

# Wet Blade

Maximum application rate of

# 2.5 GALLONS PER ACRE

With No Drift



## NOTHING CUTS LIKE A DIAMOND



# Wet Blade<sup>®</sup>

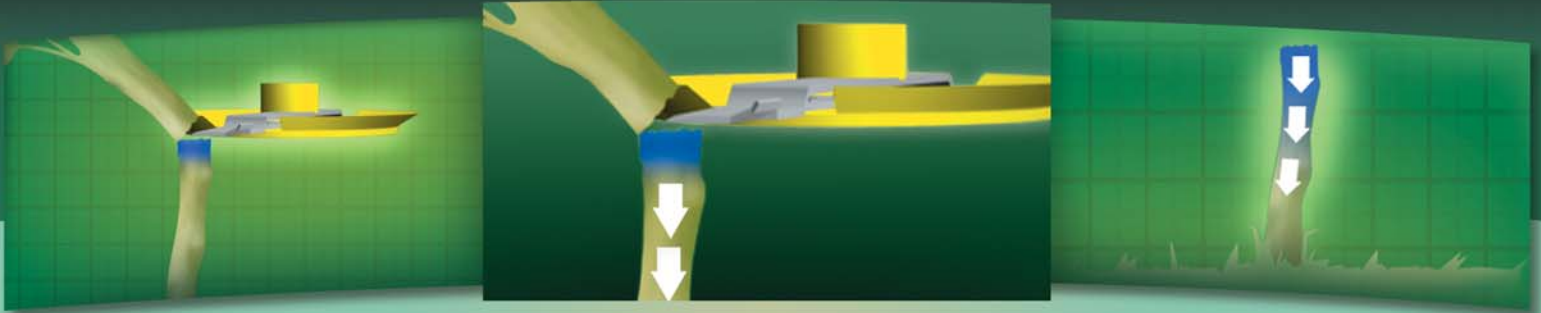
From constant mowing and brush control to tree trimming, herbicide application, beautification and fertilization – roadside vegetation management takes time, money and equipment. Wet Blade brings mowing and herbicide application together, creating one environmentally friendly, easy-to-use solution.

- Heavy-duty slope mower performance – cuts brush up to four inches in diameter
- Applies herbicide to the cut portion of the stem at the same time
- One operator needed – no more backpack units or spray trucks
- Any water-based herbicide can be used (no additives)



Wet Blade design uses centrifugal force to keep herbicide on the bottom of the blade.

### A COMPLETELY INTEGRATED MOWER/HERBICIDE SYSTEM



*Wet Blade® applies herbicide to the cut portion of the stem.*

*The plant absorbs the chemical into the roots...killing it.*

## SPECIFICATIONS

### Cutter Assembly

- Rotary, hydraulically driven
- Cutting width – 48" of actual cut
- Cutting head – 435° of combined rotation, 100,000 yield DOMEX steel.
- Full-length replaceable skid shoes on inner and outer ends.
- Spring-loaded retractable shield shielding cutter knife.
- Cutting assembly includes a 28" solid 1" thick steel bar (Wet Bar), providing channel for fluid to pass through to wet blade.
- Cutting assembly shall accommodate one solid blade 5/8" x 6" x 48".
- Cutting assembly shall have a minimum of mowing height of 18'6". Mowing reach below ground level is 13'6" and 20'6" out. Reach measured from tractor centerline and may vary depending upon tractor and/or tire configuration.

### Spindle

- One-piece, stress-proof steel mounted in straight FAG roller bearings.
- Power to cutting assembly – 3" in diameter at its largest area x 13.104" long with bearing areas of 2.755", with a minimum of 2" between bearing centers.
- Internal thru hole of .25" for a length of 7.117" and .203" for a length of 5.987".
- Spindle housing attached to the cutting head to absorb 240,000 lbs. of shear strength and distribute this load over a square area of 169 inches.
- Maximum spindle speed – 1,450 RPM.

### Flo Thru Cell Chemical Tanks

- Three polyethylene stackable tanks w/ 5 gal. capacity.
- Tanks connect using a 1/4" plastic line with quick-connect fitting.
- Tanks weigh approximately 7 pounds when empty.

### Chemical Application Controls

- Includes controller with display and driver module.
- Monitor/regulate flow to a min. 1 gallon per acre (max. 2.5 gallons per acre).

### Chemical Pump System

- Includes peristaltic pump with rotational shaft sensor.
- 12 VDC pump motor operates at maximum 94 RPM (variable speed).

### Boom Characteristics

- Mainframe of mower is properly braced to rear axle and front axle housing to absorb side torque and impact of severe applications.
- Boom shall be supported by a hardened plain bearing having not less than 37 square inches of bearing area. The base plate shall have an integral swing cylinder attachment point with spherical bearing and be constructed of not less than 1" thick and 100,000-PSI steel.
- 65-gallon reservoir includes in-tank filter rated at 75 GPM, 25-micron element, with restriction gauge.
- Reservoir suction and return outlets shall be equipped with ball valves.
- Wheel weight shall weigh not less than 1,400 pounds, mounted in left rear wheel.

- Inner boom structural tube shall not have less than the following sectional properties:
  - TORSIONAL: 74.9" 4
  - BENDING: 60.1" 4 (Horizontal)
  - BENDING: 38.6" 4 (Vertical)
- The inner boom shall be constructed of not less than 70,000 PSI steel and reinforced with not less than 1/4" 50,000 PSI steel.
- Outer boom structural tube shall have less than the following sectional properties:
  - TORSIONAL: 25.0" 4
  - BENDING: 22.1" 4 (Horizontal)
  - BENDING: 11.7" 4 (Vertical)
- The outer boom shall be constructed of not less than 50,000 PSI steel and reinforced with not less than 3/8" 50,000 PSI steel.
- Protective screen shall be tubular type 3/8" expanded metal mesh extending above and right hand side of operators position with polycarbonate window.

### Hydraulic Cylinders

- Boom shall have a hydraulically operated maneuvering cylinder for horizontal movement of cutter head. Cutter head shall have the capability of moving 26° forward and 28° rearward with limited relief protection.
- All cylinder mountings shall be replaceable hardened bushings, greasable type.
- Secondary boom cylinder shall have a spherical bearing on the rod end.
- Hydraulic lift cylinders shall be mounted on top of boom arms.
- Boom shall have two double acting hydraulic cylinders and one single acting hydraulic cylinder with accumulator.

### Hydraulic System

- Lift control valve – 4 tapered metering spools with 8 pilot pressure reliefs.
- Hydraulic oil – (1) PSI pressure at the reservoir suction outlet.
- Tractors hydraulic system supply oil for the mowers lift system.
- Suction line – unrestricted 1-1/2" inside diameter.
- Pressure and return system hoses shall be 1" unrestricted inside diameter – 1" hoses shall have a burst pressure 4 times working pressure.
- Pressure, return and lift system steel hydraulic lines shall be mounted at rear of boom arms (hoses/tubing will not be allowed inside of boom arms).
- Pump drive shaft shall have a rating of not less than 180 HP.
  - Hydraulic pump and motor – gear type with cast steel housing and steel gears.
    - Hydraulic pump – 98 input HP
    - Hydraulic motor – 99 HP
  - Oil to power cutter head – no restriction valve while operating cutter head.
  - Valve – electrically controlled pilot-operated floating spool with starter lockout.

Specifications subject to change without notice.



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The complete line of Diamond Mowers can be found on our Web site: [www.diamondmowers.com](http://www.diamondmowers.com)

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