COAST INDUSTRIAL SYSTEMS, INC.
2223 Verus Street • San Diego, California 92154

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In This Issue

Decisions, Decisions

How To Choose The Right Paint Gun

There have been many changes in the past 20 years in the types of guns and paints that are available and that are legal to use (depending on where you live). Your paint gun, air compressor and paint all have to be compatible with each other, so make certain to investigate the different types of paint and your compressor specifications.

Types of Guns:

HVLP – The high volume, low pressure gun (HVLP) have become the industry standard. They were designed to spray paints with less overspray, and therefore less environmental pollution. The best feature of these guns is that they use less paint to cover the same surface, so you save money. Less overspray also means you can potentially mask off less as swell. Most paints these days are formulated to work with HVLP guns.

Conventional – The standard, old school paint spray gun used a low volume of air, at a high pressure to atomize paint. Some paints and coatings with higher viscosity, or higher solid concentration, still go on best with conventional spray guns. If you are spraying something like chassis undercoating, truck bedliner, heavy duty industrial or tractor paints you may need the high pressure air from a conventional gun to get good atomization without excessive thinning.

Compliant/Green Guns – There are also guns called simply "complaint spray guns" or sometimes "green guns", or "reduced pressure" (RP) guns. These guns are a hybrid of the conventional and the new HVLP. They meet the letter of EPA rule 40 CFR Part 63 (6H) because they still use a low pressure at the spray head, and reduce overspray, but they spray more like old school guns so you can paint faster and the transition is easier for people with conventional gun experience.

LVLP Guns – Low volume, low pressure. These have all-in-one turbine systems that don't use an air compressor at all.

In this issue, we will be focusing on two main types of guns: RP and HVLP. The following pages highlight the benefits of choosing from SATA's new 5500 line of spray guns that offer customers a variety of options to help get the coverage and quality you come to trust from SATA.

Hot Off The Presses
SATA's New RP Gun Is Looking To Change The Game

From: SATANEWS | Vol. 31, No. 2 - 2019

Why should I use RP?

I believe the best way to answer this question is to start with what an RP is and how it's different than an HVLP spray gun. When SATA began making spray guns for the automotive refinish industry, the technology was cutting edge. We now reference those spray guns as "conventional" technology.

The definition of a conventional spray gun is more-or-less summarized as a spray gun that relies on air pressure to achieve fine atomization. The paint products that were being used were classified as low to medium solids and typically had high viscosity by today's standards, and it was not uncommon to spray with a 1.6 or 1.8 fluid tip for both primers and topcoats. And, if you wanted a finish to be flatter or smoother, you only had two options. A painter could either lower viscosity with heat, commonly referred to as "hot cupping" lacquer or enamels by placing the spray gun's syphon feed cup on a hot plate to warm the paint. Or you atomize the paint finer by cranking up the air pressure to 45-65 psi. By increasing the air pressure, the paint was atomized into smaller droplets, which resulted in a flatter, smoother finish and a better overall appearance.

A negative of utilizing higher air pressure to achieve finer atomization and smoother finishes is its effects on transfer efficiency. Though a painter was able to achieve a better appearance, they often would put more paint in the booth filters due to overspray than they did on the vehicle.

Fast forward to more than 30 years later and there are now rules and regulations regarding spray equipment and their operational efficiency. The current regulations on spray guns dictate that they must not exceed 10 psi at the air cap, or that if that air pressure is in excess of 10 psi, the spray gun must meet or exceed a 65% transfer efficiency rate.

Up until the late 1990s, painters have been using a mixed bag of both conventional and HVLP technologies in spray guns. Initially, HVLP spray guns were not welcomed with open arms. When compared to the more conventional spray guns, the HVLP spray guns were slower, felt choked for material and really had a negative reputation in the market.

The SATAjet NR95 was the first industry accepted HVLP. This had more to do with education than equipment, distributors and technicians alike were finding out through paint company training that HVLP spray guns needed a higher volume of air to run them properly. Spray booths started providing “high flow” hoses, couplers and fittings to accommodate the volume of air required to run these new spray guns.

In 1999, SATA really changed the game of vehicle refinishing with the introduction of the SATA NR2000 HVLP and the SATA 2000 RP. Not only was the NR2000 HVLP an improvement in form and function over the previous model NR95, but SATA blew our minds with the introduction of what we call today a “compliant” spray gun. The SATA 2000 RP was introduced to have the speed and wetting like a SATAjet 90, with the transfer efficiency and savings of a SATA NR95 HVLP. This new compliant spray gun met the standards of refinish equipment guidelines by focusing on transfer efficiency rather than the air pressure at the air cap. This allowed SATA to create a superior atomizing spray gun that still maintained 65% or greater transfer efficiency.

However, by this time painters had started seeing the benefits of using an HVLP over conventional spray guns for color application. OEM manufacturers were starting to use colors that contain more special effect pigments and metallic flakes. These colors required better atomization and orientation than a conventional spray gun could provide. The HVLP spray gun was really finding its place spraying basecoat color.

