DI Water vs Chemistry
Session Questions and Answers

Q: How does impingement energy effect the cleaning capability of DI Water only?

A: It sounds like you are actually touching on one of the forces of cleaning. So, there are 4 variables that I talk about when it comes to improving cleanliness and energy is one of them along with time, temperature, and solvency. So those are 4 variables that if you increase one you likely have room to decrease another. That's what you deal with when you try to optimize your cleaning process. Impingement energy does help and improves cleaning if you are able to improve your impingement but it does not necessarily do anything for the surface tension.

Q: If I get a new inline washer or a new washer at all, would it eliminate my need for chemistry?

A: Again, it depends on how high your gaps are. If you have an issue where the water cannot reach under the less than 2 mil gaps, the new impingement energy from the inline washer is not going to do anything to surface tension so you will still need small amount of chemistry to lower that surface tensions to get under those components. If you just have the higher standoffs, then yes, the new inline will just further improve cleaning.

Q: I have used only water for years with no issues, do I still need to switch to chemistry?

A: It comes down to reliability. If there's no issues with the quality of your product and if there's no customer complaints, then not necessarily, but at the same time there's other benefits that the chemistry brings. For example, if you up your productivity you can start to clean these parts faster and get the parts out the door essentially turning that into more revenue. Again, it may not be needed, but it can help your process.

Q: I don't have any cleaning issues at the moment while using only DI-water. However, my machine foams out all over the floor at least once a week. It sounds like adding chemistry will fix this, but how much is really needed if I don't need to improve cleanliness?

A: That's a good question. So in the direct comparison videos I showed earlier, it was at 3% concentration. If you're having no cleanliness issues but removing the issue of that foam is a huge deal I would start playing with it maybe at 1 or 2%. You don't need 3%, but it's not that much anyways. Really just a small amount, even 1% can be enough to defoam that bath.