

Miller
Since 1899

Miller
SPRAY-AIR

Enhanced Coverage. Superior Control. Maximum Efficiency.

SPRAY-AIR



Air Boom Technology



SPRAY-AIR™ - Efficient, Accurate, Effective

The air blast penetrates the thickest crop canopies & drives the droplets deep for unsurpassed coverage.

Spray-Air technology is not JUST an air-assist sprayer, nor is it JUST an air-atomizing sprayer.

It is a much more powerful and versatile application tool, combining the benefits of both air-assist and air-atomization into one powerful spray nozzle system.



Condor G40 100 foot Single-Fan Spray-Air Air Boom

Simply Flick a Switch and Turn a Dial to operate



Magnehelic Gauge and Air Control Dial

Enjoy easy to operate fingertip Control of the Spray-Air system. From the comfort of the Condor High-Back seat, all of your sprayer controls are easily accessed on the right armrest console. The Spray-Air on-off switch and air volume control dial are also positioned next to the right console within easy reach. Monitor the air volume (and droplet size) with the easy to read Magnehelic Gauge.

When you need to spray, Spray-Air!

When coverage is critical, and you need deep canopy penetration to kill the target pest, be it weed, disease, or insect, look no further than to Miller's Spray-Air air boom technology.

The unique air nozzle spray system puts instantaneous control of droplet size, spray pattern, and the speed of the air blast spraying into the crop right at your fingertips. There is no other technology available that will give you coverage as good as this, with the lowest application rates possible.

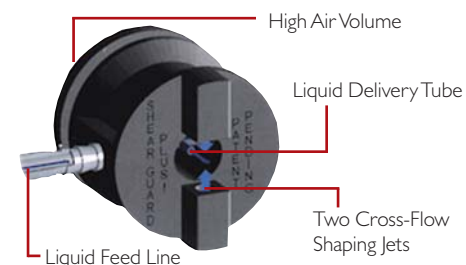
Equip the Condor G40 with up to 100 feet of Spray-Air air boom, and the G75 with up to 120 feet of Spray-Air air boom technology to improve your application efficiency and generate a superior return on your investment!

How the Spray-Air technology works

The patented Shear Guard™ PLUS Air Nozzles, spaced every 10" along the air boom, atomize the spray droplets using Dial-A-Drop™ technology. This creates the optimum sized droplets, which are not affected by speed and pressure changes, ensuring a uniform application over the entire field.

The Air Nozzle blasts the spray droplets deep into the crop canopy, ensuring complete top-to-bottom leaf surface coverage. No other application technology can measure up to the total plant coverage from the Spray-Air nozzle.

Because of the smaller controlled droplets and directed air blast, the Air Nozzle allows for a very efficient use of water; often in the range of 2 to 5 gallons per acre for herbicides, and generally from 5 to 10 GPA with fungicides.



60 degree pattern, spaced 10" apart

Awarded as Best In Engineering For Agriculture, Food, and Biological Systems "Outstanding Innovation" in 1996 by ASAE The Society For Engineering In Agriculture, Food, and Biological Systems.



Droplet Size is the Key to Coverage

Smaller droplets are retained & absorbed by target weeds, disease, and insect pests.

Follow the ASABE S572 Droplet Classification Standard*

		ASABE Standard				Comparative Size		
	VF	Symbol VF	Category Very Fine	Code Red	Apx VMD	Relative Size	Comparative Size Point of Needle (25 microns)	Atomization Fog
Fungicides	VF				<100			
Fungicides/ Insecticides	F							
Insecticides/ Contact Herbicides	M	F	Fine	Orange	100-175		Human Hair (100 microns)	Fine Mist
Contact Herbicides/ Systemics	C	M	Medium	Yellow	175-250		Sewing Thread (150 Microns)	Fine Drizzle
Systemic Herbicides	VC	C	Coarse	Blue	250-375			
Fertilizers	EC	VC	Very Coarse	Green	375-450		Staple (420 Microns)	Light Rain
		EC	Extremely Coarse	White	>450		#2 Pencil Lead (2,000 Microns)	Thunderstorm

