ALAMO INDUSTRIAL® Specification

Eagle 15[™]

Flex-Wing Rotary Mower

It is the purpose of this specification to describe a 15', 3-section flex-wing mechanically powered rotary mower used for mowing highway right of ways and other large areas. The unit bid shall be the manufacturer's current production model that meets or exceeds the following minimum specifications. Only a standard production machine may be bid on these specifications and a supplier will not be allowed to modify his standard production unit in order to meet these specifications.

MOWER FEATURES:

The mower shall be rotary, 3-section, flex-wing style and constructed from heavy-duty 7-ga steel.

Deck design shall be easy clean style with a double-deck center section for durability.

Mower shall feature a 540 PTO main driveline.

The mower shall feature an adjustable cutting height of 1-1/2" – 14-1/2".

Side skirts shall be bolt-on, replaceable, and constructed to a minimum of 1/4" x $10 \frac{1}{2}$ " thick.

Overall width of the mower, with wings unfolded, shall be 186".

Overall length of the mower shall be 183".

Overall height of the mower shall be 85-1/2"

Overall transport width, with wings folded, shall be 96".

Overall cutting width of the mower shall be 180".

Replaceable skid shoes shall be bolt-on under each side skirt.

(6) replaceable, puncture resistant foam-filled airplane tailwheels shall be featured as standard equipment

The mower shall cut up to 3-1/2" grass, weeds, and brush material.

The mower shall feature a spring-cushioned axle shock absorber.

A hydro-mechanical level-lift system shall be featured for uniform cut.

BLADE CARRIER AND BLADES:

The blade pan shall be constructed of 7-gauge steel reinforced with a 1" thick cross-bar weldment for durability.

(2) free-swinging updraft cutting blades made of 1/2" thick x 4" wide, heat-treated, alloy steel be featured as standard on wing and center blade carriers.

Blades shall overlap 6" between the wings and center section.

Blade spindles shall run at 1,045 rpm on the wings and 864 rpm on the center section.

The blade tip speed shall meet the following minimum specifications:

	FPM	MPH
Center	16,286	185
Wing	16,415	186

MOUNTING:

The mower shall be attached to the rear of the tractor using a self level-lift drawbar hitch design.

POWER:

The main driveline shall be CAT 5 constant velocity with CAT 5 wing drivelines.

Slip clutch protection shall be featured as standard for protection against heavy shock loading.

The output shaft diameter shall be 2-3/8".

Gears shall be straight bevel with tapered roller bearings.

A power divider shall be featured with a rating meeting 235 HP.

Center and wing gearboxes shall have a rating of 150 HP.

TRACTOR REQUIREMENTS:

The mower shall be mounted on a tractor featuring a minimum rating of 50 PTO HP.

SAFETY FEATURES:

The mower shall feature a safety lock for additional protection during transport.

The mower shall feature double-row chainguards on front and back as standard equipment.

OPTIONS:

The mower setup shall include the following options:

Open or closed center Three-Spool Valve

Valve Mounting Kit

Winch & Stand

Auxilliary Wheel Spindle Kit

Tires

Special Mower Paint

MISCELLANEOUS:

WEIGHT:

The mower shall weigh a minimum of 5,420 pounds.

WARRANTY:

There shall be a minimum one year parts and labor warranty on the mower itself. The gearboxes shall feature a 5-year limited warranty. Non-governmental users are subject to modified policy. Only Alamo Industrial parts may be used for warranty replacement.

Choose the term that relates directly to your specific bidding situation. Please note that it is the dealer's responsibility to use the correct verbiage for the bid type. **DO NOT USE BOTH.**

Individual Agency Bids

Bidders must include a copy of mowing equipment manufacturer's Certificate of Insurance for Product Liability of at least \$5,000,000 for the products subject to its bid. The insurance carrier is to be rated "A, VII" or higher by the A.M Best insurance rating service.

Multi-Unit DOT Bids

The successful vendor will provide a copy of mowing equipment manufacturer's Certificate of Insurance of at least \$5,000,000 for Product Liability for the products subject to its bid naming the Agency as an additional insured party. The insurance carrier is to be rated "A, VII" or higher by the A.M. Best insurance rating service.





