



FRP Systems

Proportioners and Guns for Gel Coat and Chop Applications



PROVEN QUALITY. LEADING TECHNOLOGY.

Industry-leading solutions for FRP



Raising the bar for high-performance FRP equipment

Engineered with industry-proven Graco components, Graco FRP (Fiber-Reinforced Plastic) Systems and RS™ (Resin Spray) applicator guns provide you with a system that is technologically advanced, durable and easy to use.

Lower cost of ownership

- Easy maintenance—few wear parts
- More uptime for production—longer periods between scheduled maintenance

Quality parts—all day, every day

Your reputation rides on the quality of your end products. With Graco FRP equipment, you're assured of a consistent catalyst ratio for a consistent cure—resulting in higher quality, finished products.

A smart future investment: MACT-compliant technology

Graco FRP equipment features MACT (Maximum Achievable Control Technologies)-compliant RS spray guns. As regulations change to require new technologies, Graco promises to be a smart investment for the future of your business.

Here's why. Graco FRP equipment supports MACT requirements with two application tip designs—one for air assisted airless and a second one for impingement spray processes. **With Graco, you can switch from air assisted airless to impingement by simply changing the spray tip.**



Graco Gel Coat System

External Mix Gun



Roving Management System

- Better guides—less tangling, more uptime

New Linkage and Catalyst Pump

- Truly engineered linkage for superior ratio control
- Allows for infinite adjustment of catalyst percentage —no tools required
- Ensures proper catalyst percentage and optimum results
- Variance of 1% or less

Balanced Graco NXT® Air Motor

- Provides same output pressure on upstroke and downstroke, resulting in more consistent spray pattern
- Shortened stroke on pump for better spray pattern

Control Panel

- Easy user interface with all gauges in one location

Stable, Lightweight Cart

- Easy to maneuver
- Strong, durable casters

Gravity Fed Catalyst System

- Keeps the catalyst pump primed for consistent delivery

Internal Mix-Chop Gun

Optional DataTrak™ Control

- Monitors resin usage — Helps ensure product quality by tracking resin usage per piece, shift or day
- Tracks cycles for preventive maintenance schedule
- Displays real time flow rate—eliminates material waste due to worn spray tips

Graco Chop System

Featuring:

- More consistent spray pattern
- Resin usage monitor
- Linkage and tool-free catalyst adjustment

Optional inline heaters provide consistent temperature and viscosity control at the point of application (see page 11)

Easy to use, lightweight guns

Graco RS Chop Gun with Cutter

Magnetic Cutter Drum

- Quick and easy blade changes
- Magnet in cutter head holds blades in place

Swivel Feature

(Where the fluid line connects to the gun)

- Allows smooth movement
- Operator can easily pivot in different directions without kinking the hose

