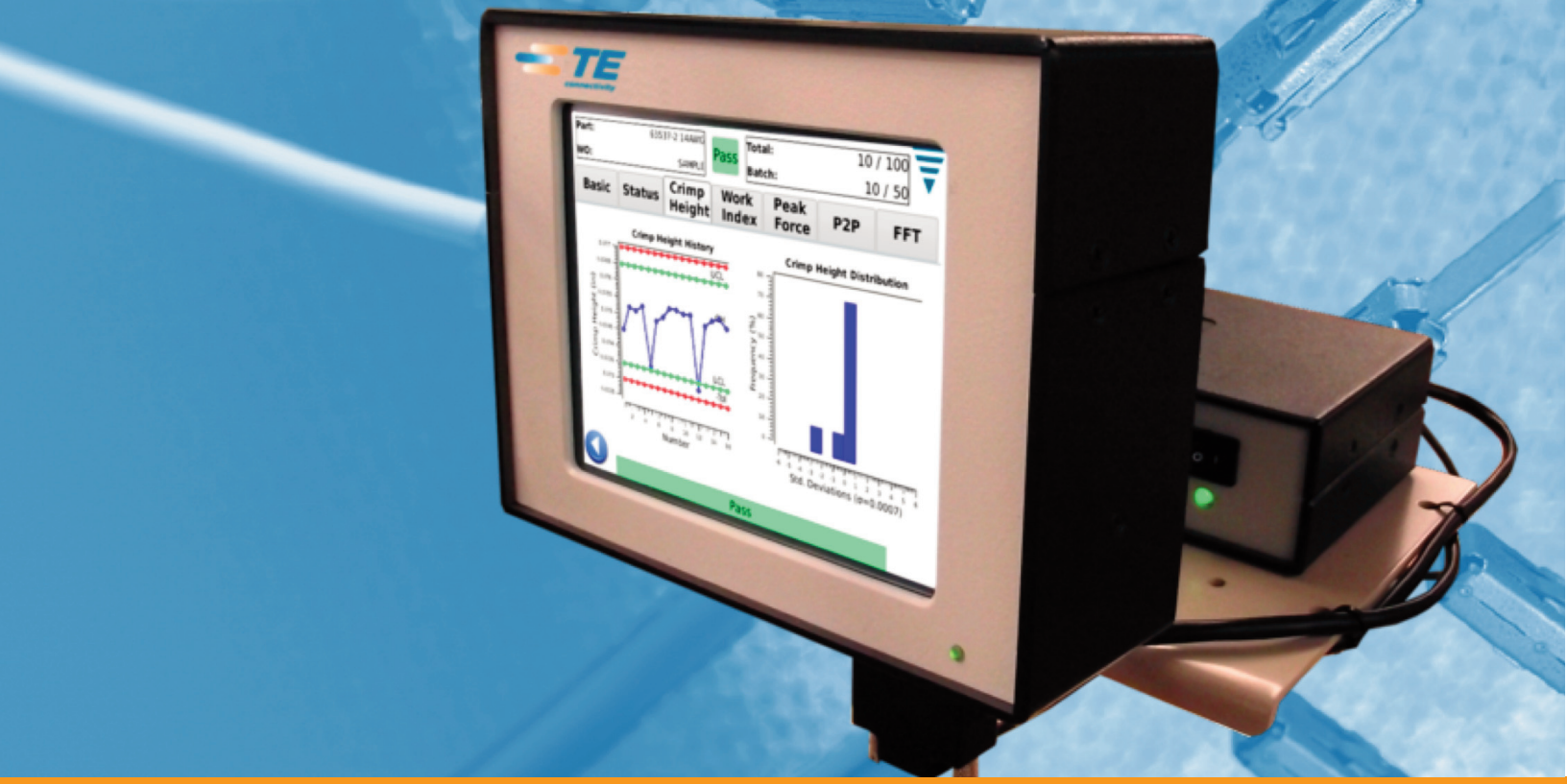


Crimp Quality Monitor II

Fast Facts

The most effective easy to use crimp quality metric, plus real time 100% crimp height measurement.

