Sensor Instruments

Let's make sensors more individual

THE WORLD OF

OPTO ELECTRONICS

WWW.SENSORINSTRUMENTS.COM

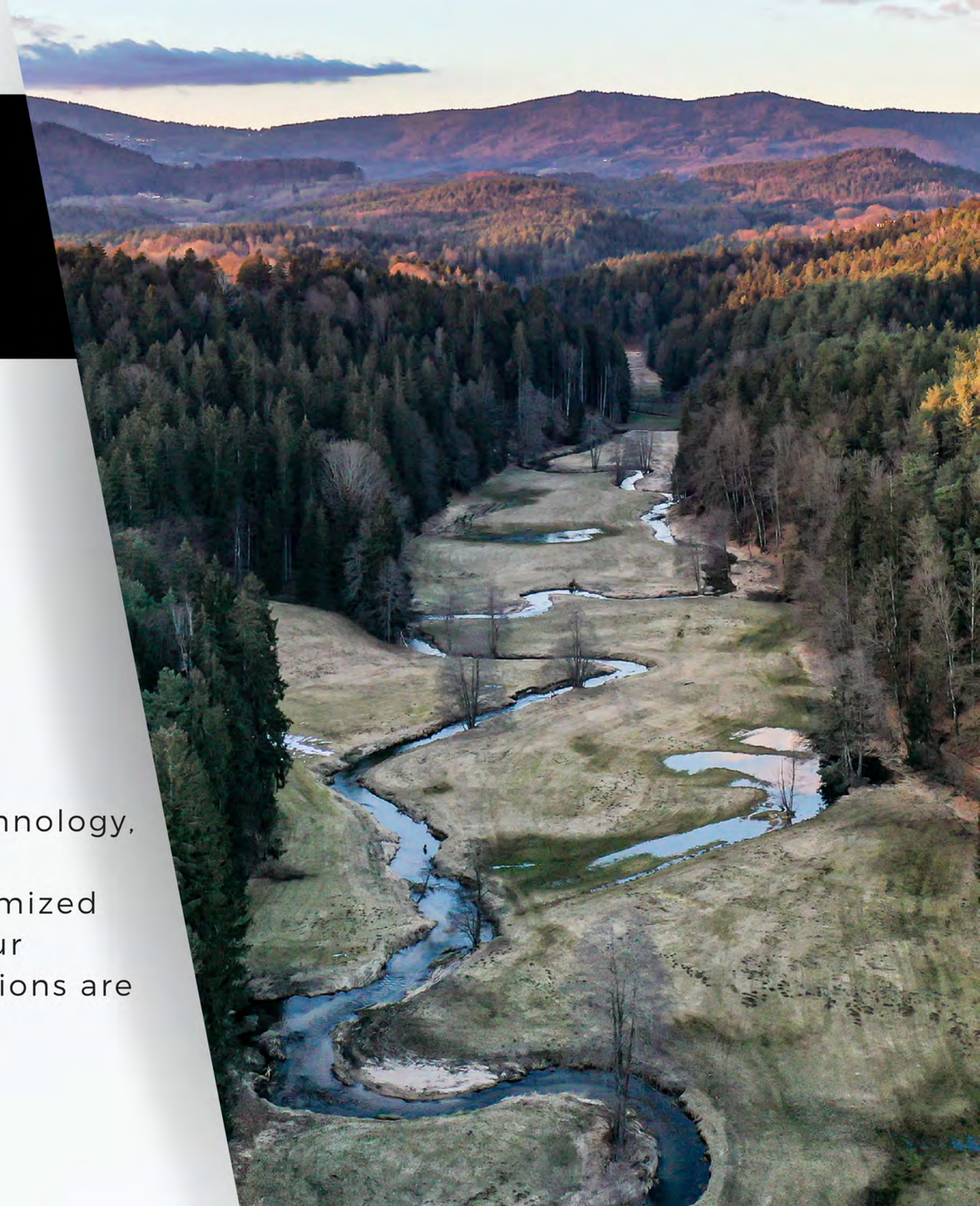
CONTENT

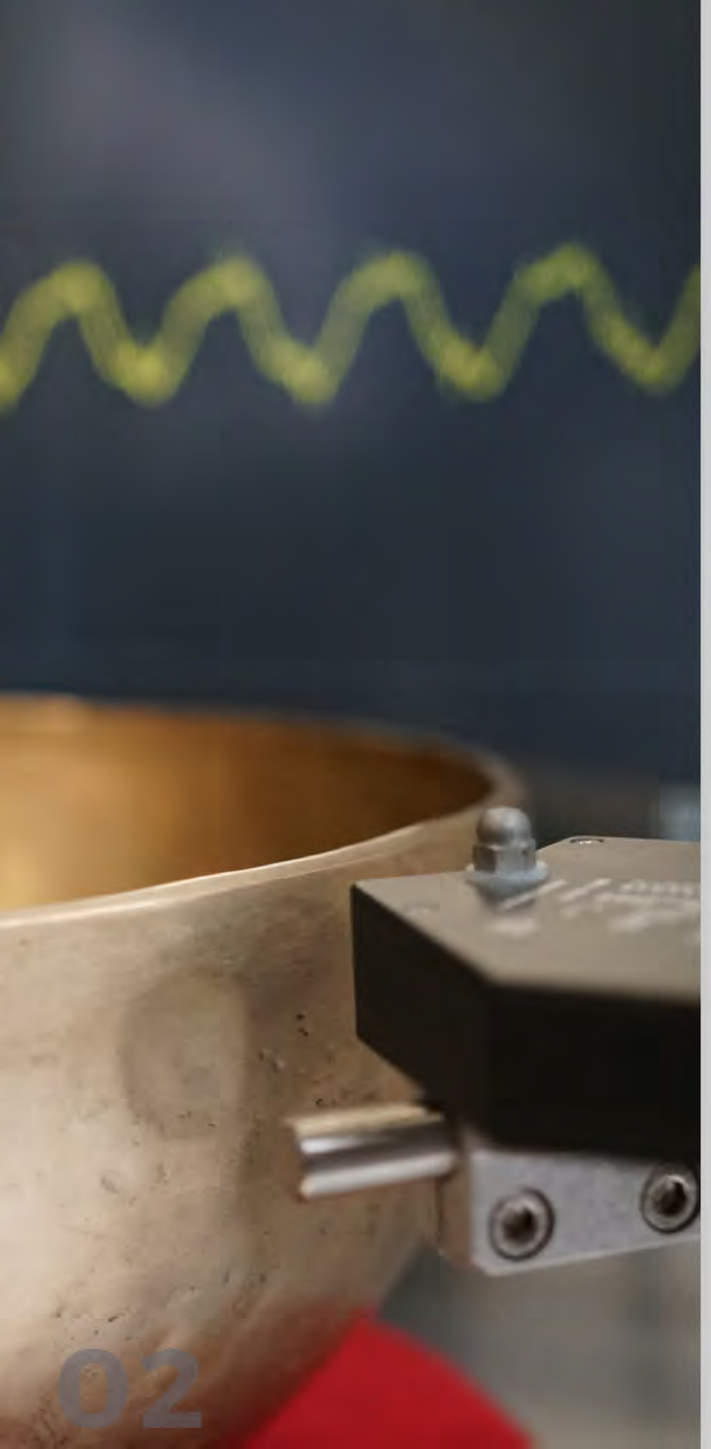
Sensor Instruments — Let's make sensors more individual

ABOUT US

Sensor Instruments GmbH is a creative and expanding company headquartered in the beautiful Bavarian Forest in the south-east of Germany.

Our company primarily focuses on optical sensor technology, where we are passionate about meeting very special challenges. We are recognized as specialists in customized sensors both on a national and international level. Our individual sensor and measurement technology solutions are used in the most varied industry sectors.





WE START WHERE THE JOB GETS TOUGH

Sensor Instruments GmbH was established in 1992 and today has about fifty employees. Strongly extended over many years with variations of standard products and with many new developments, our product portfolio today is extraordinarily wide-spread and continuously growing.

The development of customized solutions for unique challenges that do not allow for standard answers is our passion. Optical sensor technology is not only our specialty, but also our mission. Our engineers develop creative and individual sensor and measurement technology solutions when the standard solution does not apply. Discover with us the world of customized optical sensors and find unique answers to your specific challenges.

Sensor Instruments
Let's make sensors more individual

Qualitätsmanagement
ISO 9001
www.dekra-siegel.de
DEKRA zertifiziert

WE ARE REPRESENTED IN MORE THAN

50 COUNTRIES

AND AVAILABLE FOR YOU WORLDWIDE

OUR SALES PARTNERS

Competent consulting and technical sales service at the customer's place, combined with extraordinary customer service, are of particular importance for us.

