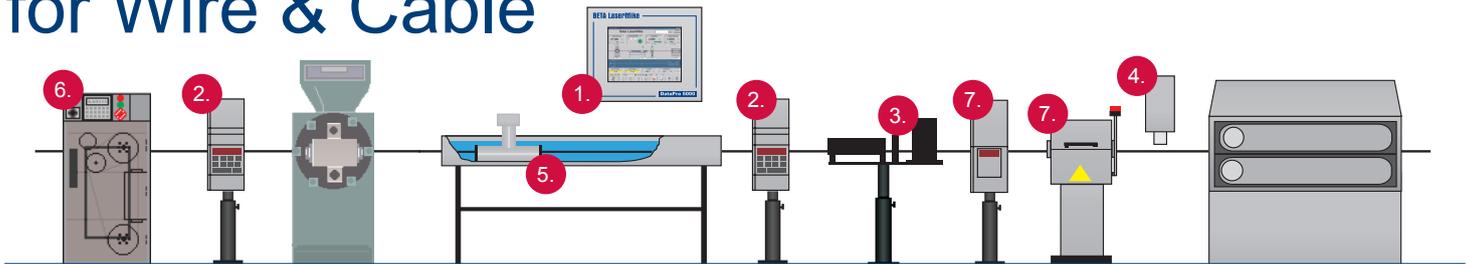


# Precision Measurement & Control Solutions for Wire & Cable

# BETA LaserMike

An NDC Technologies Brand

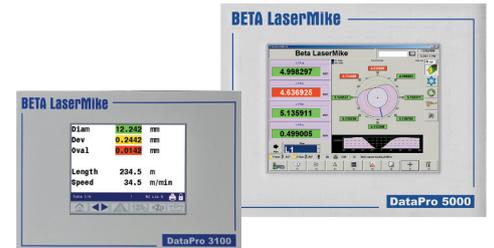


## 1. Process Control & Data Management Systems

### DataPro 5000 and 3100

Capture product and process data from Beta LaserMike gauges in real time to efficiently control processes at every step, from start-up through production to final quality checks.

- ▶ High-end, fully featured and mid-range process controllers
- ▶ Intuitively view dimensional and process data via easy-to-use, touch-screen interface
- ▶ Use closed-loop control, SPC data analysis, and customizable trend charts to continuously improve product quality and reduce manufacturing costs
- ▶ Create customizable reports and perform data logging to document product and process quality
- ▶ Get flexible communication capabilities including digital, analog, relay contacts, serial, parallel, USB, Ethernet, and VGA



## 2. Diameter & Ovality Measurement Systems

**NEW!**

### AccuScan 6000 & 5000 Series

Get the highest single-scan accuracy in the industry for the most reliable diameter and ovality measurements to ensure your wire and cable products meet tight design and quality specifications.

- ▶ Four- and two-axis gauges provide ultra-fast measurements up to 9600 scans per second
- ▶ AccuScan 6000 Series offers the most comprehensive measurement coverage for more accurate average diameter
- ▶ AccuScan 6000 Series provides ovality accuracy up to 100% unlike three-axis gauges
- ▶ AccuScan 6000 Series delivers the highest flaw detection accuracy with 25% improvement over three-axis gauges
- ▶ AccuScan 6000 Series measures diameters up to 50 mm; AccuScan 5000 Series measures diameters up to 80 mm

High-Speed  
2400 scans/  
sec/axis



## 3. Non-Contact Eccentricity Measurement System

### CenterScan 2010

Accurately, reliably measure the insulation diameter and conductor eccentricity of your wire and cable to maximize product quality and reduce production scrap.

- ▶ Perform eccentricity, diameter, and flaw detection measurements in one gauge head
- ▶ Easily integrates into your production environment with built-in flexible communications
- ▶ Benefit from compact design for installation flexibility on your production line
- ▶ Easily access, view, and configure gauge functions via optional ultra-bright display



## 4. Non-Contact Length & Speed Measurement System

### LaserSpeed®

Measures the length and speed of your products with laser precision for significant quality, productivity and manufacturing savings. Ideal replacement for contact encoders.

- ▶ Get unmatched  $\pm 0.03\%$  accuracy for depth of field up to 100 mm and full velocity range
- ▶ Eliminate product give-away and shortages for real production savings
- ▶ Prevent marking or damage to your products and improve quality with non-contact method
- ▶ Measure forward, reverse, and true zero speed on all product types regardless of shape, color, and texture

**NEW!**  
0.03%  
Accuracy



MID Certified 2014/32/EU

## Lay Length Measurement System

### LayScan

Accurately, consistently measures the lay length of twisted pairs at the cabler and twinner to improve product quality and performance.

- ▶ Perform high-speed measurements on lay lengths up to 25.4 mm with 0.025 mm accuracy
- ▶ Acquire, view, and report critical lay data via user-friendly control system
- ▶ Use FFT analysis to effectively monitor lay variations



Measured by Commitment

## 5. Capacitance Measurement Systems

### CapScan

Realize greater accuracy and consistency between in-process and post-process capacitance measurements to increase quality yields and product output.