Ergonomic Handle

- Less operator fatigue

Graco RS Gel Coat Gun

Solvent-Safe

- Easy shutdown — simply place front end in solvent at end of shift

Quick-Disconnect Front End

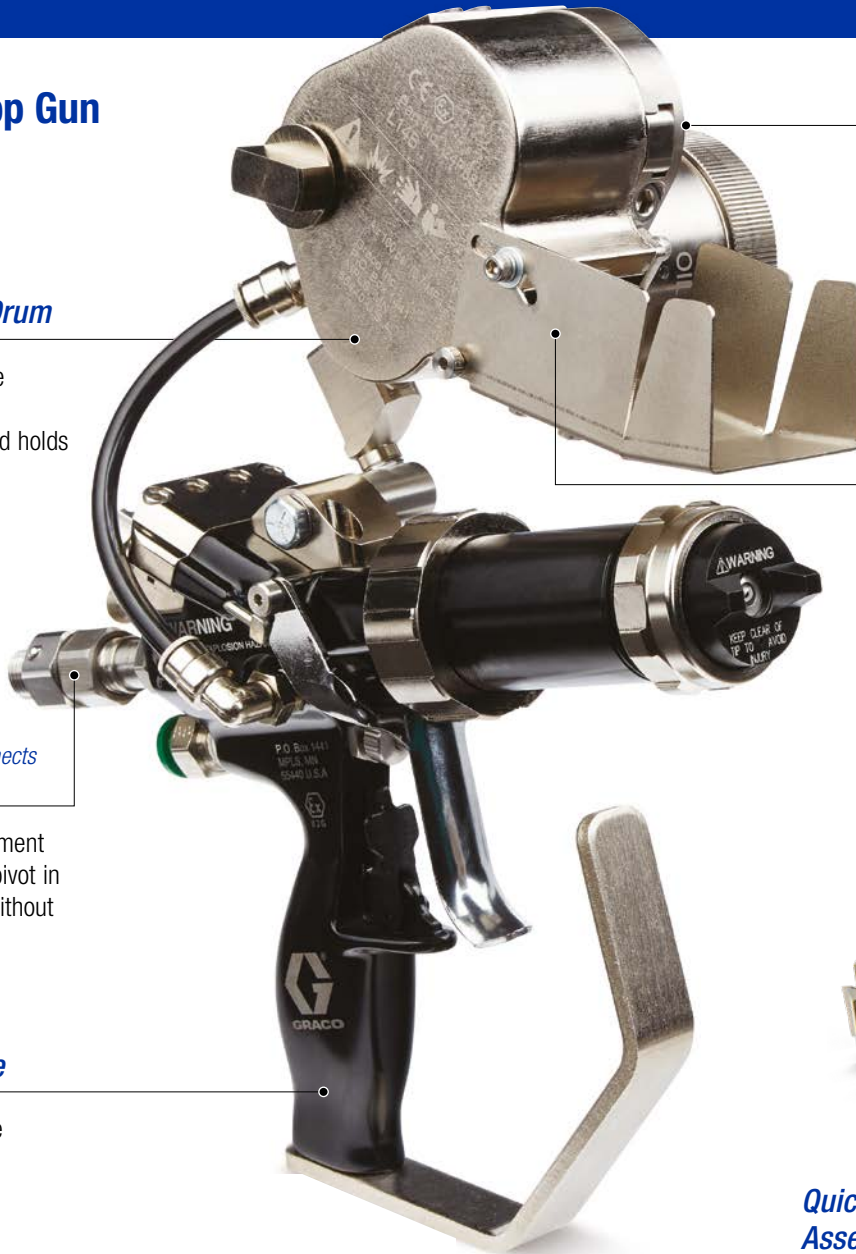
- Modular design means it's very easy to get to the specific part you need to replace
- No need to disassemble the entire gun
- Increases productivity, reduces cleanup time

Constant Control

- Adjust glass cutting tension output on the production floor in seconds
- No tools needed to make many adjustments

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
- External anvil adjustment lets you quickly and easily adjust anvil tension



Quick-Change Blade Assembly

- No tools required — easy to change blades in seconds
- Ability to quickly swap preloaded cutter assembly on the production line resulting in more uptime
- Magnetic cutter assembly snaps and holds blades in place during change out to reduce nicks and cuts
- Only available at Graco!

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



Fast switch tip design – A Graco Exclusive



Impingement Tip



Air Assisted Airless Tip

OR

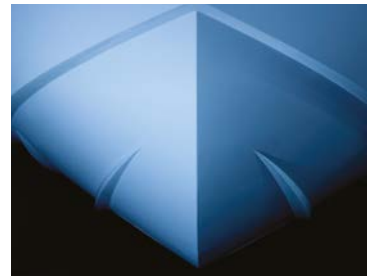


Only Graco allows you to switch technologies just by changing tips



Exclusive Graco Feature

Today's FRP market uses two different technologies. Mechanical Air Atomized (Air Assisted Airless) and Mechanical Non-Air Atomized (Impingement). Using the Graco RS Guns allows you to switch from one technology to the other by simply changing the spray tip. This can be done quickly and cost effectively. Competitive models require time-consuming spray gun head changes and or complete replacement of the spray gun which results in lost time and higher cost conversion.



