

INNOVATIONS

ISSUE 11, FALL/WINTER 2009

Super
NOVA™

THE NEW "SUPERNOVA" SPRAY GUN: A STAR IS BORN

NEW HT (HUMIDITY AND TEMPERATURE) CHARTS

ENGINEERED ATOMIZATION

WOODWORKING TOUCH-UP AND FINISH REPAIR

AWFS 2009 RECAP

**TECHNICAL DISCUSSION WITH MITZ:
PROPER AIR PRESSURE IS CRITICAL**

ASET 2009 ULTIMATE AIR AFFAIR RECAP





ANEST IWATA USA, Inc.

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

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THINK!**

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for article ideas
and photo opportunities.

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

INNOVATIONS

IN THIS ISSUE

In this eleventh installment of *INNOVATIONS*, we will focus on our new **SUPERNOVA** spray gun. We will also present:

- Engineered Atomization with our patented LV Technology.
- A preview of SEMA 2009.
- A recap of AWFS 2009.
- A recap of the ASET 2009 Ultimate Air Affair.
- Technical discussion with “Mitz” about setting proper air pressure.
- The art of woodworking touch up and finish repair.
- The new **NINJA JET** air compressor from Iwata-Medea.

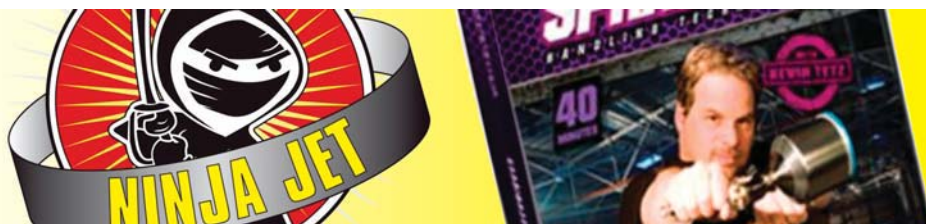
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ANEST IWATA USA, INC.

A LETTER FROM THE PRESIDENT

What's next from ANEST IWATA?

For many years, ANEST IWATA spray guns have received numerous compliments on its atomization technology, but perhaps not as much on the actual design of the spray guns.

Brand new from ANEST IWATA, **SUPERNOVA** is a spray gun designed by world-renowned industrial design firm Pininfarina, famous for their state-of-the-art automobile design. Now, superior atomization technology is combined with excellent design.

Our intention is that you find our new spray gun to be another innovative creation by ANEST IWATA. And, for those anxious to see what's next, keep yourself tuned in! We will continue to strive to create something new, focusing on two important factors that contribute to a winning product: core technology *and* design.

I hope you enjoy *INNOVATIONS*!

Satoru Iwata, President
ANEST IWATA USA, Inc.



SEMA 2009

AUTOMOTIVE AFTERMARKET INDUSTRY WEEK

This year, during the annual Automotive Aftermarket Industry Week in Las Vegas, ANEST IWATA will concentrate our efforts at the SEMA show. We will be coordinating our efforts with our sister company Iwata-Medea. As always, you can see and meet the industry's best and brightest influences in and around our booth.

Come visit us and see our latest *INNOVATION*, the new **SUPERNOVA** spray gun, and watch the best kustom airbrush artists show their talents and maybe let you in on some of their tricks of the trade!

Get dialed in at Booth #24581!



ENGINEERED ATOMIZATION

PATENTED LV TECHNOLOGY



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.

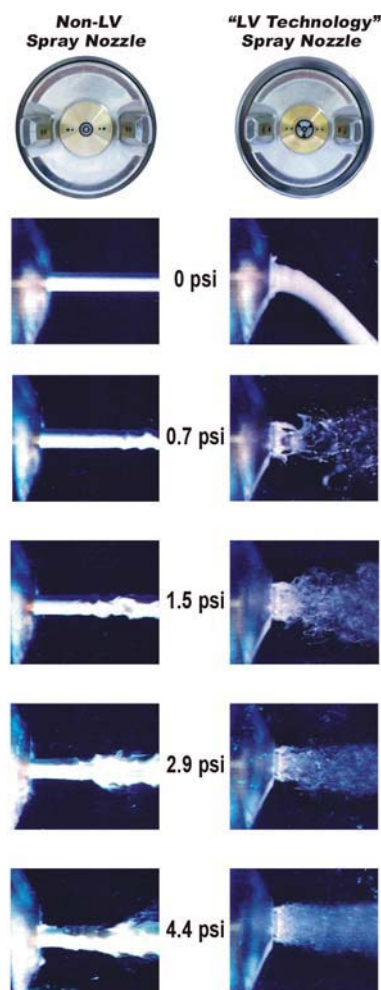
The unique technology creates a double “engineered atomization” process within the sprayed coating. LV Technology works by focusing air down the special slits in the fluid nozzle that direct air towards the center of the nozzle orifice. This change in direction also causes the air stream to speed up, 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 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, softness of film, etc. 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-atomization 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.



