



ANEST IWATA USA, Inc.

9920 Windisch Road
West Chester, OH 45069
Tel: 513.755.3100
Fax: 513.755.0888
www.anestiwata.com

INNOVATIONS
is published quarterly by
ANEST IWATA USA, Inc.

While ANEST IWATA USA, Inc. attempts to ensure the accuracy of the information contained in this publication, articles are accepted and published upon the representation by contributing writers that they are authorized to submit the entire contents and subject matter thereof and that such publication will not violate any law or infringe upon any right of any party.

No part of INNOVATIONS may be reproduced in any form without the express permission of
ANEST IWATA USA, Inc.

© **ANEST IWATA USA, Inc.** 2008
All rights reserved.

TELL US WHAT YOU THINK!

We're open to suggestions
for article ideas
and photo opportunities.

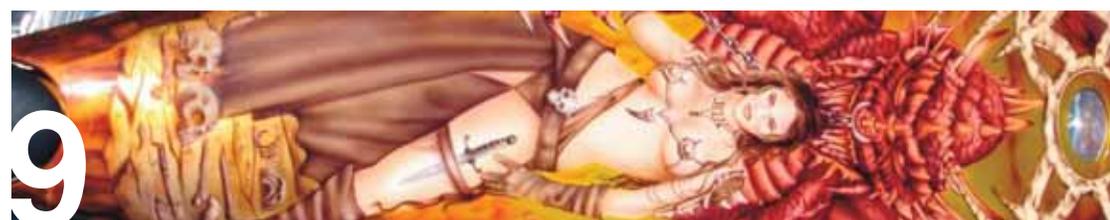
Call 513-755-3100 or e-mail
inquiry@anestiwata.com

INNOVATIONS

IN THIS ISSUE

In this seventh installment of *INNOVATIONS*, we will describe ANEST IWATA Corporation's World Marketing Conference. We will also present:

- Steven Craig's LPH-400 LVX eXtreme experience.
- The ADG-1 "Aquadry" waterborne drying system.
- Specialty Automatic Spray Guns.
- Technical discussion with "Mitz."
- More creativity from Iwata-Medea and Artool.
- Information on the 2008 Air Affairs.



ANEST IWATA WORLD MARKETING CONFERENCE 2007

In late 2007, ANEST IWATA held its World Marketing Conference at the Chateau de Pizay in Lyon, France. ANEST IWATA affiliate companies joined the conference from France, Italy, the United Kingdom, Germany, Sweden, Spain, Australia, India, Japan and the U.S. to discuss ANEST IWATA's global marketing strategy in 2008. The discussions covered a broad range of topics, from the development of new products and market-trend analysis of specific industries to the introduction of waterborne paint to the North American market.

ANEST IWATA USA's presentation at the conference detailed the successful expansion of business to original equipment manufacturers, along with the introduction of waterborne paint to the North American market. Collaboration with our European affiliate companies, which have extensive experience with waterborne paint applications, and the great efforts implemented by many distributors in North America, will continue to make ANEST IWATA the choice of professionals for 2008.



ANEST IWATA will continue to strengthen its global collaboration with all its affiliates worldwide so that ANEST IWATA USA can provide the best solutions to its North American customers.

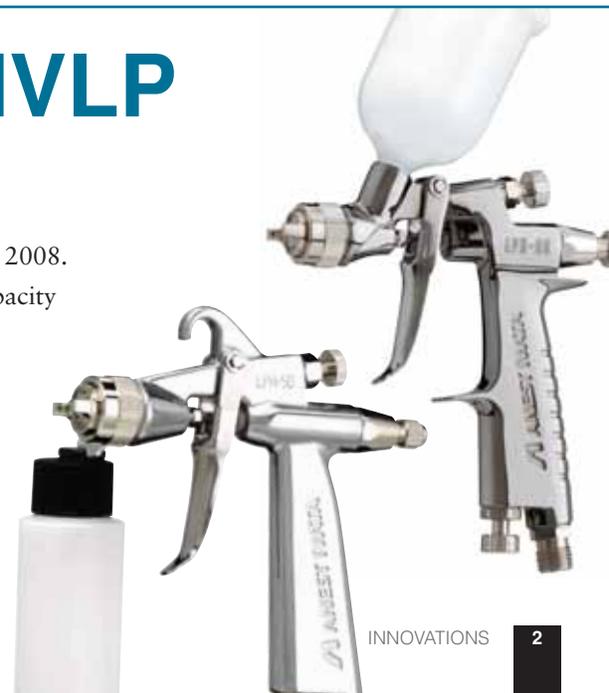
LPH-80 MINIATURE HVLP

WE'VE GOT YOU COVERED!

