

SIKORA EXTRA

Your magazine for Wire & Cable | Optical Fiber



CENTERVIEW 8000 ensures best cable quality
in automotive lines

06

X-ray technology from SIKORA –
Innovative and experienced

08



Dear readers,

SIKORA has spent the last months to reorganize itself. There was also a change in our Executive Board. After more than 45 years, our long-time Executive Board Member Harry Prunk started his retirement in March 2021 and Dr. Jörg Wissdorf took over.

Due to a new structure, our Sales department is furthermore more focused on the individual SIKORA business units. This allows us to optimally support our customers in the wire and cable market and to focus on their needs.

Dr. Christian Frank
CEO SIKORA AG

Sustainable company growth is and remains our declared goal. With a lot of commitment and team spirit, we have overcome the past year solidly and are looking forward to interesting new projects, which we can realize with you. In addition, we hope to meet you in person again soon. It seems that a reunion at upcoming major trade fairs in the course of the year, such as Interwire in October in Atlanta, GA/USA, will hopefully be possible again.

Enjoy reading!

Sincerely,

Dr. Jörg Wissdorf
Executive Board SIKORA AG



CONTENT

- 04 Goodbye, Harry Prunk
- 06 CENTerview 8000 ensures best cable quality in automotive lines
- 08 X-ray technology from SIKORA – Innovative with experience
- 09 SIKORA refurbishment
- 10 Innovations as the key to success
- 11 Raffle



GOODBYE, HARRY PRUNK

Harry Prunk left the SIKORA Executive Board

Harry Prunk left the SIKORA Board on March 31, 2021 after more than 45 years of very successful work for his retirement. He has shaped the development of the company and contributed significantly to the success of the brand.

Harry Prunk started his career at SIKORA in 1975 as the third employee under company founder Harald Sikora, directly after finishing his studies in electronics. 11 years later he was appointed Managing Director of SIKORA Industrielektronik GmbH. In 1981, he founded the first subsidiary, SIKORA International in California, USA. Since 1996, he has been a shareholder of the company SIKORA.

Since the transformation of the company into SIKORA AG in 2002, Harry Prunk has been a Member of the Management Board, which he chaired from 2011 to 2015. In his function, Harry Prunk was responsible for the areas Sales, Marketing and Service and was particularly involved in the internationalization of SIKORA. Today, SIKORA is globally positioned with 14 subsidiaries. After his retirement from SIKORA, Harry Prunk remains professionally active as a consultant.

Since March 1, 2020, Dr. Jörg Wissdorf has been the new Member of the SIKORA Board. He has been gradually taking over the succession and responsibilities of Harry Prunk for some time now. The graduated Aerospace Engineer previously worked in various leading positions in Sales and Marketing as well as a Managing Director at national and international companies.



Christian Frank on his new Executive Board colleague:

<<Jörg Wissdorf has many years of experience in corporate management. I am convinced that he will significantly shape and drive the further development and success of SIKORA and am pleased that we could win him for this position.>>

Dr. Christian Frank, CEO at SIKORA, appreciates Prunk's special commitment:

<<Harry Prunk understands and embodies SIKORA like hardly anyone else. With him, the company developed many new regions and inspired numerous customers. There is probably no one in the cable industry who does not know Harry Prunk. I would like to thank him for his passionate commitment, his untiring support of our employees, his valued advice and especially for his valuable friendship.>>

SIKORA STARS



CENTERVIEW 8000



- Non-contact, high-precision eccentricity and concentricity measurement system
- 4-axis diameter and 8-point ovality measurements
- Wide diameter range: 0.1 - 25 mm
- Unique auto-positioning of the gauge head to the conductor position; no cable guiding needed
- SIKORA exclusive and innovative scatter plot diagram to show the distribution of real-time eccentricity variations
- Over 1,000 units sold worldwide

SIKORA
Technology To Perfection



WireShow Shanghai
Booth N1 B06



www.sikora.net

CENTERVIEW 8000 ENSURES BEST CABLE QUALITY IN AUTOMOTIVE LINES

Online measurement of diameter, eccentricity and ovality

For more than four decades, manufacturers in automotive cable lines worldwide have relied on SIKORA's measuring devices to ensure the quality and dimensional accuracy of the core while reducing material consumption to a minimum. The CENTERVIEW 8000 is particularly convincing due to its versatile application possibilities. Whether thin signal cables, standard data cables or thicker battery cables – the CENTERVIEW 8000 is a true all-rounder.