THE RIGHT CHOICE FOR WATERBORNE

The waterborne basecoat paint movement has been taking over many markets in North America. While the collision business in North America has shown flat or diminished growth, many collision repair shop owners and managers have been evaluating their business structures. Each shop is different in the methods, suppliers, products and technologies that make their shop perform at its best, so in many instances, waterborne conversion has been a technology that many shops have evaluated to be a better performing system over their current solvent systems.

The decision to change to waterborne has presented some issues that our industry has not seen. Waterborne basecoat systems react much differently when the ambient air humidity level is at 20%, rather than at 75%. As of today, there is not yet fast-drying water or slow-drying water, therefore atomization is critical for the best performance in different application environments. Fine atomization is necessary for best performance when humidity is high, and coarse atomization when humidity is low.



We have created simple to use and easy to read *HT (Humidity and Temperature) Charts* for each paint company's waterborne system that will help guide the painter and our customers with selecting the best performing ANEST IWATA spray gun setup, based on relative ambient humidity and temperature. The *HT Charts* show the gun selection by matching your humidity level on the left and your temperature on the bottom. The color key shows which gun with nozzle tip size listed in the graph color for the best recommendation for your waterborne paint system.

As always, airflow across the coated surface is also a necessary requirement to get best performance from waterborne coatings. ANEST IWATA's ADG-1 drying units are available as a solution. As a reminder with waterborne, after application is completed, thoroughly clean and dry your spray equipment (inside and out) to keep it at peak performance levels.



ADG-1

Super

NOVA™

designed by

pininfarina

LS-400



A STAR IS BORN

When we talked about a new spray gun, we decided that we needed to be innovative. Our customers needed something new, so we enlisted the help of the world-renowned design firm Pininfarina, famous for their state-of-the-art automobile design.

Anxious to see how they would handle a spray gun, the Pininfarina design far exceeded our expectations. After the gun design was complete, we incorporated our advanced atomizing technology and the SUPERNOVA was born. This premium gun combines our superior atomization control with production speed and ergonomics. There are two HVLP versions of the SUPERNOVA, the LS-400 for clearcoat and the LS-400 for basecoat, and a non-HVLP version, the WS-400.

**LS400
basecoat**



**LS400
clearcoat**



Both HVLP guns are available with either a 1.3 mm or a 1.4 mm nozzle size, depending on what brand of paint you are spraying. The basecoat version is designated by the **gold** colored air-cap.

PERFECT BALANCE

The Supernova cup angle design guarantees perfect balance, regardless of what cup size you choose.

QUICK RELEASE AIR CAP

The larger thread pattern of the air cap makes it both robust and easy to remove, and is designed with low maintenance in mind. The new larger grip points on the outside of the air cap ring facilitate quick removal and refitting after cleaning.

RESPONSIVE TRIGGER

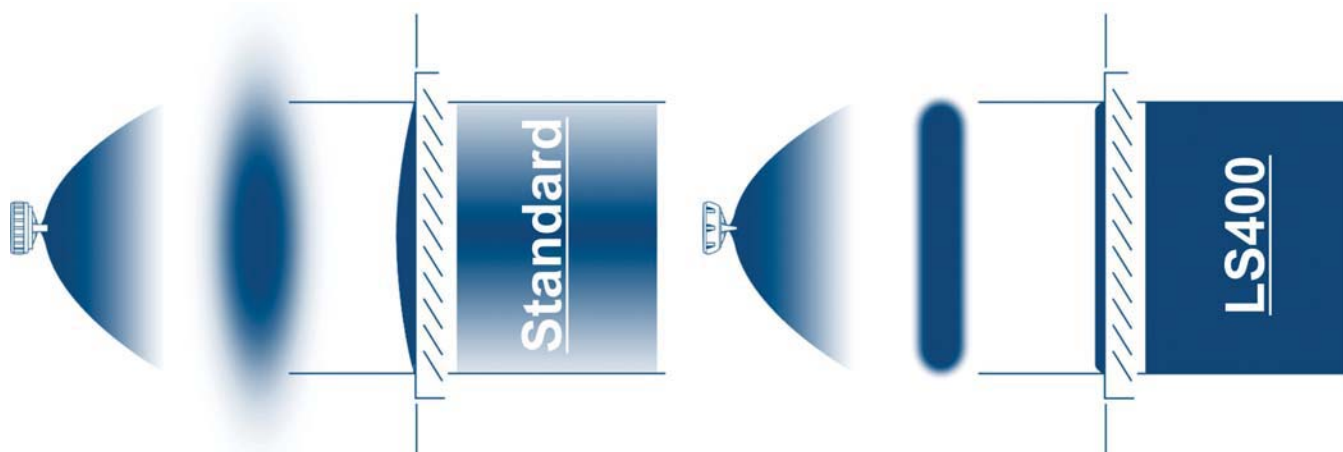
The responsive trigger action gives the painter stable airflow control during application. Accurate air pressure can now be set with either the air stroke or the fluid stroke.