The new EPA ruling on mobile repair operations went into effect on January 9, 2008. It states that handheld devices used to apply coatings must have a paint cup capacity of 3.0 fluid ounces (89 cubic centimeters (cc)) or less.

Our new 2 ounce plastic cup (part #9169) for the LPH-80 and our airbrush bottle adapter (part #6022) for the LPH-50 insure that you will be compliant.

Check out the specifications on both of these guns at www.anestiwata.com!



ADG-1 “AQUADRY” WATERBORNE DRYING SYSTEM

The ADG-1 “Aquadry” gun (part #7023), combined with the adjustable dryer stand kit (part #7031), is an indispensable item for flash acceleration of waterborne coatings.

The stand unit is simple to assemble, and is supplied with quick disconnect couplers for mounting dryer guns. Two extendable arms have rotational adjustment for directing air in various positions, and the guns can be disconnected from the stand for independent use.

The ADG-1 “Aquadry” waterborne drying gun differentiates itself with two air adjustment points, rather than just one: a butterfly valve at the air inlet, and a 6:1 air volume adjustment ratio on the outlet gun nozzle. All other dryer gun units on the market have only one adjustment, a butterfly valve at the air inlet. The air volume adjustment at the nozzle of the gun allows you to adjust one dryer to shoot air across a hood, while the other dryer can be set up for a blend on the fender. At 14 psi @ 13 cfm with the nozzle completely open, it features the lowest operating air pressure of any waterborne dryer gun on the market. Pressure drops below 13 cfm when the nozzle is adjusted to diffuse the outlet air.

The ADG-1 “Aquadry” Waterborne Drying System features:

- Stand (70” tall) with an arm (32” wide) with supports for two ADG-1 “Aquadry” guns
- Guns are provided with quick disconnect couplers
- Guns are easily oriented
- Variable Venturi airflow entrainment allows 6:1 airflow adjustment ratio
- Each gun can be used independently
- Slide and lock height adjustment
- Gun brackets can be moved along the length of the arm and positioned to suit
- Each arm swings independently to create angles for corner repairs
- Total maximum operating pressure: 28 psi @ 26 cfm
- Max. inlet pressure: 100 psi



NEW ALUMINUM CUPS FOR WATERBORNE OR SOLVENT

Most believe and been instructed that you must use plastic or disposable cups for waterborne. ANEST IWATA's latest INNOVATION is our new aluminum cups with stainless steel fluid joints and our new stronger anodization process. Our new aluminum cups are perfect for waterborne, solvent or any other coating material.



