

DiamLength

ACCURATE AND FAST DIAMETER AND LENGTH MEASUREMENT

DiamLength is an automated fiber diameter, length and curl measurement instrument. Measuring fiber diameter as small as 1 μm and fiber length as long as 20 mm, it can measure up to 40,000 fibers in less than a minute. It is ideal for measuring glass fiber, carbon fiber, basalt fiber, aramid fiber, PP fiber, polyimide fiber, PET fiber and more. This powerful tool saves time and money while preventing measurement errors and improving quality control.



COMPANY

DiamLength is developed by BSC Electronics PTY LTD, a world leader in fiber measurement technology and has been developing and manufacturing instruments for over two decades.

TECHNOLOGY

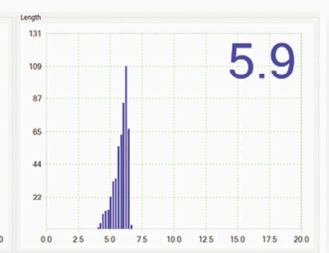
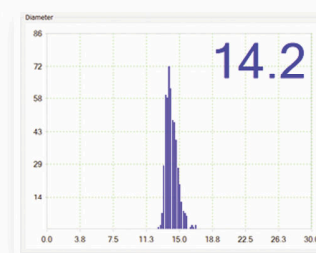
DiamLength uses digital camera technology and image processing. The fibers are measured in water and traverse across a set of imaging plates, measuring an area of 34 x 25 mm. Sophisticated algorithms classify the fibers and measures their vital dimensions.



Identifying
long fibers



Accurate fiber
following and
analysis



Analysis of 6 mm chopped PP fiber



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QUICK AND SIMPLE PROCESS

The fibers are dropped into the glass beaker of water, the instrument will disperse, measure and dispense the fibers after the measurement.

KEY FIBER CHARACTERISTICS

Fiber diameter affects the flexural properties of fiber reinforced composites and the uniformity of the glass weave for printed circuit boards.

Fiber length affects the processability of fiber composites, strength, modulus, impact resistance and wear resistance.

KEY BENEFITS

- ✓ Understand fiber properties to a level that has not been possible before.
- ✓ Greater control of fiber quality and avoid costly mistakes at the manufacturing stage.
- ✓ Easy to use with little to no operator bias.
- ✓ Accurate and repeatable results.
- ✓ Records images and generates trending information for fiber mean and distribution.

SPECIFICATION

Technology	Digital camera
Measurement medium	H2O
Length range	0.2 to 20 mm 0.02 to 3 mm (M version)
Diameter range	3 to 250 μ m 1 to 50 μ m (M version)
Maximum measurement rate	Up to 40,000
Precision of mean	0.1 μ m
Reproducibility	< 0.1 μ m
Image size	25W x 34L mm
Typical measurement time including sample preparation	1 - 3 minutes
Measurement parameters	Diameter, length, curl
Dimensions	420W x 400H x 225D
HTC / HS code	90314990 / 9031

COMPARISON

DIAMSCOPE

DIAMLENGTH

DIAMLENGTH M

Diameter (μ m)	0.2 - 170	3 - 250	1 - 50
Length (mm)	0.05 - 0.3	0.20 - 20	0.02 - 3
Bowl capacity (ml)	100 - 200	1000 - 2000	1000 - 2000

CONTACT US FOR A FREE SAMPLE MEASUREMENT

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