



# RS Resin Spray Guns

Next Generation Guns for Gel Coat and Chop Applications



PROVEN QUALITY. LEADING TECHNOLOGY.

# A revolution for the FRP industry

## Discover the next generation of gel coat and chop guns

Innovations engineered into the Graco RS Resin Spray Gun are sure to make a difference in your production uptime. It's lightweight. Ergonomic. Designed for tool-less operation and quick blade changes. Fast, easy maintenance too.

Discover how the Graco RS Resin Spray Gun's revolutionary design and industry-first features can help boost your company's bottom line.

### **Lightweight, high-output cutter**

- Allows you to get the glass output you need with fewer strands of roving
- Fewer strands of roving means less chance of tangling, easier handling and more uptime
- Up to 40% lighter than competition for better chopping control

### **External anvil adjustment**

- Lets you adjust anvil tension to correct cut variations due to anvil and blade wear
- Simply unlock thumb lever, adjust tension screw and resume spraying
- No disassembly, no tools required – results in more uptime

### **Tool-less blade design for more uptime**

- No tools required – easy to change blades in seconds
- Ability to change blades on the production line resulting in more uptime
- Operators never have to touch a blade
- Virtually eliminates nicks and cuts



Graco RS Chop Gun with Cutter

### **Speed control**

- Lets you adjust glass output on the fly
- No tools required



## Change blades in seconds and keep production moving

Graco's innovative new fiberglass cutter is sure to change the way you work. It's designed so workers can change the blades in less than a minute – significantly less time than traditional cutter designs. In addition, blades and anvils can be changed right on the production line, resulting in more uptime. Because the blades are pre-loaded in the cartridge, operators never have to handle sharp blades.

# Built to spray longer and improve uptime

## Both Graco RS Chop and RS Gel Coat Guns offer:

### *Lightweight design*

- Up to 44% lighter than the competition for better spraying control

### *Unique needle clamp design*

- Designed to retain the factory adjustment
- Eliminates need to adjust needle setting after routine service

### *Quick-disconnect front end*

- Easy shutdown procedures – simply place front end in solvent overnight
- Increases production time, reduces clean-up time
- After cleaning front end, the gun can be set aside for the next shift

### *Air Assist Containment (AAC®)*

- More material on the part, less on the floor – saves material costs
- Promotes a healthier work environment due to less overspray
- Standard on all RS guns

### *Ergonomic handle*

- Less operator fatigue means consistent quality parts throughout the shift

### *Easy maintenance*

- Whole gun may be placed in solvent
- O-rings and seals are solvent-resistant
- Virtually eliminates downtime for unscheduled maintenance

### *High-pressure swivel*

- Allows for easy gun maneuverability
- Provides more control when spraying in tight areas



Graco RS Chop Guns and Graco RS Gel Coat Guns are both available in internal and external mix models

