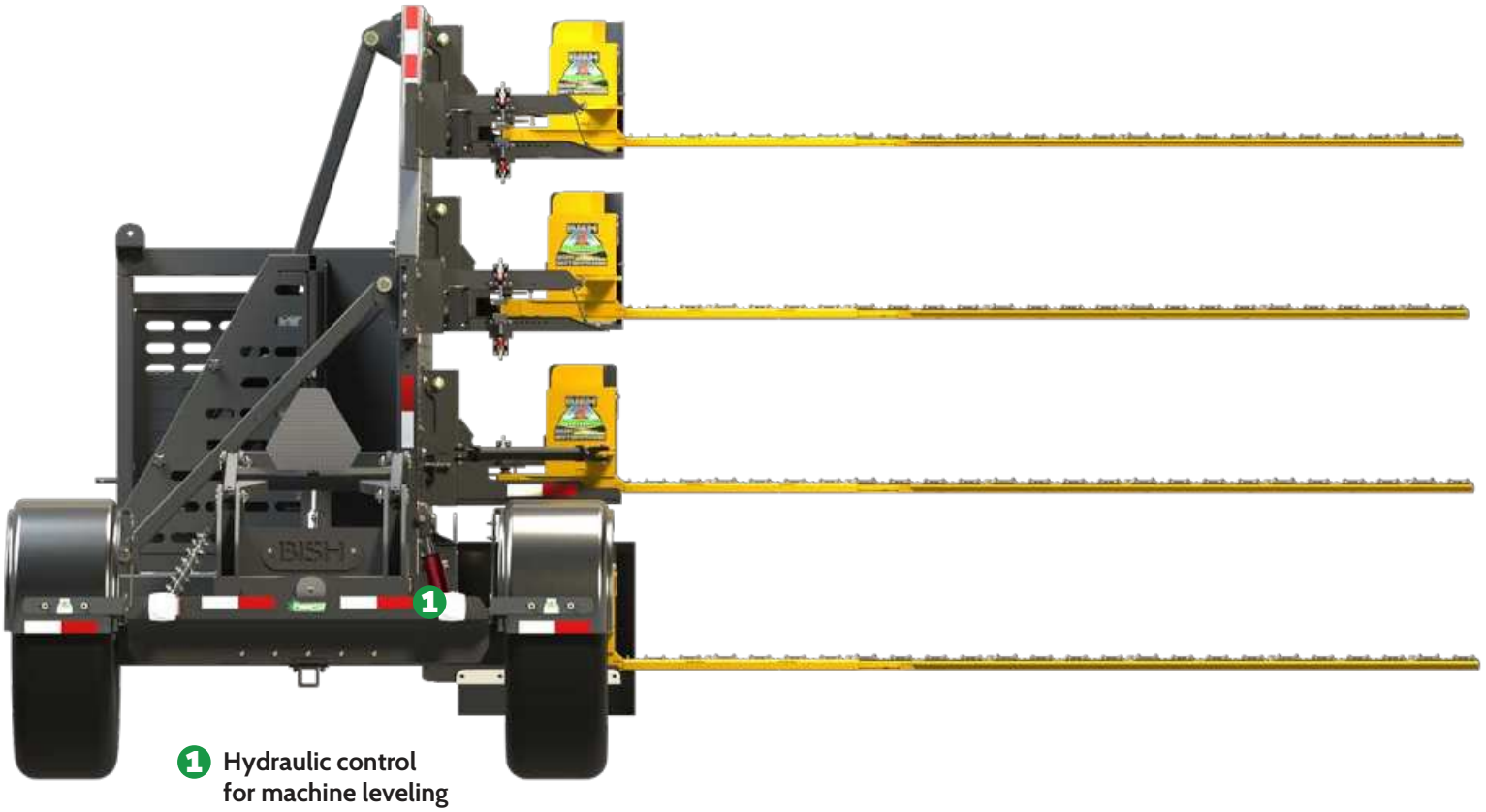



412 shown above with arms folded

1. Width
   Arms Retracted: 8'6"
   Arms Extended: 20' 8"
2. Length
   Arms Retracted: 30'2"
   Arms Extended: 27'5"

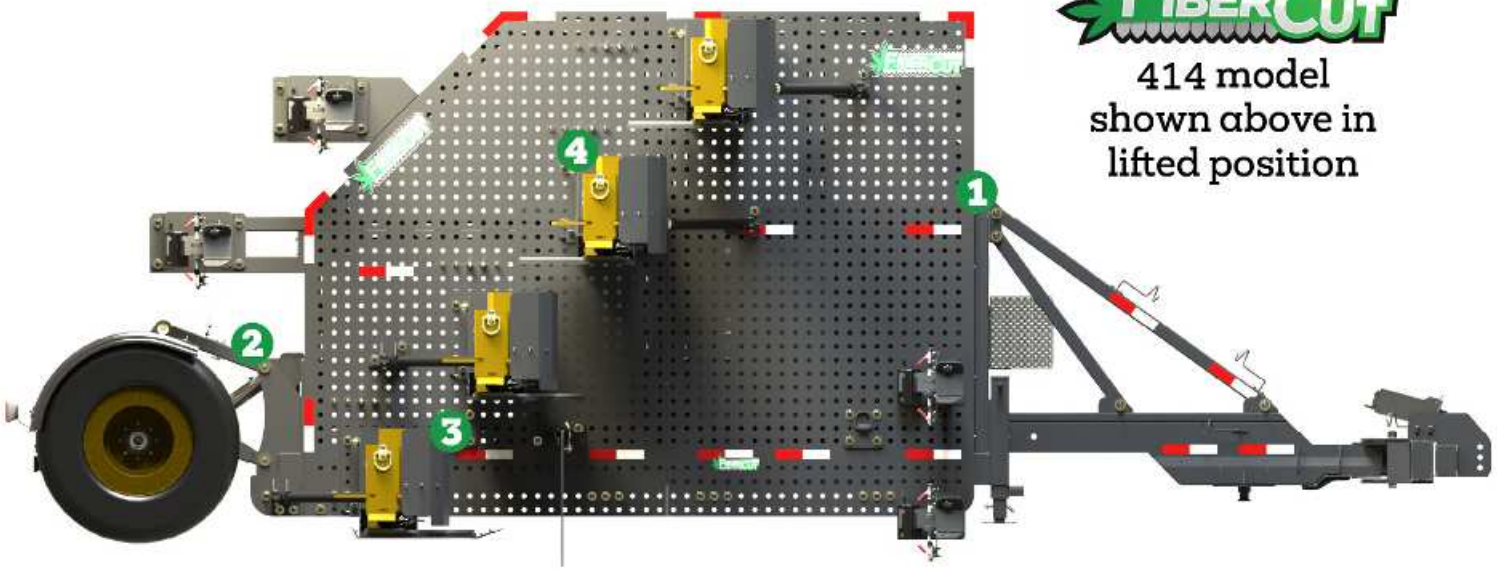
# FiberCut™ 412 model

| Folded Position: | Unfolded Position: |
|---|---|
| Overall Width: 8' 6"<br>Overall Length: 30' 2" | Overall Width: 20' 8"<br>Overall Length: 27' 5" |
| **Lowered Position:** | **Lifted Position:** |
| Overall Height: 13'<br>Distance of knife edge to ground: 5" | Overall Height: 14' 2"<br>Distance of knife edge to ground: 17" |
| **Misc.** | **Requirements** |
| Overall Weight: 14,000 lbs.<br>Overall Cut Length (12'model): 144"<br>Tire Size: 16.5L-16.1SL<br>Hydraulic fluid capacity: 45 gallons<br>Sickle guard size: 3"<br>Sickle section size: 3" | Horsepower Requirements:<br>4 bar cutters need 140+ hp tractors<br>3 bar cutters need 120+ hp tractors<br>2 bar cutters need 100+ hp tractors<br>1 bar cutter need 80+ hp tractors<br>Exception: 1 bar with 6 ft need 45+ hp tractors<br>PTO Requirements:<br>1000 RPM 21 spline<br>Hydraulic Requirements:<br>2-4 bars needs 3 hydraulic banks<br>1 bar needs 1 hydraulic bank |




1 Hydraulic control for machine leveling

# FiberCut™ 414 model




414 model shown above in lifted position

1. Lowerd Position Height 116 11/16" ; Raised Position (for Transporting) 130 11/16"
2. Hydraulic controlled lifting and tilting cylinder
3. As low as 5" Distance of knife edge to ground
4. 24"-39" Vertical range between knife edges




