

INNOVATIONS

ISSUE 10, WINTER/SPRING 2009

*...because the first thing they see is the **Paint!***

SPADE CREATIONS
F1964 Impala SS Roadster

ENGINEERED ATOMIZATION
SPRAY GUN CLEANING FOR WATERBORNE COATINGS

STEVE VANDEMON:
HOW TO GET PAID IN A WEAK ECONOMY
SAVING TIME AND MONEY: THE GFA-200

TECHNICAL DISCUSSION WITH MITZ:
AUTOMATIC SPRAY GUNS

2009 AIRBRUSH WORKSHOPS



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INNOVATIONS

is published quarterly by
ANEST IWATA USA, Inc.

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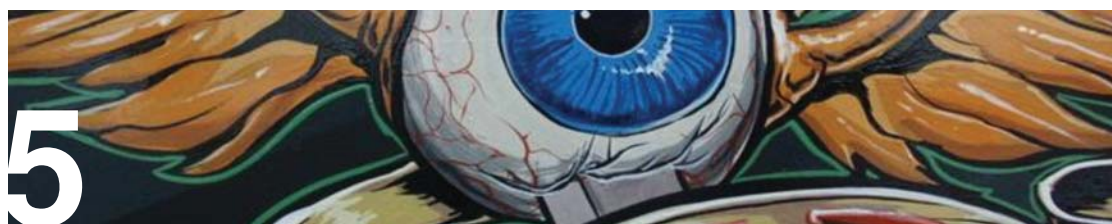
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INNOVATIONS

IN THIS ISSUE

In this tenth installment of *INNOVATIONS*, we will focus on spray gun cleaning for waterborne coatings. We will also present:

- Engineered Atomization with our patented LV Technology.
- A recap of SEMA and NACE 2008.
- Information about the 2009 Ultimate Air Affairs and Airbrush Action Getaways.
- Steve Vandemon's ideas on how to get paid in a weak economy.
- Technical discussion with "Mitz" about automatic spray guns.
- Saving time and money with the GFA-200.
- More creativity from Iwata-Medea and Artool.



ANEST IWATA USA, INC.

A LETTER FROM THE PRESIDENT

Amidst the further weakening of the global economy and very cold weather, we have a small change to announce at our office here in Cincinnati, Ohio. I would like to take the opportunity to introduce myself as the new president of ANEST IWATA USA, Inc. Whether fortunate or unfortunate, there is no better timing than the present to assume this position. I am thinking, this is a time to take another look at things.

We support ANEST IWATA's global standard of **THE CUSTOMER COMES FIRST ABOVE EVERYTHING ELSE** in all aspects of our operations, from product development to sales and services. So, what does this really mean? My first mission will be to see (re-examine) what it really takes to support and fulfill this promise to our customers. We hope you enjoy *INNOVATIONS*.

Satoru Iwata, President
ANEST IWATA USA, Inc.

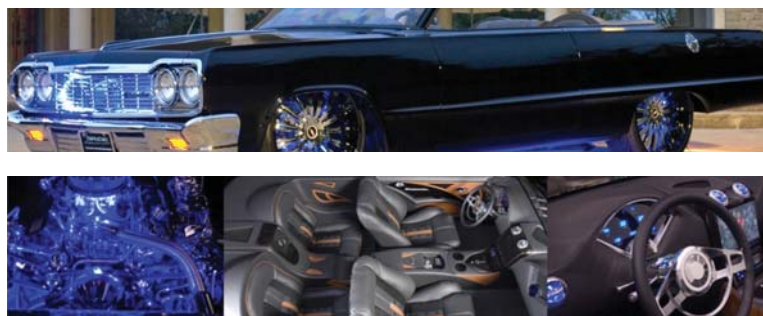
SEMA/NACE 2008 RECAP

Our objective this year was to provide a better avenue to create relationships with our customers. The NACE booth was smaller and more intimate, and the SEMA booth was setup to inspire visitors to think about their own creativity. To see more about SEMA, check out our sister company Iwata-Medea's blog page or A.D. Cook's www.airbrush-tour.com. Once again, thanks to all who utilize and support ANEST IWATA products, and a special thank you goes out to everyone who helped!



ON THE COVER: SPADE KREATIONS

Founded in 1999 as a small custom stereo shop in a tiny garage, Spade Kreations has outgrown themselves numerous times. From the initial 1000 sq. ft. facility to their new 10,000 sq. ft. facility, they have become one of the largest custom fabrication shops in the midwest. The Impala Roadster was built by Spade in conjunction with Jonny V's custom bodyshop. To find out more about Spade Kreations and owner Rick Spade, check out their Web site at www.spadekreations.com.



