

Soldering and Desoldering Tips



The ERSA **Tip-Reactivator** allows the regeneration of oxidized soldering tips. It is environmentally safe, free of lead and halogens and func-tions even at low soldering tip temperatures. For this purpose the heated soldering tip is wiped on the surface of the regeneration compound.

Nickel-plating



The base material made of highly conductive electrolytic copper ensures unhindered heat transfer from the heating element to the ERSADUR LF coating

> ERSADUR LF coating (up to 600 micron) of iron-plating (subject to type of tip) is factory pre-tinned with lead-free solder at working end

Iron-plating

Nickel-plating

Chrome-plating prevents corrosion and solder collection on undesirable spots

Cross-section of an ERSADUR soldering tip, non-scale representation



Important notice: special care for soldering tips!

Hand soldering operators are happy when their soldering tips last a long time and continue to solder well. Soldering tips that do not allow the solder to melt rapidly due to excess oxidation clearly disrupt productivity! Special care of the soldering tip should be taken in order to solder efficiently.

Important Facts:

- When a soldering tip remains hot for a long period of time, the tip will oxidize or blacken. An oxidized tip will no longer "wet" or melt solder properly.
- The higher the working temperature of the soldering tip, the faster this oxidation will take place and tip lifetime will be shorter.
- 3. Soldering irons that automatically go into a lower "stand-by" temperature increase tip life.
- 4. The oxidation of the tip will be very rapid if the tip is left "cooking" without molten solder covering the tip end. It happens, for example, if the tip is not wettned with solder right after cleaning it.
- 5. Excessive mechanical force during soldering will shorten the tip life.
- 6. Proper care of the tip will greatly increase tip life.
- 7. Lead-free soldering requires higher temperatures, is more aggressive to the tip and will always lead to shorter tip life.

Special Care:

- Always clean the tip by wiping on a slightly wet sponge after each use. Alternatively, tips can be dry cleaned using wire mesh.
- 2. Always put fresh solder onto the end of the tip BEFORE putting the tip back into the iron holder.
- 3. Always use lowest working temperature possible.
- Never leave an iron "cooking" unattended for some time. Always set iron into automatic stand-by if possible or turn-off when not in use.
- 5. Never use excessive mechanical force when soldering.
- Soldering tip oxidation can be easily removed if detected early. Early detection and removal will greatly increase tip life.
- Tip oxidation removal or tip refurbishing is accomplished in 4 consecutive steps: a. clean on damp sponge, b. clean with wire brush, c. using a Tip re-activator chemical, and d. re-tinning using proper flux cored solder wire.

ERSADUR LF soldering tips to process lead-free solders

Conventional soldering tips can also be used for lead-free solders. Since lead-free soldering requires higher process temperatures, and due to the fact that lead-free solder is more aggressive to the soldering tip, the tip's service life is shorter. ERSADUR LF soldering tips have an increased layer of iron, which increases tip life. Consequently they are especially suitable for lead-free soldering.

