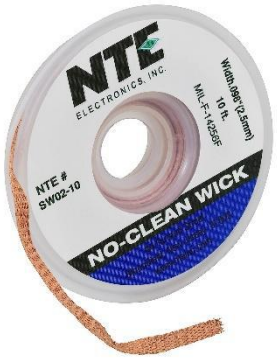
Electronic Tool Tip #6 – Solder Wick & Flux



When it comes to removing solder from a joint or a PCB, sometimes using solder wick is the quickest and easiest way to go. This is especially true when working with SMD component installation and removal, and with cleaning the PCB pads after an SMD component has been removed.

Solder wick is a flat braided length of fine copper wire strands, available in various widths and also in various spool sizes. The better solder wicks are pre-impregnated with rosin flux, but even they can stand an occasional boost of additional flux to really get the solder flowing up the wick.

The braid is laid in place on the solder to be removed, and heat from a soldering iron is applied to the braid, moving the iron on the braid, and sometimes moving the braid itself, as necessary to absorb the desired solder from the joint.

Solder wick must be clean in order to do its job, so for best results, cut off the used portion frequently as you work. Rosin flux can be added before the wick is applied, or it may be applied directly onto the wick braid. Either method will get the job done.

I prefer the braid marketed by NTE Electronics of Bloomfield, NJ as their part number SW02-10, which is a ten-foot length of the 0.098”-wide braid on a convenient plastic dispensing spool. It is of a high quality and it always does the job without the strands separating as some other brands will do. I rarely need to add additional flux with this brand of solder wick, but with some other brands, flux must be added every time it is used, almost as if the wick has no flux in it at all.

One brand of rosin flux that I like is ChipQuick part number NC191. This product comes in a capped syringe and includes the plunger, a dispensing tip, and a cap for the dispensing tip. I remove the plunger and the dispensing tip from the syringe after each use, and store the whole shooting match in its original heavy-gauge zipper-type plastic pouch, with the original syringe cap put back in place ono the business end of the syringe. I also highly recommend the use of a more free-flowing liquid rosin flux such as the GC Electronics 10-4202 *Liquid Solder-Flux*. I typically purchase this in a brush-cap bottle. The part number cited above will get you a two fluid ounce bottle of this flux. Note that clean-up of rosin flux and its residue can most easily be accomplished through the use of 99.9% isopropyl alcohol (IPA), scrubbing with a toothbrush as needed to get the stubborn areas clean.

These items are widely available online, from suppliers ranging from Amazon and Jameco to Mouser and Digikey. Pricing is approximately $10 (USD) for the ChipQuick rosin flux, $20 (USD) for the GC Electronics rosin flux, and $7 (USD) for the solder wick, all as described above, from Digikey.

Go to www.digikey.com to investigate these items for yourself.