Eagle 15[™]

Convenient Mount

Attached to the tractor using a level-lift drawbar hitch design, the unit is easily and conveniently mounted. A jack stand comes standard for proper storage of the unit when not in use as well as a safety tow chain.

Safety In Mind.

Standard double-row chainguards provide 2-layers of protection to help prevent material from being thrown out from under the machine.

Superior Power

The main driveline is CAT 5 constant velocity with CAT 5 wing drivelines featured with slip clutch protection against heavy shock loading.

A 235 HP divider coupled with 205 HP center and wing gearboxes provide the power you need to get through heavily vegetated areas with reliability. Routine maintenance is a snap with newly designed dipsticks featured on the wing gearboxes.

Optimal Cutting Performance

A reinforced heavy duty steel pan blade carrier features (2) free-swinging 1/2" x 4" updraft blades capable of cutting up to 3-1/2" diameter grass, weeds and brush. Blade tip speeds have been increased now performing at a minimum of 16,286 FPM, which translates into better cutting performance for you.

A standard deck ring incorporates a round rolled flat bar ring welded to the underside of the deck preventing the blades from contacting the deck.



Replaceable skid shoes help protect the mower from damaging ground contact.

Durable Tires

Replaceable, puncture resistant, foam-filled airplane tires provide reliable movement of the unit and contribute to steady transport.

Safely Transported

The unit may be moved down any standard road with ease with its 96" transport width. A newly designed safety lock is featured for additional protection during highway transport.



Rugged Construction.

An easy-clean 7-gauge deck made of heavy-duty steel and 1/4" x 10-1/2" replaceable, bolt-on side skirts promote durability and longer mower life.

Level and Adjustment

A hydro-mechanical level lift system is featured for a uniform cut. The mower cutting height may be adjusted from 1/2" to 14-1/2" for your specific application. A spring-cushioned axle absorbs shock when unit is in motion.

Additional Options

- Open or Closed Center Three-Spool Valve
- Valve Mounting Kit
- Winch & Stand
- Auxiliary Wheel Spindle Kit
- Special Paint
- 10' Model

Requirements

Overall Width: 186" Overall Length: 183" Minimum Tractor HP 50 HP
Gearbox Rating:
Power Divider – 235 HP
Center & Wings – 205 HP
Material Cut Size:

3-1/2"grass, weeds, & brush

Blade Tip Speed: Center 540 RPM – 16,286 RPM 1,000 RPM – 16,380 RPM 540 RPM – 16,415 RPM 1,000 RPM – 17,137 RPM Output Shaft Diameter: 2-3/8". Unit Shipping Weight: 5,695 lbs.(Approx)



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ALAMO INDUSTRIAL® Specification

Falcon 15

Flex-Wing Rotary Mower

It is the purpose of this specification to describe a 15', 3-section flex-wing hydraulically powered rotary mower used for mowing highway right of ways and other large areas. The unit bid shall be the manufacturer's current production model that meets or exceeds the following minimum specifications. Only a standard production machine may be bid on these specifications and a supplier will not be allowed to modify his standard production unit in order to meet these specifications.

MOWER FEATURES:

The mower shall be rotary, 3-section, flex-wing style and constructed from heavy-duty 7-gauge steel.

Deck design shall be easy clean style with a double-deck center section for durability.

The mower shall feature an adjustable cutting height of 1-1/2" – 14-1/2".

Side skirts shall be bolt-on, replaceable, and constructed to a minimum of 1/4" x 10 ½" thick.

Overall width of the mower, with wings unfolded, shall be 186".

Overall length of the mower shall be 183".

Overall height of the mower shall be 85-1/2"

Overall transport width, with wings folded, shall be 96".

Overall cutting width of the mower shall be 180".

Replaceable, heat-treated skid shoes shall be bolt-on under each wing side skirt.

(6) replaceable, puncture resistant foam-filled airplane tailwheels shall be featured as standard equipment

Wheel spacing shall be 50" from center outside and 25" center inside.

The mower shall cut up to 3-1/2" grass, weed, and brush material.

The mower shall feature a spring-cushioned axle shock absorber.

A hydro-mechanical level-lift system shall be featured for uniform cut.

BLADE CARRIER AND BLADES:

The blade carrier shall be constructed of 7-gauge hardened steel reinforced with a 1" thick cross-bar weldment for durability.