- Real-time monitoring of every crimp
- Effective for monitoring the crimp of open barrel, uninsulated contacts and terminals. CQM II monitors the entire crimp.
- Calculation of actual crimp height and real-time graphic display
- Touch screen graphical intuitive user interface
- Networking capability
- Multiple language support
- Dimensions:
  Host Module: 170[6.7] W x 126[5.0] D x 58[2.3] H
  Data Acquisition Module: 172.5[6.7] W x 101[4.0] D x 48.4[1.9] H
- Power: 100-240 VAC, 50/60 Hz, 1.5 Amps (max)
- Engineered and manufactured using processes independently certified to internationally recognized quality standards

Simply put, crimp height measurement is the best non-destructive way to ensure meeting the stringent mechanical and electrical properties of the crimp. Crimp Height is one of five different process analysis methods featured in the new TE Connectivity Crimp Quality Monitor II (CQM II). The CQM II analysis methods provide flexibility and ensure quality crimps are produced and faulty crimps are detected.

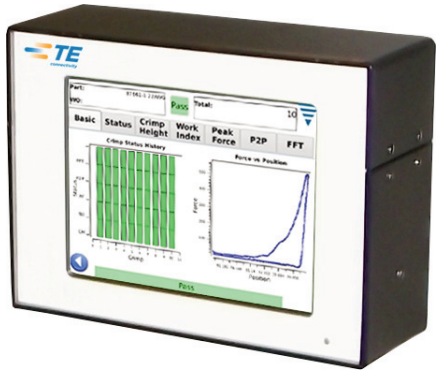
New easy to use, intuitive menus along with enhanced monitoring and graphing lead the improved feature set of the CQM II. Another major enhancement is the ability to use CQM II on non-TE terminators. This new unit can standardize and provide TE Crimp Quality monitoring across your production area by being versatile, precise and convenient.

TE connectivity

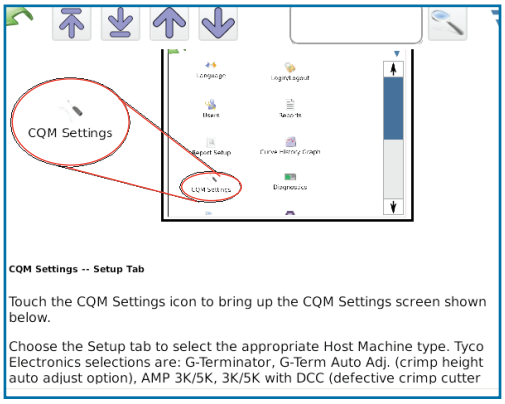
Versatile: On-screen programmability allows flexible and quick job set-up. Enhanced ability to support the use of USB peripherals such as: flash drives for database backup, saving reports, and updating firmware. It also includes a full library of USB printers to allow easy printing of the many graph and report options.

Precise: Crimp height measurements are repeatable to within 0.12mm (0.0005") for every crimp analyzed. CQM II is the only crimp monitoring system that offers continuous Crimp Height analysis for every crimp produced. Five different analysis methods are offered to monitor the process to the fullest extent. This ensures quality crimps are produced and faulty crimps are detected.

Convenient: Setup is simple and fast. Only a few parameters need to be set to get the system up and running. All functions are controlled through the touch screen, with a new intuitive easy to use graphical interface. The system walks you through all the required steps to start production. After production starts, CQM II has more choices to observe and monitor the crimping process than ever before.



Touch Screen Monitor



CQM Settings -- Setup Tab

Touch the CQM Settings icon to bring up the CQM Settings screen shown below.

Choose the Setup tab to select the appropriate Host Machine type. Tyco Electronics selections are: G-Terminator, G-Term Auto Adj. (crimp height auto adjust option), AMP 3K/5K, 3K/5K with DCC (defective crimp cutter

Choose the Help icon from the menu bar to view the customer manual page relating to the current screen. You can also search for topics in the customer manual once you are in the Help function.