AAC Spray Control Technology – A Graco Exclusive

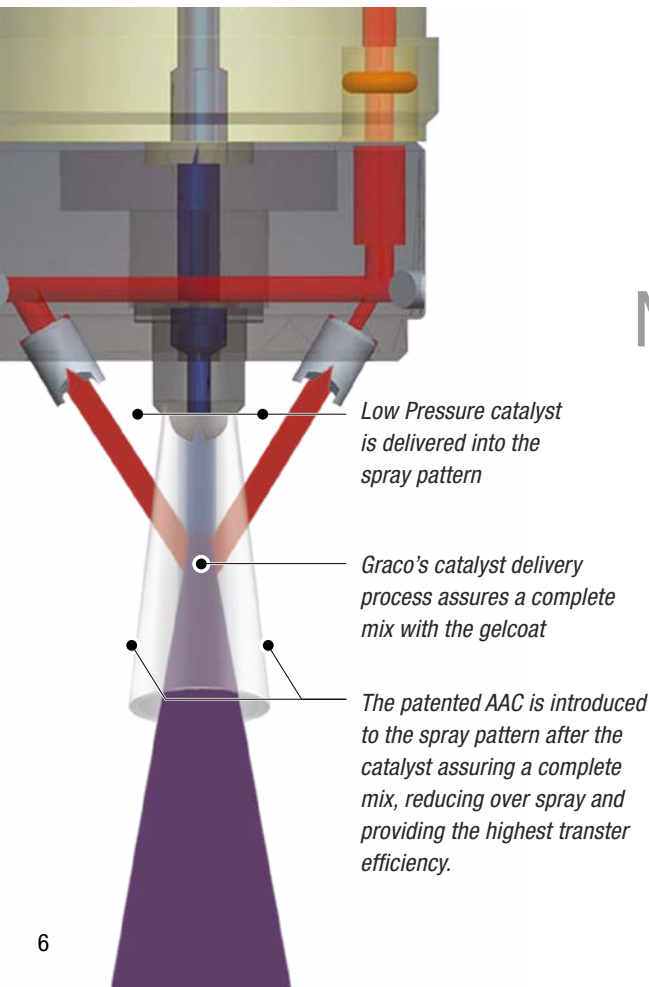


Air Assist Containment™ (AAC) – control and contain your spray pattern

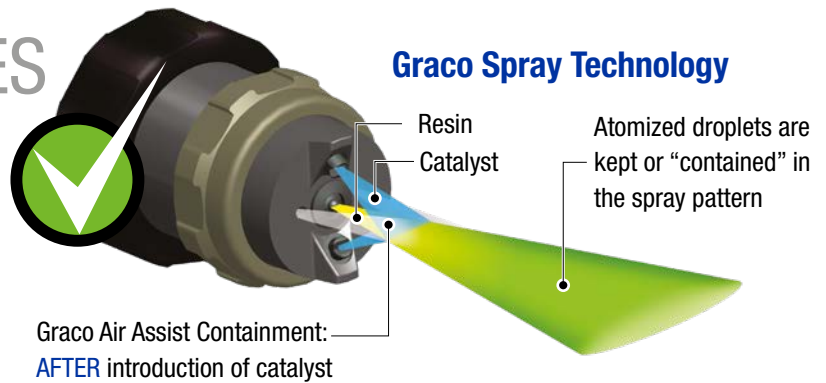
When you buy a drum of resin or gelcoat, you pay for every drop of material. Graco will help you put as many of those drops as possible on the mold.

Our exclusive Air-Assist Containment (AAC) wraps the spray pattern in a containment shield of air. This prevents atomized droplets from escaping the spray pattern creating a better working environment. Droplets that escape and end up on the floor, wall or employee's clothing are a waste of money.