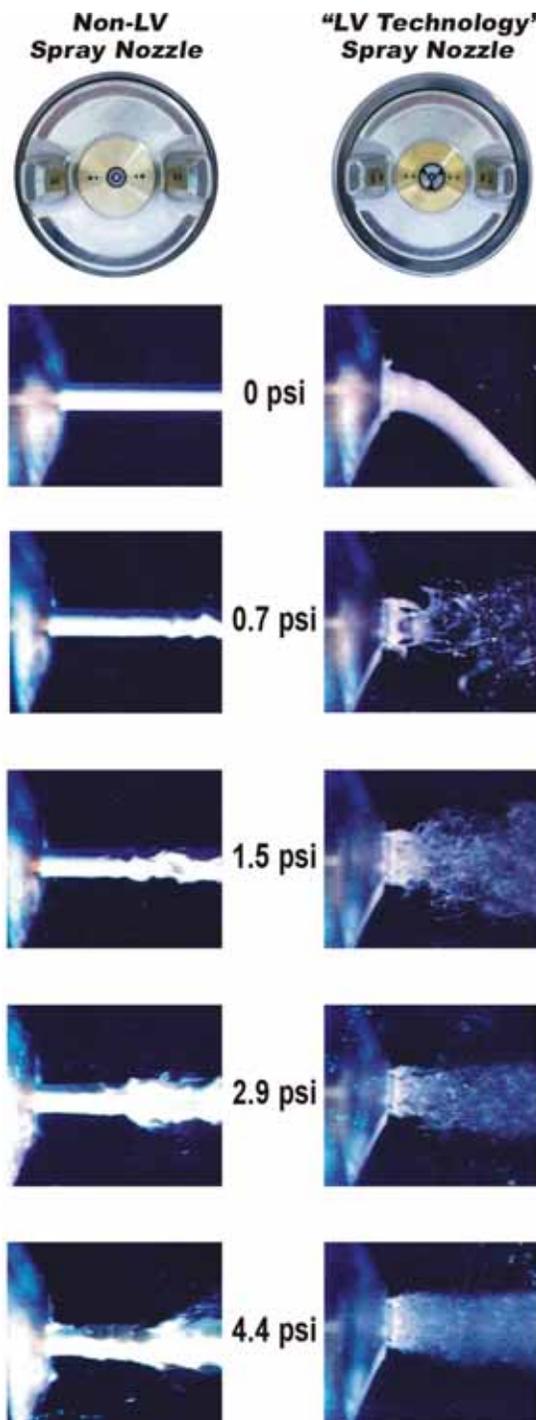
PATENTED LV TECHNOLOGY

ANEST IWATA's patented LV Technology is setting the standard by which all other spray guns are measured. This exciting new technology is a natural evolution in ANEST IWATA's continuing commitment to providing the best spray solutions for its customers.

This unique technology creates a double 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 it 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, and softness of film 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 a significant reduction in product consumption and better appearance. Our patented LV Technology is available in HVLP and compliant high transfer efficiency spray equipment. Pressure, gravity and siphon spray guns are available with this technology.



0 psi: Note the fluid velocity of the LV spray nozzle has long dwell time in the atomization area. This is because of the concave design of the fluid nozzle.

0.7 psi: Notice how the fluid stream is starting to shred and break up these ligaments of fluid. This is the pre-atomization process. Air comes around the tip and then is directed by the slits to the center of the nozzle that creates the breakup. This is less than 7/10 of 1 psi.

4.4 psi: The fluid is pre-atomized and awaiting the main atomization from the air cap to break up even further. Note that the non-LV tip is just starting to cut the fluid.



LPH-400 LVX EXTREME

STEVEN CRAIG'S EXPERIENCE

Normally, when ANEST IWATA releases a new spray gun, my distributor sends it to me knowing that I will purchase it with no questions asked. Marco Rodriguez from Pro 1 Automotive (my ANEST IWATA dealer) called me and requested that I stop by his store before I closed for the day. He informed me that he had just received the first two new ANEST IWATA LPH-400 LVX spray guns to enter the state of Arizona.

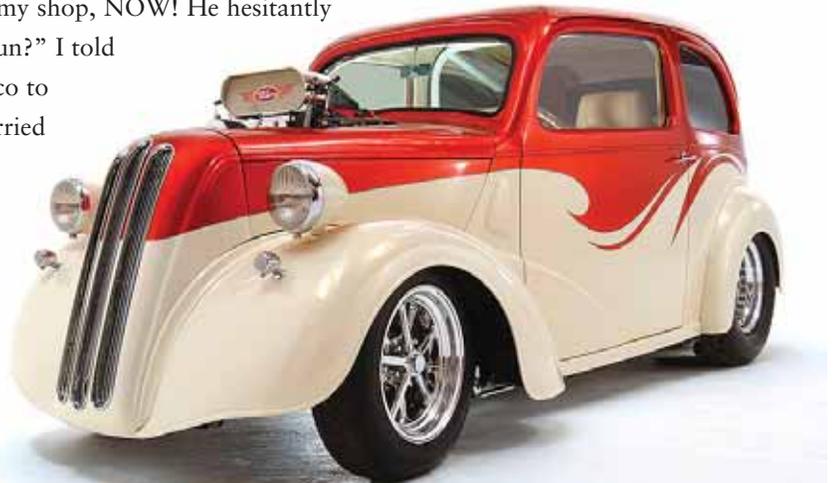


I didn't want to purchase another spray gun at that time, so I went there with no intention of buying one. Marco threw his sales pitch at me, and I replied, "I'm not buying another gun right now." We went back and forth on this for over an hour. He kept trying to sell me on the point that the gun was designed specifically for metallics and pearls, and I kept trying to explain to him that I have no problem spraying metallics.

