ServicesSuite





HIGHLIGHTS

All our services offer a clear advantage: You can call on our help exactly where you lack resources or where you need OptiSense's expertise.

Depending on your needs, you can choose from our individual modules exactly those which are important and useful for you!

This allows you to focus completely on your core business. We support your business with services ranging from consulting to comprehensive support modules.

(**@**)

Non-recurring modules *Commissioning to rental device*

Thanks to more than 25 years of experience in project support for all aspects of coating thickness measurement, we can provide you and your customers with optimum support.

We provide support during the whole commissioning of the measuring solution and offer customized training courses for all our products. Needless to say, the experts at our helpdesk are always happy to provide you with advice and assistance. Or you would like a rental device? Of course we offer that, too. All these services are modular building blocks that can be booked individually at any time.



Recurring modules *Maintenance, MSA & Application*

In addition, there are the recurring services that save your staff a lot of work and time. We take care of the annual maintenance, the measurement system and measurement data analysis and we are also happy to create customer-specific measurement applications – even for very special material combinations. We periodically check the proper operation of your measuring device with type 1 or type 2 samples. In the most demanding case, we can perform measurements on type 3 samples according to DIN EN 15042-2. This involves a DAkkS- or DKD-certified set of samples that covers the entire coating thickness range.



Our ServicesSuite Future Design

Together with you, OptiSense can take the topic of services much further: Let's think, for example, of our future "Predictive Maintenance" module.

During preventive equipment maintenance, we evaluate long-term recorded data and create statistics to assess process stability based on wear metrics, anomalies and outliers.

We provide you with our services throughout the entire product lifecycle – whether by phone, via remote access or directly on site at your premises.

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E1

Is it possible at all? The feasibility study

Our feasibility studies take several critical aspects into account. We perform various measurements to check whether photothermal coating thickness measurement is feasible from a technical point of view. Here, material properties and physical constraints are key factors.

First, we create a measurement application for your samples. Thus, we can quickly and reliably check whether your metrological requirements, such as the coating thickness range or accuracy, can be met under the desired operating conditions.

Furthermore, it is possible to use traceable samples for the measurement application. Through precise analyses and inclusion of your process parameters, all critical values are determined in advance to ensure compliance with all quality requirements.

Your benefits

- Avoiding misinvestment
- Finding the best solution
- Assessment of possible risks
- Guidance for a proper decision

E2

Rent-a-Meter: **Our Rental Service**

If you occasionally need precise measuring instruments for short-term use, our rental service with a selection of different Paint-Checker instruments is the right place to go. You can rent the test equipment for 14 days or more at favorable rates. You get an Opti-Sense measuring system with up-to-date calibration certificate on time and at the same time save your investment budget.

Your benefits

- Budget safety and investment protection
- High availability
- Always the latest measuring technology



Performance right from the start:

Commissioning support

Our mobile measurement solutions are intuitive to handle. In the training course (see E4), our highly qualified technical staff tells you, how to make the most of the various powerful features.

We are an ISO certified company. So, for sophisticated industrial measurement solutions, we address the commissioning requirements for each individual product already in the pre-sales phase. Thus, when the device is delivered, the installation site is already prepared accordingly. A comprehensive set of functional and performance tests are carried out during commissioning. Our experienced technical specialists will work with you to ensure proper installation and setup of the measurement systems. Workload of your staff will be lowered, installation and commissioning will be accelerated and costs will be reduced.

Our comprehensive know-how protects your valuable investment. We support the proper, professional installation and initial commissioning of your new OptiSense measuring system – either via remote access or on site, as needed.

Your benefits

- Operating know-how transfer to your staff
- Time, effort and cost savings
- Avoiding false starts
- Full compliance with regulations
- Live link to the line for fast and effective commissioning and more efficient support
- Complete documentation of the commissioning for audit purposes

By the way: Our team is available for scheduled maintenance (*see T1*) or extended services of the measuring system during the entire product life cycle.



Making the most of your meter **Comprehensive trainings**

Our experienced instructors offer in-depth training on all aspects of the OptiSense measurement systems. Your employees expand and deepen their knowledge to make the best and most profitable use of the coating thickness measurement equipment. Our experts know all the little tips and tricks that can simplify your daily work and are happy to pass them on.