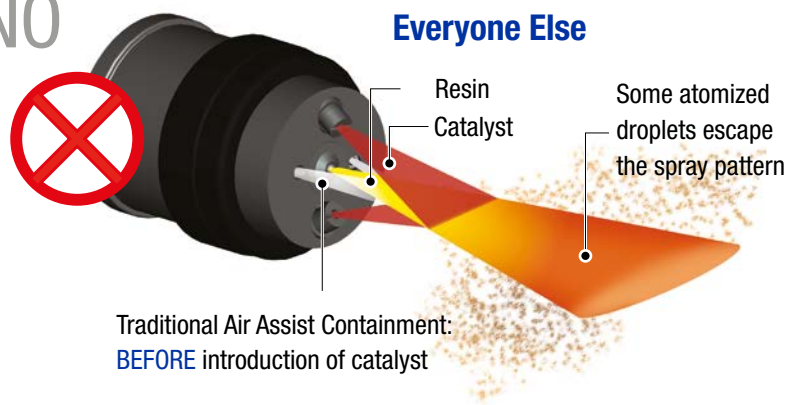
AAC creates a spray pattern where the droplets travel to the mold at very low pressure. The low speed or "particle velocity" creates very little turbulence or disturbance in the material when it is applied to the mold. Higher "particle velocity" creates a great deal of turbulence during the application process. Turbulence, or over-atomization, creates air entrapment which can result in porosity issues.



YES



NO





Systems

			No Cart/Hose Length*		Cart/Hose Length*		Cart, Mast and Boom/Hose Length*			
			Part#	m (ft)	Part #	m (ft)	Part #	m (ft)		
13:1 Ratio Max Air Consumption**: 1.000 L/Min. (35 SCFM) Max Fluid Output**: 5.7 lpm (1.5 gpm)	Internal Mix	Gel	16R065	7.6 (25)	16R002	7.6 (25)	16R053	7.6 (25)		
			16R068	10.7 (35)	16R044	10.7 (35)	16R056	10.7 (35)		
			16R071	15.2 (50)	16R047	15.2 (50)	16R059	15.2 (50)		
			16R074	(None)	16R050	(None)	16R062	(None)		
		Chop	16R135	7.6 (25)	16R123	7.6 (25)	16R004	7.6 (25)		
			16R138	10.7 (35)	16R114	10.7 (35)	16R126	10.7 (35)		
			16R141	15.2 (50)	16R117	15.2 (50)	16R129	15.2 (50)		
			16R144	(None)	16R120	(None)	16R132	(None)		
	External Mix	Gel	16R030	7.6 (25)	16R001	7.6 (25)	16R018	7.6 (25)		
			16R033	10.7 (35)	16R009	10.7 (35)	16R021	10.7 (35)		
			16R036	15.2 (50)	16R012	15.2 (50)	16R024	15.2 (50)		
			16R039	(None)	16R015	(None)	16R027	(None)		
		Chop	16R100	7.6 (25)	16R088	7.6 (25)	16R003	7.6 (25)		
			16R103	10.7 (35)	16R079	10.7 (35)	16R091	10.7 (35)		
			16R106	15.2 (50)	16R082	15.2 (50)	16R094	15.2 (50)		
			16R109	(None)	16R085	(None)	16R097	(None)		
17:1 Ratio Max Air Consumption**: 1.000 L/Min. (35 SCFM) Max Fluid Output**: 3.8 lpm (1gpm)	Internal Mix	Gel	16R205	7.6 (25)	16R006	7.6 (25)	16R193	7.6 (25)		
			16R208	10.7 (35)	16R184	10.7 (35)	16R196	10.7 (35)		
			16R211	15.2 (50)	16R187	15.2 (50)	16R199	15.2 (50)		
			16R214	(None)	16R190	(None)	16R202	(None)		
	External Mix	Gel	16R170	7.6 (25)	16R005	7.6 (25)	16R158	7.6 (25)		
			16R173	10.7 (35)	16R149	10.7 (35)	16R161	10.7 (35)		
			16R176	15.2 (50)	16R152	15.2 (50)	16R164	15.2 (50)		
			16R179	(None)	16R155	(None)	16R167	(None)		
					16R300	7.6 (25)	16R301	7.6 (25)	16R302	7.6 (25)
					16R303	10.7 (35)	16R304	10.7 (35)	16R305	10.7 (35)
		16R306	15.2 (50)	16R307	15.2 (50)	16R308	15.2 (50)			
		16R309	(None)	16R310	(None)	16R311	(None)			
13:1 Ratio with High Flow Gun 24P435 Max Air Consumption**: 1.000 L/Min. (35 SCFM) Max Fluid Output**: 5.7 lpm (1.5 gpm)	Internal Mix	Chop	24W435	7.6 (25)	24W432	7.6 (25)	24W438	7.6 (25)		
			24W436	10.7 (35)	24W433	35 (10.7)	24W439	10.7 (35)		
			24W437	15.2 (50)	24W434	15.2 (50)	24W440	50 (15.2)		

