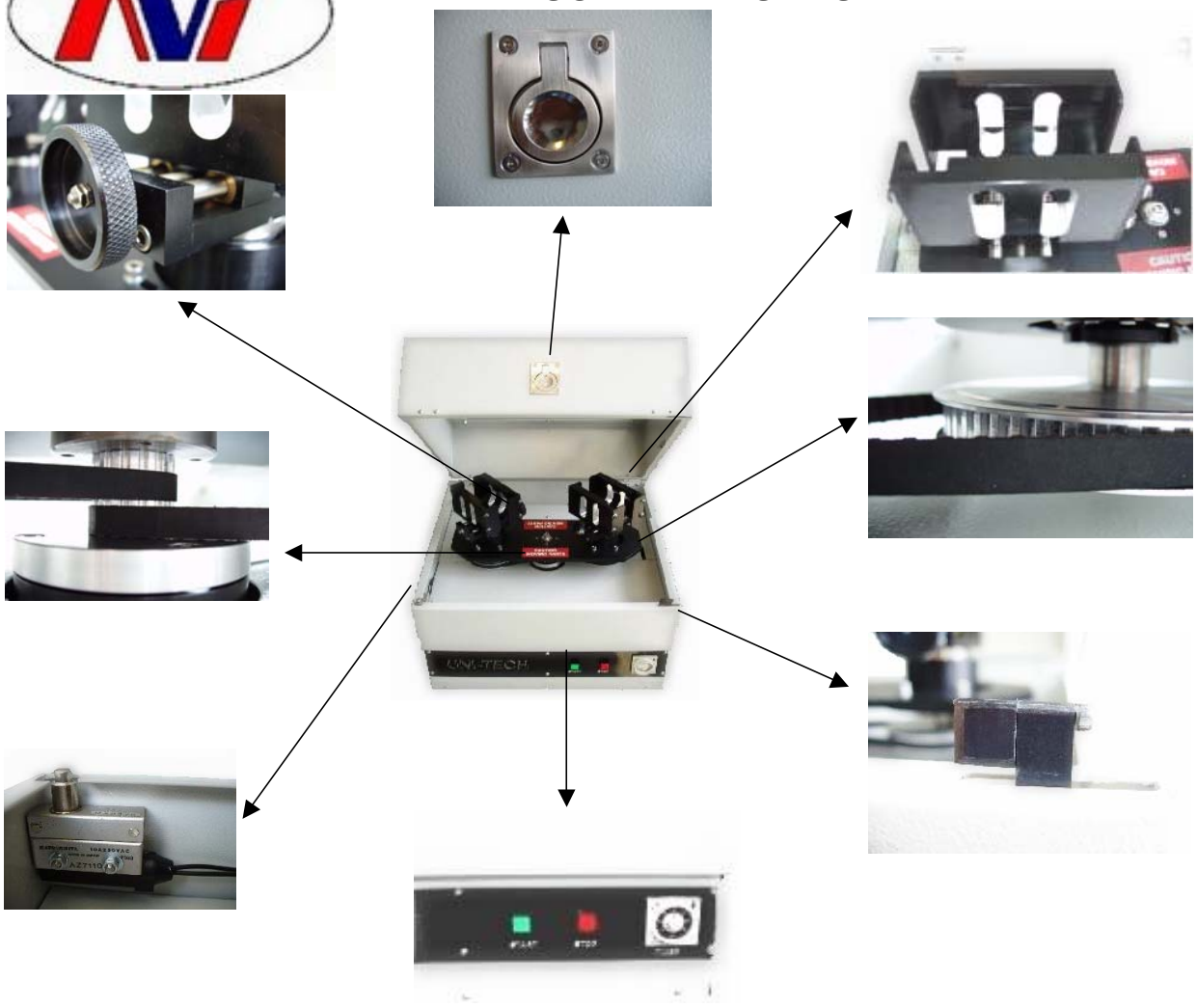
# SOLDER PASTE SPINNER



Unlike hand mixing, the AVI-SPI Solder Paste Softener is a non-contaminating mixer, which utilizes pseudo planetary motion to stir the solder paste. The SPI provides uniform paste consistency regardless of operator skill. The paste temperature rises due to friction, enabling control over the paste viscosity.Now solder paste can be solder pulled from the refrigerator and ready on the stencil, in less than 15 minutes!

