

Stencils Where Do I Begin? Session Questions and Answers

Q: Can the chemistry in a printer or stencil cleaner negatively affect the OSP?

A: The answer to that is in the printer itself, it's likely not going to have an impact. However, when you are cleaning your misprint boards in an offline stencil cleaning chemistry, you need to make sure its compatible with that OSP. Work with your suppliers and they will help you determine that. There's been a lot of work that's been done on that and not all chemistries are compatible with OSP. If you don't clean those, you're going to end up scrapping more boards.

Q: Is it best to end in a back or a dry wipe?

A: There's lots of debate on this. I guess the real answer to this question is you really need to do the work. There's a lot of different variables, different printers, and different wipe set ups. Doing a DOE similar to what we described in one of the tips will help. Go through and see what makes sense and what gives you the best SPI data. There are benefits for both processes and its really dependent.

Q: Should I worry about compatibility when cleaning with solvent? For example, nano coatings.

A: So, typically, solvents are compatible with your nano coatings. However aqueous-based chemistries can absolutely impact the life of that stencil cleaner and actually DI water. And the reason for that is many of those nano coating stencil chemistries are actually pH sensitive so if you're go into the alkaline or the acidic side of the pH, you actually can strip that and that does include DI water believe it or not.

Q: Have there been an effectiveness comparison between solvent vs water-based products?

A: If you would have asked me that a couple of years ago, I would have said you're much better off with solvent. Typically speaking, they dry a little bit better. But what we found is not necessarily the dry rate that impacts your cleaning and performance of the chemistry. Its really dialing in the chemistry that you're using with the type of paper you're using and how they react and setting up that wipe process correctly. The reality is most of your default settings in your printer for your wipe and how much fluid is going in doesn't always give you the best results and so dialing that in and doing the work again will save you time and increase your yields.

Q: Could you use a solvent rather than a nano coating and get the same results?

A: You likely will see a couple of different things. One is its not going to have as long of a lasting effect using a solvent, but it does help reduce the variation of your prints from print to print. Use the correct solvent with the nano coating. I will say that what we've seen is that when you use the combination, you can actually increase the life of your stencil life so to speak leaving it on the printer between off the printer

showers shall we say. The reality is that you've got to do the work and it depends on the process.