(2) free-swinging updraft cutting blades made of 1/2" thick x 4" wide, heat-treated, alloy steel and weighing 15.8 lbs. (Center) and 12.5 lbs. (Wings) each shall be featured as standard on wing and center blade carriers.

Blade length, from pin center to tip, shall be 22-1/2" (Center) and 19-1/2" (Wings) and shall have a blade overlap of 6".

Blade spindles on both wings and center section shall be 2-3/4" in diameter and run at the following speeds:

Blade Spindle Speed:

<u>Center</u>	<u>Wings</u>	
1,000	1,100	

Center Blade Tip Velocity:

<u>FPM</u>	<u>MPH</u>
18,800	213

Wing Blade Tip Velocity:

<u>FPM</u>	<u>MPH</u>
18,000	205

^{**}Ratings based on actual field performance.

POWER:

PUMP:

Two-section pump with one section furnishing flow to the center motor and the other section furnishing power to the wing motors in series.

PUMP DRIVE:

Tractors PTO shaft turns speed changer turning the pump.

The speed changer should have an oil bath and breather plug.

The tractor's PTO lever shall control the pump rotation through speed changer to take 540-RPM to 2160 RPM at the pump.

HYDRAULICS SYSTEM:

Front-mounted hydraulic tank with a capacity of 53 gallons.

Flex hoses connect the tank to the pump.

MOTOR:

Hydraulic, gear-type motors, one for the center section and one for each wing

Relief valves for the motors set at 3000 PSI for the center and 3000 PSI for wings.

Motors rated at 63 HP for center and 58-HP for wings

Must have a splined shaft that fits a splined socket in the spindle.

BEARINGS:

Tapered roller bearings, top and bottom, running in oil bath. Needs seal at the bottom of the housing and a filler hole located at the top of the housing.

HOSES/DRIVESHAFT:

1" hoses on center section and wings

4-spiral sire SAW100R12 pressure hoses with a 16,000-PSI minimum burst pressure.

SAE 100 R4 suction hoses with spring guard

MOUNTING:

The mower shall be attached to the rear of the tractor using a self level-lift drawbar hitch design.

The tongue weight shall be approximately 2,500 lbs. when mowing and 2,300 lbs in transport.

TRACTOR REQUIREMENTS:

The mower shall be mounted on a tractor featuring a minimum horsepower rating of 70 HP.

SAFETY FEATURES:

The mower shall feature a safety lock for additional protection during transport.

The mower shall feature double-row chainguards on front and back as standard

equipment.

No moving parts above the deck.

An automatic shutoff system shall engage when a wing is raised above a 45 degree angle from the ground.

OPTIONS:

The mower setup shall include the following options:

Open or closed center Three-Spool Valve

Valve Mounting Kit

Winch & Stand

Auxiliary Wheel Spindle Kit

Tires

Special Mower Paint

Deck Rings

Pan Assembly

MISCELLANEOUS:

WEIGHT:

The mower shall weigh a minimum of 6,350 pounds.

WARRANTY: There shall be a minimum one year parts and labor warranty on the mower itself. Non-governmental users are subject to modified policy. Only Alamo Industrial parts may be used for warranty replacement.

Product Liability Insurance:

Choose the term that relates directly to your specific bidding situation. Please note that it is the dealer's responsibility to use the correct verbiage for the bid type. **DO NOT USE BOTH.**

Individual Agency Bids

Bidders must include a copy of mowing equipment manufacturer's Certificate of Insurance for Product Liability of at least \$5,000,000 for the products subject to its bid. The insurance carrier is to be rated "A, VII" or higher by the A.M Best insurance rating service.

Multi-Unit DOT Bids

The successful vendor will provide a copy of mowing equipment manufacturer's Certificate of Insurance of at least \$5,000,000 for Product Liability for the products subject to its bid naming the Agency as an additional insured party. The insurance carrier is to be rated "A, VII" or higher by the A.M. Best insurance rating service.

FALCON 15[™]

Rotary Mowers

HYDRAULIC POWER MEETS MECHANICAL STRENGTH



FALCON 15[™]



Falcon 15™

Designed for optimum performance and safety, the Falcon™ mows cutting paths ranging from 10' to 15'. This hydraulic flex-wing incorporates safety features such as no moving parts on the top deck and automatic blade shutoff when the wing is lifted.

