

EIB-E (LH 482)



The entanglements in the yarn are responsible for holding the filaments together during the fabric formation so we can work with the yarn. Consistent entanglement-count and entanglement-uniformity are the most important characteristics of an entangled yarn.

The Electronic Inspection Board, EIB-E offers entanglement analysis based on the dynamic yarn diameter measurements. A CCD camera is used to measure the diameter values with 3.25micron precision when the yarn is moving at test speeds up to 300m/min.

As the yarn passes in front of the camera, the Accu-Count Entanglement Software, ACE counts the entanglements and searches for the missing ones in the yarn. The ACE report includes the number of entanglements per meter, standard deviation, coefficient of variation, the maximum skip (no show length) and the skip count. Accept/Reject limits can be defined by the operator.

The test results and the diameter graphs are saved in common file formats. The profile of any individual package or the entire test can be viewed at any time. This unique feature provides the ability to look at the entanglements and verify how the entanglements are counted, which is not possible with any other entanglement counting systems in the market.

The unique camera design provides the ability to test natural and synthetic yarns as well as high performance yarns including carbon, glass or hybrid yarns that cannot be tested with capacitive based systems.

EIB for ENTANGLED YARNS

FEATURES:

- Dynamic test instrument for yarn entanglement analysis based on diameter measurement
- Ability to measure every 0.5mm of the yarn with 3.25micron precision
- Optical measurement enables testing high performance yarns such as carbon, glass and hybrid yarns, which cannot be tested with capacitive based systems
- Variable yarn speed from 20-300m/min
- Maintains constant Input Tension up to 30g on the running yarn
- Windows XP based, easy-to-use Accu-Count Entanglement (ACE) software features:
 - Intuitive user interface
 - Automatic test parameter setup
 - Entanglement statistics for average, min and max entanglement/meter, standard deviation, CV% and maximum skip (no show) length
 - Constant monitoring and detection of yarn sections that are missing entanglements
 - Auto or operator defined accept/reject limits to sort out the packages
 - Ability to view the diameter profile and test data of multiple or single packages
 - Automatic saving of the test settings, results and diameter graphs
 - Easy to share test reports in common file formats

AVAILABLE TEST OPTIONS:

- Package Changer for automatic operation
- Yarn Analysis Software, YAS is available to measure and classify the spun yarn defects by their diameter and length