PLAN

DO

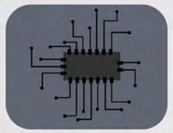
CHECK

ACT

Sensor Instruments
Let's make sensors more individual

04

APPLICATION AREAS



Semiconductor industry
Electronic industry

Construction industry
Ceramics processing industry

Automobile industry

Medical technology
Hygiene technology

Chemical industry

Paper industry
Printing industry

Plastics industry

Packing industry

Food industry

Textile industry

Cable industry
Stamping industry

Glass industry

Furniture industry
Wood industry

Pharmaceutical industry

Transport industry

Machine building industry
Metal processing industry

Robot industry

Lifestyle

Environmental technology

Agriculture

PRODUCTS

Sensor Instruments
Let's make sensors more individual

SENSOR SYSTEMS

... always the individually best solution

Measurement systems for the plastics industry

Customized products

We develop customer specific products and sensor systems that support your success - with a lasting effect contribute to an increase in value. These solutions only can be achieved in a dialog with you.

The target is to find the best solution, the economically most efficient application.

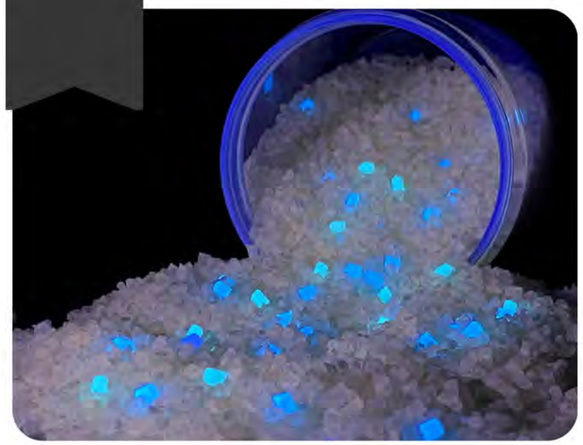
Plastics recycling and many more

SENSORS FOR THE UVA, UVB

AND

UVC RANGES

Mineral oil-based objects and liquids such as plastics and oils have different characteristics. Industrially used marker substances show considerable fluorescence in the visible wavelength range under UVA light.



The color and intensity of the fluorescence depends on the respective marker and its concentration in the carrier object.

This enables better detection of transparent objects such as films and traces of glue.

The fluorescence effect of mineral oils and other oils can be used to determine layer thicknesses in the sub-µm range.

Glass is opaque in the UVC range, which enables the differentiation of glass surfaces, e.g. to distinguish between the fire side and tin side or the detection of hydrophobic nanolayers.

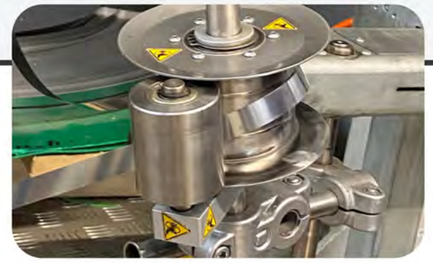
WINDERS AND UNWINDERS

FOR THE

STAMPING SECTOR

We provide customer service and advice for PS electronicTM in Europe, Africa and the Middle East.

PS electronic™, based in Singapore, has been known for its winding and unwinding technology for the stamping sector for over 30 years.



Our pursuit of perfection and customer satisfaction, as well as identifying trends in stamping technology and developing innovative, customized solutions are core values of PS electronic™.

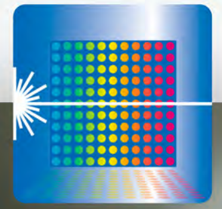
COLOR CONTROL
AND
COLOR MEASUREMENT

We have made it our target to solve almost all tasks in the field of color inspection and color measurement, with the main focus on inline applications.

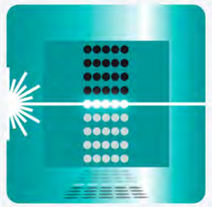
To meet this high demand, we provide a correspondingly large variety of sensors and accessories.

Learn about our comprehensive product range.

- High-frequency contrast sensors
- Two-channel sensor systems
- Color sensors (True Color)
- Laboratory measuring systems



COUNTING
AND
TRIGGERING



When it comes to highly precise triggering,

or fast and at the very same time exact counting using the through-beam procedure,

sensors of the FIA-L series are your first choice.