SIKORA offers two models for different cable dimensions:

- The CENTERVIEW 8010 is mainly suitable for the measurement of small coaxial, data or automotive cables with a diameter from 0.25 to 10 mm (.01 to .39"). Optionally, for example for micro coaxial cables, the system is also available for diameters from 0.1 mm (.004").
- The CENTERVIEW 8025 measures larger products with diameters from 0.5 to 25 mm (.02 to 1"). Thus, the system can also measure thick battery cables, which are increasingly installed in electric cars.

The CENTERVIEW 8000 is also flexible in terms of its position in the production line. As an alternative to the classic cold measurement at the end of the line, the gauge head can also be installed directly after the extruder and thus, before the cooling section. This allows fast measurement and control for maximum production efficiency with equally highest quality demands.

Intelligent operating principle

The system combines an optical with an inductive measuring method. The inductive measuring circuit measures the exact position of the conductor, while the optical system measures the outer position of the core. The optical part is based on the principle of diffraction analysis combined with pulse-driven laser diodes, whose light beam projects an image of the cable on the respective CCD line in each measuring axis. Two (!) optical systems measure the position and width of the shadows over 4 axes at 8 points. From the position of the shadows in relation to the inductively measured position of the conductor, the eccentricity is calculated within microseconds directly in the gauge head. From the width of the four shadows, the optical systems also precisely determine the respective outer diameters and ovality.

Automatic height adjustment of the measuring head

The inductive measuring circuit automatically positions the gauge head so that the conductor always passes through the center of the gauge head – that is where the measuring accuracy is highest. The system also independently detects and automatically compensates for slanted positions of the conductor. This eliminates the need for guide rollers, manual presetting or

readjustment of the system. This avoids deformation of the product and relieves the operator considerably in his daily work.

Wide range of display options

The CENTERVIEW 8000 is available on demand with an integrated 7" TFT touch screen monitor on which the production data is displayed. Alternatively, the system can be connected to a SIKORA ECOCONTROL processor system via common interfaces. By means of a sectional view of the core, the operator receives a standard display of the eccentricity, enabling him, for example, to center the injection mold.

Due to the extremely low exposure time of 0.25 μ s, the CENTERVIEW 8000 captures oscillating eccentricity values with a high single value accuracy. These are displayed in the form of a scatter plot which is an alternative display mode of the ongoing measurement on the ECOCONTROL. The scatter plot, which consists of a total of 5,000 points, graphically shows the distribution of short-term fluctuations in eccentricity. Each point corresponds to a single value of the eccentricity with respect to magnitude and direction. The extent of the scatter plot thus characterizes the standard deviation of the eccentricity. This unique visualization enables the operator to recognize which eccentricity values persist even after optimal centering and which fluctuation range is present. Based on this, the operator can initiate appropriate measures to minimize it.

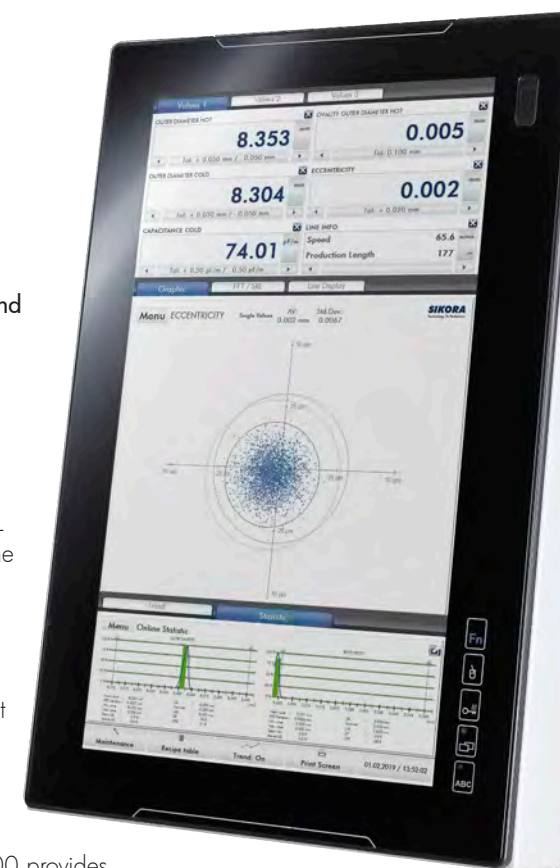
Hot/cold control and FFT analysis

The CENTERVIEW 8000 can optionally be combined with the hot/cold control module of the ECOCONTROL 6000 or 1000. The module continuously calculates the material shrinkage and automatically takes it into account when controlling the diameter.

