

# Airless Striping Applications

**Advanced Paint Striping Solutions** 





## AIRLESS STRIPING APPLICATIONS **EVOLUTION**

For over 13 years, Graco has been excelling in the manufacturing and engineering of advanced airless striping solutions. Each new generation introduces new technologies and new features. We commit to continuously improve and exceed our professional striping contractors demands.





#### AIRLESS STRIPING

UNIFORM SHARP COST FAST SAFE

## **STRIPING PAINTS**

Some lines have to last for as many as 1.000.000 passages over them. New stringent laws and concerns for the environment guarantee that paint will continue to evolve in the future. Every 3 years, Graco introduces a new range of linestripers to be ahead of the evolution.

#### **PRODUCTIVITY**

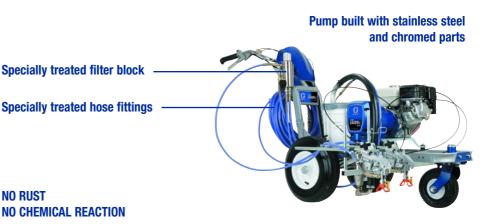
Professional striping contractors strive for continuous improvement in the line quality and definition. They need to complete a job quickly and efficiently. They require maximum versatility of their system and easy adjustments. At the same time, a system must be fast to set-up and fast to clean.

#### **LINES**

**NO RUST** 

Lines need to be even and remain consistent throughout the job. They must be absolutely straight with sharp, crisp edges. The paint must be evenly sprayed and the thickness maintained.

**KEEPING AHEAD LineLazers are 100%** compatible with waterborne paints.



Totally new, the Linelazer 3400 is the ideal professional striper for smaller jobs. Although capable of striping only one line at a time, its size, lightweight and new features make the LineLazer 3400 ideal for maintenance work, parking lots, etc ...





Parking brake



Swivelling front wheel



#### **EASY HANDLING**

#### Only 65 kg

Pushing and pulling the new Linelazer 3400 is almost effortless.

#### Comfortable handle bar

Improves the general handling of the machine as well as the line quality. The bottom hook feature allows for one finger pull back.

#### **Tall wheels**

Greatly enhance the ease of rolling while adding stability.

#### **PERFORMANCE**

#### 230 bar (max)

Enough power to evenly atomise today's thicker coatings.

## Heavy duty gear system & non-maintenance clutch

Trouble-free operation and low maintenance cost.

#### **Endurance™ Pump technology**

"on the job" service is easy. The new chromex rod extends the life of the pump while ensuring full compatibility with waterborne, solvent based and even chlorinated paints.





## ELECTRONIC PRESSURE CONTROL

#### **Easy operation**

Mounted directly in front of the operator for "on the fly" adjustments and emergency shut-off.

#### **Extremely fast response time**

The electronic pressure control guarantees a system that maintains even pressure. Essential for line striping.

#### **Gradual pumping speed**

Eliminates pressure fluctuations and deadbands.



## LINELAZER™ IV **NEW EXCLUSIVE TECHNOLOGIES**

The simple field demand, is a better line quality! Graco systems are built with this objective in mind: "To design advanced striping solutions for unmatched line quality".

Of course, Graco also adds plenty of new features and accessories to fully complete the LineLazer<sup>™</sup> family for the professional striping contractor.

#### LINELAZER<sup>™</sup> IV 3900 - 5900 - 200 H s

#### **ADVANCED VIBRATION REDUCTION SYSTEM (A.V.R.S.)**



Without A.V.R.S.



With A.V.R.S.

#### **Observation**

Uneven road surfaces and a running engine produce vibrations. These get transferred to the striping gun(s) and thus prevent the guns from maintaining a perfect fixed angle over the surface.

Graco invents the AVRS system which reduces vibrations up to 60%. Less vibrations simply results in better quality lines.

Reduced vibrations are achieved with an exclusive pump sprayer mounting system and a new single gun bar holder.

#### **REAR GUN MOUNTING OPTION**

Photo below is the result obtained while striping 2 lines simultaneously: one gun mounted on the front and the second on the back. Same machine, same speed, same paint.

#### **Straighter lines**

Lining up the gun(s) with the two back wheels and axles results in straighter lines.

Mounting the gun on the front of the machine is a requirement to stripe up to the curb on a parking lot. However, for long line pavement applications, mounting the gun on the back improves straightness and consistency of the lines.

