

# SIKORA EXTRA

Your magazine for Wire & Cable | Optical Fiber

wire

Düsseldorf



# SIKORA

## MOVING FORWARD

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CENTERVIEW PRO – Proven tradition on a new level 08



Dear readers,

It's that time again: wire is opening its doors. From April 15 to 19, the leading trade fair for the wire & cable market will present the latest trends and technologies to international trade visitors, and SIKORA will be there as well. We cordially invite you to visit us at our booth A41 in hall 9.

This year, our motto is "Moving forward". You can expect to discover 3 new products live at our stand. In this issue, you will gain insight into the features that make our new LASER PRO and CENTERVIEW PRO device series stand out and how the LM SMART impresses across the board. Take a virtual tour of our stand and see what else awaits you at the trade fair.

Dr. Christian Frank  
CEO SIKORA AG



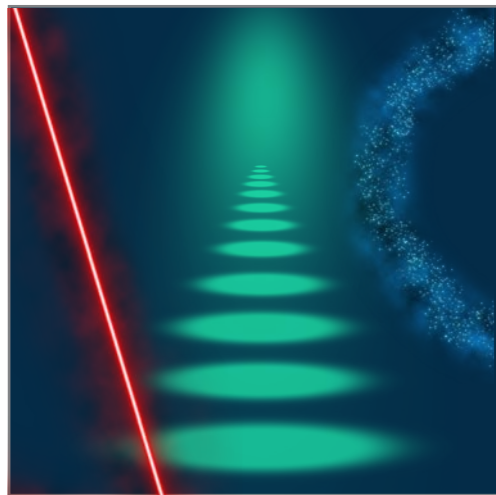
We also report on how the X-RAY 8700 NXT can be integrated both vertically and horizontally into CV lines and guarantees the highest quality of energy cables. There is also something new to report on the service side: we have expanded our product portfolio and can now offer fixed price repairs for many measuring systems. This saves you time and money. More on this in this issue.

We hope to see as many of you as possible in person at wire, and we look forward to exciting discussions with you. Until then, we hope you enjoy reading this issue!

Sincerely,

Holger Lieder  
Executive Board SIKORA AG

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# SIKORA – MOVING FORWARD

SIKORA with several innovations at the wire 2024 (hall 9, booth A41)

SIKORA, manufacturer of innovative measuring, control and sorting technologies, will present the entire range of current, improved and new products for quality control and cost optimization in cable production at wire 2024 in Düsseldorf from April 15 to 19. Visitors can look forward to three world premieres.

„Moving forward“: World premiere of new products

At wire 2024, SIKORA will unveil 3 innovative measuring devices that redefine the segment of measuring technology for cable production lines. The accompanying marketing campaign "Moving forward" underlines SIKORA's commitment to offering its customers future-oriented solutions. The campaign presents the 3 new systems as a promise of further development and as a statement for progress. "With the new products, we are bringing movement to measuring technology. Our customers can look forward to reliable, future-oriented products that continue to lead the way with their performance and make a significant contribution to increasing productivity and cost efficiency in production," says Katja Giersch, Head of Corporate Communications at SIKORA. Visitors can familiarize themselves with the advantages of the systems live at the exhibition stand.



We are looking forward to welcome you in our "Moving forward lounge" for interesting conversations with culinary delights

**PURITY SCANNER ADVANCED:** Pure plastic pellets for the insulation of power cables

Particularly in the production of high-voltage and submarine cables, it is essential that contamination, which can occur during production, does not enter the insulation of power cables. The PURITY SCANNER ADVANCED uses X-ray technology and optical cameras to detect contaminants such as metal down to 50 µm in the pellet and automatically sorts out impurities. The function and benefits of the system will be clearly demonstrated at wire using a hybrid exhibit.

**X-RAY 8000 ADVANCED/NXT:** remarkably efficient in CV lines

The X-RAY 8000 has been providing precise measurements and maximum reliability for over 30 years. At wire, SIKORA presents the 3rd generation measuring system based on X-ray technology, X-RAY 8000 ADVANCED, which measures the wall thickness, eccentricity and diameter of cables in CV lines directly after the crosshead. It therefore provides measuring values for centering and control without delay.