ERGONOMIC GRIP

An in-depth study by the University of Pavia into perfect balance and optimal ergonomics was closely considered by Pininfarina designers and ANEST IWATA engineers to produce a state-of-the-art spray gun. The slim ergonomic grip of the **SUPERNOVA** spray gun helps distribute weight and balance through the wrist, reducing the risk of repetitive strains,

PERFORMANCE

The **SUPERNOVA** delivers a consistent droplet size when atomizing. This, combined with the flat, even **SUPERNOVA** pattern, helps application issues. All **SUPERNOVA** guns are equipped with stainless steel fluid passages ideal for any type of material, solvent-borne or waterborne.



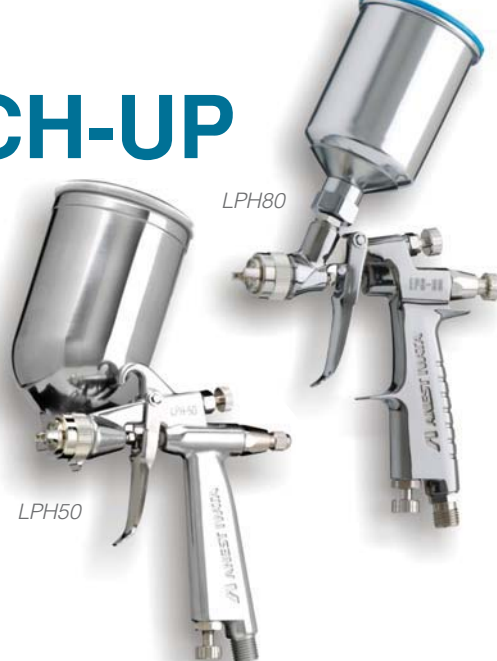
WOODWORKING TOUCH-UP

THE ART OF REPAIR

The art of touch-up and finish repair in the Wood Shops can be frustrating at best, and a refinisher's nightmare at worst. While most shops have figured how to refinish their products, many struggle with the art of touch-up and simple spot repairs. Most repairs are small in nature, and the use of a quality touch-up gun or airbrush makes the job simple and fast. The object of doing a touch-up or small repair is to keep it small and unnoticeable; by using a touch-up gun or airbrush, you will be able to control the amount of fluid and size of fan pattern much better than with a full size spray gun.



The ANEST IWATA LPH80, LPH50, RG3L, or any one of our airbrushes are the perfect solutions for any touch-up and small refinish repair, whether in the shop or at the job site. Both guns are small, lightweight, and designed to produce a high quality finish for stain, dye stain and clear topcoat. Since they use only 1.1 to 2.1 cfm, any small hot dog or portable air compressor can be used to operate these guns. This will save the shop time and money by doing the repair on site, rather than removing a door or cabinet and returning it to the shop for repair. As compared to a full size spray gun, or even a turbine spray system, the ANEST IWATA LPH80, LPH50, RG3L or other airbrushes are very versatile, easy to use, and will make any touch-up or refinish repair quick and easy.



AWFS 2009 RECAP

ANEST IWATA USA, Inc. participated this year in the AWFS 2009 show in Las Vegas. Even with the tough economy, the 2009 AWFS show was a huge success. We showcased our latest equipment, including new manifold guns, five gallon bucket-mounted pump with agitator, and 13:1 air-assisted airless system with the MSG200 spray gun, which provides a great solution for waterborne stains and topcoats. Some of the other highlights were our double diaphragm pumps and extension guns.



While the AWFS 2009 show didn't set any attendance records, we noticed steady booth traffic and a more motivated buyer profile. With the hard economic times facing the industry, distributors and end users visiting the show were there to buy. This made for a very satisfying show experience for our employees, and accumulated many solid leads for our distributors across North America.

Our thanks to all of our distributors and end users for attending. Be sure to check us out at IWF 2010 in Atlanta!