414 shown above with arms folded

1. **Width**
   Arms Retracted: 8'6"
   Arms Extended: 22'8"
2. **Length**
   Arms Retracted: 32'2"
   Arms Extended: 27'5"

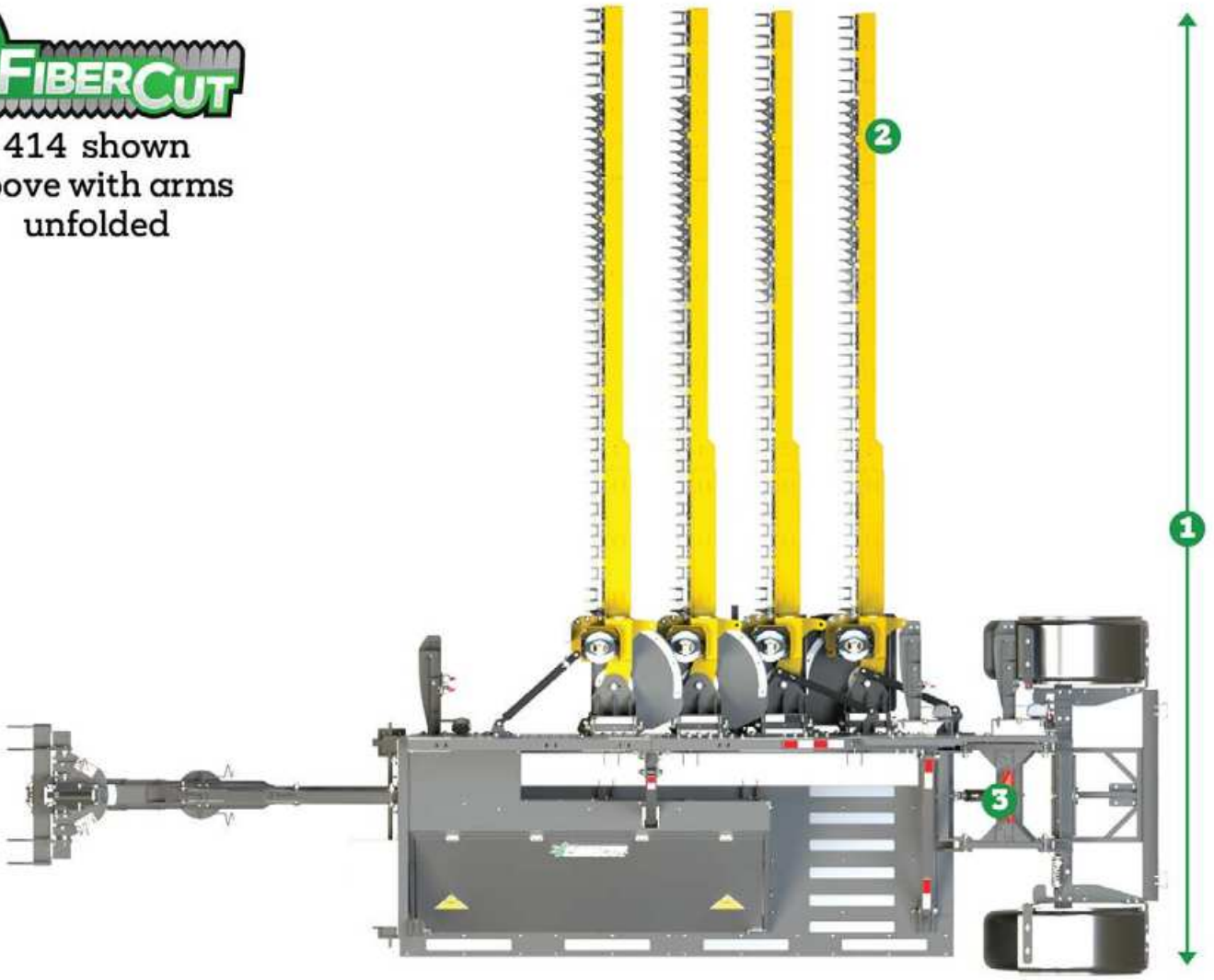
# FiberCut™ 414 model

| Folded Position: | Unfolded Position: |
|---|---|
| Overall Width: 8' 6"<br>Overall Length: 32' 2" | Overall Width: 22' 8"<br>Overall Length: 27' 5" |
| **Lowered Position:** | **Lifted Position:** |
| Overall Height: 13'<br>Distance of knife edge to ground: 5" | Overall Height: 14' 2"<br>Distance of knife edge to ground: 17" |
| **Misc.** | **Requirements** |
| Overall Weight: 14,000 lbs.<br>Overall Cut Length (14'model): 168"<br>Tire Size: 16.5L-16.1SL<br>Hydraulic fluid capacity: 45 gallons<br>Sickle guard size: 3"<br>Sickle section size: 3" | Horsepower Requirements:<br>4 bar cutters need 140+ hp tractors<br>3 bar cutters need 120+ hp tractors<br>2 bar cutters need 100+ hp tractors<br>1 bar cutter need 80+ hp tractors<br>Exception: 1 bar with 6 ft need 45+ hp tractors<br>PTO Requirements:<br>1000 RPM 21 spline<br>Hydraulic Requirements:<br>2-4 bars needs 3 hydraulic banks<br>1 bar needs 1 hydraulic bank |



# FiberCut™ 414 model

414 shown above with arms unfolded




1. 272 9/16" Overall width
2. 171-11/16" Overall Cut Length
3. Lateral Tilt









# Optional Mechanical Follow-Steering.

The FiberCut™ is now available with an optional **Mechanical Follow-Steering Option** designed specifically for the FiberCut™ platform. The system uses a purpose-built rear axle assembly and steering linkage to coordinate rear-wheel movement with the tractor as it turns.

This design allows the rear of the machine to respond more naturally to changes in direction, supporting smoother tracking and improved control during field operation. The close-up views highlight the steering linkage and rear axle components that make this coordinated movement possible.

The **Mechanical Follow-Steering Option** is available on new FiberCut™ machines, with certain newer FiberCut™ models potentially eligible for retrofit upgrades.

**Note:** FiberCut™ machines equipped with the Mechanical Follow-Steering Option do not include the rear tilting feature.




# Designed to Follow Your Turn.

The new optional **Mechanical Follow-Steering Option** was developed specifically for the FiberCut™ platform to improve maneuverability and operator control in the field. The newly engineered rear axle assembly and steering linkage allow the rear of the machine to steer in coordination with the tractor, helping the FiberCut™ follow more naturally through turns rather than simply tracking behind on a fixed axle.

