SIKORAEXTRA

Your magazine for Hose & Tube | Sheets



Make full use of your measuring technology – ECOCONTROL Series

Inline quality control for autonomous manufacturing 06

SIKORAEXTRA | Edition #1/2021

www.sikora.net

04

SIKORA FOREWORD



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 hose, tube and pipe market and to focus on their needs. 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 Fakuma in October in Friedrichshafen, Germany, will hopefully be possible again.

In this issue, we have a strong focus on the topics automation and Industry 4.0. We are looking forward to your feedback. Enjoy reading!

Sincerely,



Dr. Christian Fran

Dr. Christian Frank CEO SIKORA AG Dr. Jörg Wissdorf
Executive Board SIKORA AG

CONTENT

- Make full use of your measuring technology ECOCONTROL Series
- O6 Inline quality control for autonomous manufacturing
- OS Goodbye, Harry Prunk
- 09 Upgrade your safety Windows 10
- 10 Innovations as the key to success
-]] Raffle







SIKORA PRODUCTS

MAKE FULL USE OF YOUR MEASURING TECHNOLOGY!

Optimized production processes with SIKORA's powerful ECOCONTROL processor systems

In the increasingly complex and automated tube and pipe production, measuring devices that reliably measure the required product parameters in real time have long been standard. However, measuring alone is no guarantee for excellent product quality. Only in combination with display and control systems such as the SIKORA ECOCONTROL series, the production process can be specifically controlled and optimized.

SIKORA offers three ECOCONTROL premium processor systems with 22", 15" or 8.4" TFT screens. All models are characterized by their simple and intuitive touch screen operation and a clearly arranged display.

Data logging

Recorded production data can be stored on the internal SSD hard disk or directly on a server (Ethernet). Production reports (time, length and batch based) are also available for all ECOCONTROL models, which are used in quality control as well as in daily production to document product quality over a defined period of time

Interfaces and Industry 4.0

Furthermore, the ECOCONTROL series has all standard market interfaces, such as fieldbus or OPC UA, to conveniently transfer measurement data to the plant control system or server structures. The devices are therefore "Industry 4.0 ready" and ideally suited for use in modern tube and pipe extrusion lines with increasing levels of automation.

Automatic control

In addition to the display and documentation of measured data, the ECOCONTROL series offers its own automatic control with the SET POINT module. Here, the processor system automatically modifies the haul-off speed or the extruder speed to control to the nominal value of the wall thickness. The ECOCONTROL models thus enable a higher degree of automation (especially for older extrusion lines) and guarantee maximum process reliability with increased productivity and simultaneous compliance with the given specifications.

All supplied information is compactly summarized on one page in three sections.



Numerical mapping of the measured values

Graphical display of the measured values as a circular display

Zoom adjustment for graphic display of the wall thickness

Time- and length-oriented trend display of all values

Extensive production statistics: min. and max. values, mean value, standard deviation, CP and Cpk values, statistical distribution curve of the measured individual values

Graphic of wall thickness distribution related to the circumference in 360° (only available for CENTERWAVE 6000)



05

INLINE QUALITY CONTROL FOR **AUTONOMOUS MANUFACTURING**

SIKORA measuring and control systems in the age of Industry 4.0

The vision of autonomous manufacturing has existed for a long time. Due to technical advancements and exponentially increasing processing power, it finally seems to be within reach today. Intelligent measuring devices continuously measure and transmit measured values as well as information about the device status in real time, which enables direct intervention in the production process. However, what are the opportunities for hose, tube and pipe manufacturers?

Technical progress enables automation

Until the 1990s, measured values were transmitted analogously to the central plant computer in an extrusion line. Limited processing performance of the PLC meant that only simple control and regulation tasks were possible, such as measuring the average diameter or the average wall thickness. In the past 30 years, however, standardized fast industrial fieldbus protocols and rapidly increasing processing performance allowed more decentralized solutions. Only due to this, it was possible to develop more complex measuring devices like the X-ray measuring system X-RAY 6000 PRO. The device processes a multitude of measured values, for example, for minimum wall thickness and eccentricity, already in the measuring device itself and it allows for an improved automatic control in combination with

an ECOCONTROL processor system (see also

Another example is the CENTERWAVE 6000, which measures the wall thickness over 360° of the product circumference by means of a rotating sensor. In addition, there are further developments in IT, in particular Ethernet-based broadband networks. This allows larger volumes of data to be conveniently transferred to the PLC and overlying IT layers, for example, via OPC UA. All of this enables manufacturers to optimize their production processes, to make considerable savings in materials and costs, and to ensure reproducible quality of the end product.

Preventive maintenance

Also, in the areas of diagnosis, service and maintenance, the interaction of SIKORA measuring devices and processor systems offers hose, tube and pipe manufacturers many advantages. All information collected during the measurement flows into a SIKORA diagnostic program, which can be started, for example, by a SIKORA Service Technician via remote access on the ECOCONTROL 6000 or on the mobile industrial tablet SAM. Thus, he can draw conclusions on the device status and possible error causes at an early stage and react to them – for example, if a malfunction message occurs due to a dirty LASER gauge head. In addition, the user receives recommendations regarding device maintenance,

for example, when wearing components should be replaced as a preventive measure. Lengthy service calls with costly error diagnosis caused by the sudden failure of a measuring device are a thing of the past. Instead, device maintenance and other service calls can now be planned in advance, independent of location, and carried out at optimized times.