I've always felt that being able to lay heavy metallics evenly with no modeling or zebra-stripping is what separates a great painter from a mediocre one. Those who know how to apply them take great pride in the fact that they can. It shows that they have the knowledge and experience that can demand high dollar amounts for their ability.

As usual, Marco told me that he would take the spray gun back if I didn't like it. I still wouldn't budge on the fact that I just didn't want another gun right now. So, he kept adding extras, like a gallon of the new clear developed for custom work. Needless to say, he finally got me to cave in and reluctantly buy the spray gun. The following day, the new spray gun was put on a shelf, where it remained for about a week. I began a new project that would be done in Candies, and required a heavy metallic silver base. I figured this would be a good time to give the new LPH-400 LVX a field test.

Starting out, I mixed up the amount of silver I would normally use for this size of project. On average, to get good solid coverage with a heavy metallic silver, it would take three to five coats of paint to remove any striping, a medium wet coat followed by one or two arrangement coats. I took a piece of cardboard in the booth with me to test the spray pattern before applying it to my project. Starting out at the recommended 16 psi, the pattern didn't look like the gun was atomizing correctly. It looked as though the gun was delivering large paint droplets. Trying to correct what I thought was too low of air pressure, I set the gun at 20 psi, which is where my ANEST IWATA LPH-400 is set. I knew immediately that this setting was incorrect, and I would have more silver airborne than reaching the surface. After adjusting the gun and doing a few test patterns, it seemed the sweet spot was between 14 psi and 16 psi. I began by applying one medium wet coat. I stood back to look at the first pass and stopped. Walking out of the spray booth, I immediately called Marco. I informed him that I demo'ed the new ANEST IWATA and to get over to my shop, NOW! He hesitantly asked, "What's the matter? Don't you like the new gun?" I told him to just get over here. It didn't take long for Marco to show up at my shop. I think at this point he was worried that I was unhappy with the new spray gun and it didn't deliver what ANEST IWATA claimed it would. When he came in, I kept up with the demeanor that I wasn't happy. I said, "Come in the booth. I want you to look at this."





We walked in the booth and I sternly said, “Look at it!” Marco stood there for a few seconds trying to figure out what I was so unhappy about. With a smile, I continued, “That’s one coat of paint. I achieved full coverage with no modeling or striping with one perfectly even coat.” Anyone who has ever sprayed House of Kolor’s Orion Silver knows that this is impossible. Marco laughed and then proceeded in calling me several names using very colorful language, if you know what I mean.

We talked about how much I liked the spray gun for a few minutes, and Marco decided to call John Beck, who is the regional representative for ANEST IWATA, and run him through the same routine that I just did to him. He called John, told him that I wasn’t happy with the spray gun, and then handed me the phone. The first thing out of my mouth was, “John, I’m not telling anyone about this spray gun!” He seemed a little baffled for a minute, and I continued, “I don’t want other painters finding out about the LPH-400 LVX. This gun is going to level the playing field and make mediocre painters look like experienced custom painters. We get the big dollars because we have the experience to apply hard-to-spray metallics. Now everyone can do it!”

John told me how excited he was about the new spray gun. He felt that ANEST IWATA produced another full size gun that will be revolutionary to the industry. He asked what psi I ended up using. I told him between 14 and 16 psi. He said that

“This spray gun will level the playing field.”

what I did when it didn’t look like it was atomizing correctly is what many painters will do, and may disappoint them with the gun until they get used to the low psi. It made a lot more sense

when he explained that, to deliver the metallic better, a larger droplet was needed that would hold the metallic in place and keep it from standing on edge.