The SPI employs a pseudo-planetary motion whereas the solder paste container rotates slowly at the end of an arm, which spins rapidly. The resulting centrifuge force causes the solder paste within the container to repeatedly fold over itself, thereby mixing and softening itself.

| MACHINE SPECIFICATIONS | |
|---|---|
| Number of Rotations | 400 - rpm revolution, 100 - rpm revolution (60 Hz) |
| Paste Temperature Rise | 0 to 25 C in 30 minutes |
| Dimension (L X W X H) | 465 (W) X 445 (D) X 425 (H) mm |
| Power | AC 230 V (50/60 Hz) / Single Phase |
| Weight | 26 Kg |
| Electrical Consumption | 500 W (60 Hz) |

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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 AVIsmt 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

AVIsmt 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.

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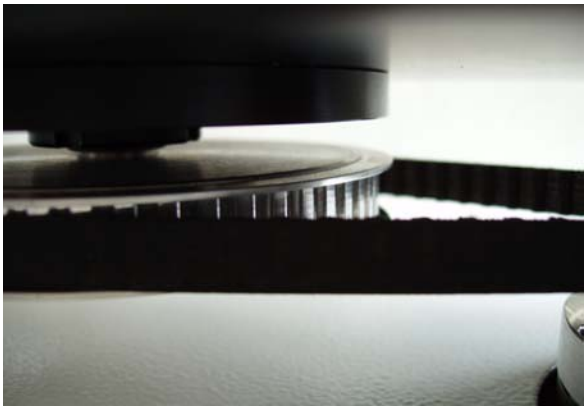