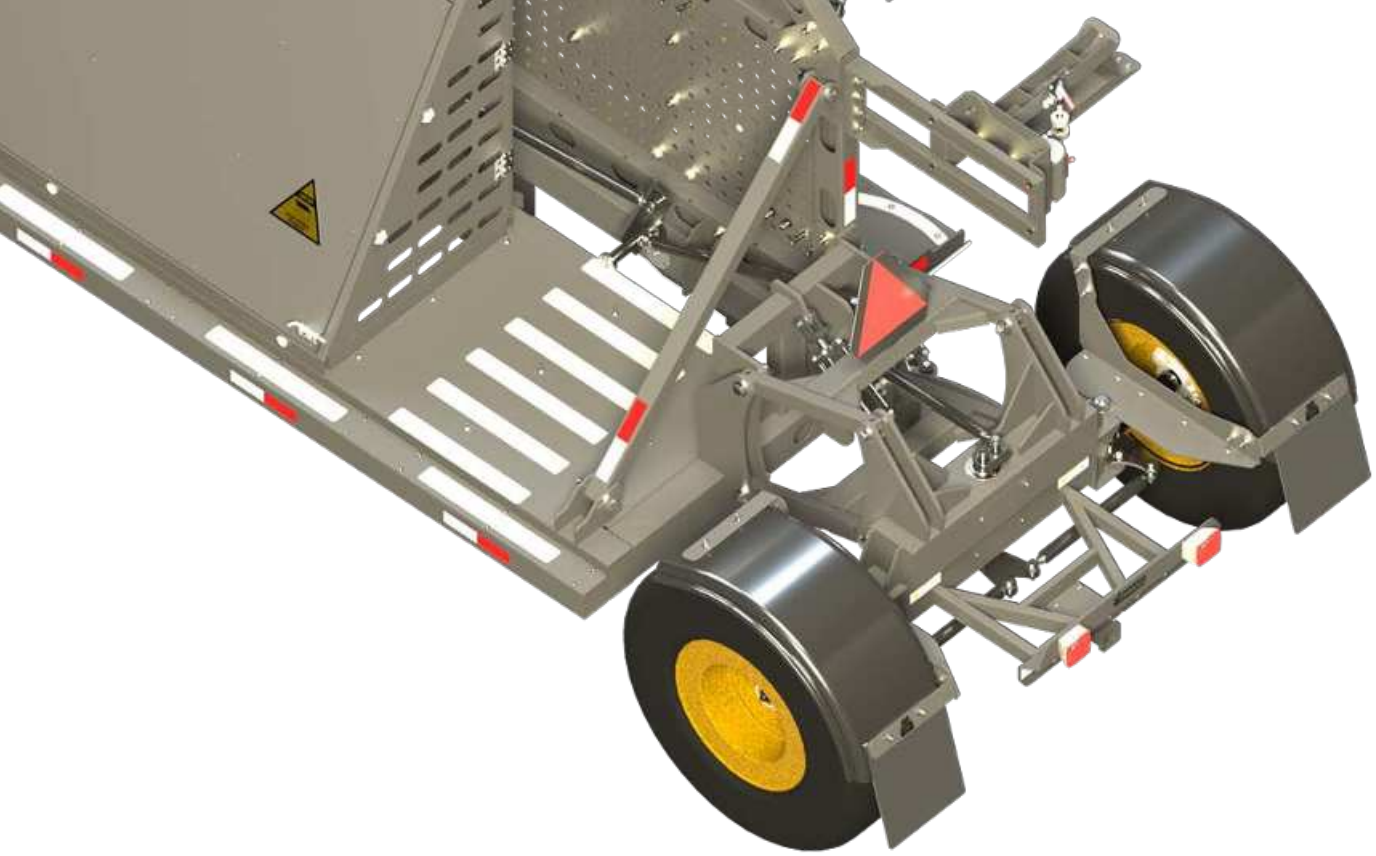
This added steering capability can be especially valuable in tighter end rows, field entrances, contoured terrain, and irregular field layouts where maneuvering space may be limited. By allowing the rear axle to respond with the tractor's movement, the system helps reduce the space required to turn and gives operators greater control when positioning the machine in changing field conditions.

The **Mechanical Follow-Steering Option** builds on the FiberCut™ platform's focus on practical field efficiency and adaptability, giving operators another way to configure the machine around the needs of their operation. It is available on new FiberCut™ machines, with certain newer FiberCut™ models potentially eligible for retrofit upgrades.



# Key Benefits.

- **IMPROVED MANEUVERABILITY:** Helps reduce the space required to complete turns.
- **MORE NATURAL TRACKING:** Rear axle steers in coordination with the tractor through changing direction.
- **GREATER OPERATOR CONTROL:** Especially useful in end rows, field entrances, contoured terrain, and irregular layouts.
- **FLEXIBLE UPGRADE OPTION:** Available on new FiberCut™ machines, with certain newer models potentially eligible for retrofit.