* Systems without hoses do not come with guns
 ** Fluid and air flow rate for 70 cpm

Solvent Flush Kits

16M560	Diaphragm Pump Solvent Flush Kit - 9.5 l (2.5 gal)
16M561	Diaphragm Pump Solvent Flush Kit - 19 l (5 gal)
16M893	Pressure Pot Solvent Flush Kit - 7.6 l (2 gal)
16M894	Pressure Pot Solvent Flush Kit - 19 l (5 gal)
16M874	CE Pressure Pot Solvent Flush Kit - 7.6 l (2 gal)

Optional Kits

16M881	DataTrak Upgrade Kit
24M501	19 l (5 gal) Catalyst Tank Kit
16M896	208 l (55 gal) Drum Cart for Cart, Mast and Boom
16M897	208 l (55 gal) Drum Cart for Pole Cart
16M961	Roving Box Kit
16N918	Wall Mount Bracket Kit
16N761	Boom Kit



Hose Kits

16M718	Internal Gel Hose Extension 7.6 m (25 ft)
16M587	Internal Gel Hose Bundle 7.6 m (25 ft)
16M590	Internal Gel Hose Bundle 10.7 m (35 ft)
16M584	Internal Gel Hose Bundle 15.2 m (50 ft)
16M719	External Gel Hose Extension 7.6 m (25 ft)
16M588	External Gel Hose Bundle 7.6 m (25 ft)
16M591	External Gel Hose Bundle 10.7 m (35 ft)
16M585	External Gel Hose Bundle 15.2 m (50 ft)
16M712	Chop Hose Extension 7.6 m (25 ft)
16M586	Chop Hose Bundle 7.6 m (25 ft)
16M589	Chop Hose Bundle 10.7 m (35 ft)
16M583	Chop Hose Bundle 15.2 m (50 ft)

Replacement Outlet Filters

224458	30 mesh, 2-pack
238436	30 mesh, 25-pack
224459	60 mesh, 2-pack
238438	60 mesh, 25-pack
224468	100 mesh (standard option), 2-pack
238440	100 mesh (standard option), 25-pack
224469	200 mesh, 2-pack
238442	200 mesh, 25-pack



Pump Kits and Parts

W17CFS	17:1 Pump Assembly 75 cc SST
W13DFC	13:1 Pump Assembly 100 cc CS
W09DFC	9:1 Pump Assembly 150 cc CS
M07LNL	4.5 in FRP NXT Air Motor
16N238	4.5 in FRP NXT Air Motor - Seal Kit
LW150A	150 cc FRP Lower
17E098	150 cc FRP Lower - Seal Kit
17E099	150 cc FRP Lower - Connection Kit
LW100C	100 cc FRP Lower
16N232	100 cc FRP Lower - Seal Kit
16N243	100 cc FRP Lower - Connection Kit
LW075S	75 cc FRP Lower
16N231	75 cc FRP Lower - Seal Kit
16N242	75 cc FRP Lower - Connection Kit
16N740	Internal Mix Catalyst Pump Assembly
16N741	External Mix Catalyst Pump Assembly
16N919	Catalyst Pump Rebuild Kit