## How to change a Graco cutter blade



Remove locking mechanism



Remove used blade cartridge



Replace with new blade cartridge

# Air Assist Containment

## Advanced technology to control and contain your spray pattern

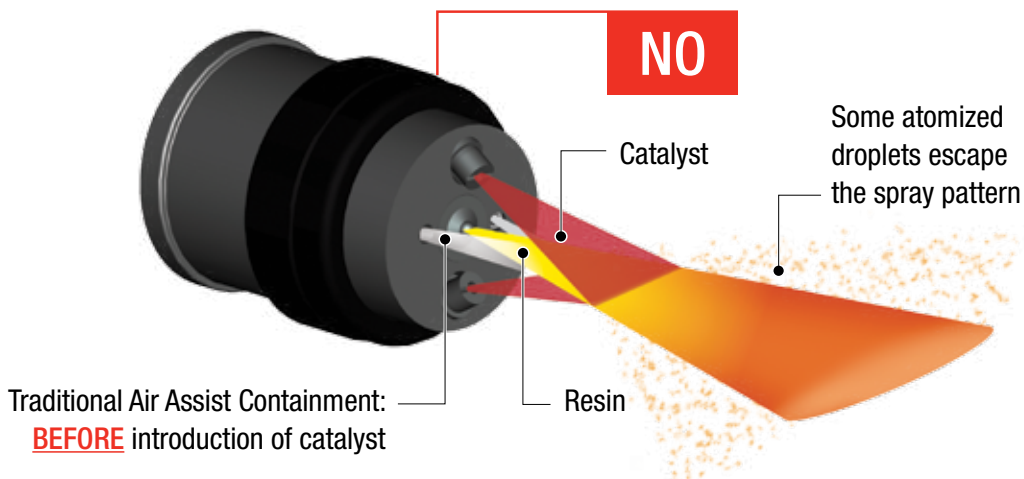
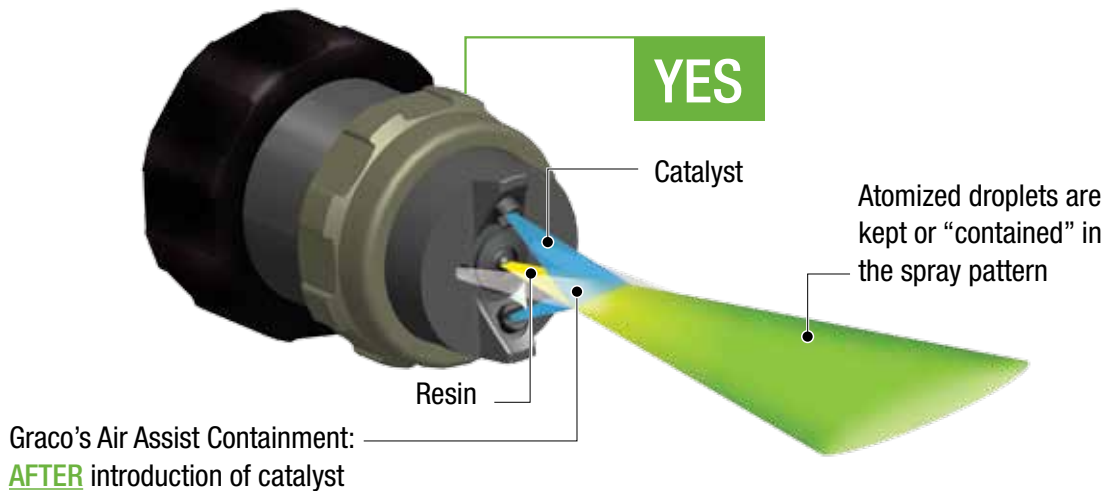
When you buy a drum of resin, you pay for every drop of material. It makes good economic sense to put as many of those drops as possible on the mold.

Air Assist Containment (AAC) technology wraps the spray pattern in a containment shield of air – preventing atomized droplets from escaping the spray pattern. Droplets that escape and end up on the floor, wall or employee’s clothing are a waste of money.

AAC creates a spray pattern where the droplets travel to the mold at very low pressure. The low speed or “particle velocity” creates very little turbulence or disturbance in the liquid when the droplet makes contact with the mold. Competitive spray guns with higher “particle velocity” create a great deal of turbulence when the droplets impact the mold. Turbulence creates air entrapment which results in porosity. AAC spraying dramatically reduces the chances of air entrapment and porosity.

### AAC improves your profit picture

- All Graco RS guns feature the patented AAC technology
- Reduces material waste – which results in more molds per drum of material
- Precise catalyst delivery and reduced particle velocity assure the highest quality finish
- Less overspray means a healthier work area for employees



*External mix technology shown in example*

# ROI Calculator

## Lightning-fast blade changes – more uptime

### Calculate your return on your investment

If it takes longer than a few minutes to switch out the blades on your current chop gun, then you need a Graco RS Chop Gun. You'll discover that the Graco RS Chop Gun pays for itself with saved labor costs and improved production uptime. Here's how:

### Easy, convenient blade change-out for improved production uptime

The blade cartridge in the Graco RS Chop Gun adds a whole new level of convenience and speed to the production line. Blades can be switched out in under a minute, right on the production line. No more stopping production to switch out guns. No more taking the gun to the workbench. Instead, blades can be quickly switched out on the production line. The Graco RS Gun significantly reduces downtime due to blade maintenance.

