



SMTA Carolinas Chapter In-Person Technical Meeting to Improve SMT Quality with Accuracy and Force Validation

Charlotte, North Carolina – The Carolinas Chapter of the SMTA is hosting an evening dinner presentation on Thursday, February 22, 2024 from 6:00 - 8:00 pm ET at East West Charlotte in Mooresville, NC with CeTaQ General Manager Michael Sivigny, who will present on ways to improve SMT quality. Special thanks to our site sponsor, East West Manufacturing. Additional information about the event and the registration form is found at the following link: <https://smta.org/events/EventDetails.aspx?id=1829872&group=225181>.

If you don't measure, you don't know. These are appropriate words for the application of statistical methods for measuring machine and process capabilities in SMT manufacturing. Only through diagnostic measurement and analysis of SMT equipment can quality performance improvement be realized. Measured mean values can be used to 'soft' calibrate machines to a higher level of accuracy than available through OEM standard calibrations.

With the complexity of highspeed automation combined with high accuracy requirements for product miniaturization, it is necessary to dig deeper with statistically significant data collection methods to understand and solve the root cause of sub-component machine failures which impact product quality.

When machines are allowed to run in 'maximum accuracy mode', they are more confident and capable of producing today's high reliability electronics with fewer defects. Defect contribution in each process step needs detailed analysis to reduce cost. When costs are minimized, the underlying inherent process efficiencies go way up which contributes to higher productivity and bottom-line profitability. The improvement effects of process optimization have several intrinsic benefits that can easily maintain high manufacturing productivity.

The presentation will discuss individual process step validation methods with real examples of improvement that contribute to DPMO reduction. Examples will include examples from laser marking, stencil printing, dispensing, and placement equipment. While each process step is characterized, the underlying objective is to verify OEM specifications and prove that machines are capable for intended quality performance. This allows engineers to streamline efforts and focus on other areas of process improvement. Register today as space is limited: <https://smta.org/events/EventDetails.aspx?id=1829872&group=225181>.

About the Surface Mount Technology Association

Since 1984 SMTA has been dedicated to sharing practical knowledge in the electronics manufacturing industry. It is an international network of professionals who build skills, share practical experience, and develop solutions in electronics manufacturing, including microsystems, emerging technologies, and related business operations. As a non-profit professional organization, SMTA is dedicated to the advancement of the electronics manufacturing industry by: advancing technical knowledge with conferences & events, training, and published research; enabling member connections & engagement; and supporting a strong industry workforce and providing career resources. With over 50 local chapters/alliance groups in major manufacturing regions around the world, chances are good you can connect with other members near you.

