

Solder Paste Softener

Getting the process right in Surface Mount Technology (SMT) begins with the preparation of solder paste for the printing process. The process of thawing the solder paste and stir mixing them well prior to use is well documented and practised.



The process may look simple, but is usually not carried out correctly as it is very operator dependent. Thawing the paste from 5 deg C (normally solder paste is kept in the refrigerator) to room temperature (~23Deg.C) is important so as to avoid condensation of water moisture onto the paste. When water gets into the paste, the rheological properties of the paste is changed. It gets oxidised much faster and tends to splatter during the reflow process. The change in rheological properties also tends to affect the printing processes. Mixing of the solder paste is important so as to get a homogenous paste as the heavier solder balls tend to settle down and separates from the paste flux and chemicals during storage. However over stir mixing them can also create problems owing to the thixotropic nature of the paste which tends to become `watery' during the shearing (mixing) process.

It is here that **PTS** introduces the unique Solder Paste Softener. It **eliminates the operator dependant variables** like time of thawing, time of stirring and the method and force used during the stir mixing process. With the Solder Paste Softener the process parameters once determined can be easily specified, followed and documented

PTS Solder Paste Softener makes use of centrifugal forces to mix the paste. As the paste inside the jar rotates about the main spindle, it also rotates along its' own horizontal axis thereby ensuring that the paste is thoroughly mixed. During the shearing (mixing) process, heat is generated and this raises the temperature of the paste. The end result is a well mixed paste to room temperature within a few minutes under a controlled process!

It is strongly recommended that a Solder Paste Softener be used. Its cost is insignificant as compared to the higher quality yields achieved during the SMT process. It eliminates solder paste scrap due to wrong handling procedures.

For more information please contact **PTS System(S) Pte Ltd or e-mail at sales@pts.com.sg Tel: 67780300 Fax: 67732262**