### No tools required

The cover to Graco's cutter assembly is easy to remove and doesn't require any tools. Neither do the blades.

### Fewer cuts

Old style cutters featured razor blades that needed to be replaced individually. With Graco's new blade cartridge, you simply remove the entire used blade cartridge and insert a new one. It's much quicker, with less chance of getting cut.

### Reduced labor costs

Some shops have a specialized gun maintenance person whose sole job is to switch blades in chop guns. Because of the Graco RS Gun's simple, innovative design, this is no longer necessary.

Stop and think: what's the real cost and time spent at your plant to change out the blades on your current chop gun? Add it up: stopping the production line, getting the tools to remove the cover and wheel, taking the cutter to the bench, removing blades... it all adds up.

Labor savings alone on the Graco RS Gun will provide a strong return on investment. Use the ROI tool below to determine the savings in your shop.

LABOR SAVINGS	EXAMPLE ESTIMATE		Formula	ACTUAL ESTIMATE	
	Typical Competitive Gun	Graco RS Chop Gun		Current Chop Gun	Graco RS Chop Gun
(including cost of blades)					
Labor rate per hour	\$30.00	\$30.00	A	\$ <input type="text"/>	\$ <input type="text"/>
Time to switch blades (hrs)	0.25	0.0083	B	<input type="text"/>	0.0083
List price of blades (4-blade)	\$1.40	\$6.21	C	\$ <input type="text"/>	\$6.21
Daily labor & blade cost	8.90	6.46	$D = (A \times B) + C$	<input type="text"/>	<input type="text"/>
Number of shifts each day	1	1	E	<input type="text"/>	<input type="text"/>
Number of times blades are changed per shift	1	1	F	<input type="text"/>	<input type="text"/>
Number of times blades are changed each week (assumes 5-day work week)	5	5	$G = E \times F \times 5$	<input type="text"/>	<input type="text"/>
Weekly cost	\$44.50	\$32.30	$H = D \times G$	\$ <input type="text"/>	\$ <input type="text"/>
Annual cost @ 50 weeks/year	\$2,225.00	\$1,615.00	$I = H \times 50$	\$ <input type="text"/>	\$ <input type="text"/>
<b>LABOR &amp; PARTS SAVINGS</b>	<b>\$610.00</b>			<b>\$ <input type="text"/></b>	

This ROI Calculator provides an estimate of savings only. Part prices and time to switch blades are estimates only. Dollar savings generated by this ROI tool are not guaranteed. Actual results may vary depending on equipment, materials and factory conditions.

# Technical Specifications

## Minimum Air Flow (at 100 psi)

Internal Mix Gel .....	12.5 scfm (0.354 meters <sup>3</sup> per minute)
Internal Mix Chop .....	2.25 scfm (0.064 meters <sup>3</sup> per minute)
External Mix .....	2.0 scfm (0.06 meters <sup>3</sup> per minute)
Cutter.....	16.5 scfm (0.467 meters <sup>3</sup> per minute)

Maximum Air Pressure ..... 125 psi (8.7 bar, 0.87 MPa)

## Weight

Internal Mix Gel.....	2.32 lb (1.05 kg)
Internal Mix Chop .....	2.46 lb (1.12 kg)
External Mix Gel .....	2.08 lb (0.94 kg)
External Mix Chop .....	2.33 lb (1.04 kg)
Cutter .....	2.00 lb (0.91 kg)

Manual (Guns and Cutter)..... 3A0232

## How to read a composite spray tip number



**EXAMPLE**      **C S T 5 2 1**

**CST** = Composite Spray Tip

**4TH DIGIT** = pattern width code. Double the number to get pattern width at 12 inches. In this case, 5 equals a 10-inch spray pattern width at a 12-inch spraying distance.\*