In addition, the CENTERVIEW 8000 provides information about eccentricity values and cold diameters, which can be used in combination with the ECOCONTROL 6000, the LASER Series 2000/6000 (hot diameter) and the CAPACITANCE 2000 (capacitance values) for FFT analysis and calculation of return loss.

Continuous precision without calibration

The CENTERVIEW 8000 is factory calibrated prior to shipment. After on-site installation, a one-time concentricity adjustment is performed. No further calibration, maintenance or adjustments to different product dimensions are required.



X-RAY TECHNOLOGY FROM SIKORA – INNOVATIVE AND EXPERIENCED

Future-oriented quality control in CV, insulating and sheathing lines for more than 30 years

Since 1990, SIKORA has been supporting wire and cable manufacturers with systems based on X-ray technology for quality control during extrusion. For years, the X-RAY 8000 has been the industrial standard for non-contact measurement of the wall thickness, concentricity, ovality and diameter of cables in CV lines. Nevertheless, SIKORA does not stand still in terms of technological innovations and therefore, has been offering the X-RAY 8000 ADVANCED for this application area since 2018. Equipped with 16 measuring sensors, the system allows a measurement up to 10 times faster than the X-RAY 8000 NXT and an immediate control. In insulating and sheathing lines, the X-RAY 6000 PRO is used. It provides measuring values of the wall thickness, concentricity, diameter and ovality.

Noteworthy are the technical structure and the sophisticated design of the equipment, which is precisely adapted to the requirements of the extrusion lines in close cooperation with customers and business partners. SIKORA thus guarantees that the measuring systems can be easily integrated into all existing as well as new production lines.

With SIKORA you have the advantages of a comprehensive sales and service network with 14 offices worldwide with expertise in X-ray technology at your disposal. Our international employees advise customers in all wire and cable industries and, thanks to years of personal experience and detailed documentation around production lines worldwide, always have a future-oriented solution for your specific requirements.



X-RAY 6000 PRO
for insulating and
sheathing lines

In addition to decades of experience, the performance and variety of SIKORA equipment for X-ray technology speak for themselves. X-ray technology enables the measurement of up to three different material layers and can be used for diameters from 0.65 - 270 mm (.026 - 10.6").

Advantages X-RAY 6000 PRO

- Measurement of the wall thickness, concentricity, diameter and ovality of up to 3 different material layers
- Suitable for various diameters
- Selectable measuring rate from 1 to 3 Hz (optional 10, 25 Hz)
- High-resolution X-ray line sensor camera technology with 0.05 mm (0.002") resolution
- Output signals for automatic centering of the crosshead
- No calibration
- Internationally recognized security concept



X-RAY 8000
ADVANCED for CV
lines

Advantages X-RAY 8000 ADVANCED

- Measurement of the wall thickness, concentricity, diameter and ovality of up to 3 different material layers
- XXL (xXtra-Long-Life) X-ray tubes
- Ceramic and NTX windows for a longlife use without cleaning
- Optimized High-Speed-Technology
- Quick centering of the crosshead and optimum quality and process control
- Immediate measuring values directly after starting the line, no calibration, no warm-up
- Suitable for medium, high and extra-high voltage cables

SIKORA REFURBISHMENT

Equip your X-RAY 8000 NXT for the future!

The increasing automation in the running production process includes increasing demands on our bestseller X-RAY 8000 NXT, which is indispensable in the production of high voltage cables. To meet the demands and to extend the availability of the devices, SIKORA offers you a customized refurbishment package.

Each X-RAY 8000 NXT refurbishment is individually prepared by the SIKORA Service Specialists. The planning includes existing device options as well as new, increased demands on the device. The refurbishment set consists of a powerful

Common interfaces such as USB, LAN, OPC DA/UA, Profinet IO, Profibus-DP or DeviceNet are available for communication with a plant computer or PLC. The use of WINDOWS 10 as operating system also ensures the secure connection of the X-ray device to your network as well as the availability of upgrades. Finally, SIKORA guarantees a spare parts availability for another ten years due to the refurbishment.

All assemblies required for the modernization are configured and pre-installed prior to delivery. This allows a quick installation on site with minimal



processor system with a 22" touchscreen monitor. On this monitor, all production relevant data are clearly displayed with the current X-RAY 8000 NXT software. The 8-point eccentricity display for all three insulation layers as well as extensive trend and statistics displays ensure a continuous monitoring of the production process.

production interruptions by a SIKORA Field Service Engineer. Furthermore, you receive device training as part of the commissioning process. Thus, your device is optimally equipped for the future and for use in the age of Industry 4.0.

Contact us!