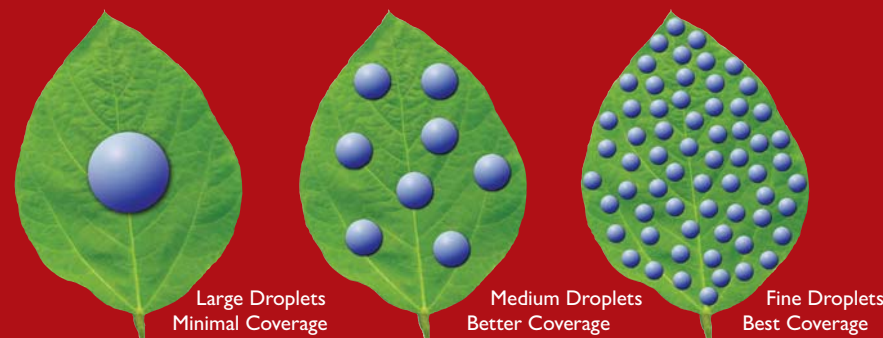
*ASABE S 572 by the American Society of Agricultural and Biological Engineers

How do you manage your spraying?

Crop protection applications are expensive, and necessary. To control weeds and other pests, to protect your crop's health and maximize yield, you spray them, probably many times a season.

Look at the chart on the left. Are you using the right size of droplets for each different type of application? Are they penetrating the crop canopy and contacting the targeted pest? Or, are you wasting time and money each time you spray inefficiently?

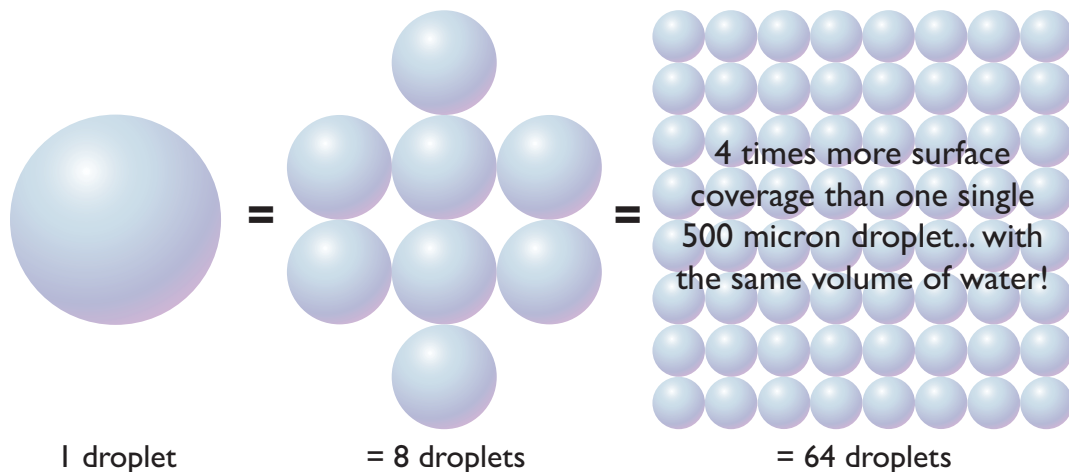
Be sure your investment in your crop is protected by a nozzle technology designed to maximize penetration & coverage, maximize efficacy, and maximize your yields, with the lowest rates possible. You should Spray-Air.



500 Microns

250 Microns

125 Microns



How Droplet Sizes Determine Coverage

One 500 micron droplet contains the same volume of water as eight 250 micron droplets combined, and as much as sixty-four 125 micron droplets combined.

Do more, with less. Applying crop protection products with smaller droplets results in significantly more coverage than large droplets, when applying the same carrier volume. This is why the Spray-Air nozzle allows for a reduction in water carrier volumes over conventional flat fan nozzle applications: **more smaller droplets means more surface coverage, requiring less water and the lowest rates of active agent possible!**