While HVLP spray guns were doing a great job with color, they still weren’t a painter’s first choice for clearcoat application. Even with ideal hoses and fittings, painters were still holding onto those jet 90s to spray clearcoat due to their speed, wetting and final appearance. In the hands of a trained technician, the SATA 2000 RP could provide you with an incredibly smooth, glossy finish

without sacrificing those application attributes painters expect. It was during this time that the painters' unwritten rule of using HVLP for basecoat and RP for clearcoat was created. SATA had a different vision for the RP's future.

Today, SATA continues to improve its spray guns' performance. Today, we have the SATAjet X 5500 series of spray guns in our arsenal. With its introduction, SATA has changed the game again. The SATAjet X 5500 now has pattern choices available with it, the "I" and "O" patterns are both available in HVLP and RP, and truly allow a painter to customize their spray gun to their specific style and technique of spraying.

The approach the X 5500 is taking with the pattern choices is nothing shy of brilliant. Now you have a range of fluid tips from 1.1 to 1.5 in HVLP and 1.1 to 1.4 in RP, and you can choose the shape pattern that best suits your style. Some painters prefer to be close to the panel with quick arm speed, while others prefer to be a little further back and controlled. Now both painters have that option. But what makes the X 5500 even better is the gap between an HVLP and an RP's performance has never been tighter.

In today's automotive refinish Industry, painters are being asked to do more with less every day. SATA's entire line of RP technology spray guns allows painters to achieve incredible final appearance without sacrificing material savings. SATA RPs are available in primer, sealer, basecoat, clearcoat and minijet spray guns. So, the next time you're in the market for a new spray gun, ask for the world leaders in spray gun technology and pickup a SATA.

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SATAjet X 5500

The revolutionary nozzle system

The Dream Team: Newly designed with synchronized air flow geometry inside the spray gun and nozzle set, ensuring **perfect material distribution**, **optimized atomization** and **precise spray fan shapes**. All of this combined with **material savings** and a much **softer** application with a **reduced noise level**.

Two distinct available spray fan patterns per nozzle size allows for either enhanced application control or increased application speed, as well as the adaptation of the nozzle set to different temperature and air humidity levels.

RP version is approved for SCAQMD.
Pending EPA approval.

- Revolutionary: The X-nozzles are taking atomization to a whole new level
- Noticeably quieter: Whispering nozzle™ due to optimized air flow geometry, reduced noise and softer feel
- Individual: Matches each application requirement, such as specific characteristics of the paint system, climatic conditions and application method (application speed and control)
- Precise: Optimized material distribution for enhanced spraying uniformity and atomization with both spray fan shapes
- Low maintenance: No air distribution ring required, ensuring a much easier and faster cleaning process
- Consistent: Constant fan size across the entire nozzle spectrum (within the range of each respective atomization technology) with linear increases of the material flow rate
- Efficient: With the optimized atomization painters will notice considerable material savings using the same application method

	I-nozzle					O-nozzle				
	RP									
Nozzle size	1.1 I	1.2 I	1.3 I	1.4 I	–	1.1 O	1.2 O	1.3 O	1.4 O	–
Standard with one each RPS multipurpose cup 0.6 l / 0.9 l, with swivel joint										
Part No.	1061548	1061556	1061564	1061572	–	1061580	1061598	1061605	1061613	–
DIGITAL cpl. with one each RPS multipurpose cup 0.6 l / 0.9 l, with swivel joint										
Part No.	1061639	1061655	1061704	1061738	–	1061770	1061796	1061811	1061837	–

	HVLP									
Nozzle size	1.1 I	1.2 I	1.3 I	1.4 I	1.5 I	1.1 O	1.2 O	1.3 O	1.4 O	1.5 O
Standard with one each RPS multipurpose cup 0.6 l / 0.9 l, with swivel joint										
Part No.	1061895	1061902	1061887	1061910	1061928	1061936	1061944	1061952	1061960	1061978
DIGITAL cpl. with one each RPS multipurpose cup 0.6 l / 0.9 l, with swivel joint										
Part No.	1062009	1061986	1062017	1062041	1062059	1062083	1062091	1062132	1062140	1062174

Important video on Hand Cleaning your SATAjet X 5500 and other SATA guns

www.sata.com/X5500io

www.sata.com/nozzlefinder

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COMPANY OVERVIEW

Coast Industrial Systems, Inc. is the #1 supplier of painting and coating application equipment to the marine and manufacturing industries, and is proud to serve both San Diego and Mexico since 1986.

Coast Industrial Systems, Inc. has always placed the customer first, and strives for business excellence in all ways. Our friendly sales and customer service staff are knowledgeable, experienced and qualified to help meet your painting and coating application requirements, and to exceed your expectations.

Graco Top 20 High-Protective Coatings & Foam Distributor
Award Winner 2010-2018

GRACO HPCF 2018 NORTH AMERICAN TOP 20 DISTRIBUTOR

GRACO · TITAN · BINKS · Nordson · ANEST IWATA · SATA · CARLISLE FLUID TECHNOLOGIES · Ransburg · WAGNER · BGK · DEVILBISS AUTOMOTIVE REFINISHING