## **Bid Specifications**



### Woods TBW12.40 Turf Batwing® Finish Mower

**General:** This specification describes a 12' flexible wing finish mower suitable for mowing large, grassy areas such as those found on farms and in parks, sporting complexes, and other commercial locations. The unit shall incorporate two (2) 48" wing decks and one (1) 60" center deck. The unit shall be equipped with four (4) gearboxes, ten (10) caster wheels, a floating clevis multi-position type hitch, two (2) hydraulic wing lift cylinders, one (1) hydraulic center deck lift cylinder, and adjustable parking jack.

**Decks and Trailer:** The mower shall be a pull-type with three (3) separate decks positioned to allow 6" standard blade overlap between sections to provide a cut width of no less than 12'. The blades shall cut the full width of the unit and shall be so designed that no uncut areas will exist between each section. The wing deck connection shall include a second position that will shift the wing decks 3" closer to the trailer frame, thus increasing section overlap to 9" and reducing total cut width to 11' 6". The tops of the decks shall be designed to prevent water and debris from accumulating on the deck top. The top deck sheets shall be of not less than (0.179") 7-gauge steel. The lateral structure of each mower section shall extend the full width. The depth of the deck side frame shall be no less than 5.56" from the top of the deck to the bottom, measured at the front of the deck (opposite the discharge.) The side frame material shall be minimum .179" in thickness. The mower decks shall be fully baffled, with minimum .135" thick high-strength steel baffles welded to the frame. The baffles must be rugged enough to withstand all mowing conditions encountered in heavy use. The three decks shall be mounted to a trailer constructed of square tube steel not less than 4" x 4" x .25" thick for the main frame elements. Decks shall include heavy-duty steel shields to cover the drive belt, spindles and sheaves. Shields shall be easily removable without the use of tools.

**Gearboxes and Clutches:** The mower shall have an input gearbox that connects to the tractor PTO shaft. The input gearbox shall have a minimum horsepower rating of 100 HP. Each deck shall have one (1) gearbox to enable the transfer of power from the input gearbox to the three (3) blade spindle assemblies in each deck. The shaft of each blade spindle shall be 1" in diameter. Gearboxes and spindles shall carry 10-year and 3-year limited warranties, respectively, which cover defects in material and workmanship. Gearbox warranties shall include the seals. The gearboxes shall utilize ball bearings throughout. An oil level dipstick shall be threaded into each deck gearbox to allow for oil level inspection. The input gearbox will include a breather plug and an oil level inspection plug.

**Drive Lines:** The input drive from the tractor to the input gearbox shall be ASABE Category 4 constant-velocity drive, and the drive from the input gearbox to the decks shall be ASABE Category 3 and contain in-line driveline grease fittings. ASABE compliant driveline shields shall provide full driveline coverage between connection points.

**Blades:** Each deck shall have three blades, positioned to allow cutting across the full width of the deck. Blades shall be one-piece, .25" thick, and manufactured from heat-treated, high-grade alloy steel. The blade tip speed shall be 18,000 ft/min at 540 RPM input from the tractor. Blades on all decks shall rotate in a clockwise direction (when viewed from the top of the mower).

**Hydraulic Equipment:** The unit shall utilize two (2) single-acting 3" bore by 10" stroke tie rod type cylinders for raising and lowering the right and left wings. One (1) single-acting 3" bore by 8" stroke tie rod type cylinder shall be used to raise and lower the center deck. The unit shall be configured for a single hose with quick coupler for connection to the tractor hydraulics.

Wheels and Tires: Each wing deck shall have four (4) 15" x 6-6 pneumatic caster wheels mounted on steel rims, and the center deck shall have two (2) 15" x 6-6 pneumatic caster wheels mounted on steel rims. The trailer shall have two (2) 20.5" x 8-10 highway tires, mounted on steel rims.

**Hitch:** The standard hitch shall be a floating clevis-type, ASABE category 1, drawbar mount. The floating clevis allows the trailer to follow the tractor through undulations of the ground without binding.

**Parking Jack:** A retractable pin-on type, hand operated, screw jack shall be provided to assist in the attachment of the mower to the tractor. The jack attached to the tongue shall be perpendicular to the ground at any ASABE

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category 1 drawbar height. A second mount shall also be provided on the trailer for jack storage when the mower is attached to the tractor.

**Safety:** Gearbox and driveline shields shall provide the necessary ASABE recommended coverage at all connection points to prevent injury. Latching mechanisms (with secondary, manual locking pins) shall be provided on each wing frame to automatically lock decks in place when in the fully raised transport position. Locking mechanisms shall include an unlocking rope that, when pulled by the operator from the tractor seat, unlocks the wing frame locks. An ASABE compliant safety tow chain and LED turn and stop lighting shall be provided. SMV (Slow Moving Vehicle) and SIS (Speed Identification Symbol) signage shall be provided. Mowers shall comply with ANSI B71.4 thrown-object test and acceptance criteria.



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### Specifications

Tractor PTO HP	30-80
Hitch	CAT 1 / 2, Drawbar
Hitch Adjustment	Floating clevis, Multi-position
Cut Width [in]	144
Cut Height [in]	1.5 - 5.5
Wing Deck Cut Width [in]	48
Center Deck Cut Width [in]	60
Deck Overlap [in]	6.0 std. (9.0 opt.)
Overall Width [in]	145
Transport Width [in]	88
Max. Overall Length [in]	171
Transport Length [in]	167
Max. Tongue Weight (transport) [lb]	688
Weight [lb]	2819
Max. Ground Pressure [lb/in^2]	15
Splitter Gearbox HP	100
Blade Tip Speed [fpm]	18,000
Drive Type	Gearbox over v-belt
Input Driveline	CAT 4 CV (const. vel.)
Wing Drivelines	CAT 3
Transport Tires [in]	(2) 20.5 x 8-10
Caster Wheel Bearings	Tapered roller bearings
Caster Wheels [in]	(10) 15 x 6-6 pneumatic
Wing Deck Lift Cylinders [in]	3.0 x 10 single-acting
Center Deck Lift Cylinders [in]	3.0 x 8 single-acting
Trailer Frame Construction [in]	4.0 x 4.0 x .25 sq tube
Deck Thickness	7 gauge
Blade Spindles	(9) ductile iron
Blade Spindle Bearings	Triple ball bearings
Gearbox warranty	10-years
Spindle warranty	3-years
Overall warranty	1-year