

Laser marking with



ELASTOSIL® LR 3003/50  
ELASTOSIL® COLOR PASTE  
LASER MARKING WHITE

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Merck WACKER

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DURABLE



# Cooperative Webinar LASER MARKING ON SILICONES 2023



**February 28, 2023:**  
**10:00-11:00 CET\*** (morning session)  
**16:00-17:00 CET\*** (afternoon session)

\*CET - Central European Time



KOENIG & BAUER



Dear Customers,

It's our pleasure to invite you to the **Cooperative Webinar "Laser Marking on Silicones"**. During this collaborative webinar we will unveil the secrets of creating permanent and highly durable marks on silicone using laser marking technology.

**To fit in with your schedule, you can join us on 28 February 2023 either in the morning session (10:00-11:00) or afternoon session (16:00-17:00).**

There are many potential application areas for silicone elastomers, such as cables, tubings, profiled strips, hoses, molded parts, and household appliances, spanning a variety of safety-relevant industries such as railways, aerospace, automotive, food processing, and many other areas with growing demand for individualized goods (e.g. kitchen appliances).

Customers face challenges in all areas where there is demand for high-quality, fast, and permanent marking on silicone elastomers. Markings are needed on different shapes, achieving high resolution and strong contrast, with absolute flexibility required even with complex designs (e.g. QR codes).

There are multiple challenges encountered in using current marking technologies on silicone. Inkjet printing, as well as pad printing involving the use of special inks (often solvent-based) on silicone elastomers, both require additional processes (ink preparation, printing, curing, and cleaning). Surface adhesion also needs to be adjusted. Print quality and durability are inferior to laser marking.

From this webinar you will learn how to address these challenges with laser marking technology. Three companies will be joining together to give you a comprehensive understanding of laser marking technology from the material development to application in production.

**Participant numbers are limited, so if you haven't already registered, do contact us soon!**

Feel free to share this invitation with anyone else who might be interested in laser marking on silicones. We are looking forward to seeing you (virtually) in February.

Sincerely,

*The EMEA Industrial Team at Merck together with WACKER, Koenig & Bauer Coding*





# HOW TO REGISTER

To better fit into your schedule, we are offering two time slots:

» **28 February, 10:00-11:00 AM CET\***

» **28 February, 16:00-17:00 PM CET\***

\*CET – Central European Time

Click below to sign up for the cooperative webinar “Laser Marking on Silicones”. Please note that the number of participants is limited, so you’ll need to be quick to make sure you book a place. Please note that we reserve the right to admit or deny participant access to the event.

If you can’t join our event, we would be happy to share with you the presentations of the cooperative webinar “Laser Marking on Silicones”. Simply register to receive the content so you can read at a more convenient time.

**REGISTER NOW!**

Click to register!



## GOOD REASONS FOR JOINING THE WEBINAR

This unique webinar is a golden opportunity to

- » Gain insights into the permanent and durable marking of silicone elastomers using laser technology
- » Gain a comprehensive understanding of laser-sensitive pigments, silicone elastomers, and laser-active color masterbatches, as well as the use of laser marking technology on production lines
- » Ask our experts all kinds of questions, relating to all stages of the value chain – laser-sensitive pigments, silicone elastomers and laser color masterbatches, laser marking technology and applications

More information:





# AGENDA

- » 10:00 **Opening & Housekeeping**
- » 10:05 **Create fast and permanent markings on silicones with Iriotec® laser-sensitive pigments**
- » 10:20 **Learn about silicone rubbers and how to mark them with new ready-to-use laser-sensitive color masterbatches**
- » 10:35 **Hands on: how to integrate laser marking in the production line**
- » 10:50 **Q&A & Closing**

Press on the icon to read presentation abstracts.

## GET IN TOUCH

To browse the agenda and topics that will be covered in the presentations, simply go to the Laser Marking on Silicones Cooperative Webinar landing page.

Need to ask us a question? Email us at:

[industrial-emea@merckgroup.com](mailto:industrial-emea@merckgroup.com)

## JOINT WEBINAR INVOLVING 3 COMPANIES:

- » **Merck Electronics KGaA**  
**Expert in laser marking and laser-sensitive pigments**  
At Surface Solutions, we inspire our customers with decorative and functional solutions. We provide products that help to create all kinds of innovative surfaces.
- » **WACKER Chemie AG**  
**Expert in silicone material manufacturing**  
WACKER is a technological leader in the chemical industry and manufactures products for all key global industries. Its fields of business include the silicone, polymer, life sciences, and poly-silicon markets.
- » **Koenig & Bauer Coding**  
**Leading company for high-quality coding systems used in laser and inkjet solutions**  
As a leading company in high-quality coding systems, Koenig & Bauer Coding offers a variety of key advantages to its customers. Spanning all key areas of coding, our wealth of experience and utmost commitment to ongoing development offer you the reliability you require to answer the demands of your markets, to optimize product quality, and to deliver professional service and advice – even when it comes to future requirements.



# WEBINAR ABSTRACTS

## CREATE FAST AND PERMANENT MARKINGS ON SILICONES WITH IRIOTEC® LASER-SENSITIVE PIGMENTS

Marking silicones can be challenging, not least because they are smooth, but also because they are flexible and elastic. Using lasers to mark surfaces involves no contact with the material. Markings are virtually created inside the material – as if by magic, like the silicone generates markings itself. This is only possible by adding laser pigments. Our aim with this webinar is to demonstrate how pigments interact with lasers and which colors or color combinations are possible. Find out how to create permanent, reliable, and individual markings of superior quality. Also, because light creates markings, there is no need for consumables.

