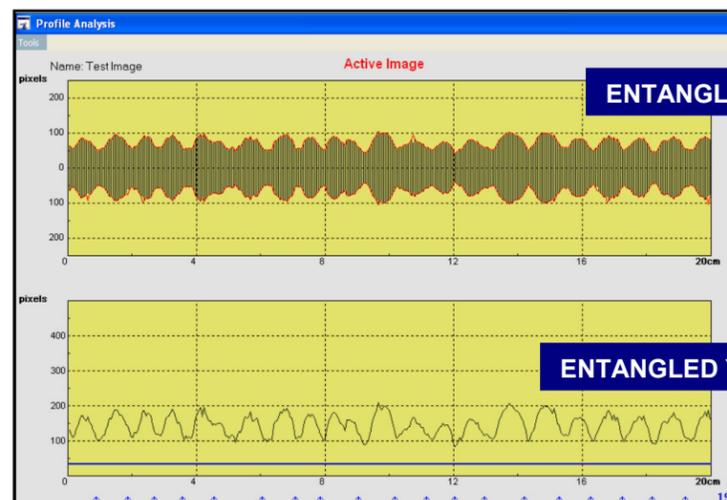## FEATURES

- Dynamic test instrument for Entanglement Analysis based on yarn diameter measurement

- Ability to measure every 0.5mm of the yarn with 3.5micron precision

- Variable yarn speed from 20-300m/min

- Maintains constant Input Tension up to 30g on the running yarn

- Windows based, easy to use Accu-Count Entanglement (ACE) software to analyze the entanglements

- can be equipped with a Package changer for continuous operation

BENEFITS

- Constant monitoring and detection of yarn sections that are entangled and missing entanglements

- Automatic test parameter setup

- Entanglement statistics for average, min and max entanglement/meter, standard deviation, CV% and maximum skip (no show) length

- Accept/reject limits to identify good and bad 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
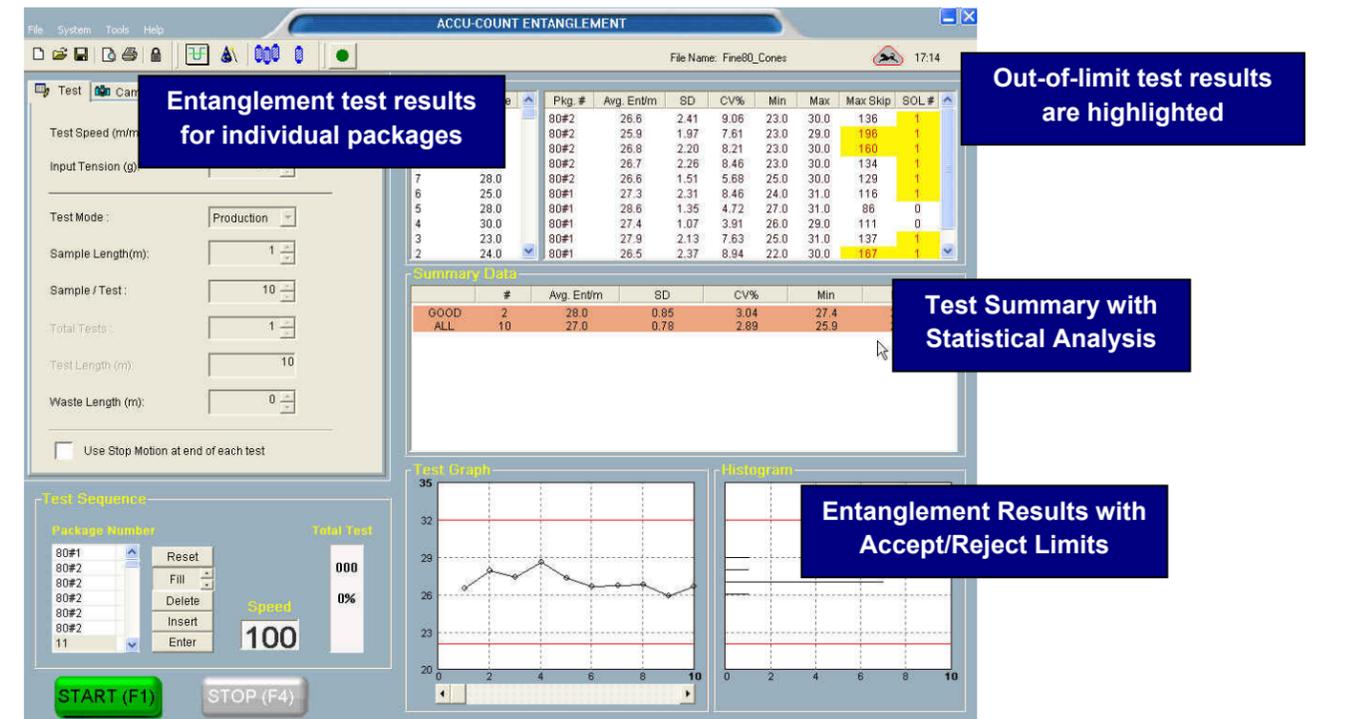
- Easy to share test reports in common file formats

ACCU-COUNT ENTANGLEMENT SOFTWARE (ACE)