We would be pleased to check if your X-RAY 8000 NXT is suitable for a refurbishment. Please send us the serial number of the device to service@sikora.net

INNOVATIONS AS THE KEY TO SUCCESS

SIKORA awarded with "SME INNOVATION AWARD"

SIKORA is one of the most innovative small and medium-sized enterprises in Germany 2021/2022, according to a survey of the independent German Association for Consumer Studies (DtGV). In the parallel federal state ranking, SIKORA is furthermore listed among the top 3 companies from Bremen.

This year, for the first time, the German Association for Consumer Studies (Deutsche Gesellschaft für Verbraucherstudien, DtGV) is presenting the "SME Innovation Award 2021/2022" to small and medium-sized companies from Germany that demonstrate particularly high innovation potential in their segment and/or state.

For the selection, the number of all patent applications of German SMEs in 2020 was first determined based on the Corporate Patent Classification (CPC) system. The basic parameter patent number was finally rounded off by the qualitative moment of the citation frequency and condensed into a score value. SIKORA receives the award, as the company achieved a score value in the CPC main class "instruments", which is among the top 10 % of all examined SMEs. In the federal state ranking, SIKORA also places among the top 3 companies from Bremen.

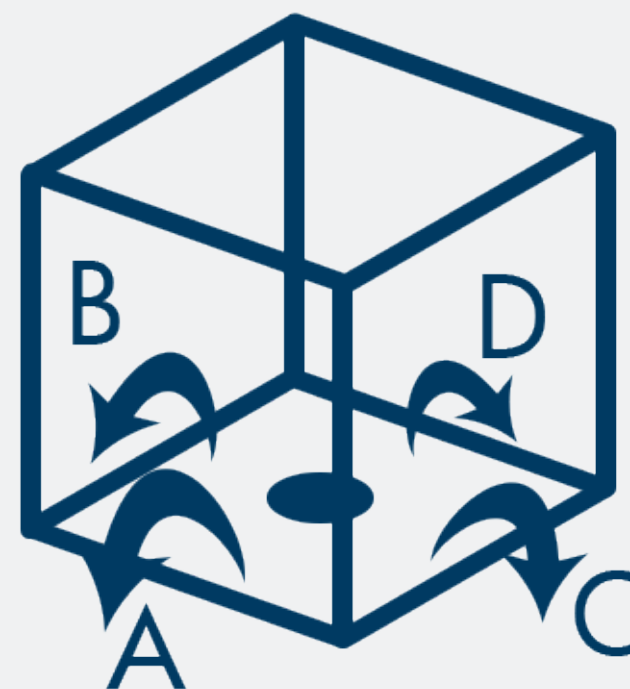
Dr. Christian Frank, CEO, about the award:

<<This award makes us very proud and confirms the corporate course we have been following since the foundation of the company. Thanks to our inventive spirit and innovation potential, we are able to continuously offer our customers future-oriented technology solutions. Thus, we create the basis for highest customer satisfaction and long-term growth.>>



The incentive to always bring forth innovations and not to rest on existing ones is in our DNA. Therefore, SIKORA invests annually more than 10 percent of the turnover in R&D. More than 50 colleagues from the Development department are continuously working on new technologies and further developments of the existing portfolio. Furthermore, SIKORA closely cooperates with research institutes, such as the Fraunhofer Institute for High Frequency Physics and Radar Technology (FHR), the Fraunhofer Institute for Applied Solid State Physics (IAF), the Kunststoff-Zentrum (SKZ), the University of Bremen, or start-up companies, for example to utilize the latest know-how on the market in the field of "Artificial Intelligence".

RAFFLE



Where is the dot?

Imagine a dice. This dice can roll in four different directions (A to D). On the bottom of the dice is a dot.

Roll the dice in your mind in the following directions:

A, B, B, A, C, D, C

Where is the dot now?

Send us your solution via email by August 31, 2021, to: extra@sikora.net

Win one of three Sennheiser SC 165 headsets in black.



Your contact details will not be passed on to third parties. Each correct answer takes part in the raffle. Employees of SIKORA AG and SIKORA Holding GmbH & Co. KG and their relatives are excluded from participation. Each player can only participate once. We value the first email, all subsequent emails will be considered invalid. The legal process is excluded.

GOOD LUCK!