John got such a thrill out of our conversation that he told me of a similar encounter. He said he was demonstrating the new LPH-400 LVX at a collision shop where the owner was equally reluctant to purchase another new gun. The painter there was preparing to spray a red metallic made by DuPont, which he felt was one of the most difficult colors to apply. The painter finally agreed to try the new gun, figuring this would be the ultimate test, and didn’t expect any miraculous results. After applying two coats of paint, he stopped. He looked at what had been produced at this point, and to his amazement, he had full, even coverage, and the metallic had laid flat with none standing on edge. At that point, his helper was walking by, and he handed the gun to him and told him to spray the same paint on a panel. Now, this person was just a helper, and had never painted before. He got the same results as the professional painter did: two coats with full, even coverage. The owner turned to John and said, “I’ll take five of these guns!”



By using what he had learned, and with me as a reference, Marco, being the uncanny salesman that he is, went out and either sold or took orders for 8 of the LPH-400 LVX that day. Obviously, I got over my wanting to keep this gun a secret by writing this article. I highly recommend this spray gun to every painter out there. The LPH-400 LVX can only add to your talents – not to mention, it’s a sound investment.

Steven Craig is the owner and head partner of SKC CUSTOMZ in Lake Havasu City, AZ. In the past, Steven has won the House of Kolor Prestigious Painter Award and was a First Place Winner of DuPont’s Hot Hues Awards. He most recently was awarded the Matrix System’s FX Grand Prize Award for the second time. Steve paints a wide range of jobs, from guitars to large offshore boats. His work can be viewed at his Web site, www.showpaint.com. Steve is a Certified Paint Technician for both PPG and DuPont Industries. Steve was also a contributing journalist for Airbrush Action magazine before putting together the highly-acclaimed digital magazine for airbrush artists and custom painters, www.airbrushlive.com.

SPECIALTY AUTOMATIC SPRAY GUNS

Most people are already aware of the multitude of automatic spray solutions available from ANEST IWATA, ranging from fully automated robotic spray guns like our LRA-200 to simple non-paint coating solutions like our TOF series guns (see *INNOVATIONS* Issue 3 for more information). However, in today's industrial climate, more specialized equipment is necessary to increase productivity and minimize waste to boost the overall competitiveness of our customers' operations.

Several exciting new products have come from ANEST IWATA's systems division with the aim of making ANEST IWATA the only choice in automated painting systems.



GFA-200

The GFA-200 is specifically designed for spraying plastics. This gun not only atomizes superbly with small paint volumes, but also incorporates several design elements to reduce dwell time inside the unit and minimize paint travel. The nozzle is uniquely designed to work with the small paint volumes and low pressures associated with spraying plastic parts. High gloss finishes and minimal mottling are the results. It is available in aluminum and stainless steel versions.

The AS-80-013 is a fully automatic spray gun incorporating our proven aircap design from the LPH-50. This small (3 inches long!) spray gun is best suited for complex shapes where several of these spray guns can work in tandem to completely coat the surface while minimizing paint waste. It is available in aluminum and stainless steel versions.

AS-80-013



TOF Series

Our TOF series spray guns have been discussed in previous issues as great options for non-paint applications. But there is a lot more to this line than low cost automatics. ANEST IWATA's TOF line also offers many specialty automatic spray guns that solve some of the more difficult coating problems. Small pattern extension guns spray down to 5mm patterns and can be made in almost any length. LPH-50 based right angle extensions for tight quarters. Internal coating extensions that spray from 90 degrees angles to full doughnut shaped patterns. In fact, the bulk of these spray guns came about due to specific customer needs. The ANEST IWATA TOF series excels at solving any coating issue with custom engineering and batch manufacturing.

ANEST IWATA has many options available to current and future customers of our automatic spray guns, from micrometer fluid adjustment and specialized aircaps to lockout kits and custom fluid packings. Have an abrasive coating? ANEST IWATA has tungsten carbide needle nozzle sets for several of our automatic spray gun configurations. Contact your ANEST IWATA industrial distributor, or visit our Web site at www.anestiwata.com for more information.



TECHNICAL DISCUSSION with “MITZ”

“HOW DO THEY PAINT THEM?”