- ▶ Obtain accurate readings on wet or dry trough installations at line speeds up to 3000 m/min
- ▶ Benefit from enhanced accuracy via unique self-balancing bridge, auto gain, and auto self-calibration
- ▶ Use fast Analog output for FFT/SRL analysis to eliminate costly SRL failures with DataCom, Coaxial, and any high-frequency (HF) cable products
- ▶ Get flexible connectivity via Profibus, DeviceNet, RS-232, and Analog



## 6. Wire Preheating Systems

### Preheaters

Eliminate quality issues such as insulation gaps and cracks in primary cables from uniform, in-process wire heating.

- ▶ Preheat products from 0.28 – 2.8 mm OD at line speeds up to 2500 m/min
- ▶ Get maximum operational flexibility with external temperature controller interface that compensates for low-speed applications and varying input temperatures
- ▶ Protect personnel and equipment with wire break detection, current overload sensors, and a concealed wire path behind the electrically locked door



## 7. Fault Detection Systems

### 3-Axis Lump & Neckdown Detectors

Detect lump and neckdown flaws in products with highest achievable precision for maximum quality control.

- ▶ Detect flaw height down to 0.02 mm at line speeds up to 3000 m/min.
- ▶ Achieve higher accuracy:  $\pm 0.011$  mm on LN3015 and  $\pm 0.018$  mm on LN3040 (or  $\pm 3\%$  max flaw height)
- ▶ Accept a range of inputs and get more built-in communications for easy integration



### Spark Testers

Continuously and quickly detect insulation faults, such as bare patches and pin holes, and produce the highest quality products.

- ▶ Meet virtually all international spark testing standards
- ▶ Protect personnel and equipment with EHT warning lamps, interlock safety switches, ozone extraction ports, and current limiting circuits
- ▶ Get efficient operation from grounding chains that remove excess charge on cable, easy threading at startup, and unique bead chain design for individual strand replacement
- ▶ Available in standard models for a variety of applications and high-frequency models for higher line speeds

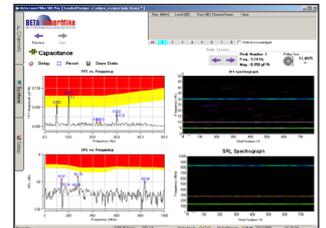


## On-Line Structural Return Loss Prediction

### SRL Pro

Quickly, reliably identify potential causes of SRL problems on Datacom, Coaxial, and HF cable products in real time to avoid costly product quality, downtime, productivity issues, and material losses.

- ▶ Resolve SRL problems before the production run is completed to ensure your cable complies with critical specifications
- ▶ Capture and archive FFT and SRL performance trend data for the entire production run and for future analysis
- ▶ Take corrective action immediately before the product moves to post-process cable inspection and testing phases



## Off-line Diameter & Ovality Measurement System

### BenchMike

With over 15,000 units installed worldwide, BenchMike is the Industry's leading off-line diameter & ovality measurement system. Get high accuracy, reliability and ease of use in this bench-top system.

- ▶ Measure diameters to 50 mm with  $\pm 0.9$   $\mu\text{m}$  accuracy and  $\pm 0.3$   $\mu\text{m}$  repeatability
- ▶ Benefit from auto-compensation to maintain accuracy throughout the measurement range
- ▶ Employ tolerance checking to quickly alert operators of out-of-tolerance conditions
- ▶ Use Library list capabilities for quick, easy storage and access to product recipes
- ▶ Select from a complete range of part-holding fixtures

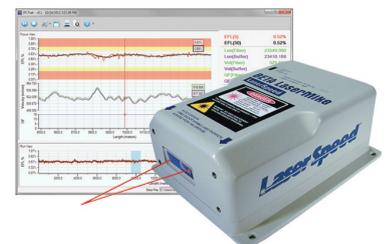
NEW Larger High-Resolution Display



## Excess Fiber Length (EFL) Measurement System

Produce loose tube fiber and fiber ribbon cable more efficiently, at higher quality, and at lower cost.

- ▶ Eliminate time-consuming and costly cutting, exposing, and cleaning of cables to calculate excess fiber length-to-jacket ratio
- ▶ Efficiently, accurately, and reliably control excess fiber length in real time
- ▶ Compare fiber bundle-to-jacket ratio with 0.01% (0.1 per mil) resolution
- ▶ Use SPC to improve product quality and reduce process variations to minimize waste and rework
- ▶ Create and store unlimited production recipes for easy production run setup



# BETA LaserMike

An NDC Technologies Brand

**USA**  
Ph: +1 937 233 9935  
Fax: +1 937 233 7284  
sales@betalasermike.com

**Europe**  
Ph: +44 1621 852244  
Fax: +44 1621 856180  
sales@betalasermike.com

**China**  
Ph: +86 21 6113 3617  
Fax: +86 21 6113 3616  
sales@betalasermike.com

[www.ndc.com/betalasermike](http://www.ndc.com/betalasermike)