

What You Need to Know About Flush Mounted Component Cleaning – The Ins and Outs of Surface Tension

Session Questions and Answers

Q: As a contract manufacturer I have many different components and many different solder paste flux combinations. How can I measure if I am getting clean under components?

A: Well, most of your customers should be telling you what their definition of clean is. As you know "ROSE" testing is no longer a valid test, but it did give people a number to define what clean should meet. I would look toward an SIR test or Magnalytix test. Ion Chromatography could help define what portion and will help you identify where the residue is coming from.

Q: You mentioned different pressures and nozzle types, but you never gave up and machine manufactures, who do you recommend?

A: Nice try! As you are aware, we must play nice with all machine companies. All the batch and inlines have their own positives and particular specialties. Do not forget this is a session about how we, the chemistry guys, help the machine guys in breaking down the droplet size to get it under your components to solubilize that flux and remove it.

Q: Why not just use a no-clean and forget about cleaning?

A: Well, you can if you want to. We are talking about critical cleaning here. Phones are a great example; I would use a no-clean as they have a short life expectancy. A self-destruct button on the other hand, maybe not. Also, let's not forget if you do clean a no-clean, clean it 100%, don't un-encapsulate the metal salts and stop there. You could open Pandoras box.

Q: Are you saying that cleaning under bottom termination components are easy?

A: No, cleaning under low stand-off components can be particularly difficult. However, with the appropriate equipment and a well thought out process, it is very possible to clean successfully. You will need to monitor the process to ensure you are getting the results you desire.