» **Silvia Rosenberger**

» **Ulrich Quittmann**

## LEARN ABOUT SILICONE RUBBERS AND HOW TO MARK THEM WITH NEW READY- TO-USE LASER-SENSITIVE COLOR MASTERBATCHES

Silicone rubber differs from other elastomers thanks to a number of unique properties. These also support a variety of important megatrends such as electric vehicles, sustainability, and health care. In this webinar we will provide a brief introduction to silicone elastomers and highlight their extraordinary qualities. WACKER's additive portfolio includes a number of color masterbatches, and thanks to the laser color pastes recently introduced, the door is now open to high-quality laser marking of solid and liquid silicone rubbers (esp. HCR and LSR).

» **Dr. Steffen Jungermann**

» **Dr. Ulrich Frenzel**

## HANDS ON: HOW TO INTEGRATE LASER MARKING IN THE PRODUCTION LINE

In this webinar we will explain the possibilities offered by lasers and how powerful they are. We support customers with the integration of lasers into production lines, drawing on a wealth of experience and engineering know-how. Professional coding is also a key aspect of modern product safety, and everyday life without coding would be almost inconceivable. In addition to producing highly precise codes, reliably, 24/7, lasers use no consumables and require little maintenance. As you doubtless know, modern laser marking can be trusted to deliver as expected.

» **Rüdiger Hohe**

» **Thorsten Diergardt**





# SPEAKERS' PROFILE

**MERCK**



## SILVIA ROSENBERGER

**Technical Marketing Manager  
Surface Solutions  
Merck Electronics KGaA**

Silvia Rosenberger studied Industrial Chemical Engineering at Mainz University. During her long career as a Technical Consultant at Merck's pigment division, she has worked with numerous global customers and gained vast experience in the application of effect and technical pigments in plastics. In 2004, she also became responsible for laser pigments and has been instrumental in the development of special pigments used with laser technology. Laser marking has since become an indispensable tool for industrial products and packaging, rapidly gaining in popularity due to its excellent sustainability benefits.



## ULRICH QUITTMANN

**Lab Manager – Application Technology  
Surface Solutions  
Merck Electronics KGaA**

Ulrich Quittmann graduated in 2001 at the University of Dortmund as a Chemical Engineer. He gained his first industrial experience working as a lab manager in the development of wood-polymer composites mainly for the building industry. In 2006 he changed his position and started to work as a lab manager for a global producer of polymer foams in the field of expandable polypropylene and polystyrene foams for the automotive as well as building industry. Ulrich has worked in a variety of roles at Merck in application technology in Surface Solutions since 2012, mainly focusing on laser pigments, conductive pigments, pigments used for brand protection, IR-absorbing and IR-reflective pigments.







## DR. STEFFEN JUNGERMANN

**Technical Manager  
Engineering Silicones  
EMEA & LATAM, WACKER SILICONES**

Dr. Steffen Jungermann studied chemistry at the Technical University of Munich with a focus on polymer chemistry, culminating in a PhD thesis on new functional materials used in organic light-emitting diodes (OLEDs). He joined WACKER in 2006 as R&D manager in the central R&D department. This role involved working on new silicone/polyurethane hybrids. Since 2015, Steffen has worked as a technical manager providing support to customers around Europe, initially for the WACKER POLYMERS division, with a focus on organic polymer dispersions, before moving to the WACKER SILICONES division to work on all kinds of applications involving silicone rubbers, including technical textile coatings.



## DR. ULRICH FRENZEL

**Technical Manager  
Health Care  
EMEA & LATAM, WACKER SILICONES**

Ulrich Frenzel studied chemistry at the Technical University of Munich with a focus on polymer chemistry, graduating in 2001 with a PhD thesis on ring-opening olefin metathesis. In the same year, he embarked on his career in central research at Bayer AG in Leverkusen working in the field of BR and SBR rubber. After working in a variety of positions in the organic rubber industry, in 2017 Ulrich moved to WACKER Chemie AG, where he currently works as Technical Manager for health care and related applications in the WACKER SILICONES division.



**WACKER**





## RÜDIGER HOHE

### Vice President of Sales & Marketing Koenig & Bauer Coding

As Vice President at Koenig & Bauer Coding, Rüdiger Hohe is responsible for sales and marketing. Having successfully graduated in business administration and gaining many years of experience in B2B sales, primarily involving leading positions in industry, Rüdiger offers extensive expertise in the field of sales and marketing.



## THORSTEN DIERGARDT

### Pre-Sales Manager Koenig & Bauer Coding

Thorsten Diergardt was early to establish a foundation for his passion for technology, completing an apprenticeship as a communications electronics technician. He has now been working for Koenig & Bauer Coding since March 1997. For the past 22 years, his projects at the company have revolved around laser technology, also involving a variety of related developments. The broad scope of his work has allowed Thorsten to deliver highly successful and complex international projects for the company, spanning a multitude of advanced applications in the field of coding and marking.

# KOENIG & BAUER





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More information:



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[industrial-emea@merckgroup.com](mailto:industrial-emea@merckgroup.com)