TECHNICAL DISCUSSION with “MITZ”

PROPER AIR PRESSURE IS CRITICAL



In *INNOVATIONS* Issue 6, Fall 2007, I talked about the importance of using clean air to prevent paint defects. In this issue, I want to talk about the importance of your spray gun's air pressure setting. As you know, paint atomization in a spray gun is created by the impact between paint and compressed air at the tip of the spray gun nozzle. Each gun is designed to provide the best spraying ability at certain settings, which are described in the instruction manual or catalogues for each of our spray gun models. Every ANEST IWATA spray gun is designed for use with the setting of each adjustment “fully open.” The main thing you need to be concerned with is the inlet pressure, or atomizing air pressure. Every instruction manual, catalogue or tech sheet has the correct spraying air pressure. It is critical to follow these air pressure recommendation guidelines to get the right finish. You need to check this air pressure at the inlet of spray gun when the trigger is fully pulled with the fluid stroke. I am going to explain simple ways to set up the spraying air pressure using our 8018 and 8130 AK-1B airflow valves and 8131 AK-1R regulator.

SETTING THE GUN USING OUR 8018 OR 8130 AK-1B AIRFLOW VALVES

The 8018 and 8130 AK-1B adjustment needs to be fully open and then adjust the booth inlet air wall gauge until the needle on the valve reads the appropriate pressure for each specific gun or even a little higher just as long as the inlet pressure to the gauge is less than 100 psi.



8018

8130
AK-1B

Please make sure that the inlet pressure to these gauges is less than 100 psi since the maximum inlet pressure of these airflow valves is 100 psi. In the case of the 8130, if the pressure exceeds 100 psi, the swivel joint will leak or the rubber o-ring inside the swivel blows out the side or the gauge needle will pin at around 5 to 10 psi even if no air pressure added. This is to protect you and your spray gun since the maximum pressure of most guns is 100 psi. This safety warning is printed in the instruction manual and stamped on the gun handle opposite the label LPH400, W400, etc. We realize that many shops have more than 100 psi inside a booth for different equipment, and this seems to be the main cause for this problem.

SETTING THE 8131 AK-1R AIR PRESSURE REGULATOR

Since the 8131 AK-1R is a true air regulator, you do not need to worry about the inlet air pressure. The maximum air inlet pressure for the AK-1R is 250 psi. However, it will only allow 50 psi to exit, so you do not need to worry about 100 psi being the maximum air pressure; just supply enough air from the booth wall regulator. Before connecting the air hose, make sure the knob of the AK-1R is fully rotated to counter-clockwise. This prevents letting the uncontrolled air rush into the spray gun. After that, supply the air from the wall regulator, and adjust the inlet air for the spray gun, rotating the knob of AK-1R clockwise until the gauge shows proper air pressure.

8131
AK-1R

NEW NINJA JET COMPRESSOR

Cloaked in black, and so small it's nearly invisible, this ninja-like compressor is the perfect choice for portable air!

Compact in size, the NINJA JET includes a built-in airbrush holder and a carrying handle that's ready to go anywhere. It comes complete with an air hose, and the low-maintenance oilless piston motor and adjustable pressure regulator deliver reliable performance. A metal cover provides protection.

The NINJA JET is great for:

- Hobbies
- Crafts
- Bakery
- Cosmetics
- Nails
- Airbrush Fun!

iwata
MEDEA



NEW SPRAY GUN DVD FEATURING KEVIN TETZ



Growing up, Kevin Tetz worked in his father's automotive tech shop, learning everything from engine mechanics to bodywork and restoration. Kevin writes for several publications, including Mustangs & Fords magazine, and participates in numerous automotive shows offering "how to" clinics and seminars to hobbyists and professionals alike. He presently is the host of Spike Network's **Trucks TV**. This video covers:

- The complete line of ANEST IWATA spray guns, including the new and dynamic SUPERNOVA gun, Century Series guns (LPH-80, LPH-400, and LPH-440), robotic, and fluid handling equipment
- Spray gun handling techniques
- The ANEST IWATA waterborne drying system
- Training aids for spray gun perfection
- Health and safety issues
- Proper compressor settings
- How to achieve various spray patterns
- How to analyze spray patterns, and the three stages of atomization
- The difference between silver, orange, and purple air caps for the LPH-400
- How spray guns work, and the anatomy of a spray gun
- How to assemble and disassemble a gun
- How to clean your spray gun