Cell phones are used all over the world, and it is said that 2 billion cell phones are currently in service. The first consumer service of cellular telephones began at the end of 1970's. But in those early days, they were not popular because of their limited service area, short battery life and immense size and weight. The current generation of cell phones, which you are now using, began widespread adoption in the 1990's. Currently, hundreds of models are released every few months, and each one has many variations of color and features. Cell phone manufactures must prepare a certain amount of their new products as soon as possible to satisfy the transient market demands. So, how do they paint them?

PREPARATION OF WORK PIECE

Today, most cell phone bodies are made of plastics like ABS. Once the mold is prepared, tens of thousands of pieces are manufactured in a couple of days. Some manufacturers have both the molding machines and a painting line. After molding, they must take some steps before they can be painted.

ELIMINATING ELECTROSTATIC AND FABRIC DUSTS

Pretreatment of work pieces before the paint process is very important. Look at your cell phone carefully. Is there any dust on the painted surface? Even a single speck of dust renders the work piece defective. To prevent this critical problem, most cell phone manufactures use an air duster that includes an anti-electrostatic device. Plastics are usually electrostatically charged, which can attract contaminants, and this must be eliminated before they can be sprayed.

VARIOUS TYPES OF PAINTING

Almost all cell phones are painted on an automatic painting line because of the vast numbers involved. The most productive type of cell phone painting line is called the Spindle Painting Line. Work pieces are placed on a jig in a circle, and the jigs rotate in front of spray guns. This painting process is beneficial because all of the work pieces are painted to the same quality level, and there is less movement of spray guns (especially painting robots). In the past, most spindle lines used a combination of a continuous conveyer and some fixed automatic spray guns. In fact, this type of line provides very high productivity, and many manufacturers still use this process. However, there are some disadvantages. It takes a long time when changing part types because each spray gun must be adjusted for paint angle, pattern width, output, etc. Depending on the shape of the work piece, the number of guns must also be increased or decreased.

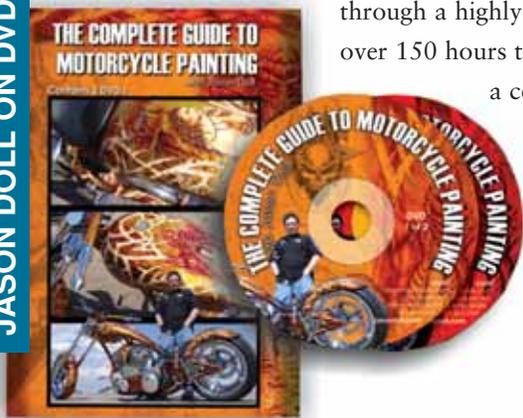
Recently, painting robots have taken the place of these fixed guns. Using robots, manufacturers can reduce the number of spray guns and the time needed to change the part type. This robot painting system is called PSS (Precision Spray System). This system requires high efficiency spray guns (such as the GFA-200) and accurate paint supply systems (such as Flow Control Valve or Gear Pump). Using this equipment, manufacturers can also reduce paint waste and lower overall costs while benefitting the environment.



JASON DOLL ON DVD

THE COMPLETE GUIDE TO MOTORCYCLE PAINTING

Jason Doll presents *The Complete Guide to Motorcycle Painting*, the hottest new video lesson on custom painting! Let Jason walk you through one of the most comprehensive painting video lessons of its kind. The 2-disc DVD set walks you through a highly detailed custom motorcycle project that took over 150 hours to complete. Jason shows you how to lay down a complete bike project as only he can!



For more information about his DVD series, and to check out more of his work, visit Jason's Web site at www.jasondoll.com.



NEW ARTOOL TRUE FIRE 2

2ND DEGREE BURN BY MIKE LAVALLEE



Artool Products Co., Inc., of Portland, Oregon, is thrilled to announce the release and availability of the next generation of Artool True Fire: *2nd Degree Burn* by Mike Lavallee. *True Fire 2: 2nd Degree Burn* is sold as a set (FH TF2), and contains 21 new positive/negative breakaway shapes from the 3 new master True Fire 2 configurations: Pyro, Fireball, and Blaze. Ever since the release of Mike's original Artool True Fire Set nearly 3 years ago, and Mike's many appearances on television programs like "Monster Garage," "Rides," "Overhaulin'" and others, the kustom automotive painting world has never been the same. Thanks to Mike Lavallee's revolutionary concepts, and his incredible talent and skills as an artist, the way we all look at flame jobs nowadays is off the charts!