NEXT EVENTS



• Wireshow | Aug 31-Sep 2, 2021 | Shanghai, China



• wire South America | Oct 5-7, 2021 | São Paulo, Brazil



• Interwire | Oct 26-27, 2021 | Atlanta, GA, USA

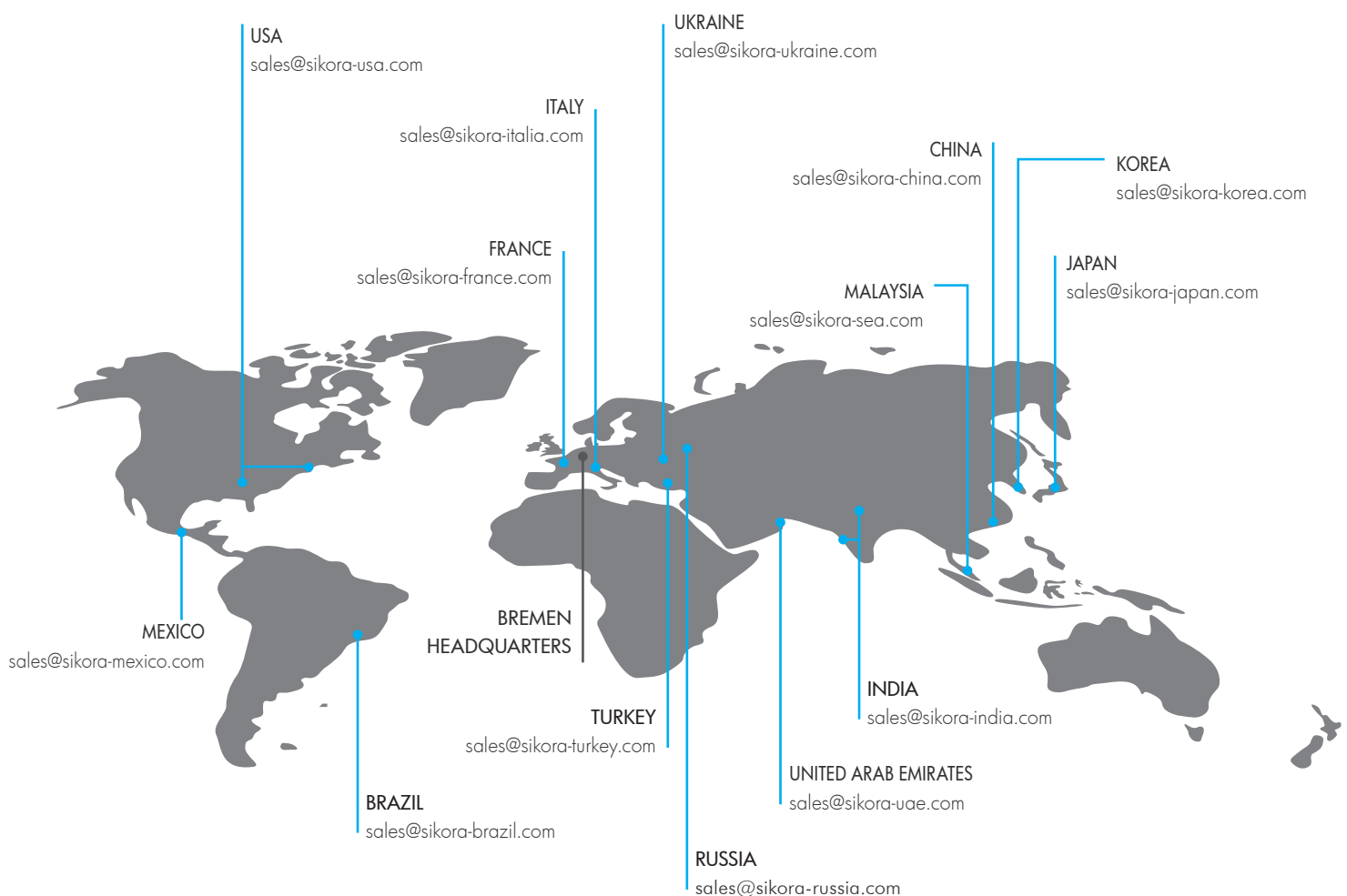
Sustainability at SIKORA

Our environment is important to you, but you do not want to do without the informative SIKORA EXTRA articles? Register today at extra@sikora.net and receive the SIKORA magazine conveniently via email instead of printed material.

SIKORA

Technology To Perfection

SIKORA AG
Bruchweide 2, 28307 Bremen
Germany
Phone: +49 421 48900 0
www.sikora.net, sales@sikora.net



Publisher
SIKORA AG, BREMEN

Editor's Office
SIKORA AG, Bruchweide 2, 28307 Bremen, Germany
Phone: +49 421 48900 0
communications@sikora.net, www.sikora.net



[www.twitter.com/sikoranet](https://twitter.com/sikoranet)



www.linkedin.com/company/sikora-ag



www.youtube.com/sikoraag