#### Easy

The rear gun mounting option eliminates the need to reverse the mount of the engine and the handle.



Rear mount

Front mount





#### **NEW DASHBOARD**

#### **Back lit display**

Allows visibility of all important information at night or any other low light conditions.

#### Easy height adjustment

Simply slide the dashboard (and not the whole handle bar) up and down in 3 different height options.

#### Accessory plug-in

Together with the light switch a "headphone" style connector is added on the dashboard.

Both the Linelazer 3900 and 5900 have been redesigned with all the new technologies of Linelazer IV to deliver precise and consistent lines. Ideal for parking lots and for street marking. These are versatile linestripers. Their performance meets the requirements of municipalities and small cities.





Easy hose wrap



Flow through filter: cleaner and simpler



#### **PERFORMANCE**

**New GMAX™ II pumping systems** 9% more flow for the LineLazer IV 3900 and 7% more flow for the LineLazer IV 5900.

#### **Increased flow**

Faster striping and higher productivity.

#### **Larger Endurance™ pump**

Provides easy service. Upgraded with Chromex<sup>™</sup> piston rod.

#### **EASE OF USE**

#### Versatile

Line stripers are not used solely for line marking. Being airless machines, they also do stenciling and general painting.

#### **Gun (dis)mounting**

No tools gun removal for quick and easy handling.

#### Precision through the concept

The new gun mount and gun adjuster are made out of one piece of extruded aluminium.

The special design automatically aligns the gun position perfectly and consistently.



#### **COMFORTABLE HANDLING**

#### New handle bar design

Natural and comfortable extension of your arms. Eliminates some of the natural sideway motions created while walking.

#### **Less lateral movement**

Straighter and more consistent lines.

#### **Centralised controls**

The dashboard, with all controls, are right in front of the operator for fast and precise control.





### LINELAZER™ IV 200HS

This is the "workhorse" of the LineLazer family. It has the most flow and is powered by a very heavy duty hydraulic system. The choice for intensive line striping. Used by large cities and airports, this machine will do everything from parking lots to street marking with unmatched production rate and trouble-free operation.





#### **HIGH CAPACITY SYSTEM**

#### **Hydraulic system**

Heat is naturally generated by a hydraulic system. Keeping a hydraulic system cool is the key for long life and trouble free operation.

#### Graco design

The hydraulic reservoir capacity has been increased by 20% and the fan design provides 70% more flow to keep the system cool.

#### **ABS** belt cover

Easy to clean, won't rust, won't crack or bend.

#### **MOUNTING TECHNOLOGIES**

#### **Gun shut-off feature**

The one piece, forged aluminium gun mount has now a spring for faster and positive gun shut-off. No need to keep a finger on top of lever to shut the gun(s) off.

#### A.V.R.S.

The LineLazer IV unique mount system eliminates up to 60% of the vibrations. Allows for straighter, sharper and more precise lines.

#### Perfect belt alignment

Better power transfer efficiency while extending the belts life.

No need to adjust the belt tension.



#### **PERFORMANCE**

#### **High flow**

Largest pump in the LineLazer IV family.

#### Chromex<sup>™</sup> piston rod

Up to 4 times harder than chrome. This coating technology extends the life of your wear parts while being 100% compatible with waterborne and solvent based paints.



### LINEDRIVER™ - LINEDRIVER™ HD



Accessory to an airless striping machine. Transforms your striper into a ride-on push and pull, hydrostatic driver. It doubles your production rate and improves line quality while reducing operator's fatigue.





#### **IMPROVED PRODUCTIVITY**

#### Finish your jobs in half the time

Striping can be done faster compared to manually pushing. Save more time on all distances travelled while not striping.

#### **High operator comfort**

There is a physical limit as to how long a person can push a machine each day. Differences in street levels make manual work more difficult. The LineDriver overcomes these considerations.

#### **Carry more paint**

The power of the LineDriver enables carrying extra paint on board. Less time is lost for refills.

#### **IMPROVED LINE QUALITY**

#### Precise hydrostatic drive

Once the average, micron build is achieved, the LineDriver makes it easy to maintain the correct speed to reproduce exactly the same thickness throughout the job.

#### 1 hydraulic drive per wheel

Having the same force on each wheel guarantees a straighter line. This eliminates the natural side-to-side motion a person produces while walking.