**X-RAY 6000 PRO:** Fascinating in insulating and sheathing lines thanks to cost savings

The X-ray measuring device X-RAY 6000 PRO continuously provides measuring data on wall thickness, eccentricity and diameter in insulating and sheathing lines. These are clearly displayed on the monitor of the ECOCONTROL 6000 processor system. The X-RAY 6000 PRO can be used either after the extruder, between two cooling sections or at the end of the line for cold measurement.

**Service To Perfection:** For reliability and availability of SIKORA systems

When it comes to the reliability and availability of SIKORA systems in the production line, the SIKORA service team in Bremen and worldwide subsidiaries are always there for their customers. At wire, SIKORA presents the entirety of its service portfolio. From the installation and commissioning of the devices to consulting and training, always tailored to individual customer requirements.

**FIBER Series 6000:** Distinctive measuring rate for optimum tension measurement

From the measurement of diameter, fiber position, vibration frequency, temperature and spinning to the detection of airlines and lumps, the innovative measuring devices monitor and control the entire drawing process. The improved measuring rate of the FIBER TENSION 6003 of up to 50 kHz enables optimum tension measurement – just perfect for premium glass fibers.

# LM SMART – RETHINKING LENGTH MEASUREMENT

Exceptionally accurate and non-contact length measurement – permanent and reliable

The LM SMART stands for smart length measurement with extraordinary accuracy of 0.05 %. Compared to conventional contact-based solutions, there is no slippage or wear. Once the device has been configured, no further calibration is required. The LM SMART measures accurately and reliably over time.

**Benefit from the exact length**  
Length measuring devices are used to ensure that the required wire or cable length is accurate. Short or excess length leads to yield losses. If the production length is reduced by just 0.1 %, the LM SMART length measuring device pays for itself in just a few months.



**Function: so simple and smart**

The LM SMART is based on the market-proven laser doppler measuring method and therefore functions largely independent of the color, surface quality and diameter of the product. Two laser beams are used to direct light onto the passing product surface. The beams overlap and create a stripe pattern on the object, from which the speed and thus the product length traveled over time is precisely determined.

**Your personal benefit**

The LM SMART offers precise length measurement and ensures that the required product length is maintained. Thanks to its very compact design, this device can be easily integrated into existing lines. No slippage, no

maintenance and only a single calibration. This impressive system ensures smooth, continuous measurement independent of the material, which allows for use on many different products. The long service life also ensures maximum availability of the LM SMART.

TYPICAL FEATURES OF THE LM SMART

- laser protection class 3B (laser class 1 optional)
- Comfort stand (optional) for easy set-up and adjustment
- ECOCONTROL display unit (optional) provides a clear display of the produced length and line speed
- Direction recognition via system signal



# LASER PRO – NEW STANDARDS IN DIAMETER MEASUREMENT

Three innovative models with 5 extended benefits for product diameters from 0.1 to 51 mm (.0039 to 2.0079")

**Accurate and repeatable measured values**

The diffraction analysis in combination with pulse-controlled laser diodes results in an impressive 500,000 measuring points per second per measuring axis in the entire measuring field. This results in 5,000 accurately measured values per second per measuring axis. This ensures that the values supplied are both accurate and repeatable.

**Precise measured values despite vibrations**

Thanks to the extremely short exposure time of less than 1/1,000,000 seconds, the individual precisely measured values per second per axis are captured with maximum image sharpness. This ensures absolute measuring accuracy, even at high line speeds with product vibrations. Each individually measured value achieves an extraordinarily high single value accuracy.

**Robust technology and high availability**

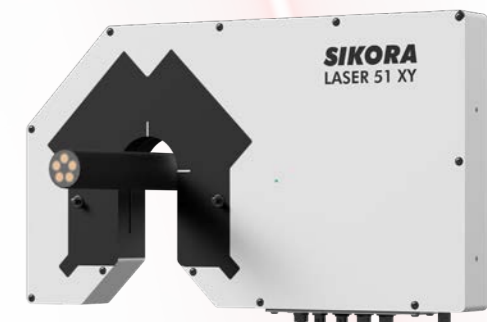
The non-contact measuring technology of the LASER PRO works entirely without moving parts and is therefore maintenance and wear-free. A single calibration before delivery is sufficient to guarantee precision for the lifetime of the device. The availability of the laser measuring heads is 99.8 %.