SPRAY GUN CLEANING

FOR WATERBORNE COATINGS



The PBE business in North America is moving toward the use of waterborne coatings. In the past, with single stage and solvent base coats, we could easily clean our equipment using the cleaning solvents or urethane grade gun washing solvents designed to speed the process of cleaning. Not so with waterborne coatings, which still contain solvent based resin “emulsified” in some water. Now we need both water and solvent to completely clean our equipment — either manually or automatically, we still need both!

ANEST IWATA spray guns are developed and designed with waterborne base coat in mind to allow proper application and atomization of these more highly pigmented coatings. We now know that we need water and solvent to thoroughly clean these “coatings.” It is extremely important that you protect the air channels in your spray guns. If solvent gets into these channels, it may not only contaminate your paint job, but also destroy your spray gun. If water gets in those air channels, it may contaminate and corrode them. Remember, only air is supposed to be there!

MANUAL SPRAY GUN CLEANING *(check to make sure your state allows this)*

You should still unscrew your air cap to allow the air to back flush or “percolate” the fluid passages of the gun. There are some products introduced that have incorporated solvent and water to offer a one-step procedure for manual cleaning or flushing of the gun. The air channels of the spray gun must be protected from these solutions, but these products do speed up the manual process. Remember, these are for manual cleaning only! **DRY THE SPRAY GUN AFTER CLEANING. DO NOT SOAK THE GUN IN THE WATERBORNE CLEANING SOLUTION.**

AUTOMATIC SPRAY GUN CLEANING

The air passages **MUST** be protected and the gun must be dried after the cleaning process. **DO NOT ALLOW THE GUNS TO SOAK IN THE WATERBORNE CLEANING SOLUTIONS.**

Make sure that you can answer the questions below and follow the simple guidelines when cleaning ANEST IWATA spray equipment:



- 1. AM I GOING TO CLEAN MANUALLY OR AUTOMATICALLY?**
This will determine the type of equipment you purchase. Included in your decision should be your mixing and cleaning equipment. Water will cause damage to any steel not properly protected – we know what rust can do – so think about your mixing tables, tools, walls, doors, racks for booth filters , and on and on.
- 2. AUTOMATIC CLEANING**
You need to ask...is my equipment stainless steel? Are my components water ready? Is my system “closed loop” for maximum cleaning to protect my shop environment? Are my ANEST IWATA spray gun air channels completely protected during ANY cleaning process?
- 3. CHOOSE ONLY THE PROPER CLEANING SOLUTION DESIGNED FOR AUTOMATIC SPRAY GUN WASHERS.**
- 4. MAKE CERTAIN THAT THE EQUIPMENT IS DRY IMMEDIATELY AFTER CLEANING.**
- 5. DO NOT ALLOW SPRAY GUNS TO SOAK IN THE WATERBORNE CLEANING SOLUTIONS.**
- 6. GROUND THE SOLUTION AND EQUIPMENT**
Gun cleaning equipment comes with a grounding strap that is required for operation; with solvent solutions, it helps to prevent static sparking. With waterborne coatings, the utilized cleaning solution can increase the pH level, especially after several cleanings. The grounding helps to retard the galvanic corrosion action on components. Please make sure to coagulate the solution regularly to insure best performance.
- 7. MAINTAIN PROPER pH LEVELS.**
Make sure the pH levels of the cleaning solution do not exceed the limits. 6.0 -11.0, but only for the cleaning duration.

ENGINEERED ATOMIZATION: PATENTED LV TECHNOLOGY

HOW DOES YOUR GUN ATOMIZE?



ANEST IWATA's patented **LV Technology** is setting the standard by which all other spray guns are measured while **turning paint into profit**. This exciting technology is a natural evolution in ANEST IWATA's continuing commitment to providing the best spray solutions for our customers.

The unique technology creates a double "engineered" atomization process within the sprayed coating. **LV Technology** works by focusing air down the special slits in the fluid nozzle that direct air towards the center of the nozzle orifice. This change in direction also causes the air stream to speed up, meeting the fluid in the center of the tip where a powerful pulverization of the fluid occurs. This pulverization is the pre-atomizing step, which expands the paint stream 4 to 5 times that of the fluid opening and is now a mixture of air and paint rather than fluid only. This air and paint mixture is much easier for the main atomization to break up, resulting in lower gun operating pressures. The secondary air cap piercings then complete the main atomization.

