



H2O Transition Success Tips

1. **Wetting down the paint room floor.** If you are accustomed to watering down the floor in the paint booth before you paint, that will be a no-no when using waterborne. The air in the booth will be absorbing the moisture coming out of the paint so on humid days you will need all the "room" you can get for moisture evaporation. As an alternative, try a dust control spray like Cumberland or Devilbiss
2. **Booth air movement.** Some people will tell you your booth moves enough air now so you are ready for waterborne. That is false. A downdraft provides a laminar envelop of air around the vehicle being sprayed. Especially if you are a production shop, you will need turbulent air not laminar air flow that the booth delivers. Therefore you will need hand held air movers and more than likely a retrofit of air movers to your booth. These air movers if outside the spray zone will penetrate the envelope and create turbulence. If you have the Garmat type fans that mount under the ceiling filters, they create turbulent air within the clean zone.
3. **Handheld blowers.** Not all handheld blowers are created equal. Ranging in price from \$29.00 to the hundreds and performance will vary just as much. All the manufacturers talk about a high input psi and high cfm consumption. Nobody mentions the real issue. What is the amount of air required to flash off the waterborne color on the car? The answer to that question is 300-600 feet per minute. For example, we tested the Prevost, which is our handheld of choice, and found the recommend 58psi in and claim consumption of 12 cfm per unit. In reality we discovered that to achieve the 300 fpm required you need to input 18 psi and will then consume 4-5 cfm per unit. There, we saved you thousands of dollars because you didn't blow up your compressor!
4. **Hazardous waste.** You will notice a reduction in hazardous waste generation. However, the waste you generate will need to be treated separately from the solvent waste. You cannot intermix the two as the waste haulers will not accept it mixed.
5. **Dedicated spray equipment.** Yes, you will need to dedicate a paint gun to the waterborne product. Trying to use one gun for both waterborne and solvent borne products requires way too much cleaning and would be counterproductive. Either select an existing gun or purchase a new one. Make sure the fluid tip is the correct size as many of the companies recommend a different size for waterborne. Make sure the internal fluid passages are specially coated and recommended for waterborne.
6. **Compressed air quality.** Probably the most over looked and misunderstood area of the shop but also one of the most important things to get in line when making the transition to waterborne. For the most part when spraying a solvent borne product if the relative humidity within the compressed air system was at 25% or less you were pretty good. (also consider the refrigerated dryers many shops have will only get the air down to 18-28% RH) For water the lower you go the better. Under 10% RH is where you need to be. In most cases, a point of use desiccant system or a membrane system will dry the air effectively.
7. **Disposable cup systems.** Depending on the paint system and cup system you use, you may need to change to a different mesh filter. Check with your paint rep for specifics.
8. **Get ready for better color matches.** All feedback on the brands we sell says the color match is better with waterborne. This is probably due to the fact that 80% - 90% of the cars are painted with waterborne at the factory now days and so are the color variant decks.
9. **Safety.** Many people think that they are using waterborne paint so it is safer to use and will not require the use of a fresh air supplied respirator. Wrong! Read the label on house paint sometime. There are still coalescent solvents in the paint. When they evaporate they carry away the water molecule. Also, since many shops are advertising that they are now using waterborne as a "green theme", OSHA is now circulating those shops and checking to make sure the painters are using fresh air supplied respirators. For the record, wearing fresh air supplied respirators is required and must be enforced by the shop, period.
10. **Tack cloths may cause surface imperfections.** We have heard some tack cloths use beeswax for the stickiness and will cause surface imperfections, this has not been verified. There are however tack cloths being marketed as waterborne specific such as Gerson #19921B Particle Control System.
11. **Finer preparation scratch needed.** True. The waterborne basecoats tend to be less filling. Therefore you will not be able to "hide" coarse preparation scratches. If a paint company recommendation states preparation scratch range is P400-P600 dry then go to the P600 dry and you will be fine.
12. **Application process will vary by manufacturer.** Wet or flowing coats. Some companies recommend a wet coat first, flash, followed by a medium coat. Others recommend a medium coat first followed by a wet coat. Make sure you follow the recommendation set forth by the manufacturer you are using.
13. **Production will decrease.** False. We have found the opposite **IF** you follow the paint company recommendations and install air movers in the booth.
14. **Blendability is easier.** True. This is due to the water in the paint eliminating the static charge on the blend panel. This allows the paint to lay down thus virtually eliminating the "halo" effect.
15. **Raising the temperature in my booth will flash off the basecoat faster so I don't need air movers.** Yes and no. Raising the temperature to 92-95 degrees will help but beyond that you are just wasting energy. A shop still needs air movers.
16. **My new waterborne basecoat will freeze in cold temperatures.** Depends on the brand. For every waterborne system we are aware of, except BASF, the toners contain water and therefore must be kept in a range of 34-95 degrees to avoid freezing and taking away pot life. A shop could also incur additional heating costs. BASF toners do not have water in them. The technician adds the water when he mixes it in the shop. Therefore the only thing BASF has to worry about freezing are 4 additives. Sherwin-Williams toners can freeze and thaw and still be used.
17. **Some colors take longer to flash than others.** True. This is mainly due to the pigment to binder ratio of the mix. The higher pigment load the slower the flash.
18. **One visit method of application.** Some paint companies have a "one visit" method of application for the basecoat. This is a double coat back to back followed by a light "drop coat". The issue here is that the coats of color need to "dehydrate" and begin the film formation by coalescing between applications so you don't trap water and solvent deep in the film. Naturally the flash off time of this type application will be greatly increased since water is trapped so deep in a thick film.
19. **How far back do color formulas go?** Most paint companies will tell you they are focusing on 10 years back. That means to 1998-1999 for most. BASF says they go back to the early nineties and even further back on some colors.
20. **Gun cleaning.** It is imperative that you clean the paint gun thoroughly and follow by cleaning the gun inside and out with acetone or rubbing alcohol each time the gun is used (final neutralization). Failure to do this will result in your gun corroding inside and reducing the life expectancy to a mere few months!
21. **A different animal.** Solvent basecoats dry slow in the winter and fast in summer heat. Waterborne is the opposite. We need to slow things down in winter (slow reducer). Since the air is so dry the water evaporates fast drying the paint quickly. During the summer months when humidity is high waterborne will slow down because the air has less room for the evaporating water molecules so we need to speed things up in summer on those humid days (fast reducer).

