

## Focus: Wire Crimp Tooling

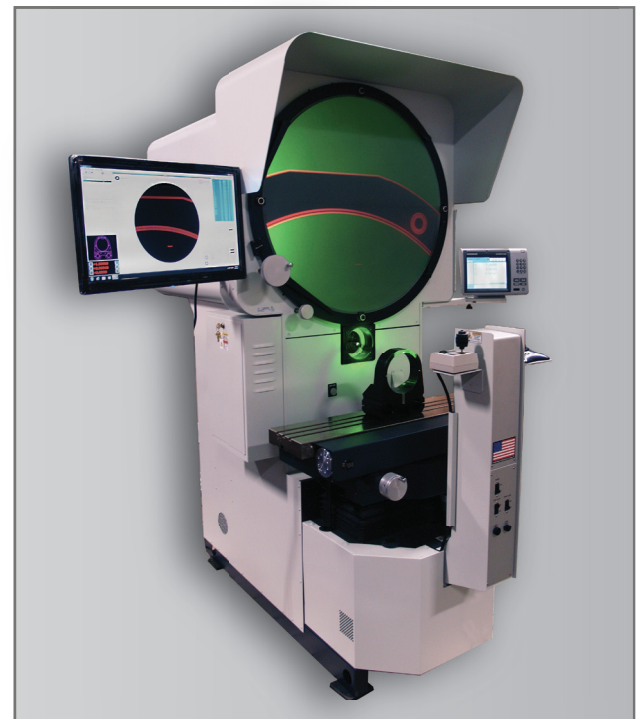
The use of Mylar overlay charts is standard measurement practice in applications using an optical comparator. However, traditional Mylar overlay charts are easily damaged by everyday handling, require significant storage space and if misfiled can lead to downtime in the inspection process. Mylar overlays are also expensive to make and certify, and frequently need to be replaced due to changes in product design.

**The Challenge:** TE Connectivity's (TE) Application Tooling (AT) Division, a manufacturer of manual and automatic systems for wire crimping, sought a measurement and inspection solution that would allow it to reduce inspection time and costs through the use of the latest measurement technologies while still permitting use of its large inventory of traditional Mylar overlay charts for legacy parts.

TE's low volume, high mix production and existing inventory of over 3,500 14" and 30" Mylar overlays led it to look for a modern 30" comparator solution that would accept existing charts, while also offering an automated solution for the future.

### **The CC-30 with eCAD® Advantage:**

CCP's CC-30 optical comparator with eCAD virtual chart technology is ideal for manufacturers looking to reduce inspection time and costs through the use of CAD software, while still maintaining the option to use traditional Mylar overlay charts. The CC-30 offers a large viewing screen, allowing the user to see more of the part at one time and to potentially measure multiple features at once. The addition of eCAD virtual chart technology eliminates the need for traditional overlay charts, by directly projecting the eCAD chart onto the comparator screen. eCAD charts can be created directly from CAD files, safely stored on a secure network for easy access, and called up when needed.



Custom Color CC-30 with eCAD

eCAD's coupling feature automatically moves the CAD overlay along with the comparator stage and screen image, allowing an entire part to be inspected without repositioning or restaging the part.

**The Result:** The CC-30 equipped with eCAD technology successfully reduced inspection time and costs of wire crimp tooling by eliminating the need to create, store and handle thousands of traditional overlay charts. The large 30" viewing screen provided TE operators the ability to use traditional charts for existing part designs while eCAD's coupling feature allowed them to inspect parts without restaging using the high magnification 100x lens for widths of 0.26" and tight tolerances.

CCP representative Holco, Inc. recommended a CC-30 with eCAD that would serve as a dual system, allowing TE to measure all existing overlay charts and new digital charts on one machine. This decision not only saved TE on system costs but also reduced the space needed on the shop floor.

TE stated that the CC-30's eCAD is "very intuitive and user friendly" for easy operation and that "manufacturing technology is great but you need equally matched technology to inspect the part." According to TE the CC-30 with eCAD provided the inspection technology they were looking for, reducing typical inspection times by 40%.



A special thank you to TE Connectivity,  
Application Tooling (AT) Division for the information  
provided in this case study.

[www.te.com](http://www.te.com)



**Technology Presented to TE By:**

Scott Conti-Holco Inc., Ambler, PA

Holco, Inc. is a Premier CCP Representative in Eastern PA,  
Southern NJ, DE, MD and Washington, DC.

[www.holcosales.com](http://www.holcosales.com)