2009 ULTIMATE AIR AFFAIR

DONN SHANTEAU



September 3-6, 2009 marked a unique convergence of airbrushing luminaries in Salt Lake City Utah for the 2009 Ultimate Air Affair. They were summoned to the shores of the Great Salt Lake and guided to the fortress of “Kreative Kool” by the siren song of Sherri Candland. Sherri is the host of the Ultimate Air Affair, and one very cool customer. The mission of the airbrushing illuminati was to enlighten the Ultimate Air Affair attendees in the ways of airbrush effects and custom painting techniques over the three days of classes. This “Dirty Dozen” of instructors consisted of some of the most respected airbrush painters in North America: Mike Lavalle, Fonzy, Gerald Mendez, Brian PaPa, Ron Gibbs, Pamela Shanteau, Steve Driscoll, Bob Soroka, Jason Doll, Steve Vandemon, and the irrepressible Craig Fraser. The wonderfully talented Deborah Mahan was not able to attend the Event as an instructor this year; she was missed, and we look forward to seeing her at future Ultimate Air Affairs.

The aforementioned fortress, also known as Automotive Spray Equipment Technologies (ASET), houses what is possibly the finest airbrushed art gallery in existence and the infamous “Voodoo Lounge,” where the airbrush instructors let their hair down and “paint from their hearts” as they enjoy the fellowship of their peers and the workshop attendees during the three days of classes. This year, the instructors airbrushed puzzle pieces in the “Voodoo Lounge” that will be assembled on the wall in the foyer of ASET.



The “Air Space” gallery at ASET is a cornucopia of airbrushed art that spills out towards the viewer from virtually every angle. Incredible masterworks airbrushed by past and current Ultimate Air Affair Instructors adorn a wide variety of objects, including pedal planes, snowboards, guitars, and cocktail tables. These items cover the wall space and floor to create a truly “sens-surround” experience.

Of course, the lounge and art gallery are only “sauce for the goose.” The “goose” for this gathering is the information and techniques that are on display in the various classes that take place over the three days of the Ultimate Air Affair. The instructors cover a wide range of painting techniques in their classes, and all are experts in their specialties. Students from around the globe have homed in on this event to get the finest custom airbrushing and pinstriping instruction available in the world.

The 2009 Ultimate Air Affair was a wonderful success, and a great experience for all who attended. All of the students earned an I-Car certification for airbrushing, and got to see how the finest airbrush artists paint, up close and personal. This first class event is a must-attend function for anyone who desires the finest in airbrush and custom painting instruction!



AirGuns

ANEST IWATA Group

The NEW AirGuns guns from ANEST IWATA have been redesigned for performance. These low cost affordable guns include a ergonomic lighter body with a softer trigger pull to reduce fatigue. The new polished surface allows for easier cleanup.

AZ3HV2

An affordable center post gravity HVLP spray gun

| Model | Nozzle Size | Pattern Width (in.) | PSI | CFM | Gun & Cup # | Usage |
|---------------------------|-------------|--------------------------|-----|------|-------------|-----------|
| AZ3HV2-13GC | 1.3 | 11.0 | 28 | 12.0 | 9230 | Sealer |
| AZ3HV2-15GC | 1.5 | 11.5 | 28 | 12.0 | 9231 | Sealer |
| AZ3HV2-18GC | 1.8 | 13.5 | 28 | 12.0 | 9232 | Primer |
| AZ3HV2-20GC | 2.0 | 14.0 | 28 | 12.0 | 9233 | HS Primer |
| AZ3HV2 Air Cap Test Gauge | | Air Cap #All HVLP Models | | | Part #9245 | |

Standard Replacement Cup # 9131

Optional Air Control Valve # 8018

AZ3HTE2

An affordable non-HVLP center post gravity air spray gun

| Model | Nozzle Size | Pattern Width (in.) | PSI | CFM | Gun & Cup # | Usage |
|--------------|-------------|---------------------|-----|------|-------------|--------------|
| AZ3HTE2-13GC | 1.3 | 9.5 | 29 | 7.0 | 9234 | Sealer |
| AZ3HTE2-15GC | 1.5 | 10.0 | 29 | 7.0 | 9235 | Sealer |
| AZ3HTE2-18GC | 1.8 | 12.0 | 29 | 7.5 | 9236 | Primer |
| AZ3HTE2-20GC | 2.0 | 13.5 | 29 | 7.5 | 9237 | Spray Filler |
| AZ3HTE2-30GC | 3.0 | 16.0 | 44 | 10.5 | 9238 | Spray Filler |
| AZ3HTE2-35GC | 3.5 | 16.5 | 44 | 10.5 | 9239 | Spray Filler |

Standard Replacement Cup # 9131

Optional Air Control Valve # 8018



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

make
Your Paint
LOOK
great!