The many benefits of LV Technology include better appearance, better through dry and better transfer of the material to the surface. Solvents that do not escape the film before drying or curing cause many common paint defects. Solvent pop, die back, shrinking, loss of gloss, softness of film, and the like are all defects caused by solvents remaining in the paint film. The ANEST IWATA **LV Technology** pre-atomization theory minimizes these problems because the in-flight loss of solvent is greater than with other technologies. Painters who have made the switch to LV Technology notice better appearance and a significant reduction in product consumption. Our patented **LV Technology** is available in HVLP and compliant high transfer efficiency spray equipment. Pressure, gravity and siphon spray guns are also available with this technology.



THE STATE OF THE INDUSTRY

HOW TO GET PAID IN A WEAK ECONOMY, OR “WHEN DO I GET MY BAILOUT???” – STEVE VANDEMON

Since that's definitely not going to happen any time soon, we're all going to have to figure something else out. In keeping with Kraig Fraser's series, we thought it might be good to address the current economic conditions as they relate to our “State of the Industry”. If you're like me and you make a living doing custom paint, you may have noticed a few things lately. First of all, if you're still incredibly busy doing exactly what you were a year ago, then consider yourself very lucky. Many of my clients have decided to spend much less these days on their toys. Because, let's face it, what we do is decorate people's toys.

Now, don't get the wrong impression. I'm not going to go on and about how bad things are and tell you to get out while you still can. On the contrary, this may well be a blessing in disguise. Now, bear with me for a moment. Due to a bit more down time than usual, my output of fine art has increased dramatically. Now, this may sound like a waste of time, but I've been wanting to delve into this market for years, and in the last two weeks I've sold 12 paintings!

The great thing about this profession is that there are countless ways to make money doing what you love. All you need to do is diversify. If you are good at doing lettering on race cars or boats, and especially if you have a plotter, start offering signage. I just got a call the other day from a dentist's office, asking if I could restore their outdoor signs. I made a killing! Although it's not airbrushing or spraying, pinstripping is a great way to supplement your work. If you don't feel confident in your striping prowess, maybe take a class to further your abilities.

Have you ever done faux wood in a graphic job? Try seeking out some interior designers who might need some faux finishing. Marbling is another highly sought-after technique. Interior designers are often interested in pieces of art for projects as well.

Another side to the custom thing is restoration work. Now, I'm not talking about restoring muscle cars. I'm talking about the fun stuff like gas pumps, old oil pumps, safes, signs, things like that. I'm not lying to you when I say that I've helped restore at least a hundred million dollars worth of this stuff. I have a very good client that has an incredible private museum. There are absolutely no reproductions whatsoever. He has seven complete gas stations, a diner and a general store that I have personally lettered, detail painted, striped and touched up. Painting old safes is also a blast. Those things have incredible detail inside and out. So brush up on your lettering skills (pun intended) and seek some of this stuff out. I guarantee it's out there.





Assuming that most of you reading this are working in the automotive side of things for the most part, some of this may seem out in left field. If some of it does, then this is going to sound way out! Clothing design is another way that I have been making money for years. As a matter of fact, many of you have been wearing some of the shirts Kraig and I designed for Iwata.

You may not have known that we designed them, but you also may not have known that they were taken directly from hand-painted panels done with HPC's and Mack sword stripers! So, try talking your clients into some new shirt designs. It's always good for them to advertise their business, and even better for you to be the one to help them do it.

Going back to the subject of fine art, one thing that has definitely separated the look of my pieces from many other artists in general is the materials I use. Most artists don't paint on metal with automotive-grade pigments. Much less do they have the know-how to finish a piece off, making it appear to be covered in glass without the glass! This is probably one of the best directions that I could point you in as far as supplementing your income, or even creating a new career for yourself. Using the techniques that I have learned from painting hot rods, Harleys, etc. has definitely transitioned very well into this other world. I've even had an exhibition in an Art Museum! (Who would have thought?)

It's also a good idea to frequent car shows and show off your work to keep yourself in the public eye. Getting a booth is generally not too expensive, and if you end up getting a job or two, it can be well worth it. I always try to hit the more popular ones; being based in Southern California, there are lots of big ones. If you bring some small affordable pieces of artwork with you to sell, chances are you will probably get rid of some. Remember, just because they can't afford that big graphic job right now that doesn't mean they won't spend a few bucks on some custom painted knick-knacks!

