

**MAKO 445/445NT/455**



**MAKO<sup>®</sup>**  
**445/445NT/455**



# Maneuverability & Field Performance



The Mako 445, 445NT, and 455 sprayers are some of the latest members of the GVM equipment family. The smallest, most compact self-propelled sprayer in the marketplace; the Mako is the perfect machine to get into fields early, when grounds are still wet.

Small, stable, and nimble, the Mako features a 425 gallon polyethylene product tank, multiple boom options, 36 or 46 inches of crop clearance, and a tight turning radius. Its light footprint results in minimal, yield-robbing soil compaction. Powered by a Cummins Stage V, 154 horsepower engine paired with an automatic Allison five-speed transmission, the Mako's robust powertrain provides aggressive reliability to keep you in motion all season long. The Mako is simple enough for first time applicators, yet smart enough for the pros.

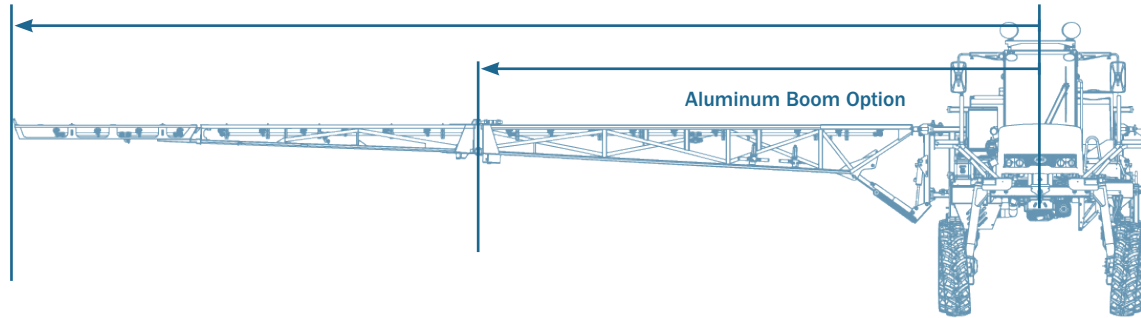


## Strength in Lightweight Spraying

When it's time to spray, you don't have time to waste. Packed with reliable power, the quick and light Mako will be the first to the fields, no matter the conditions. Carrying a small, 425-gallon poly tank, there's no need to worry about rutting or yield-robbing compaction, and there's no need to wait until the ground dries out.

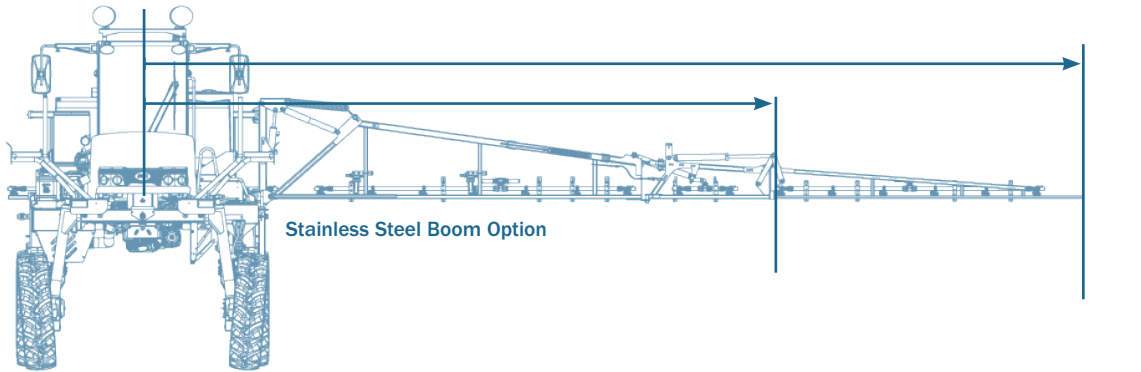
GVM's spray system is designed for durability, even in the harshest conditions. Standard with steel booms, the design is light, yet features extra support to withstand the tough demands of the industry. Aluminum boom options let you spray further while reducing your weight and adding strength.

- Hypro belt drive, centrifugal pump with heavy-duty clutch
- Maximum capacity: 140 gpm (530 lpm) and 114 psi (7.8 bar)
- Quick easy, ground-level access to the 2 in. plumbing
- Electric agitation with manual adjust



### Boom System and Options

- Standard booms: 60 ft steel booms, 20 in. spacing, single nozzle bodies
- Boom options: 60/80 ft (18.3/24.4 m) steel, 42/80 ft (12.8/24.4 m) or 50/90 ft (15.2/27.4 m) aluminum
- Electronically controlled, 5-section manifolds
- Hydraulic adjustable boom height, boom fold with cylinder cushion, & boom tip lift
- Inner boom breakaway with shock absorber, auto reset





# Under the Hood

## ...a small, yet powerful package

The Mako features a Stage V emissions-compliant, 154 horsepower, Cummins F3.8, inline 4-cylinder engine and an all-mechanical powertrain. Paired with an automatic, Allison five-speed transmission, the Mako's robust powertrain provides aggressive reliability to keep you in motion.