Terminator Part Numbers	
Termination Unit	**Part Number**
AMP 3K/40	3-1725950-0
AMP 5K/40	3-1725900-0
AMP 3K/40 w/Stripper Module	1-1725910-9
AMP 5K/40 w/Stripper Module	2-1725910-0
AMP-O-LECTRIC Model G Terminator	2217000-2
AMP-O-LECTRIC Model G Terminator w/Stripper Module	2217001-2
AMP-O-LECTRIC Model G-Splice Terminator	2217002-2
AMP-O-MATIC SF Stripper Crimper II	1320895-7

Retrofit kits are available for field installations or replacements. Contact the Tooling Assistance Center for part numbers.
Ph: 1-800-722-1111, E-mail: tycosupport@custhelp.com

Need More Information?

For information about tooling, call 1-800-522-6752 or e-mail toolsales@te.com.

Analysis Methods

The five analysis methods can be used individually or in combination to provide the most flexible and complete coverage of the crimping process.

CQM II Analysis Methods		
	TE Terminator	non-TE Terminator
Crimp Height	X	
Work Index	X	
Point-to-Point	X	
Peak Force	X	X
FFT Analysis	X	X

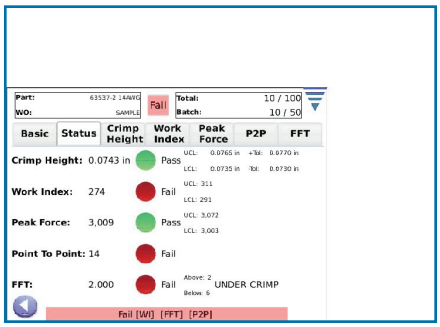
Crimp Height: The crimp height is the measured height of the terminals crimp barrel formed around the wire. Crimps are analyzed to be within the set tolerance zone.

Work Index: The work index is a value that is used to compare the relative position of a specified section of the crimp curve that occurs while the wire and terminal are compressed. Crimps are compared to historical data to determine pass/fail. The work index is a dimensionless value.

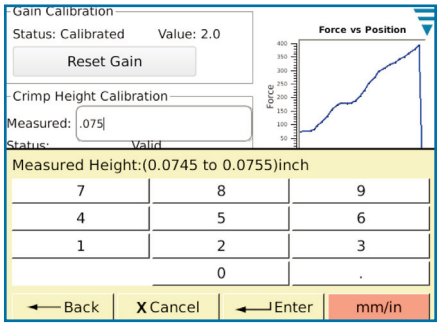
Peak Force: The peak force is the maximum force reading that occurs during the crimp, minus the idle force reading. Crimps are compared to historical data to determine pass/fail. The peak force is a relative value.

Point-to-Point (P2P): A series of points are established along the crimp curve in the P2P analysis. During production each point is compared to its upper and lower control limits, and if no points are out of their limits the analysis method considers the crimp to be a PASS crimp.

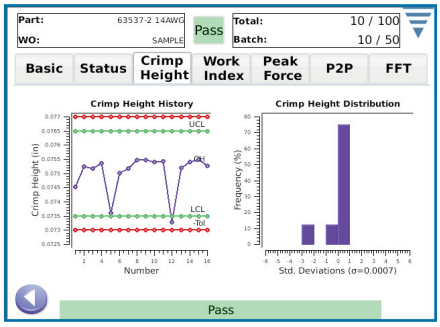
Fast Fourier Transform (FFT): The FFT analysis method converts the force profile into its component frequencies. It computes mean and standard deviation for each of the lowest 32 frequencies from the learn crimps updates the mean and standard deviation with each good crimp. If 4 or more frequencies are outside the tolerance limits, the crimp status is FAIL. Otherwise the crimp status is PASS.



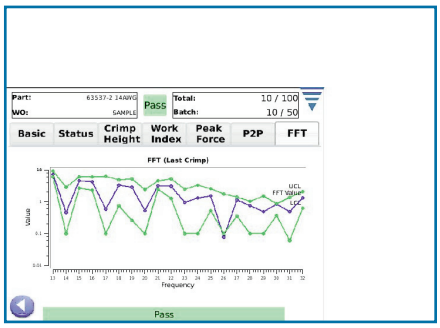
Basic Analysis Monitoring



Crimp Height Entry



Production Crimp Height



FFT

Technical Documents

ISO-9001:2000 and Telecommunications Industry Standard TL 9000

Customer Manuals

409-10100 CQM II

Need More Information?

For information about tooling, call 1-800-522-6752 or e-mail toolsales@te.com.

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