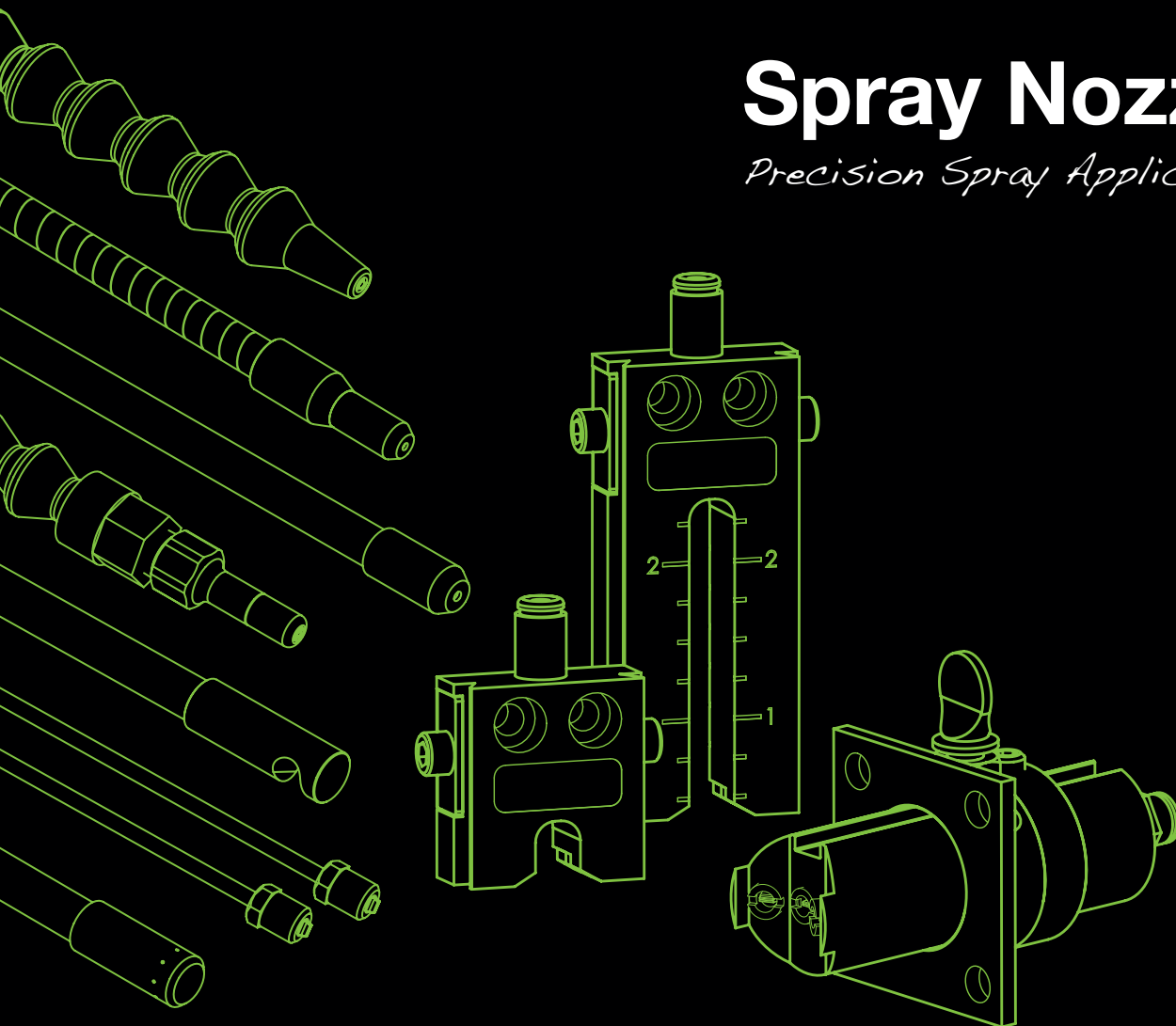




Spray Nozzles

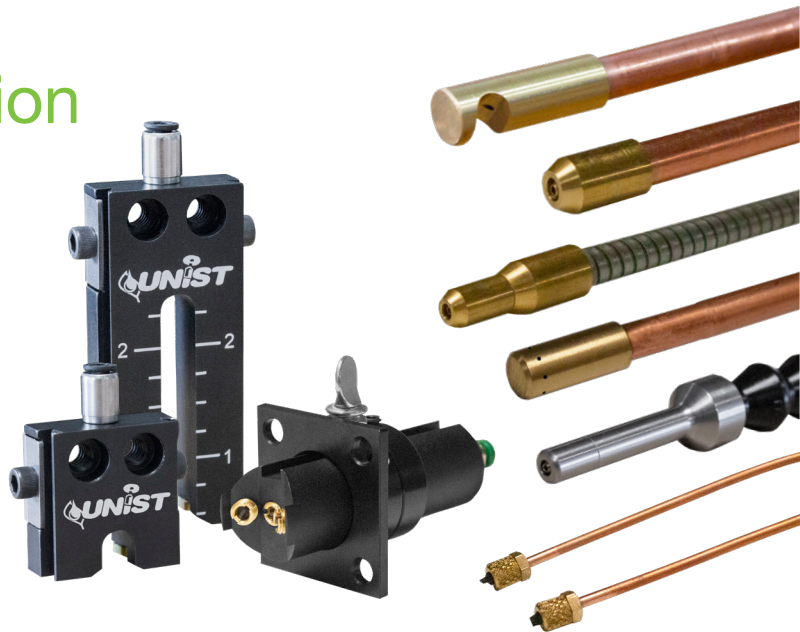
Precision Spray Application



Precision Spray Application

Precision fluid application requires the right combination of an accurate fluid dispensing system and a spray nozzle. Supplying the perfect amount of fluid is important, although properly delivering it to the target is just as important. To make this possible, Unist has developed a wide variety of spray nozzles to apply fluids precisely in any application.

By applying the right amount of fluid, right where it needs to be, manufacturing operations can be as efficient as possible while still providing the protection and coating required. This is true of any operation requiring a precise amount of fluid. Minimum Quantity Lubrication (MQL) for metal cutting, coating for assembly processes, lubricant application to machine wear points, applying release agents, or rust preventatives, all benefit from a precise fluid applicator paired with the right spray nozzle.



The Positive Displacement Difference

Positive displacement pumps are the key to supplying a measured, repeatable volume of fluid to any style of Unist spray nozzle. Positive displacement means that each and every time the pump cycles, the same amount of fluid will be dispensed. Easy adjustment of fluid and atomization air means dialing in the perfect amount will be a breeze once the nozzle is mounted and positioned.

- Coaxial or single-line configurations
- Semi-rigid or flexible options
- Specialized nozzles for sawing
- Variety of mounting options

Available Nozzles

Unist spray nozzles are available in coaxial (2-line) or single-line configurations, each in a wide variety of styles. Coaxial nozzles keep atomization air and fluid separate up to the point of application whereas single line nozzles mix air and oil right after the pump.

Coaxial Nozzles

Flexible Plastic Nozzle
with and without
stainless steel tip



Semi-Rigid Copper
Nozzle with a
standard, radial,
and fan tip



Stainless Steel Nozzle



Flexible Steel Nozzle



Single Line Nozzles

1/8" OD Semi-Rigid
Copper Nozzle



Splitter Nozzle



Band Saw Blade Nozzle



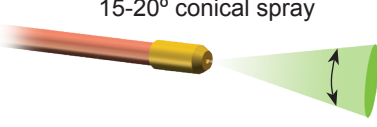





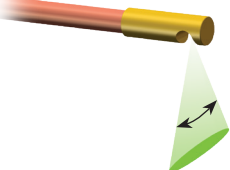

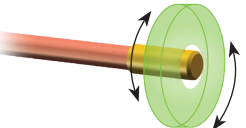

Band Saw Guide Nozzle