Laser reflected light edge detectors
RED Series

Laser fork light barriers
F-LAS Series

SURFACE INSPECTION

AND

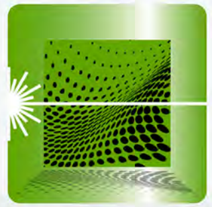
GLOSS MEASUREMENT

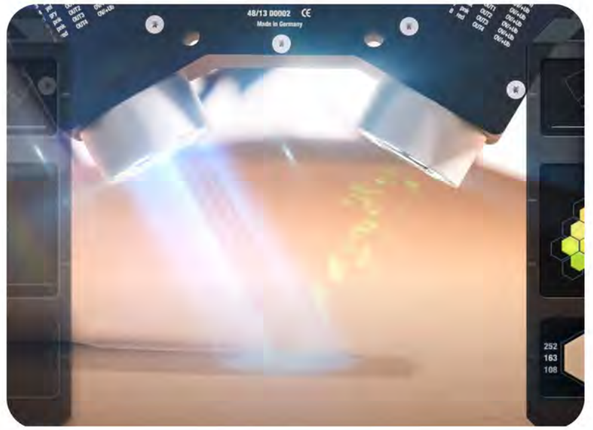
Do you need to perform gloss measurement, turbidity inspections or contrast or structure inspections? Then you have come to the right place!!

In order to meet this high standard, we offer a wide range of sensors and accessories.

- GLOSS Series
- COAST Series
- GLAST Series
- SI-JET Series
- SPECTRO-M Series

Another advantage for you:
With our sensors, you can detect your products INLINE with high precision even in adverse environments.





SENSORS AND SENSOR SYSTEMS

FOR

RECYCLING TECHNOLOGY

Products for sustainability are made from recyclable materials without compromising on quality. In the plastics industry, recycled materials must meet the same standards as virgin materials.

Monitoring the type of plastic

Grade purity of high-quality recycled material

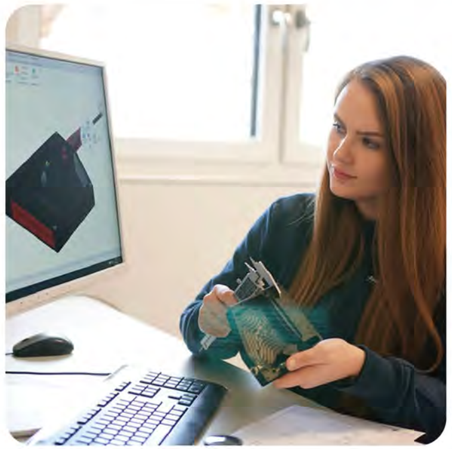
The use of recyclates must not have a detrimental effect on either the production plant or the end product. Above all the purity of the material is crucial for high-quality recyclates. Special sensors enable the precise monitoring of plastic type and color both in the laboratory and inline.

Monitoring the plastic color

SERVICE
AND
ENGINEERING

We offer tailor-made products, customer-specific software and circuit development, process analysis, calibration service, installation and on-site testing of measuring equipment.

Our scope of work also includes worldwide service, training for customers and partner companies as well as solving technical problems and customer-specific applications.



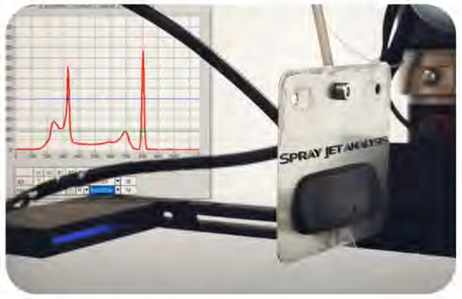
DISTANCE MEASUREMENT
AND
POSITIONING

Line sensors are applied where precise positioning is required or where the dimensions of an object need to be determined with high accuracy.

- **Triangulation sensors**
  L-LAS-LT Series
- **Reflected light line sensors**
  L-LAS-RL Series
- **Transmitted light line sensors**
  L-LAS-TB Series
- **Line camera sensors**
  L-LAS-CAM Series

The laser triangulation sensors of the L-LAS-LT Series enable precise distance measurements in the near and far range on various surfaces, from steel, wood and paper to textiles.

In addition, the laser light curtains of the L-LAS-TB Series offer a wide range of applications in transmitted light mode, including the high-resolution measurement of film thicknesses using macro lenses.



We individually respond to your requests and build special versions especially according to your ideas and requirements.