Hydraulic Power -

Power for the unit is provided by three hydraulic gear-type motors with a high capacity 53-gallon tank. The motor control electrical circuit utilizes environmentally sealed Weather-Pack and Metri-Pack wire connectors to withstand harsh mowing environments.

Rugged Construction

The Falcon shares the same rugged mower chassis as the field-proven mechanical Eagle™ Flex-Wing. The unit is continuously welded to enhance strength and durability for rough municipal mowing.

Optimal Visibility

The operator has the ability to view site gauges from inside the tractor cab for continuous monitoring of hydraulic filter condition, fluid level and fluid temperature.



Mount

The Falcon mounts to tractors with a minimum 50 PTO HP and features a self-level lift drawbar hitch design for uniform cutting.

Easily Replaceable Parts

Bolt-on side skirts provide ease of maintenance and replaceable skid shoes help protect the mower from damaging ground contact.

Safety In Mind

Standard double-row chainguards provide 2-layers of protection to help prevent material from being thrown out from under the machine.

Choose Your Width

The Falcon 15' is also available in a 10' version which is exactly the same base model excluding the left wing.

Requirements

Overall Width: 186" Overall Length: 183" Overall Height: 85-1/2" Overall Transport Width: 96" Overall Cutting Width: 180" Cutting Capacity: 3-1/2" material Unit Shipping Weight: 6,350 lbs.

Warranty: Minimum one year parts and labor. Non-governmental users are subject to a modified policy. Only genuine Alamo Industrial parts may be used for warranty replacement.



Productivity Includes Safety

The blades will cut 3-1/2" diameter grass and weeds. A deck ring prevents the blades from contacting the top deck. For safety with productivity in mind, an automatic shutoff system engages individually on either wing when lifted above 45° from the ground allowing for productivity in small spaces without the hazard of exposed spinning blades.



T.M.O.S.T: Tractor Mower Operator Safety Training



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DECI

- Mechanically driven 3 point hitch mounted rotary mower
- 17.5" offset adapter for the RX 96 models for use with select side mowers
- Features a stump jumper blade pan assembly



GEARBOX

- Features mechanical gearboxes with a 5 year manufacturer's warranty
- CAT IV Drivelines with plastic safety shielding for safety and durability



HAINGUARDS

 Sturdy 10 gauge deck construction with front and rear double chain guards for safety



REAR TAILWHEEL

Features laminated rear tires with 36 degree swivel fork

RX SERIES SPECIFICATIONS	60″ MODEL	72″ MODEL	84″ MODEL	96″ MODEL
Cutting Width	60"	72"	84"	96"
Overall Width	67.5"	79.5″	89.5"	101.5"
Overall Length	111"	123"	138.5″	150.5"
Equipment Weight	998 lbs	1,158 lbs	1,540 lbs	2,004 lbs
Cutting Heights	1.5" to 12"	1.5" to 12"	1.5" to 12"	1.5" to 12"
Cutting Capacity	2.5" grass & brush	Standard: 2.5" grass & brush Super HD: 4.5" grass & brush	2.5" grass & brush	3" grass & brush



TRACTOR REQUIREMENTS	60″ MODEL	72″ MODEL	84″ MODEL	96″ MODEL
Minimum Weight	2,500 lbs	3,500 lbs	3,500 lbs	3,500 lbs
3-Point Lifting Capacity	1,000 lbs	1,200 lbs	2,000 lbs	2,000 lbs
Minimum PTO	35 HP	45 HP	60 HP	70 HP
Hitch	CAT I rear 3-point hitch, CAT II hitch adapters are available	CAT I rear 3-point hitch, CAT II hitch adapters are available	CAT II rear 3-point hitch, CAT III hitch adapters are available	CAT II rear 3-point hitch, CAT III hitch adapters are available
PTO Shaft	540 RPM, 1 3/8" 6-spline			
ROPS	Certified Roll-Over Protective Structure (ROPS) or ROPS cab and seat belt	Certified Roll-Over Protective Structure (ROPS) or ROPS cab and seat belt	Certified Roll-Over Protective Structure (ROPS) or ROPS cab and seat belt	Certified Roll-Over Protective Structure (ROPS) or ROPS cab and seat belt



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