**FFT analysis for detecting irregularities during extrusion**

The LASER PRO offers the option of FFT analysis to detect periodically recurring variations in cable parameters as well as predict the expected return loss (SRL). These are important tools for producing high-quality cables and detecting irregularities during cable extrusion.

**Slim design with swivel concept**

The measuring heads of the LASER PRO family provide the ultimate functionality with their compact and slim design. The optical components are located in protected areas. The diffraction analysis detects unavoidable, gradually occurring contamination in real time and reports it. All models are designed to be open at the bottom so that neither water nor dirt can fall into the measuring head. The swiveling measuring head concept allows the device to be swiveled out of the working area if required.



The measured values of the LASER PRO are displayed on the ECOCONTROL. Trend data, statistical functions, FFT and SRL analyses can also be viewed. The SET POINT control module can be used to control the diameter to the setpoint or minimum value.

# CENTERVIEW PRO – PROVEN TRADITION ON A NEW LEVEL

Reliable eccentricity, diameter and ovality measurement thanks to combined inductive and optical measuring method

**Precise measured values thanks to an impressive measuring rate**

The new model series is based on the trusted CENTERVIEW predecessor – a benchmark that is used thousands of times worldwide. The system measures the cable continuously over 4 axes. The mathematical evaluation of the diffraction signal results in an impressive 500,000 measuring points per second per measuring axis. These are summarized in 5,000 high-precision measured values per second per measuring axis. Combined with an extremely short exposure time of less than 1/1,000,000 seconds, the CENTERVIEW PRO enables accurate measurements, even with high line speeds and product vibrations. Each individually measured value achieves an extraordinarily high single value accuracy.

**Reliable measured values, no matter where in the measuring field**

Because of the position and diameter measurement when the cable enters and exits the measuring device, the measuring system automatically compensates for vertical and horizontal inclination and sagging of the product. No matter where the cable is in the measuring field, the operator receives reliably measured values. The automatic alignment of the measuring head to the position of the cable helps to ensure that the CENTERVIEW PRO delivers accurately measured values even under dynamically changing production conditions.

**FFT analysis to detect irregularities in the extrusion process**

The CENTERVIEW PRO offers the option of FFT analysis for detecting periodically recurring fluctuations in cable parameters and predicting the expected return loss (SRL), which is an important parameter for data cables. These are important tools for producing high-quality cables and detecting irregularities during cable extrusion.

**Clear visualization and scatter plot display of the eccentricity**

The measured values of the CENTERVIEW PRO are shown on the ECOCONTROL 6000 or directly on the integrated display (optional). Trend data, statistical functions, FFT and SRL analyses can also be clearly viewed. The display of the measured values are viewed as a scatter plot. Each point in the scatter plot corresponds to a highly precise individual value of the eccentricity and represents the distribution of short-term fluctuations. The alignment of the scatter plot helps the operator to, among other things, center the extruder crosshead, if necessary. The SET POINT control module can be used to control the diameter to the target or minimum value.

Using the new CENTERVIEW PRO ensures the highest cable quality, optimizes production and saves costs simultaneously.

- Your benefits:**
- Eccentricity measurement on a new level, based on over 50 years of experience
  - High measuring rate for precisely measured values, 500,000 measuring points, 5,000 high-precision measurement values (per second/per measuring axis)
  - Reliably measured values, even if the position of the cable in the measurement field changes
  - FFT analysis for detecting irregularities during extrusion
  - Scatter plot shows short-term fluctuations in eccentricity for maximum production reliability
  - Highest cable quality, optimized production and cost savings



# SIKORA FIXED PRICE REPAIR – HOW TO SAVE TIME AND MONEY

Expansion of the service portfolio: Fixed price repair offers are now also available for many devices

SIKORA measuring and control systems are characterized by their long service life. To ensure that your device still works as reliably as when it was commissioned, our SIKORA Service has increased its options for device maintenance. From now on, fixed price repair offers are available for several devices.