DYNAMIC DISTANCE MEASUREMENT

AND

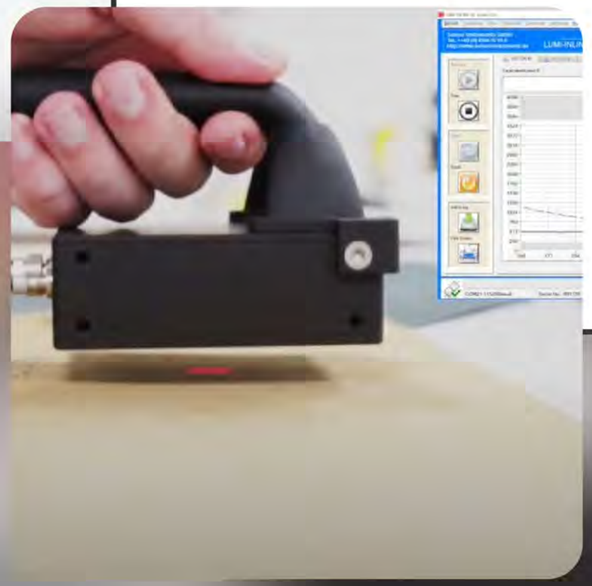
DYNAMIC POSITIONING

With many applications it is essential to determine distances, e.g. the distance between two objects (gap size measurement), especially during a movement. The sensors of the A-LAS Series or the SPECTRO-1-CONLAS Series and the SPECTRO-2-CONLAS Series perform very good services and can provide scan frequencies of up to 175 kHz. The measurement ranges are determined by the light spot size, with spot sizes from 0.1mm to 100mm available.

PRODUCT MARKING
AND
PRODUCT TRACKING

No chance for pirate counterfeits – with our help!

Confidentiality is mandatory!



Cooperative solutions with strategic partners

In cooperation with our strategic partners, we offer comprehensive solutions that cover the entire process chain from the selection of a suitable marking agent to its application or integration into the respective product through to unique identification.

TAGTEC!

SENSORS FOR THE NEAR (NIR)

AND

MID-WAVELENGTH INFRARED RANGE (MIR)

NIR and MIR sensors are crucial for the early detection of spoiled food, moisture measurement in various materials and the differentiation of plastics.

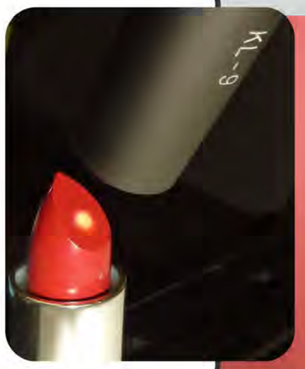
MIR sensors can also distinguish soot-colored plastics and measure the thickness of oil layers in the sub-micrometer range, even with synthetic oils without fluorescence under UV light. They even make it possible to determine the water content in recycled plastics by examining the inside of the granules.

FIBER OPTICS
AND
ACCESSORIES

Our high-quality fiber optics and optical frontends of the FIO Series today are used in almost all the product ranges of Sensor Instruments.

Discover our versatile fiber optics solutions, including reflected light, transmitted light and special light fiber optics as well as optical frontends.

Find out more about their wide range of applications. Sensors with the suffix "FIO" in the product names (e.g. SPECTRO-3-FIO-JR) are specifically suitable for use with fiber optics.



1. Fiber optics
2. Optical frontends
3. Connecting cables
4. Mounting devices
5. Blast air tops
6. Calibration units
7. Spacers
8. Further accessories for sensors

INNOVATION

Passion for innovation:

Our Managing Director Walter Braumandl emphasizes that creating something new is more than just work – it is passion.

The positive feedback from our customers encourages us to keep taking new challenges.
Being honored with the TOP 100 Innovation Award reinforces our commitment.
Our motivation goes beyond the need to succeed in disruptive times - we create something new out of genuine passion.

Our customers are the source of our ideas, and it is our obligation to take on challenges. In fields with a promising future, we appreciate cooperation from the idea to the finished product, the engineering model. Continuous optimization keeps the series model up to date.

In our search for the blank spots on the innovation map, we sometimes enter uncharted areas. We don't get discouraged even by the occasional setback - the sense of achievement of creating something completely new makes the effort worthwhile.

Walter Braumandl

Managing Director

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Schlinding 15 / 94169 Thurmansbang (Germany)

OUR TEAM

Strong core team, versatile expertise:
Our specialists in the fields of hardware and software development, design, layout, opto-electronics and system integration form the very heart of our team.

This core ensemble is complemented by committed customer-facing employees and competent sales specialists to ensure optimal cooperation.

FUTURE

Sensor Instruments is passionately committed to actively participating in shaping the "Project Future". Special know-how gives us the necessary drive to develop outstanding solutions.
Technical challenges are our lifeblood!
We consider it our duty to find answers to the urgent questions of our time.
And we are fully convinced that, together with our partners, we can still make a difference, especially in the field of

- plastics recycling - carbon black detection using MIR / food - non-food differentiation using markers,
- supply chain monitoring - using marker-based product authentication of sustainably manufactured goods combined with blockchain technology and
- electromobility - optimization of cell production with the help of laser, UVA and MIR sensor technology

Together for a sustainable tomorrow - Let's shape the future!
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