

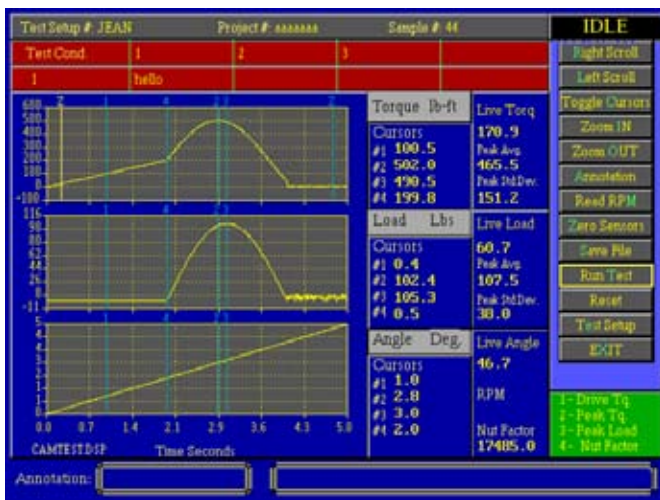
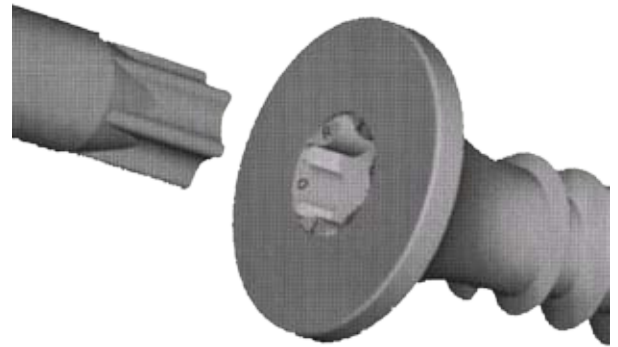
■ Fastener Test System: Calculation of Torque-Load-Angle Characteristics

**Highlights:**

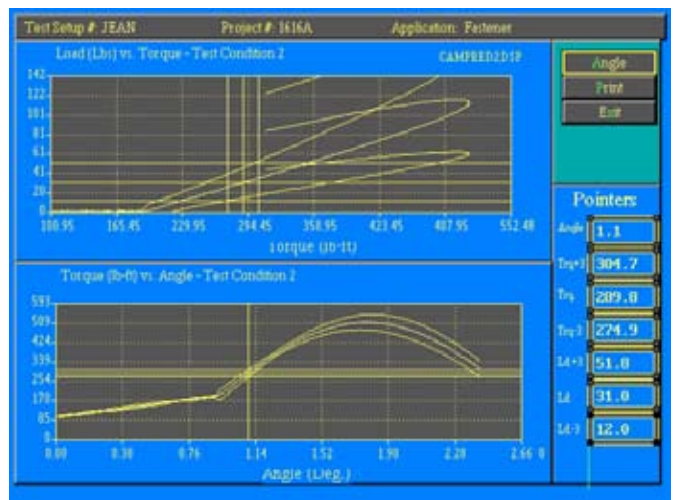
- Collects and calculates critical product information
- Data consolidation and analysis determines product variation statistics
- Completely user-configurable data collection and analysis
- Critical torque and load points are identified using Signature Analysis
- Tests and product data stored in a database
- HPGL graphics printing of all data plots

In order to meet customer specifications for fastening products, a test system is configured to measure the mechanical characteristics of a bolt while it is tightened to the point of fracture (i.e. failure occurs). By repeating this process for a statistically significant sample size, it is possible for the manufacturer to consolidate all data for a certain product in order to provide not only average mechanical characteristics, but also values for the statistical variations of mechanical parameters for the product (std. deviation, std. error, etc.).

Torque, compressive load and rotational angle are collected during a test with all data collection parameters (sampling rate, total test time, triggering value, sensor selection, etc.) being completely user-configurable in order to accommodate hundreds of product types.



Testing and Data Collection Display



Data Analysis Display (1 of 27)