When will we have achieved fully autonomous manufacturing and what will it look like? Forecasts and expert opinions differ on this. Regardless, however, it is clear that Industry 4.0-capable intelligent measuring and control systems, for example, from SIKORA pave the way for a future-oriented production.



SIKORA CORPORATE NEWS

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 Industrieelektronik GmbH. In 1981, he founded the first subsidiary, SIKORA International Corp. 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





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. 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.>>

UPGRADE YOUR SAFETY!

Equipped for the future with WINDOWS 10

The ECOCONTROL display and control systems are the heart of the SIKORA quality assurance. Since 2021, the systems have been delivered with the current Windows 10 operating system. Older ECOCONTROL 1000 and ECOCONTROL 6000 devices, which are still running with the Windows 7 operating system, can now be upgraded to the latest safety technology.

Affected are all SIKORA measuring and control systems as well as inspection and sorting systems, which are controlled via a SIKORA ECOCONTROL 6000 or ECOCONTROL 1000. These are, for example, the X-ray devices of the X-RAY 2000 and 6000 series, the PURITY SCANNER as well as LASER Series 2000 and LASER Series 6000, which are not used as stand-alone solutions.

On January 14, 2020, the manufacturer Microsoft ended the support of the Windows 7 operating software. "Technical functions run without any problems without further updates", says Jörg Hischer, Service Sales Manager at SIKORA. "However, since Microsoft no longer offers security updates for Windows 7, the outdated software poses a risk for the network security of the production sites." The solution is to upgrade the operating software to the latest Windows 10 loT LTSC (Long Term Servicing Channel). The manufacturer promises:



>> WINDOWS 10 IoT LTSC guarantees secure integration into an existing network and ensures safe and trouble-free operation through regular upgrades. <<

Make an appointment today for your ECOCONTROL Windows 10 upgrade with the SIKORA Service department at service@sikora.net or +49 421 48900 50.

SIKORA KNOWLEDGE SIKORA RAFFLE

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 longterm growth.>>



INNOVATION AWARD

SMALL AND MEDIUM-SIZED ENTERPRISES

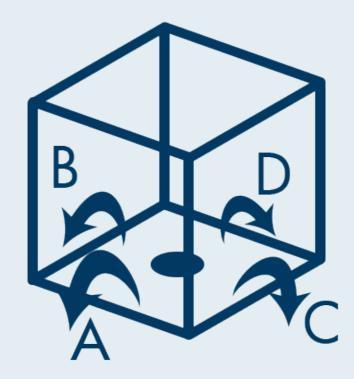
Leading Innovator Bremen

SIKORA

Examination 05/2021. Federal state ranking Analysis period: 2020, Level: CPC mainclasses, dtgv.de

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!

Congratulations to the winners of the last raffle - SIKORA EXTRA 1/20:

- Sonja Granith
- Philipp Rechberger
- Christian Meitner

NEXT EVENTS



• MD&M West | Aug 10-12, 2021 | Anaheim, CA, USA



• Plastic Pipes XX | Sep 6-8, 2021 | Amsterdam, Netherlands

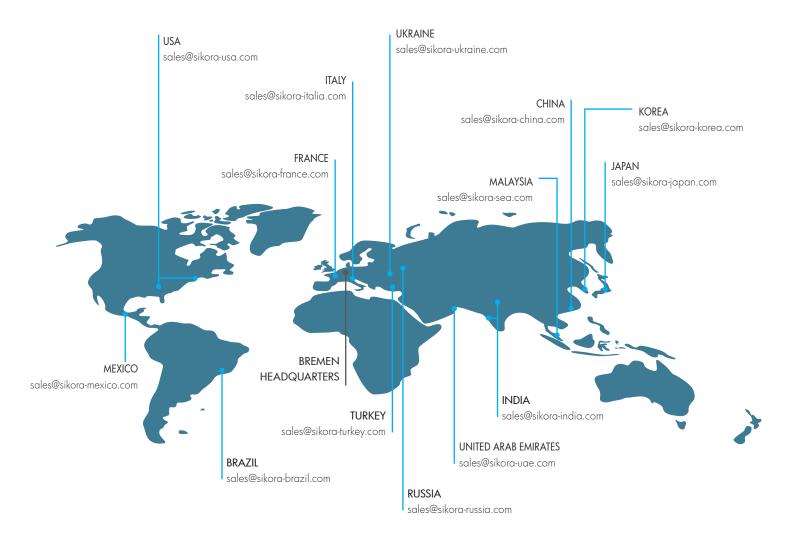


Compounding World Expo | Sep 29-30, 2021 | Essen, Germany

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.





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





MD_06_21/4.400