Backed by a Cummins warranty and the largest service network in the business, the charged air-cooled and turbocharged Cummins F3.8 works harder, smarter, quieter, and longer. The F3.8 combines proven full-authority electronic controls with impressive reliability, durability, and long maintenance intervals you expect from one of the world's most successful and durable designs.

The Mako's Allison 2100 Series 5-speed transmission delivers unrivaled reliability and durability day in and day out. Its patented, Continuous Power Technology delivers smooth and seamless full-power shifts, superior acceleration, reliable start ability, and high field speeds.

SPEED RANGES	
1st	4.5 mph (7.2 kph)
2nd	7.7 mph (12.4 kph)
3rd	10.1 mph (16.3 kph)
4th	14.1 mph (22.8 kph)
5th	22 mph (35.4 kph)
Reverse	3.2 mph (5.1 kph)



## Widths for Every Field

### Ready to Go, Wherever You Go.

Built on a solid foundation, the Mako will provide years of dependable use through a wide variety of crops, growth stages, and field conditions. Its box-style frame is reinforced with plates and gussets, eliminating the need for heavy cross members and reducing overall machine weight. Built-in rear axle tubes add strength and rigidity to the frame. Additionally, the Mako offers users a balanced center of gravity, placing the engine, transmission, and differential between the frame rails to increase the machine's stability.

Tackle any field and every crop with the Mako's multiple track width adjustments. Prepare to switch between fields using the manual front and hydraulic rear track adjustments, for over 30 inches of adjustability.

**The optional extended width kit takes the standard track width from 82-110 inches to 94-122 inches.**

The Mako features an independent integral strut and spring front suspension with an oscillating front axle and an independent knee action suspension with coil springs and hydraulic shocks to provide a comfortable, stable ride over any field condition



Standard track width from 82-110 inches



Extended track width from 82-110 to 94-122 inches

### Mako 445NT

- Track Width: 72 in. (182.9 cm)
- Crop Clearance: 36 in. (91.4 cm)
- Boom Heights:
  - Low: 11-66 in. (27.9-167.6 cm)
  - High: 27-82 in. (68.6-208.3 cm)

### Mako 445

- Track Width: 82-110 in. (203.2-304 cm)
- Crop Clearance: 36 in. (91.4 cm)
- Boom Heights:
  - Low: 11-66 in. (27.9-167.6 cm)
  - High: 27-82 in. (68.6-208.3 cm)

### Mako 455

- Track Width: 82-110 in. (203.2-304 cm)
- Crop Clearance: 46 in. (116.8 cm)
- Boom Heights:
  - Low: 21-76 in. (53.3-193 cm)
  - High: 37-92 in. (94-233.7 cm)



# Operator & Cab Comfort

The sprayer-specific Mako cab is simple, spacious, and comfortable. Whether you're headed out for a quick job or a long day of application, the Mako will keep you cool and comfortable.

Step through the large, glass door into the air conditioned cab, and you'll notice ample leg room, a comfortable, air ride seat, and unobstructed visibility. Next, you will find that all controls are smartly organized, easily within an arm's reach, and simple to operate.

Once inside, optimize your comfort by adjusting your seat position, angle and air support, lumbar support, and the tilt and telescoping steering wheel. As you head to the field, you will immediately notice the quiet drivetrain and well-insulated cab are designed to maximize operator comfort. You will also notice the large glass windows and door maximize your visibility to help you monitor your application.



Ag Leader Product Options



Raven Product Options

**Choose the technology you want.** The Mako comes standard with ISOBUS controls, so whether you're comfortable with Ag Leader, Raven, TeeJet, Trimble, John Deere, or Case, you will be able to choose the guidance system that works for you. Thoroughly tested with each system you'll notice a seamless integration and easy start-up.

# Weigh Your Options

- 1** Controller and Steering Options
  - Ag Leader: 800, SteadySteer, or Z2
  - Raven: CR7, MD, or SmarTrax
  - TeeJet IC45
- 2** Boom Height Control Options
  - Greentronics RiteHeight with 3 or 5 sensors, ISO or standard
- 3** Boom Options (page 3)
  - 60 ft, 20 in. on or off- enter nozzle spacing
  - 60/80 ft, 10 or 20 in. off- enter nozzle spacing
  - Aluminum: 42/80 ft, 5 section, 15 or 20 in. off- enter nozzle spacing or 50/90 ft, 5 section, 20 in. off- enter nozzle spacing
  - Rotary triple nozzles, in lieu of standard
- 4** Tire and Wheel Options
  - Front: 9.00x24 ILOS or 320/85R24, standard or fluid fill
  - Rear: 320/85R32 or 230/95R32
- 5** Toolbox
- 6** Fenders, front and/or rear
- 7** Field Installed Options
  - Stainless steel crop defle tors
  - Belly shield (not pictured)
  - Foam Marker Kit (not pictured)
  - Rear Floodlight Kit, LED (2, 4, or 6 lights), not pictured
  - Extended Width Kit: includes 12 in. front suspension extension and 6 in. stub axle drive-shaft extension (allows 82-110 in. machines to be extended to 94-122 in.)