The new Artool Freehand Airbrush *True Fire 2: 2nd Degree Burn* Template Sets by Mike Lavallee are now available at your favorite Iwata-Medea/Artool supplier. For a complete listing of the Iwata-Medea/Artool catalog on the Web, go to www.artoolproducts.com!



2008 ASET AIR AFFAIRS

BY SHERRI CANDLAND



When ASET (Automotive Spraying Equipment Technologies) decided to host the first Ultimate Air Affair in 2004, we had no idea it would turn into a traveling kustom show. The Ultimate Air-Affair in Salt Lake hosts 16 of the best airbrush artists in North America, with over 3 full days of intense hands-on training. 100 students each year head to ASET's state-of-the-art training facility in Utah and have the time of their lives, all the while learning the latest custom techniques these masters have to offer.

After hosting 3 successful Ultimate Air Affairs in Salt Lake, students from across the county were requesting

that these events be held in other areas to make it more affordable for people to attend. It was a bit daunting thinking of taking this large of an event elsewhere, but we felt it was time to give it a try. After finding an unbelievable facility in Williamsport, PA, at the Pennsylvania College of Technology, funded by Penn State, Air Affair East was born. In 2007, we took 8 of these incredible artists to host a 2-day workshop in Pennsylvania, and we had a blast. Many of the attendees were from that part of the country and were so excited, because they were unable to afford getting to Salt Lake to attend the Ultimate. As always, the students walked away with an arsenal of knowledge that started with beginning strokes, segued into real fire, pin-up girls, and portraiture, and ended with Pamela Shanteau's mystical dragon eye.



I am sure you can see where this story is going – yes, we had even more requests for the Air Affairs in other states, even a big request to take it down under to Australia. Air Affair East is in Williamsport again this year, May 30th and 31st. There will also be the “Great Lakes Air Raid” in Mt. Pleasant, MI, on July 11th and 12th. These events are 2-day, hands-on workshops with the likes of Craig Fraser, Deb Mahan, Fonzy, Abel, Gerald Mendez, Jason Doll and Steve Driscoll, plus many more. ASET provides all you need to have a great class. Call ASET today and sign up for the coolest, most complete custom events the industry has to offer. Can you afford not to? For more information and to register, go to www.asetusa.com, or call 1-800-628-5449.

LEAH PRUETT-LEDUC

“HEARTBREAKER”

At the age of 20, Leah Pruett-LeDuc is already a force to be reckoned with. In the male-dominated sport of Nostalgia drag racing, Leah continuously beats the odds and the boys on the racetrack. Leah started racing at the young age of 8, fiercely competing in the NHRA Junior Drag Racing League. After clinching many titles and championships, Leah graduated to the Nostalgia Eliminator category when she was 16, driving a 1932 Blown Altered car for three years. January 2008 marked the debut of the Ron Pruett-owned and Les Leggitt-tuned “Heartbreaker” Nitro Nostalgia Funny Car sponsored by Dickies Girl, Iwata-Medea, Artool and Coast Airbrush, with custom paint by Kal Concepts/Air Syndicate.



...check out our latest **INNOVATION!**

EXTREME
LV
BASECOAT

The NEW
LPH400-LVX

Teaming up with our LPH400 LVB the LPH400 LVX extreme basecoat technology was developed for use with 90-95% of basecoat colors and engineered to provide increased productivity in application for solvent or waterborne basecoats. While the LPH400 LVB remains the set-up for the most difficult or complex colors the LPH400 LVX handles all the middle range colors where productivity and speed is a must.

Just look for the **ORANGE** cap!



LPH400 LVB



ANEST IWATA

ANEST IWATA USA, Inc.
West Chester, Ohio 45069
(800) 440-0282
www.anestiwata.com

make
Your Paint
LOOK
great!