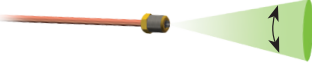


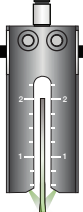


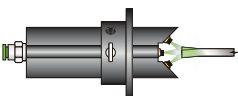

Bat Nozzle



Coaxial/2-Line Nozzles (standard lengths: 6", 12", 18", 24")

<p>Standard Conical Spray</p>  <p>15-20° conical spray</p>	 <p>The Flexible Plastic Nozzle is easy to aim and can be repeatedly bent into different shapes.</p>  <p>The Flexible Plastic Nozzle with a stainless steel tip is great for protecting the nozzle from damage.</p>  <p>The Semi-Rigid Copper Nozzle offers a nice balance of flexibility and rigidity. It can easily bend and mold to shape.</p>  <p>The Stainless Steel Nozzle offers strength and rigidity. Great for jobs where you don't want the nozzle to move or change shape.</p>  <p>The Flexible Steel Nozzle offers flexibility and strength for harsh environments.</p>
<p>Fan Spray</p>  <p>80-100° elliptical fan spray</p>	 <p>The Semi-Rigid Copper Nozzle with a fan tip is useful when a fan spray pattern is preferred instead of a conical pattern. For example, coating an item coming down a conveyor line.</p>
<p>Radial Spray</p>  <p>Conical radial spray; 360° coverage</p>	 <p>The Semi-Rigid Copper Nozzle with a radial tip is useful when a radial spray pattern fits the application. For example, coating the inside of a tube for assembly.</p>

Single Line Nozzles

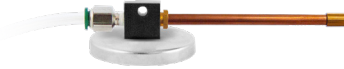
<p>Conical Spray (standard lengths: 6", 12", 18")</p>  <p>15-20° conical spray</p>	 <p>The 1/8" OD Semi-Rigid Copper Nozzle offers flexibility and rigidity. It can easily mold to shape.</p>  <p>The Splitter Nozzle features two 1/8" OD Semi-Rigid Copper Nozzles attached to one nozzle coupler block.</p>
<p>BSB & BSG Spray (standard BSB lengths: 1", 2", 3")</p> 	 <p>The Band Saw Blade Nozzle provides users with alternative mounting options and delivers an ideal spray pattern for horizontal band saw blade lubrication.</p>  <p>The Band Saw Guide Nozzle lubricates the sides of the blade to help minimize guide block friction.</p>
<p>Bat Spray (standard lengths: 1", 3", 7")</p> 	 <p>The Bat Nozzle was designed to easily fit on a wide variety of circular saws, vertical band saws, and horizontal band saws.</p>

Mounting Options

For Standard Nozzles



The **coupler block** nozzle mounting option allows direct mounting of the nozzle coupler block with either a 1/4" clearance hole or 1/4-20 tapped hole.