#### HYDROSTATIC ADVANTAGES

#### Easy to use

Only change the oil to maintain the system. No belts, chains or gears to adjust or change.

#### Independent Honda engine

The LineDriver does not tax power from the striper engine. For tight striping jobs, just disassemble and use the striper on its own. The weight of the hydraulic and engine power is on the LineDriver, not on the striper.

#### **LineDriver drives**

On reverse, the LineDriver pulls back. On forward it pushes. Very simple and intuitive.



#### AIRLESS STRIPING APPLICATIONS



#### **ROADLAZER**

#### **FIELDLAZER™**

#### HYDRAULIC MOTOR/ PUMP ASSEMBLIES



Graco's striping expertise extends further than just parking lots and streets. For many years, Graco has been able to satisfy many large contractors with its range of RoadLazer products.

#### **CONFIGURATION**

Available as a 1, 2 or 3 pumps machine. Now also available on a palette version for mounting on the bed of a truck.

#### **APPLICATIONS**

As the RoadLazer 3 pump version is the only striper capable of striping the "yellow-black-yellow" lines in one pass only, it is particularly well-suited for airports.

#### COMPACT

All the abilities of a striping truck built in a "tow-behind" configuration. Takes limited storage space.

No need for a dedicated striping truck.

\*Check your local laws for traffic regulations

Find more product information in the Graco RoadLazer brochure, part number 300430.



#### **QUALITY LINES**

With the FieldLazer, Graco introduces airless spraying advantages to fields. Unlike transfer pumps, that disperse, the airless principle atomises paint. This results is uniform, bright lines in only one pass.

#### LIGHTWEIGHT

With only 36 kg, the FieldLazer is one of the lightest equipments available today for sports fields. This greatly reduces operator's fatigue and enhances manoeuvrability for corners and center field circle.

#### **VERSATILE**

With its airless pump, painting of logos and letters on the field is extremely simplified. With the extra large filter mounted on-board, together with the self-cleaning tip, tip clogs and their hassles are a problem of the past.



#### **OEM SUPPLIES**

Being one of the world leading manufacturers of paint pumps, Graco also offers a wide range of parts and accessories to fulfil almost any integration requirements.

#### **GH ROOF RIGS**

Graco further completes these proposals with its GH "roof rigs" sprayer, that can be used for striping applications as well.

#### **ACCESSORIES**

From various filter elements, agitators, fittings to all kinds of automatic paint and bead guns, etc, Graco has a product solution for your needs.





### AIRLESS STRIPING APPLICATIONS



#### TECHNICAL SPECIFICATIONS

	LineLazer 3400	LineLazer IV 3900	LineLazer IV 5900	LineLazer IV 200Hs	LineDriver/LineDriver HD
Part number					262004
1 gun 2 guns	249007 x	249008 249009	249010 249011	249012 249013	262005 (HD)
Max. tip sizes 1 gun 2 guns	0.027" x	0.035" 0.025"	0.043" 0.029"	0.045" 0.033"	x x
Max. fluid flow	2.8 l/min	4.7 l/min	6.0 l/min	7.5 l/min	Х
Output difference		66%  -> more than LineLazer 3400	28% more than LineLazer IV 3900	25% -> more than LineLazer IV 5900	х
Max. pressure	230 bar	230 bar	230 bar	230 bar	х
Honda engines	120 cc (3 kW)	120 cc (3 kW)	160 cc (4 kW)	160 cc (4 kW)	160 cc (4,1 kW) 200 cc (4,83 kW)
Fuel tank capacity	2.5 liter	2.5 liter	3.6 liter	3.6 liter	3.6 liter
Weight	65 kg	96 kg	105 kg	125 kg	120-125 kg
Dimensions in cm (w x h x l)	81 x 162 x 155	81 x 102 x 165	81 x 102 x 165	81 x 102 x 165	66 x 104 x 147

### OPERATING SPEED Given average thickness of 300 microns over 10 cm lines LineLazer 3400 LineLazer IV 3900 (1) LineLazer IV 3900 (2) LineLazer IV 5900 (1) LineLazer IV 5900 (2) LineLazer IV 200Hs (1) LineLazer IV 200Hs (2) 2 3 4 5 6 11 12 13 15 16 7 8 9 10 Km/H SCHOOLS TOWNS / MUNICIPALITIES CITIES / AIRPORTS





#### AIRLESS STRIPING

248157 FlexPlus™ striping gun. Mounted with HandTite™ guard and LL5319 striping tip



243161 HandTite™ guard 7/83



245225 Striping hose with E-nickel fittings. 3/8" x 15 m (230 bar)

245798 Striping hose with E-nickel fittings 1/4" x 1,8 m (230 bar)

> \* Only use these hoses with striping to avoid chemical reactions with water-based materials.