So, there you have it. Unless you're in negotiations for a government bailout, or you feel like you finally should get a real job, you might want to consider diversifying. Things are pretty bad out there right now, but one thing's for sure . . . what we do is make things look cool, and that makes people happy. So, you might need to get a little more creative with how you spend your down time, lower your overhead wherever possible, and even lower your prices a bit. But I think we'll get through this just fine.

Steve Vandemon has been a professional custom painter for the last 14 years. He has been on the cover of over 40 different magazine publications, and has been featured in well over 100 more across the U.S., Europe, Canada, Australia, and New Zealand. He has appeared on Pimp My Ride, Monster Garage, Rides, Chop-Cut-Rebuild, Roll-with-IT and various other television shows as a guest artist. Steve's work has also been on exhibit at the prestigious Laguna Art Museum, as well as many other art galleries across the U.S. Some of his clients include Black Sabbath, Tommy Lee, Pamela Anderson, MTV, West Coast Choppers, Kustom-City, The Craftsman Truck series, Jack Rudy, Master Image Customs, Toyota, and many more. To contact Steve, call (714) 717-2042 or e-mail steve@vandemon.com.

SAVING TIME AND MONEY:

THE GFA-200 IS A SUCCESS STORY

ANEST IWATA's GFA-200 automatic spray gun has been making quite an impact in the U.S. market. Known as the best solution to eliminate mottling in sprayed plastic, the GFA-200 also has the added benefit of saving users time and money.

The gun itself is uniquely designed to eliminate any dwell areas inside the fluid passages. It is also ideally suited to very low paint volumes and precisely metered applications. Its patented nozzle design and aircap configuration eliminate mottling in metallic coatings by evenly spacing the metallic particles and orienting them properly in the spray pattern.



But what does all of this really mean? Let's look at a real world application using the GFA-200, two of them to be precise. The plastic parts being coated are conveyed between the painting robot and ANEST IWATA's proprietary baffle booth. The coatings being used are 2k metallic urethanes.



The machine cycle time is 55 seconds, and there are two pieces coated per cycle. In the months since the GFA's were put online, here are the results:

- Paint usage was 220-230cc/min, now reduced to 160-170cc/min. **(26-27% reduction)**
- Atomization pressure was 30psi, now reduced to 23psi. **(23% reduction)**
- Finish quality was mottled, now virtually all mottling has been eliminated.

These changes not only saved the customer money on coatings, but also reduced overspray because of the lower spray pressures. This, coupled with our baffle technology, reduced maintenance on the main filter elements as well. Reduced air consumption saves electricity, and the improved finish quality lowers scrap and increases throughput.

The manufacturer wishes to remain anonymous, but our thanks go out to them for sharing these pictures and information.



TECHNICAL DISCUSSION with “MITZ”

AUTOMATIC SPRAY GUNS

In the industrial marketplace, ANEST IWATA automatic spray guns are very popular and paint almost anything imaginable all around the world. They work 24/7 without notice, even when being tossed around relentlessly by painting robots all day long. However, even with their robust design, we must give them periodic attention or they could stop working suddenly. This would cause a serious disruption to your business. To prevent this, we have to know how to take care of them.

The basic structure of ANEST IWATA automatic spray guns is not that different from our manual spray guns. They both have air caps, fluid nozzles, needles, atomizing air connections and fluid connections. Even the paint atomizing process is same. The biggest difference between manual and automatic spray guns is how the needle is actuated. In the case of a manual spray gun, we use our own fingers to pull the trigger. But in the case of automatic guns, an air piston connected to needle coupled with a spring open at close the needle.



DISASSEMBLY

1. Loosen the **fluid adjustment set** of the piston/needle section using a 32mm wrench. Remove the fluid adjustment set, and you will see two springs and a white plastic part. Remove the springs, and at the center of the piston, you will see a metal piece with threads. This is the end of the needle; pull it out.
2. To take out the piston, thread the needle end in the center of the piston and remove.
3. Inside the gun body you will see a round brass part. This is the **air valve seat set**. This keeps air from leaking into the fluid section. If air leaks around the air valve seat set, you must replace the O-rings. To remove the air valve seat set, you will need part number #93834580 (LPA / WA air valve seat set tool).
4. Our **air cap sets** and **fluid nozzles** in the atomizing section are the generally the same design as the manual spray guns.



