# EVALUATING CUT QUALITY OF FLEX-WING ROTARY CUTTER BRANDS

**Five brands, which make up 90%+ of the 15' flex-wing rotary cutter market**, were evaluated by rotary cutter owners and operators in a blind online study. The results showed the Woods<sup>®</sup> Batwing<sup>®</sup> BW15 was chosen as the preferred brand for cut quality.



#### PARTICIPANT QUALIFICATIONS

Qualified participants met all of the following criteria:

- Currently own or operate flex-wing or rigid rotary cutters for personal or professional agriculture/farming or commercial landscaping purposes.
- Involved with either the operation of rotary cutter tractor attachments or equipment purchase decisions.



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#### METHODOLOGY

Radius GMR, LLC, a global leader in market research, conducted the study in 2023 to understand perceptions of cut quality achieved by top brands of tractor-mounted flex-wing cutters. The purpose of the study was to capture the perceptions of overall cut quality from rotary cutter owners and operators in a blind comparison of the major brands in the category.

In this study, the Woods Batwing BW15.52 was tested against similar flex-wing models from major brands to represent the greatest competition for cut quality in the market. The models chosen had features often associated with superior cut quality, such as under-deck baffling and high tip speeds.

To enable user evaluation of overall cut quality, photographs were taken of grass plots that had been mowed by five brands of 15' flex-wing rotary cutters. A side-by-side, paired comparison design allowed respondents to evaluate cut images against each other. All tested images were unbranded. Over the course of ten screens, respondents were presented with sets of cut images for two brands at a time and asked to choose which one of the two represents the better overall cut quality based on the following definitions:

- Evenness of Cut The uniformity of height after mowing and the absence of extended grass blades in the cut path.
- Distribution of Cut Material The even spreading of material in the cut path.

For each evaluation, respondents saw two photographed images for each brand on the screen side-by-side. One image was intended to represent evenness of cut and one image intended to represent distribution of cut material.

After ten evaluations of overall cut quality, respondents evaluated every possible pairing of the five brands. The results of this exercise represent a robust series of evaluations that can be used to determine which brands' rotary cutters are perceived as offering the best overall cut quality.

## DAY 1: FLEX-WING CUTTER SETUP

# THE CUTTER SETUP AND MOWING COMPARISON WAS COMPLETED OVER TWO CONSECUTIVE DAYS.

Each cutter was set up for mowing according to its respective operator's manual. Setup included verifying the front to back pitch, leveling the wings, and setting the cut height. This process was completed for each cutter at the same location on a level concrete slab with the tractor parked in the same position.

### The following steps were repeated to ensure a consistent procedure for all cutters evaluated:

- 1. Park the cutter and tractor on a flat concrete surface with the location of cutter rear wheels and tractor centerline marked.
- Unfold the wings and lower the cutter to an estimated 5 inch cut height.
- 3. Turn off the tractor and set the parking brake.

#### MOWING

After setup, each cutter was operated to cut a 100 ft strip of grass and weeds at 4.5 mph ground speed. All runs were made in similar material with a cut height of 5 inches.



Woods<sup>®</sup> BW15 shown unfolded and placed on flat concrete surface.



Verifying cut height.



## DAY 2: PHOTOGRAPHY

A photographer, who had no knowledge of which brands mowed the test strips, captured images of each. Photos were taken using a white backdrop at ground level across the cut strip to highlight the material profile. The elevated view shots were taken from a platform lift at a height of 10 ft to observe the cut material distribution.

#### CAMERA SPECIFICATIONS:

CAMERA MODEL: Nikon Z6II (Mirrorless, 24.5mp)

CAMERA LENS: Nikon 24-70 / 4S

#### PHOTOGRAPHY SPECIFICATIONS:

IMAGE 1: EVENNESS OF CUT Camera Height: 8 Inches Focal Length: 200mm F-Stop Setting: F/20 Camera Sensitivity: ISO400 IMAGE 2: DISTRIBUTION OF CUT MATERIAL Camera Height: 10 Feet Focal Length: 35mm F-Stop Setting: F/20 Camera Sensitivity: ISO400



Example of Image 1: Evenness of Cut

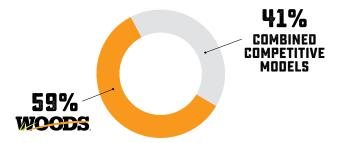


Example of Image 2: Distribution of Cut Material

### FINDINGS OF THE STUDY

A total of 75 completed surveys revealed that respondents selected Woods as the best in overall cut quality in 59% of the pairings in which they appeared. Comparatively, respondents selected one of the competitors as the best in overall cut quality in 41% of the paired comparisons.

At a 95% confidence interval, this represents a statistically significant difference based on the output of a two-tailed paired t-test.



CONCLUSION

Cut quality has been consistently ranked as a top priority for flex-wing owners and operators. With its legendary Batwing<sup>®</sup> cutter, Woods has continued to lead in precision cutting attachments by working closely with users to understand their needs and improving products to deliver on what matters most. When put to the test, the Woods Batwing is again confirmed as the preferred brand for cut quality. Learn more about how Woods innovative designs, engineering and technology keep it on the cutting edge of performance at woodsequipment.com.

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