**What that means for you**

Even the most reliable systems will be repaired at some point to ensure precise and lasting measurement. It is important that it is quickly operational again. With our SIKORA fixed price repairs, you receive the quote immediately following your inquiry – without any additional wait time. Further costs, for example, a second cost estimate or subsequent costs for the repair, are eliminated with this service offer. In addition, the turnaround time for your equipment is considerably reduced. We guarantee your production will run smoothly again quickly.

- Planning reliability
- Shortened lead time
- Cost efficiency
- Cost transparency



**Which product groups are eligible for these service packages?**

SIKORA fixed price repair is available for selected products of the following device series:

- **LASER Series:** LASER 2010 XY/T, LASER 2025 XY/T, LASER 2030 XY, LASER 2050 XY, LASER 2100 XY, LASER 2200 XY, LASER 6020 XY, LASER 6040 XY
- **LUMP Series:** LUMP 2010 XY/T, LUMP 2025 XY, LUMP 2035 T
- **SPARK Series:** SPARK 2030 UL, SPARK 6030 HF
- **FIBER Series:** FIBER LASER 6003, FIBER LUMP 6003

**Make your device fit for the future!**

Have your SIKORA device checked and contact us today at [+49 421 48900 50](tel:+494214890050) or at [www.sikora.net/en/fixed-price-repair](http://www.sikora.net/en/fixed-price-repair), to request your fixed price rate quote. For further questions, please contact our SIKORA Service.

# INNOVATIVE QUALITY CONTROL IN CV LINES

## Whether horizontal or vertical – you can rely on SIKORA's X-RAY 8700 NXT

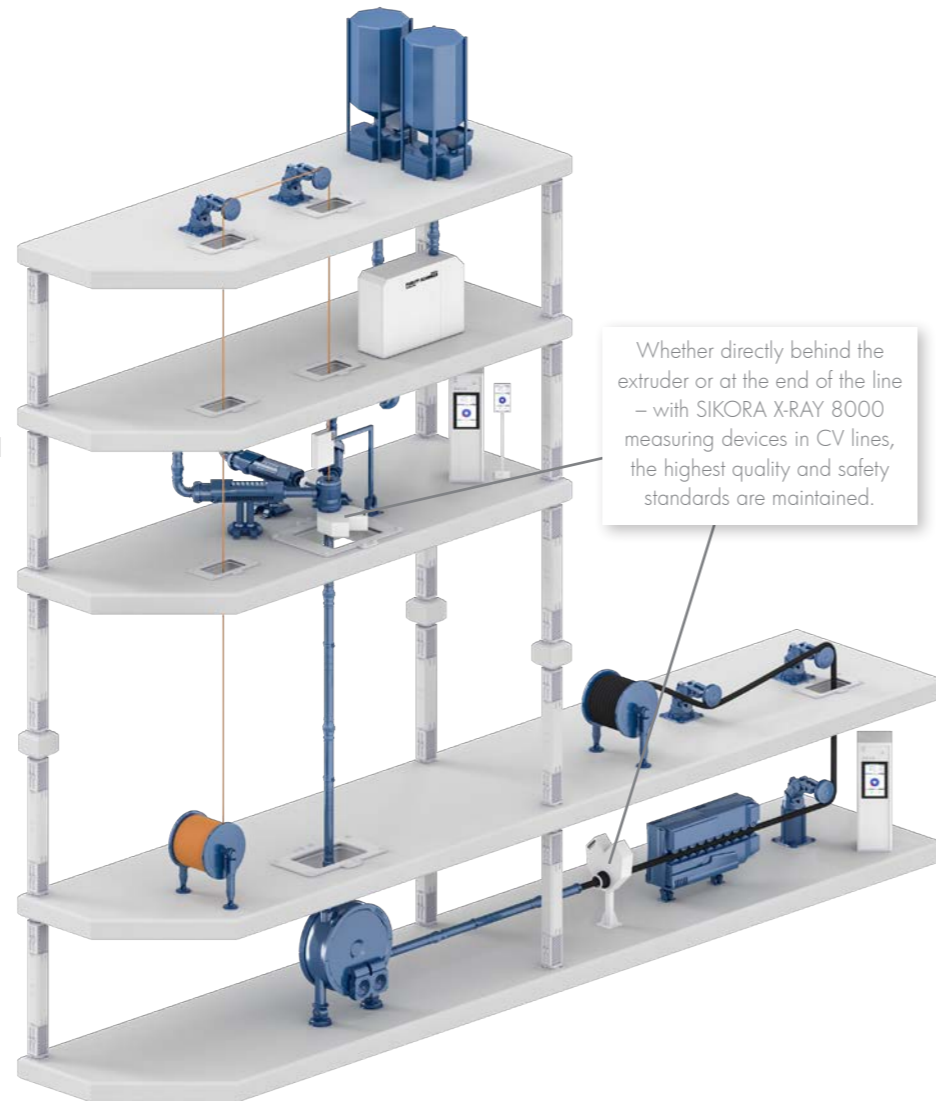
The highest quality and safety standards apply to power cables. This is the only way to ensure that the electricity is transported safely by sea or underground cable and arrives where it is needed. Power cable manufacturers therefore rely on innovative systems for testing the raw material and cable dimensions for quality control in CV lines.