Guns

RS Guns

258853.....	RS Internal Mix Gel Coat Gun, CST521 tip
258840.....	RS External Mix Gel Coat Gun, CST521 tip
258971.....	RS Internal Mix Chop Gun with Cutter, CST443 tip
258970.....	RS External Mix Chop Gun with Cutter, CST443 tip
258854.....	RS Internal Mix Chop Gun without Cutter, CST443 tip
258852.....	RS External Mix Chop Gun without Cutter, CST443 tip
24P435.....	RS Internal Mix Chop Gun (High Flow) with Cutter, CST561 tip
24P436.....	RS Internal Mix Chop Gun (High Flow) w/o Cutter, CST561 tip

RS Gun Parts

24E512.....	Cutter assembly
24E448.....	4-Blade Cartridge Kit, 5-pack
24F602.....	6-Blade Cartridge Kit, 5-pack
24E449.....	8-Blade Cartridge Kit, 5-pack
123672.....	Anvil - Cartridge Cutter Head
126995.....	Anvil - Individual Blade Cutter Head
16K768.....	RS RTM and Pour Adapter
24H337.....	Internal Mix High Flow Kit
24H336.....	External Mix High Flow Kit
24M569.....	Roving guide, 2-hole feeder bar

Optional Cutter Chutes

16K759.....	Open, Short, Adjustable Chute
16K760.....	Closed, Short, Adjustable Chute
16K762.....	Open, Long, Adjustable Chute
16K763.....	Closed, Long, Adjustable Chute
125883.....	Closed, Long, Wide Chute
125884.....	Closed, Narrow Chute

Head Assemblies

24E426.....	External Mix Horizontal Front Head Kit
24E427.....	External Mix Vertical Front Head Kit
24E442.....	Internal Mix Chop Front Head Kit
24G615.....	Internal Mix Gel Front Head Kit

Gun 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
24E446.....	Front head external check valve kit
24E447.....	Front head external check valve repair kit
24F706.....	Chopper Air Shutoff Valve
24Y928.....	RS Gun ratio check kit

HOW TO READ A COMPOSITE SPRAY TIP NUMBER

Airless Composites Spray Tips - For example: CST521

1. The first three letters (CST) = Composite Spray Tip.
2. The 4th digit indicates pattern width code.
Double this number to get the pattern width at 3mm (12 inches) distance.
In this case, 5 equals a 250mm (10 inches) spray pattern width at a 2 inches spraying distance.
3. The last two digits indicates orifice size.
In this case, 21 is equivalent to a .021" diameter orifice.

Impingement Composite Spray Tips - For example: CSTS75

1. The first three letters (CST) = Composite Spray Tip.
2. The 4th digit indicates S for stainless steel or T for tool steel.
3. The 5th digit indicates spray pattern width code.
Double the number to get pattern width at 450mm (18 inches) distance.
In this case, 7 equals a 350mm (14 inches) pattern width at an 450mm (18 inches) spraying distance.



Airless Composite Spray Tips (CSTXXX)

FAN WIDTH

		ORIFICE SIZE - INCHES											
IN	(MM)	0.015	0.017	0.019	0.021	0.023	0.027	0.031	0.035	0.043	0.051	0.061	0.071
4	100	215	217	219	221	223	227	231	235				
6	150	315	317	319	321	323	327	331	335	343	351		
8	200	415	417	419	421	423	427	431	435	443	451	461	471
10	250	515	517	519	521	523	527	531	535	543	551	561	571
12	300	615	617	619	621	623	627	631	635	643	651	661	671

Impingement Composite Spray Tips (CSTXXX)

FAN WIDTH

		ORIFICE SIZE - INCHES								
IN	(MM)	0.018	0.021	0.036	0.042	0.052	0.062	0.070	0.081	
6	150	S31	S32	S33	S34	S35	S36, T36	S37, T37		
8	200	S41	S42	S43	S44	S45	S46, T46	S47, T47		
10	250	S51	S52	S53	S54	S55	S56, T56	S57, T57	S58	
12	300	S61	S62	S63	S64	S65	S66, T66	S67, T67	S68	
14	350	S71	S72	S73	S74	S75	S76, T76	S77	S78	
16	400	S81	S82	S83	S84	S85	S86, T86	S87	S88	
18	460	S91	S92							