This software is Windows based and it is very easy to use. At the end of the test, it displays the statistics for individual test packages and the summary for the entire test.
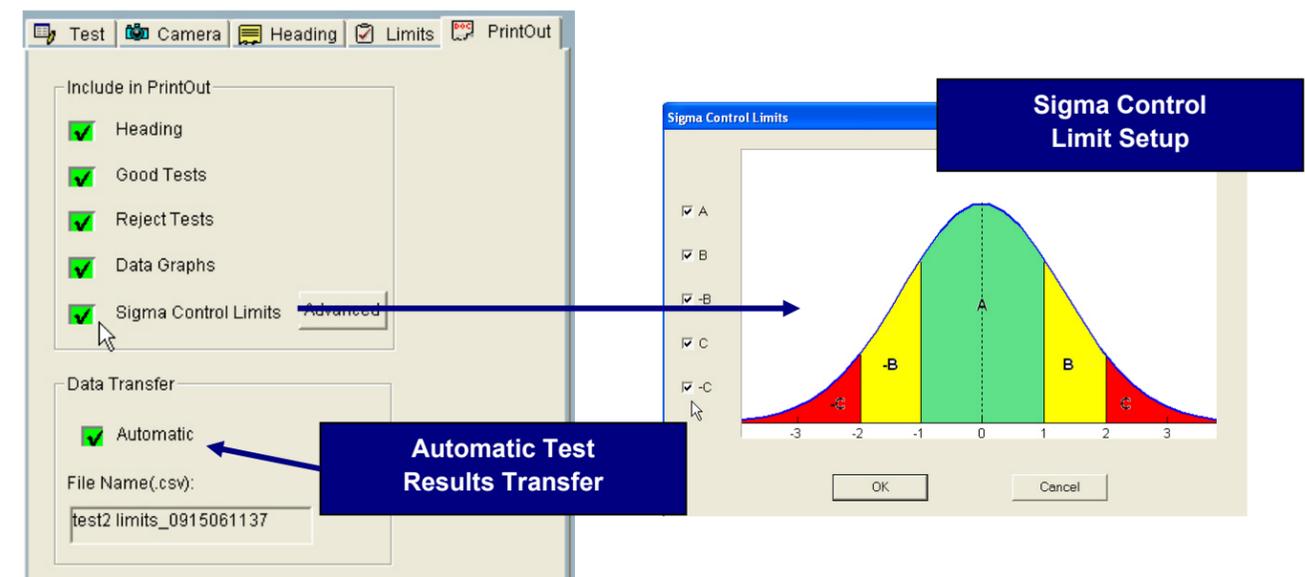

Entanglement test results for individual packages

Out-of-limit test results are highlighted

Test Summary with Statistical Analysis

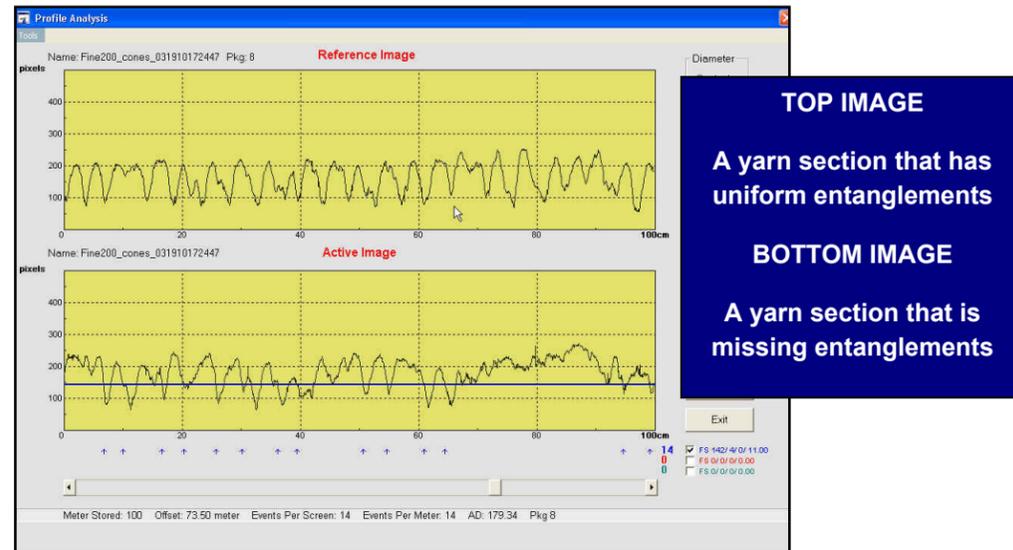Entanglement Results with Accept/Reject Limits

ENTANGLED YARN PROFILE

ENTANGLED YARN DIAMETER GRAPH

Sigma Control Limit Setup

Automatic Test Results Transfer

ACE CAN SHOW and COMPARE THE ENTANGLEMENTS

ACE is the only software that can show you the entanglements that get counted. It will also allow you to compare different packages or the good/bad sections of the same package on the same graph.

TOP IMAGE

A yarn section that has uniform entanglements

BOTTOM IMAGE

A yarn section that is missing entanglements

SPECIFICATIONS

Ordering Information: LH-482 EIB-E

Instrument Size: 47 inches (119cm) x 30 inches (76cm) x 63 inches (160cm) (*)

Weight: 485 lbs (220kg) (*)

(*) specifications are subject to change.

CONNECTIONS

Electrical: 115/220 VAC 50/60Hz

Air: Instrument quality, clean air at 60psi (3bar) required

Contact us today for information on this or any of our products

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Please visit our website **www.Lawsonhemphill**.com

EIB-E
ELECTRONIC INSPECTION BOARD
with ACCU-COUNT ENTANGLEMENT (ACE)

LAWSON-HEMPHILL
Smart Quality Control

INTRODUCTION

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 3.5micron 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 variation, coefficient of variation, the maximum skip (no show length) and the skip count. The software can mark the good and the bad packages based on the Accept/Reject limits.

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.