**LAST TWO DIGITS** = Orifice size. In this case, 21 is equivalent to a .021 diameter orifice.

## Airless Composite Spray Tips

Part Number		
CST215	CST223	CST343
CST415	CST423	CST443
CST217	CST523	CST543
CST417	CST427	CST351
CST517	CST527	CST451
CST219	CST231	CST551
CST419	CST431	CST651
CST519	CST531	CST461
CST221	CST235	CST561
CST421	CST435	CST661
CST521	CST535	CST471

## How to read an impingement tip part number



**EXAMPLE**      **C S T S 7 5**

**CST** = Composite Spray Tip

**4TH DIGIT** = S for stainless steel or T for tool steel

**5TH DIGIT** = Spray pattern width code. Double the number to get pattern width at 18 inches. In this case, 7 equals a 14-inch pattern width at an 18-inch spraying distance.\*

**6TH DIGIT** = Orifice size code. Number roughly matches the diameter of the angled hole size. In this case, 5 is equivalent to a .052-inch diameter angled hole.

## Impingement Composite Spray Tips

Part Number		
CSTS42	CSTS64	CSTS75
CSTS73	CSTS74	CSTS56
CSTS34	CSTS84	CSTS66
CSTS44	CSTS55	CSTS57
CSTS54	CSTS65	CSTT57



Patterns may vary slightly due to  
on changes in pressure, viscosity  
and temperature.

## Guns

- 258853 Gel coat gun, internal mix with CST521 tip
- 258840 Gel coat gun, external mix with CST521 tip
- 258854 Chop gun, internal mix with CST443 tip, without cutter
- 258852 Chop gun, external mix with CST443 tip, without cutter
- 258970 External mix chop gun with CST443 tip, with cutter
- 258971 Internal mix chop gun with CST443 tip, with cutter
- 258900 Cutter assembly
- 24E448 4-blade cartridge kit
- 24F602 6-blade cartridge kit
- 24E449 8-blade cartridge kit

## Gun Repair Kits

- 24E415 Solvent AAC assembly fitting kit
- 24E416 Needle clamp assembly kit
- 24E417 Complete needle assembly
- 24E418 Needle repair kit
- 24E419 Needle AAC kit
- 24E420 Catalyst Seat Kit
- 24E421 Resin Seat Kit
- 24E422 Cutter adapter kit
- 24E423 Catalyst check valve
- 24E424 Check valve housing kit
- 24E425 Trigger air valve kit
- 24E428 Seat seal, 6-pack
- 24E435 Tip seal kit, 6-pack
- 24E436 Needle assembly kit, 6-pack
- 24E443 Front head internal check valve
- 24E444 Internal spring check valve kit
- 24E445 Internal mixer kit
- 24E446 Front head external check valve kit
- 24E447 Front head external check valve repair kit

## Head Assemblies

- 24E426 Horizontal external mix front head kit
- 24E427 Vertical external mix front head kit
- 24E442 Horizontal/vertical internal mix front head kit



## ABOUT GRACO

### PROVEN QUALITY. LEADING TECHNOLOGY.

Founded in 1926, Graco is a world leader in fluid handling systems and components. Graco products move, measure, control, dispense and apply a wide range of fluids and viscous materials used in vehicle lubrication, commercial and industrial settings.

The company's success is based on its unwavering commitment to technical excellence, world-class manufacturing and unparalleled customer service. Working closely with qualified distributors, Graco offers systems, products and technology that set the quality standard in a wide range of fluid handling solutions. Graco provides equipment for spray finishing, protective coating, paint circulation, lubrication, and dispensing sealants and adhesives, along with power application equipment for the contractor industry. Graco's ongoing investment in fluid management and control will continue to provide innovative solutions to a diverse global market.

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## SALES/ DISTRIBUTION/ SERVICE

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