When manufacturing power cables, it is essential that no metallic contaminants get into the cable insulation, as these endanger the functionality and safety of the cable. In the worst case, they can lead to cable breakdowns. To ensure that only pure XLPE and PP material gets into the cable insulation, SIKORA offers the PURITY SCANNER ADVANCED. The inspection and sorting system inspects the material before extrusion and detects metallic contaminations down to 50 µm and reliably sorts them out. This minimizes breakdowns, ensures the quality of the cable and saves follow-up costs.

Directly after the extruder, the X-RAY 8000 ADVANCED X-ray measuring system measures the various wall thicknesses, eccentricities, diameter and ovality of the energy cable. All measured values are recorded and visualized in real time. This enables fast centering of the extrusion tools and loss-free control to the target values.

The use of the X-RAY 8700 NXT at the end of the line is enjoying growing demand from manufacturers in order to meet the high demands placed on cable quality. This comprehensive, final quality control at the end of the CV line is very useful. SIKORA's X-RAY 8700 NXT records the cold values of the cable. When the system is combined with an X-RAY 8000 ADVANCED at the beginning of the line, the shrinkage values for all 3 cable insulation layers are checked. This enables optimum process control.

The X-RAY 8700 NXT is integrated horizontally as standard in CCV lines. The system is available in 3 variants for cable diameters of up to 94, 145 and 180 mm (3.70, 5.71 and 7.09"). Alternatively, the X-RAY 8700 NXT can also be aligned vertically in the line, which simplifies installation in VCV lines. The vertical X-RAY 8700 NXT is now available in 2 different sizes up to 145 and 180 mm (5.71 and 7.09") cable diameter. In this way, SIKORA serves the high quality awareness especially in VCV lines, as it has been the case for 30 years with X-RAY 8000 systems in CCV lines as standard.



# RAFFLE

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R	F	A	S	C	R	D	B	B	W	Y	L	L	P	R	P	T	T	A	F	B	C	U	S	G
U	O	S	Q	J	L	D	Z	A	J	W	O	X	N	T	I	C	I	S	E	L	K	A	N	S

## Wordgrid

Find these 6 hidden words in the letter grid:

- FIXED PRICE REPAIR
- QUALITY CONTROL
- LENGTH MEASUREMENT
- DIAMETER
- WORLD PREMIERE
- CENTERVIEW

Send us a photo/screenshot of your solution by May 31, 2024, to: [extra@sikora.net](mailto:extra@sikora.net)

You can win one of 3 Blink Video Doorbells (black).



Fig. similar

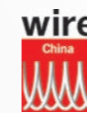
Your contact details will not be passed on to third parties. Every entry will be entered into the prize draw. Unfortunately, SIKORA employees and their relatives may not take part. Each person can only enter once. We will evaluate the first e-mail, all subsequent e-mails will be considered invalid. Legal recourse is excluded.

GOOD LUCK!

