CIS 300

LENZING INSTRUMENTS

The number of crimp is an essential parameter of staple fiber for its subsequent processing performance. Most often, it is counted manually fiber by fiber. If one considers that across the tow there are hundreds of thousands of single fibers and that the variation of the number of crimp over the width of the tow can easily be more than 300 % - it becomes obvious that such a manual method never can come even close to a reliable judgement of the real crimp numbers and their actual variation over the tow.

CIS 300 determines the main (average) crimp number and analyzes the complex crimp distribution over the entire width and length of the tow. The micro crimp and the long crimp are analyzed specifically. That allows an immediate feedback and a perfect, representative control of the entire crimp variation in your staple fiber tow. 100 % of the production history is recorded and can easily be recalled from the professional data base.

That means in case of claims that you can provide much more determined investigations in terms of crimp variations.

CIS 300 allows for prompt response to typical problems encountered during the crimping process, which presents an opportunity for cost savings. These are also achieved by the possibility of accurately identifying which bales are impacted by defectively crimped fibers rather than downgrading entire production batches. Improved and consistent quality perceived by customers is a benefit for your business, as it enhances your image and reduces claims related to crimp inconsistencies.

qualityaustria
SYSTEM CERTIFIED
ISO 9001:2015   No.00894/0

CIS 300

CRIMP INSPECTION SYSTEM

Scope:
On-line crimp inspection of the passing tow directly in the production; analyzing the average crimp count (base crimp), crimp distribution, micro crimp, long crimp and edge crimp. It displays the crimp variations in down- and cross tow directions. The CIS 300 concept allows to fully control an entire fiber production plant with different lines

The CIS 300 concept allows to fully control an entire fiber production plant with different lines using
• either the corresponding number of optical sensors per line
or
• cameras traversing the tow (suitable for larger tows) which are connected to only one central control unit.

Method:
The tow is inspected for its crimp characteristics by means of high resolution industrial cameras, which monitor the passing tow between dryer and cutting machine.

Results:
Data are displayed and analyzed by means of a powerful data base tool enabling also customized reports.

Camera application options:
• Onto a fixed frame: a number of cameras monitor the tow simultaneously
• On a traversing unit: automatic and periodic movement of one camera from one side of the tow to the other
• On a fixed frame for off-line measurements in the laboratory

Crimp count rate:
Up to 30 measurements /min, fully parallel for each sensor

Distance to fiber tow:
Approx. 100 mm from sensor to tow surface

Max. tow velocity:
Dark colour tow: 60 m/min
Bright colour tow: 200 m/min

Scan width:
The captured image area is 4.5 x 6 cm

Measuring range:
3 - 20 periods/cm
(7 - 50 periods/inch), higher ranges on request

Data presentation:
Easy data accessibility and customized reports. Direct data presentation on device front-end

Evaluation unit:
PC with crimp evaluation software and powerful data base

Line infrastructure:
I/O interfaces for external Start/Stop/Pause/Alarm relays for each fiber line

Power supply:
Line infrastructure:
230/115 VAC ± 10 %
50/60 Hz, 1400 W

Dimensions sensor head:
Length: 120 mm
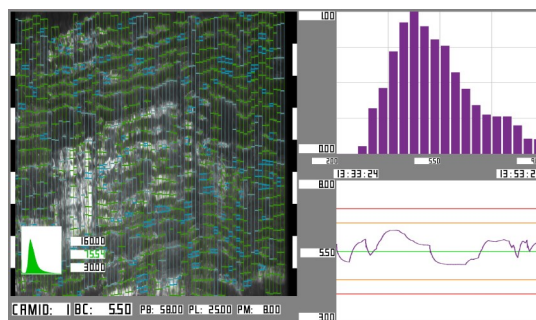Width: 240 mm
Height: 350 mm
Weight: 10 kg

Dimensions control cabinet:
Length: 400 mm
Width: 500 mm
Height: 210 mm
Weight: 140 kg

Optionally available:
• Remote display of crimp count
• Ethernet connection to host computer
• OPC UA interface

Technical data and pictures are subject to change.

LENZING INSTRUMENTS

Textechno
textile testing technology