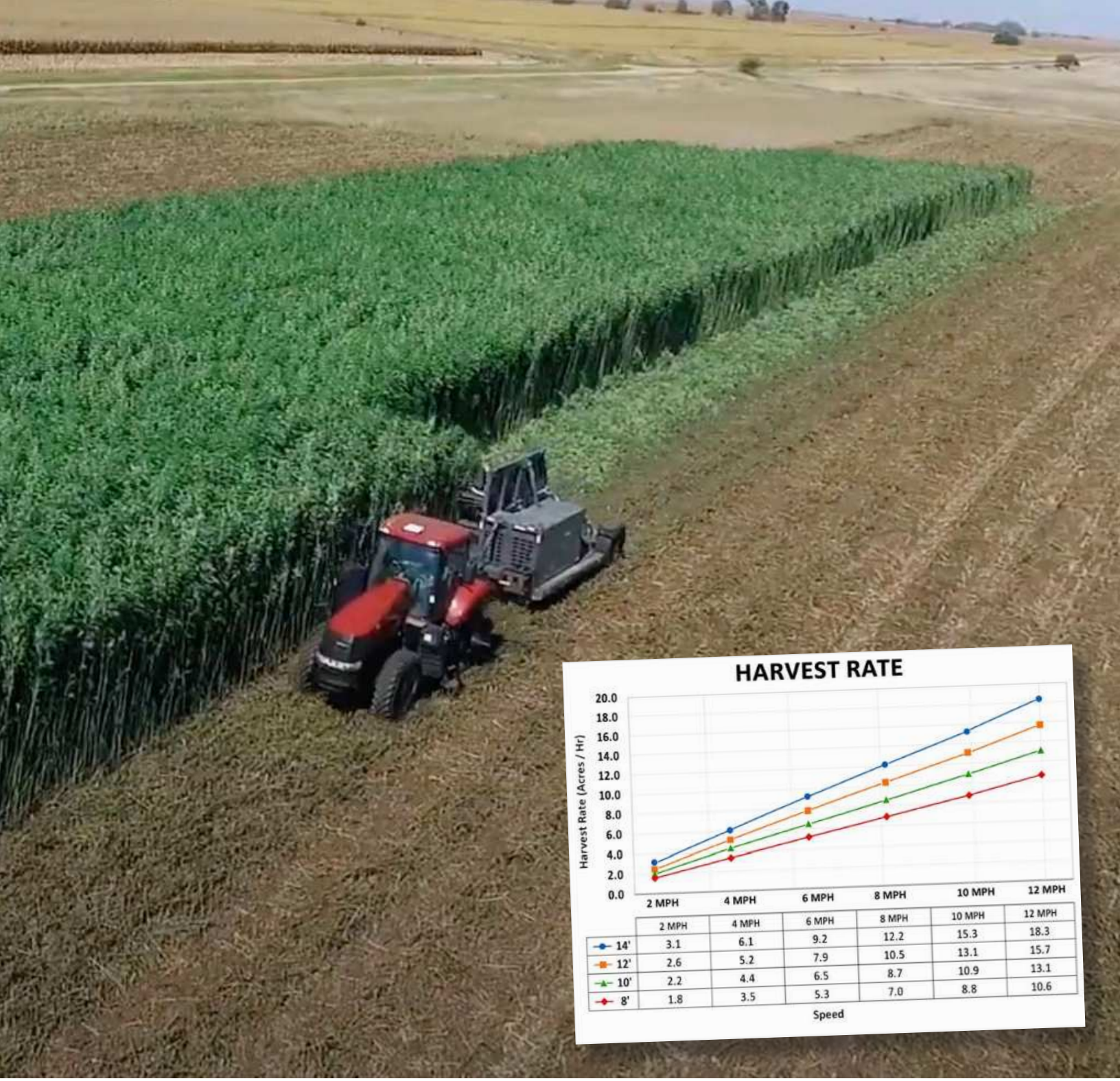
# FiberCut™ Mechanical Follow-Steering

**ENGINEERED FOR MORE NATURAL TRACKING**

The optional Mechanical Follow-Steering Option uses a purpose-built rear axle assembly and steering linkage developed specifically for the FiberCut™ platform. As the tractor turns, the steering mechanism allows the rear axle to respond with the change in direction, helping the machine track more naturally through the turn.

This coordinated movement is designed to improve maneuverability and operator control while reducing the space required to position the FiberCut™ in tighter field conditions.

**Mechanical Follow-Steering Option**
Available on new FiberCut™ machines, with certain newer FiberCut™ models potentially eligible for retrofit upgrades.




| | 2 MPH | 4 MPH | 6 MPH | 8 MPH | 10 MPH | 12 MPH |
|---|---|---|---|---|---|---|
| 14' | 3.1 | 6.1 | 9.2 | 12.2 | 15.3 | 18.3 |
| 12' | 2.6 | 5.2 | 7.9 | 10.5 | 13.1 | 15.7 |
| 10' | 2.2 | 4.4 | 6.5 | 8.7 | 10.9 | 13.1 |
| 8' | 1.8 | 3.5 | 5.3 | 7.0 | 8.8 | 10.6 |

# Cut Wider. Harvest Smarter.

The FiberCut™ is designed to help operators cover more ground efficiently while maintaining the flexibility needed for different crops, field conditions, and harvesting operations.

With cutting widths up to **14 feet**, the FiberCut™ can significantly increase field coverage. Based on a 14-foot cutting width and a 10% overlap, estimated field capacity ranges from approximately **3.1 acres per hour at 2 mph to 18.3 acres per hour at 12 mph.**

Greater cutting width can reduce the number of passes required across the field, helping operators make better use of harvest time while supporting efficient raking, tedding, drying, retting, and baling.



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