# NEXT EVENTS



wire expo | Jun 11-12, 24 | Uncasville, CT, USA



wire China | Sep 25-28, 24 | Shanghai, China



wire South America | Oct 2024 | São Paulo, Brazil

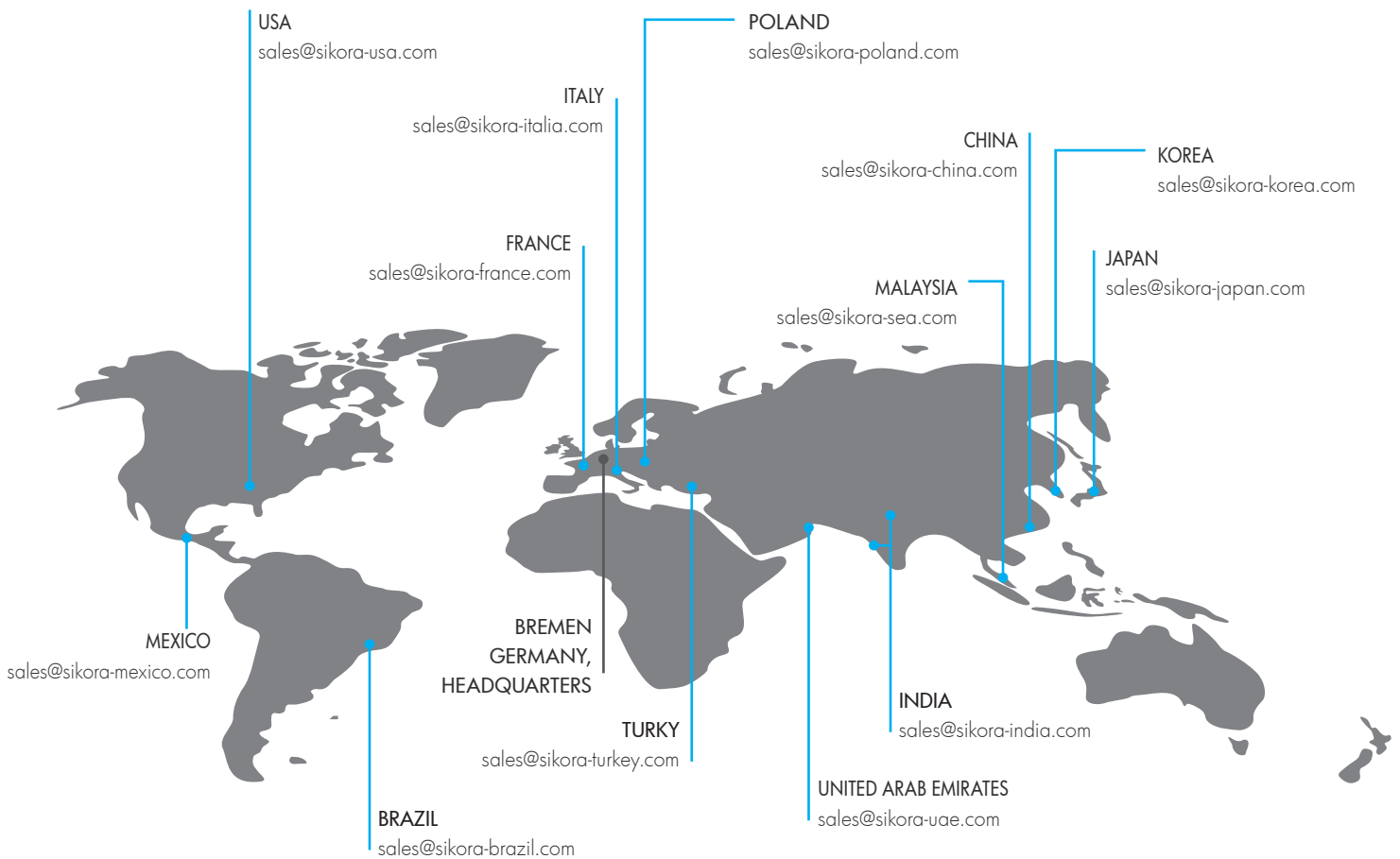
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Technology To Perfection

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