FRP Accessories

Heavy Duty Drum Agitator

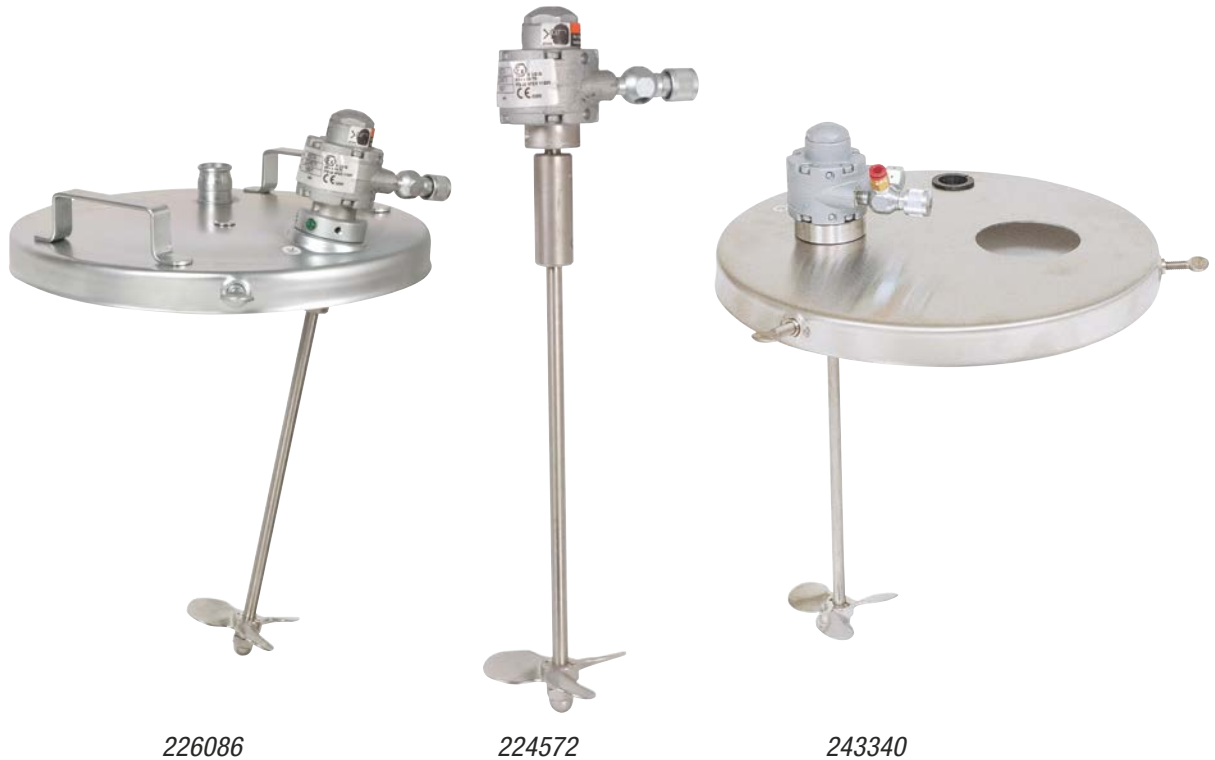
- Heavy duty gearbox mixes high viscosity materials
- Leak-free and oil-less gearbox prevents material contamination
- Stainless steel agitator and cover for corrosion resistance
- Twin paddles thoroughly mix finishing materials
- Siphon option allows material transfer through agitator shaft
- Access port for easy sampling and inspection of material during operation



