Precise Dispensing for Thermal Interface Materials (TIM)

Reduce material waste and accurately dispense using bulk material supply to achieve optimal performance.

Henkel Liquid TIM Dispensing

In Spring of 2016, the research and development lab team at Nordson Sealant Equipment worked closely with material manufacturer Henkel to develop a state-of-the-art automated dispensing system for 2-component TIMs.

Henkel’s Bergquist® brand TIMs are a replacement for pre-cured die-cut swatches that are used to dissipate heat from electronic chips and diodes. Often, TIMs are applied by hand from a cartridge dispenser. The use of cartridges creates costly material waste and manually applied material is inconsistent.

By using automated metering-rod technology, material waste can be significantly decreased. Automation adds dispensing accuracy and repeatability that is hard to achieve with manual application methods.

Additional Application Information:
- Material: 2K Thermal Paste
- Shot Size: 3-5 cc total dispense
- Material Flow: 2 cc/sec
- Supply Pressure: 300 PSI (21 bar)
- Dispense Pressure: 500 PSI (35 bar)

Rod Metering Advantages:
- Rod displacement provides longer seal life
- Single seal location allows easier maintenance
- Servo-Motor provides high accuracy and repeatability
- Fixed ratio ensures 1:1 ratio is maintained