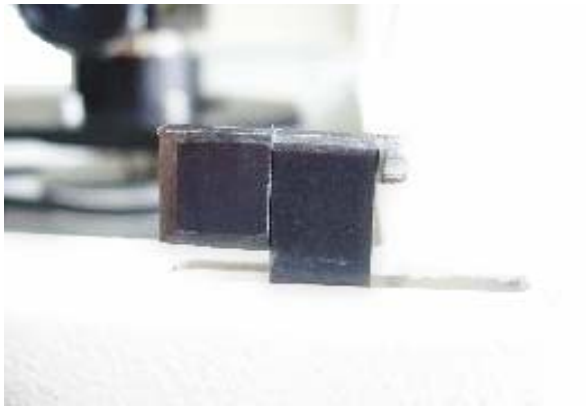

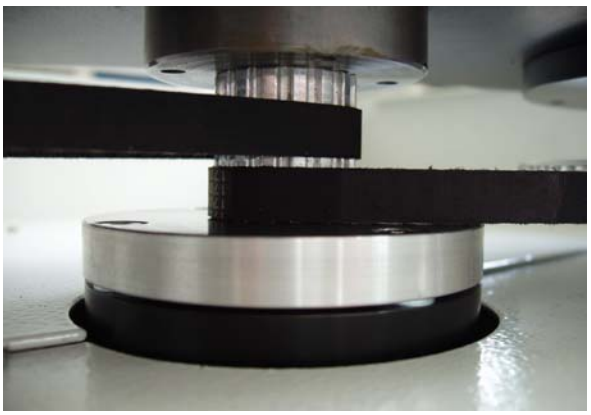


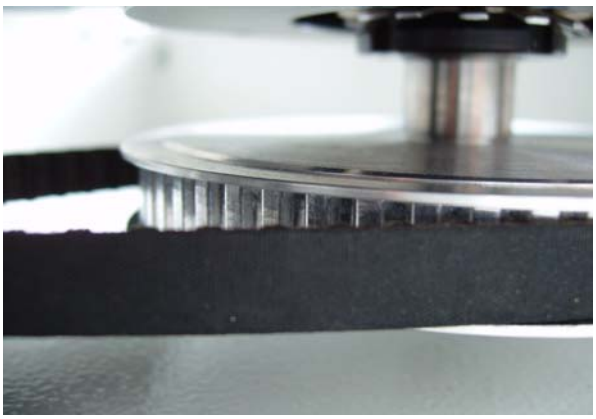

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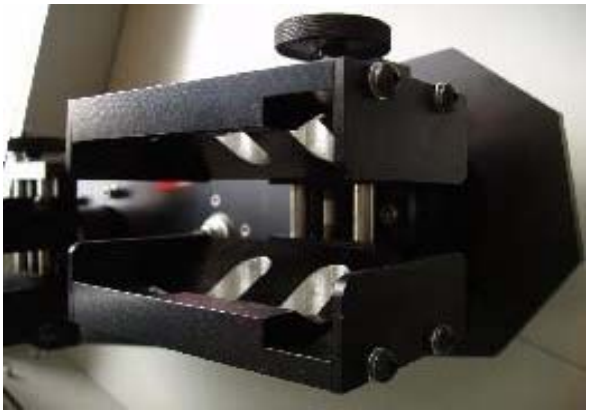

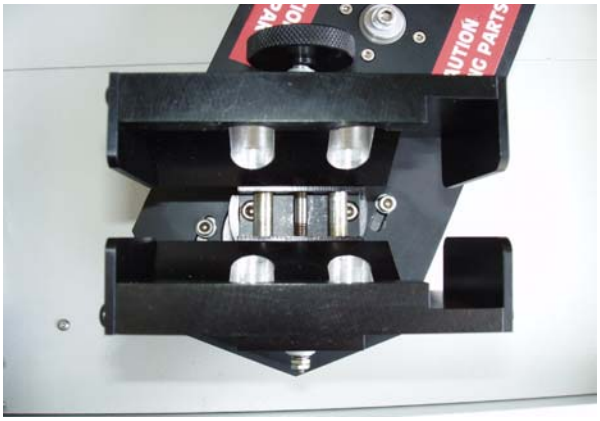

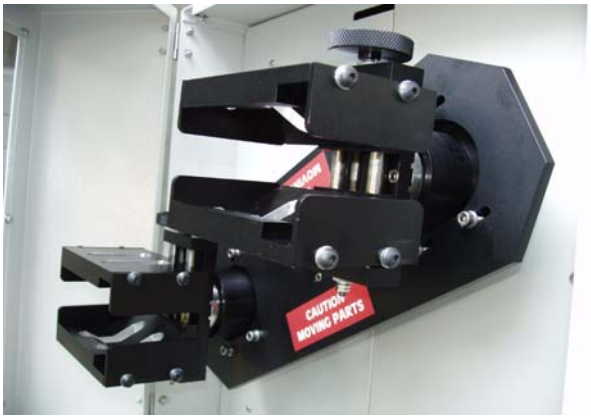



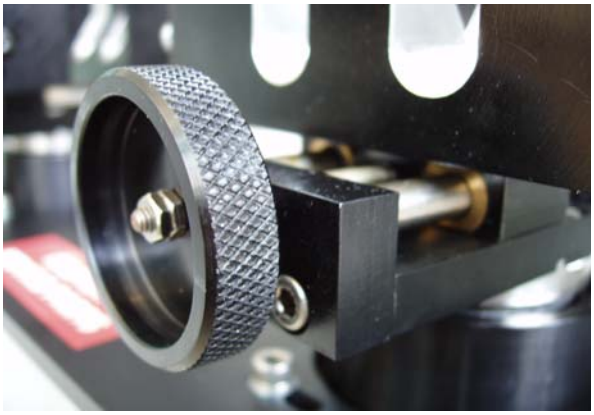

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