Part No.	Description	Drive	KW (HP)	Length cm (in)	Material	Manual
231414	Heavy-duty back-gearred agitator with elevator, drum cover and siphon kit	Air	0.37 (0.5)	81.25 (32)	SST	308609
231413	Same as 231414, except without siphon capability	Air	0.37 (0.5)	81.25 (32)	SST	308609
238157	Heavy-duty back-gearred agitator	Air	0.37 (0.5)	81.25 (32)	SST	308609
240209	Same as 238157 with siphon kit	Air	0.37 (0.5)	81.25 (32)	SST	308609
238250	Siphon tube kit; fits 238157 agitator			109 (43)	SST	308609

Pail Cover Agitator

- Lift handles for easy moving and colour changes
- Locking bolts to secure cover and reduce spills
- Ideal for wall mount pumps or spray packages



226086

224572

243340

Part No.	Size	Description	Drive	KW (HP)	Length cm (in)	Material	Manual	Notes
222695	18 l (5 gal)	Round prop	Air	0.019 (1/4)	33.6 (13.25)	SST	307968	224571 Agitator and hose
204536	18 l (5 gal)	Round prop (3 blade)	Air	0.019 (1/4)	33.6 (13.25)	SST	306565	224571 Agitator and metal tube
226086	18 l (5 gal)	Pail cover, round prop	Air	0.019 (1/4)	33.6 (13.25)	CS	306670	224571 Agitator and CS pail cover
243340	18 l (5 gal)	SST pail cover with SST agitator	Air	0.019 (1/4)	33.6 (13.25)	SST	306565	224571 Agitator and SST pail cover
245081	18 l (5 gal)	SST pail agitator kit for Triton pkgs	Air	0.37 (0.5)	33.6 (13.25)	SST	309305	
245895	18 l (5 gal)	CS pail cover with SST agitator	Air	0.019 (1/4)	33.6 (13.25)	CS	306565	
224572	37 l (10 gal)	Single round prop (3 blade)	Air	0.019 (1/4)	43.8 (17.25)	SST	306565	

FRP Accessories

In-line Air Filter and Coalescers

- Reusable filter removes particles down to 5 microns
- Coalescer removes contaminants down to 0.01 microns
- Auto-drain eliminates manual emptying of filters
- Built-in filters change indicator signals replacement to ensure optimal efficiency



Part No.	Description	Air Inlet in	Air Outlet in	Air Flow Capacity	Maximum Inlet Pressure
234405	Air filter/coalescer assembly (both with auto drain)	1/2 f (npt)	1/2 f (npt)	70 CFM	12 bar (1.2 MPa, 175 psi)
234406	Stage 1 - Air filter with auto drain removes contaminants to 5 microns.	1/2 f (npt)	1/2 f (npt)	108 CFM	12 bar (1.2 MPa, 175 psi)
234407	Stage 2 - Coalescer with auto drain removes particles to 0.01 microns.	1/2 f (npt)	1/2 f (npt)	70 CFM	12 bar (1.2 MPa, 175 psi)
234408	Air filter with auto drain removes contaminants to 5 microns	3/4 f (npt)	3/4 f (npt)	300 CFM	12 bar (1.2 MPa, 175 psi)
234409	Coalescer with auto drain removes particles to 0.01 microns	3/4 f (npt)	3/4 f (npt)	115 CFM	12 bar (1.2 MPa, 175 psi)

Instruction Manual: [309919](#)

Fluid Heater Kit

- Variable heating levels for consistent viscosity control
- Approved for hazardous locations
- 500 bar (7250 psi) maximum working pressure
- Stainless steel construction is compatible with polyester resins and coats



Part No.	Description
16N014	Viscon Heater Kit - 120V
16N015	Viscon Heater Kit - 240V

Part No.	Description
16N018	Viscon HP Heater Kit – 120V
16N019	Viscon HP Heater Kit – 240V
16N016	Viscon HP Hazardous Location Heater Kit – 120V
16N017	Viscon HP Hazardous Location Heater Kit – 240V
16N119	Heater Mount Kit



ABOUT GRACO

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.

GRACO LOCATIONS

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Graco is certified ISO 9001.



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