287553 2nd gun kit for LineLazer IV (includes LL5319 + 286517)

2nd gun kit for LineLazer III (includes LL5319 + 286517)

241284 2nd gun kit for LineLazer II (includes LL5319 + 286517)

277062 64 cm Line pointer system: Wide blade allows operators to follow stripe "see-through" for "e" stripe.



277061 High output LED light kit (LL IV only).

Includes multiposition mounting hardware and 70 cm cable for mounting flexibility.



248393 60 liter hopper kit with insulated RIM



240717 Pail cover (euro size)

287626 50 cm adjustable width striping ramp. Includes 2 swivel heads, 100% waterborne compatible and 2 tins



249187 Field tires kit for LL 3900/5900 or 200HS. Wide, low pressure turf tires. To upgrade your LineLazer for field striping



249081 Adjustable spray shield kit. Attaches directly onto existing LineLazer to contain spray pattern within set width limits.



244071 EasyOut™ pump filter, 30 mesh,

244067 EasyOut Pump filter, 60 mesh, black

EasyOut Pump filter, 100 mesh, 244068 blue 244069 EasyOut pump filter, 200 mesh,

red



#### EZ BEAD™ GLASS BEAD APPLICATION SYSTEM

Dispense beads mechanically and by gravity. Dispersing heads can be adjusted with trap-doors for 5 cm, 10 cm and 15 cm. EZ bead hopper is reversible for use on both sides of the striper.

277064 Complete EZ bead system with 2 dispensers Complete EZ bead system 277065 with 1 dispenser 277067 Disperser kit

(contains 1 dispenser + hose)



245516 EZ bead 30 cm bead dispenser kit. Includes trap-doors to apply beads over 10 cm, 20 cm or full 30 cm.



277066 EZ bead wind deflectors (15 cm)

6 per pack

245520 EZ bead wind deflectors (30 cm)

3 per pack



#### LINEDRIVER\*\*M

245343 Battery kit for LineDriver (auxiliary)



245321 Hitch kit for LineDriver



245340 LineDriver

249089 Field tires kit for LineDriver. Wide, low pressure turf tires. To upgrade your LineDriver™ for field striping.



#### AIRLESS STRIPING APPLICATIONS



#### STRIPING TIPS



LineLazer™ tips are especially designed

to create clean, lazer sharp lines with no fuzzy edges.

17 new tip sizes added to the range

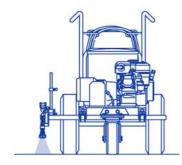
to match the higher performances of the LineLazer™ IV family.

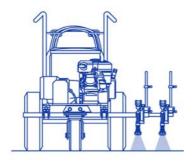
New easy tip clog removal.

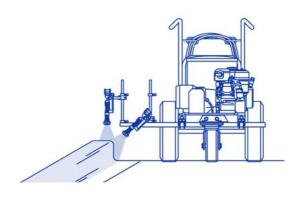
You no longer need to turn the tip assembly to unplug the tip.

Simpler and faster operation.

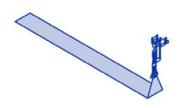
#### POSITIONING







#### LL5 TIP SELECTION CHART



Line width is measured with the tip positioned 15 cm above the surface. Width can be adjusted by lowering or raising the gun.

To order: LL5-XXX. Replace the XXX with the chosen tip size.

Make sure that the flow rate of the tip is within the performance ability of the striper.

	Orifice siz	Orifice sizes											
Line width	0.013"	0.015"	0.017"	0.019"	0.021"	0.023"	0.025"	0.027"	0.029"	0.031"	0.033"	0.035"	0.039
5 cm	213	215	217	219									
10 cm		315	317	319	321	323	325	327	329	331	333	335	
15 cm			417	419	421	423	425	427	429	431		435	
30 cm					621	623	625	627	629	631		635	639
Flow rate I/min	.69	.91	1.17	1.47	1.79	2.15	2.54	2.96	3.42	4.42	4.98	6.18	7.51



#### **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.

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