NEW ARTOOL STEAMPUNK FX

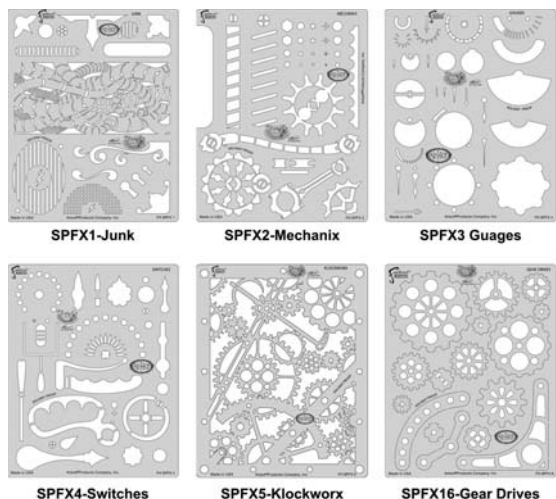
TEMPLATES BY CRAIG FRASER



Announcing the new Artool Steampunk FX® Freehand® Airbrush Templates designed by Craig Fraser! There is a new art form hitting the street, which has been around for over a century: Steampunk! More than an art form, Steampunk is a fashion statement, design aesthetic and kustom culture lifestyle. These new Artool Templates have all the “Tesla-esque” Jules Verne and Edgar Rice Burroughs goodies for that unique Neo-Victorian, retro-futuristic techno rendering.

The Artool Steampunk FX lineup: JUNK (FH SPFX 1), MECHANIX (FH SPFX 2), GAUGES (FH SPFX 3), SWITCHES (FH SPFX 4), KLOCKWORX (FH SPFX 5), GEAR DRIVES (FH SPFX 6) or the whole Steampunk FX Set (FH SPFX 7). Steampunk FX is also available in the popular Artool MINI SERIES as a six-pack (FH SPFX MS).

“Hang them proudly above your workbench – between your brass goggles and the #5 Wirly-Gox Tesla-driver!” - *Craig Fraser*



2009 ULTIMATE AIR AFFAIRS

ASET (Automotive Spraying Equipment Technologies) will be hosting the 2009 Ultimate Air Affairs. The kustom painters in attendance give both paint demos and hands-on clinics.

This year's Ultimate Air Affair will be **August 27-29** with a one-of-a-kind car show following on August 30. Regional 2-day Air Affairs include Atlanta (**April 3-4**) and Vancouver (**June 12-13**). This upcoming year's events will continue to attract new talent, and are already filling up! Contact Sheri at (800) 628-5449 for more information.



AIRBRUSH ACTION GETAWAYS 2009

ANEST IWATA USA is proud to be participating as a sponsor of this year's Airbrush Action Getaways alongside our sister company Iwata-Medea.

Kustom painting seminars are available for all skill levels, novice to professional. Whether you're a complete novice or a seasoned professional, spend five exciting, information-packed days learning from top professionals in one of the best airbrush seminars you'll ever attend.

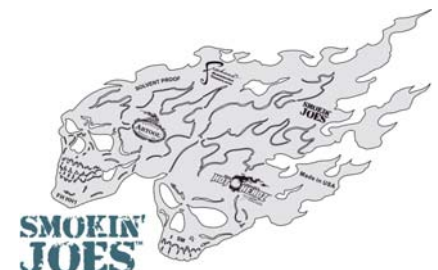
The gun of choice by the industry's top kustom painters is ANEST IWATA. Be a part of the traditional camaraderie and bonding that develops between students and staff at every workshop! There are three Getaways this year: **February 23-27** in Las Vegas, **May 13-17** in Charlotte, NC, and **September 21-25** in Las Vegas. For more information, visit www.airbrushaction.com and click on Workshops.



NEW ARTOOL HOTHEADZ TEMPLATES BY MIKE LAVALLEE

Announcing the new Artool HOTHEADZ Freehand Airbrush Templates designed by Mike Lavallee. Hold onto your hats, because it's gettin' hot 'n scary in here! For a few years, the world of kustom painting hasn't been the same since the creation of Mike's True Fire® airbrushing techniques. Now, Mike turns up the heat a few notches with his outrageous skull offerings, which are sure to win over the hearts and souls of kustom auto painters everywhere. They'll save you a ton of time in creating something completely wicked for your rod or chopper. There are two sets of HOTHEADZ to choose from, which contain 4 sizes in SM through XLG: SMOKIN' JOES (FH HH 1), and HELL RIDERS (FH HH 2).

"My Artool HOTHEADZ Templates make my skull 'n fire painting a Killer Painting® breeze!" - Mike Lavallee



LPH440
HVLP Primer

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START**

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eXtreme Basecoat

**TO
FINISH**

LPH400 LV
Clearcoat



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