1 AutoSteer Kit



2 RiteHeight Boom Control



4 320/85R24

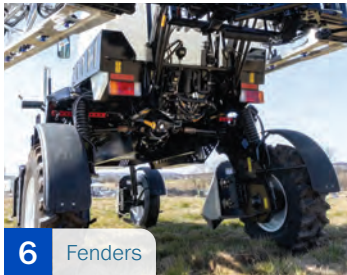
320/85R32

230/95R32

9.00 x 24



5 Toolbox



6 Fenders



7 Crop Defle tors



		445/445NT	455
Drivetrain	Type drive	Mechanical	
	Maximum transport/road speed	22 mph (35.4 kph)	
Engine	Make and configuration	Cummins F3.8, inline 4-cylinder	
	Type	Stage V emissions compliant	
	Peak rated power	154 hp (115 kW) @ 2200 rpm	
	Displacement	3.8 L (232 cu in.)	
	Fuel	Diesel	
	Fuel tank capacity	44 U.S. gal. (166.6 L)	
	DEF tank capacity	15 U.S. gal. (56.8 L)	
	Engine oil capacity	12.6 qt (11.9 L)	
Transmission	Types	Automatic Allison 2100 RDS 5-speed	
	Transmission oil capacity	Allison 15 qt (14 L)	
Chassis	Frame construction	5 x 3 x .3 in. (12.7 x 7.6 x .76 cm) rectangular tube steel	
	Clearance	36 in. (91.4 cm)	46 in. (116.8 cm)
	Wheelbase	139.9 in. (355 cm)	
	Overall length	245 in. (622.3 cm)	
	Overall width	108 in. (274.3 cm) top-fold boom tips, 112 in. (284 cm) side-fold boom tips	
	Overall height	127 in. (322.6 cm)	137 in. (348 cm)
	Turning radius	13.8 ft (4.2 m)	
	Primary brakes	Power disc brakes	
	Parking brakes	Hand lever operated parking brake	
	Estimated empty weight	11,250 lb (5,102.9 kg)	
	Estimated operating weight	15,000 lb (6,803.9 kg)	
Booms	Spraying width	Steel: 60 ft (18.3 m) and 60/80 ft (18.3/24.4 m) or Aluminum: 42/80 ft (12.8/24.4 m) and 50/90 ft (15.2/27.4 m)	
	Boom sections	5 section, electronically controlled	
	Nozzle spacing	15 in. (38.1 cm) off-center (42/80 ft) or 20 in. (50.8 cm) off-center (60, 60/80, 42/80, & 50/90 ft)	
	Breakaway width	Steel: 7.3 ft (2.2 m) or Aluminum: 14.4 ft (4.4 m)	
Boom Height	Low position	11-66 in. (27.9-167.6 cm)	21-76 in. (53.3-193 cm)
	High position	27-82 in. (68.6-208.3 cm)	37-92 in. (94-233.7 cm)
Spraying System	Product tank capacity	425 U.S. gal. (1,609 L)	
	Spray control	Raven 660	
	Product pump	Engine mounted, belt drive centrifugal pump with electromagnetic clutch	
	Agitation	Manual adjust with electric on/off	
	Fresh water tank	15 U.S. gal. (56.8 L)	
	Filtration	50-mesh screen	
	Quick fill size	2 in. (5.08 cm)	
Tires, Suspension, and Track Width	Front	320/85R24 standard / 9.00 x 24 ILOS (60 ft booms), fluid filled .00 x 24 ILOS (80/90 ft booms) optional, or fluid filled 320/85R24 OS (80/90 ft booms) optional	
	Rear	320/85R32 standard / 230/95R32 ILOS (80 in. centers) optional	
	Front suspension	Independent integral strut and spring suspension with oscillating front axle	
	Rear suspension	Independent knee action suspension with coil spring and hydraulic shock	
	Track width	NT: 72 in. (183 cm), AA: 82-110 in. (208-279 cm)	AA: 82-110 in. (208-279 cm)

### Standard Warranty

- 2 yr/2,000 hr Cummins engine warranty
- 3 yr/2,500 hr Allison transmission warranty
- 2 yr/2,000 hr Dana warranty
- 1 yr/1,000 hr GVM standard warranty

### Speed Ranges

- 1st: 4.5 mph (7.2 kph)
- 2nd: 7.7 mph (12.4 kph)
- 3rd: 10.1 mph (16.3 kph)
- 4th: 14.1 mph (22.8 kph)
- 5th: 22 mph (35.4 kph)
- Reverse: 3.2 mph (5.1 kph)

\*Weights vary based on machine configuration.

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