The **magnet** nozzle mounting option allows easy mounting to any magnetic surface.



The **articulated arm** nozzle mounting option provides easy nozzle repositioning while still being able to rigidly lock the nozzle into position. The arm has a 1/4-20 threaded stud for mounting.



The **articulated arm with magnet** nozzle mounting option includes a magnet for easy mounting with the flexibility of an articulated arm.

For Saw Nozzles



The **block mount** adds 0.50" [12.7 mm] to the thickness and allows the nozzle to be placed at a right angle to the mounting surface.



The **rail mount** adds 0.25" [6.4 mm] to the thickness and allows 1.88" [47.8 mm] of additional vertical adjustment.



When the BSG Nozzle is paired with a BSB Nozzle, they can be stacked together using the clamp plates.



The Bat Nozzle includes a 1.75" [44.5 mm] **square mounting flange** that can be attached to the blade guard.

Tubing Options (standard length: 5' increments)

Coaxial Nozzle Tubing



Polyurethane coaxial hose is the standard coaxial hose option.



Braided stainless steel coaxial hose is available for harsh environments.

Single Line Nozzle Tubing

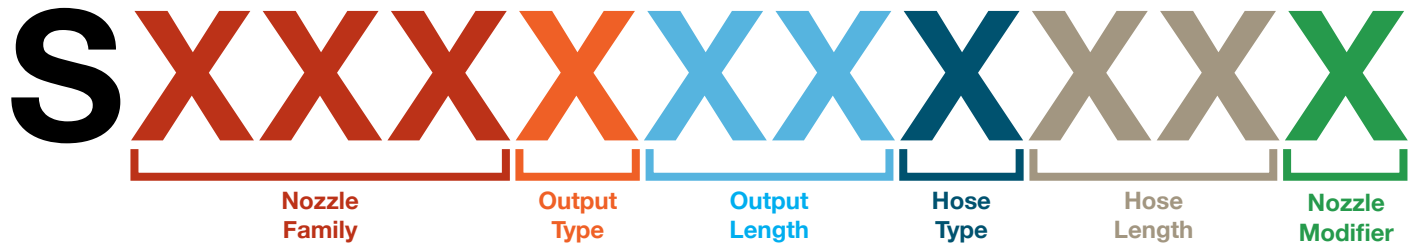


Straight 1/8" tubing is available for routing fluid and air to single line nozzles.



Coiled 1/8" tubing provides flexibility in length and starts at 10' lengths (10' length uncoiled).

Nozzle Part Number Scheme



Nozzle Family

Designator	Description
101	Coolubricator™ Nozzle (Continuous Output)
201	Serv-O-Spray™ Nozzle (Shot Output)

Output Type

Designator	Description	Valid Nozzle Family
Coaxial (2 Line) Nozzles		
A	1/4" - Flexible Plastic	101, 201
B	1/4" - Semi-Rigid Copper	101, 201
C	1/4" - Stainless Steel	101, 201
D	1/4" - Flexible Steel	101, 201
P	1/4" - Copper Fan Spray	101, 201
T	1/4" - Flexible Plastic w/SS Tip	101, 201
U	1/4" - Copper, Radial Spray	101, 201
Single Line Nozzles		
E	Bat Nozzle ¹	101
M	1/8" OD Copper Nozzle	101
N	Splitter ²	101
R	Band Saw Blade Nozzle ¹	101
S	Band Saw Guide Nozzle ¹	101

¹Nozzle Modifier does not apply

²Articulated Arm does not apply

Output Length (6" increments standard 6" - 24". Special lengths additional cost)

Designator	Description
06-36	Length (in inches) ¹
XX	Predefined Length Nozzle ^{2, 3, 4, 5}

¹06, 12, 18, and 24 are standards for Coaxial Nozzles

²Bat Nozzle limited to 01, 03, & 07

³Splitters limited to 06, 12, 18

⁴Band Saw Blade use 01, 02, 03

⁵Use 00 for Band Saw Guide

Hose Type

Designator	Description
Coaxial Hoses	
A	Polyurethane Coaxial Hose
B	Braided Stainless Steel Coaxial Hose
Single Line Hoses	
C	1/8" Coiled Tubing (10' long minimum)
D	1/8" Straight Tubing

Hose Length (5ft increments standard. Special lengths additional cost)

Designator	Description
05-50	Length (in feet)

Nozzle Modifier

Designator	Description
A	Standard (Magnet Only)
B	Articulated Arm Only
C	Magnet & Articulated Arm
X	No Magnet, No Articulated Arm



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