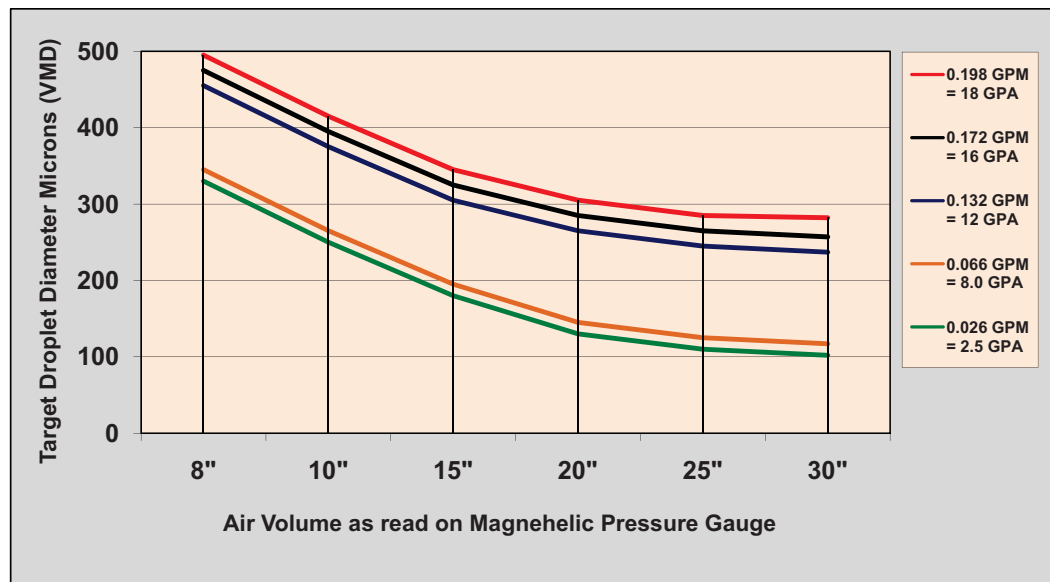
Large coarse droplets (particularly 400 microns and larger) tend to miss the leaves, bounce or run off, or pool in concentrations. Only smaller fine & medium droplets provide consistent & uniform surface coverage, especially important with contact herbicides, as well as insecticides and fungicides.

Your Productivity is Our Business

One nozzle does it all! As conditions change, simply dial-in the correct droplet size to get the job done right.

On-the-Go Droplet Size Control

Depending on the situation, you can Dial-In the OPTIMUM droplet size range on the go, minute to minute, to improve coverage, reduce drift potential, or to match ASABE Droplet Size Classification Standards.



NOTE: the target droplet size/diameter is the Volume Median Diameter (VMD). It is an average. Half of the droplets will be the VMD or larger, and half of the droplets will be the VMD or smaller. With the Spray-Air nozzle, 90% of the spray volume typically contains droplets within 100 microns of the target size (VMD), an exceptionally tight and accurate range.

Bottom Line: The Benefits of Using Spray-Air

- **Maximize Productivity.** The superior plant coverage from the use of the Spray-Air Nozzle enables you to use only the minimum amount of herbicide required, and no more.
- **Lowest Water Volumes.** Use the lowest possible carrier volumes for herbicide, desiccant, insecticide, and especially fungicide applications. Spray with as little as 2 to 10 gallons of carrier volume per acre.
- **Fungicide Applications That Work.** Simply stated, the Spray-Air technology is *proven to be the best method to apply fungicides for superior disease control!* Benefit from dense canopy penetration and total plant coverage with often only 5 to 10 gallons of water per acre!
- **Application Versatility.** Three application methods to choose from:
 1. Spray-Air air nozzle application to maximize coverage and efficiency
 2. Conventional flat fan nozzles for higher volume applications, especially over 10 gallons per acre (when coverage is less critical)
 3. Use conventional nozzles + air blast from the Air Nozzle for classic Air Assist to maximize coverage in higher volume applications
- **Environmental Stewardship.** Spray-Air owners practice environmental stewardship by using only as much chemical and water as required, reducing soil and water carryover of crop protection products.
- **Return on Investment.** Operator surveys show \$6 to \$10 per acre in application cost savings by applying the lowest, most efficient rates possible.

Miller

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Note: when adding a Spray-Air completing package to a Spray-Air Ready Truss Boom on a Condor G40 or G75, conventional flat fan spray nozzles may still be installed and used. Product descriptions and specifications are subject to change without notice. Some Condor features listed or shown may be optional. Always read and follow label instructions when applying crop protection products. Copyright 2009 Miller-St. Nazianz, Inc.