Through hands-on learning and in-depth knowledge exchange with our experts, your staff will be perfectly qualified to properly operate, maintain and service the measuring equipment. The training sessions can be tailored and scheduled to meet your individual requirements.

Your benefits

- Budget security and investment protection
- Proper handling of the measurement equipment
- Improved in-house knowledge and know-how



Malfunctions or downtime of the coating line are not only annoying, they can also be really expensive. This is where experience and proven workflows are needed to quickly fix the problem. That's what our Help Desk stands for. With sophisticated processes, issues are resolved quickly and sustainably.

Technical questions or error messages are classified and processed right away – by remote access, by phone or by mail. Triggered by this first-level contact, a ticket is created and processed by the specialist support staff in charge. An on-site service team can also be requested to tackle the problem directly at the coating line. They solve even complex challenges quickly and effective.

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Our HelpDesk offers quick and easy access to our wealth of knowledge. Submit a request directly to our experts – and be "up and running" in no time.

Your benefits

- Bundled expertise
- · Fast, efficient troubleshooting
- Coating line remains operational

Keeping the optimal line performance **Our maintenance service**

Periodic maintenance of critical line components is key to avoid downtime and ensure high plant availability. Our experience and skills ensure the proper operation of quality and safety relevant measuring equipment. We will take care of the annual maintenance and functional testing of the OptiSense measuring systems according to DIN 31051. We also perform a Type 1 factory calibration and the important insulation test. On completion of maintenance, all services are documented by a detailed report and an inspection sticker is attached to the measuring system.

Your benefits

- Optimal device performance ensures safe and smooth operation
- Detailed documentation ensures full compliance with quality requirements
- Qualified maintenance protocol for improved safety
- Budget safety due to precisely predictable maintenance expenditures
- No creeping reduction in line performance
- Ensuring and extending the measurement system life cycle

Calibration services

| Model | Type 1 | Type 2 | Туре 3 |
|--|------------|-------------|--------------|
| Functional test | Yes | Yes | Yes |
| Adjustment | — | Yes | Yes |
| Sample set (according to DIN EN 15042-2) | Grey Glas* | 8 x Typ 2** | 8 x Typ 3*** |
| Number of measurements | 25 | 8 x 10 | 8 x 10 |
| Determination of measurement uncertainty | — | Yes | Yes |
| Assessment of results**** | _ | Yes | Yes |

*Type 1: standard color glass with high optical absorption

**Type 2: Samples of a coating/substrate combination similar to the application

***Type 3: Measurement on a DAkkS- or DKD-certified set of samples covering the complete coating thickness range in 15% steps. The samples consist of the original substrate coated with the same material as used in the application

**** Optionally according to 50% or 95% confidence level

Efficient data evaluation Measurement system analysis

Since a measurement system is often operated for years, long-term stability is crucial. Periodic measurement system analysis (MSA) - monthly, weekly or every day - is a proven method for validating the performance and stability of a measurement system. It checks whether the measured values represent reality with sufficient confidence and whether a process provides stable results. The Measurement data is analyzed according to coordinated evaluation models and deviation as well as disturbance variables are determined. Finally, solutions are proposed to achieve the required measuring capability. OptiSense offers three types of MSA analysis: Procedure 1 checks the accuracy and repeatability of the calibrated PaintChecker using the customer's reference samples. Procedure 2 checks the operator influence on the measurement results. Once procedure 1 has confirmed feasibility, procedure 3 examines the impact on coating line accuracy. Upon successful completion, you will receive a comprehensive MSA report.

Your benefits

GERMANY

• Measuring certainty through high data quality

T3

Maximum precision Our calibration services

Our highly accurate, cost-effective calibration services ensure consistent high quality as well as full compliance of your measurement equipment. You can even request us to come to your company and perform the calibration on site. Our calibration experts work with you to optimize all aspects of your measurement system operation.

We maximize your plant performance and improve your product quality at the same time. Our service staff is specially trained in metrology and achieves excellent calibration results with our type 1, 2 or 3 factory calibrations. The table above gives an overview of the different procedures. After successful final approval, you will receive a factory calibration certificate according to type 1 to 3, a service report in case of on-site service as well as an inspection sticker.

Your benefits

- Reliable measurement data as an essential prerequisite for any optimization
- Protection against regress claims
- Solid foundation for all kinds of quality management

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OptiSense is certified according to DIN EN ISO 9001:2015 WEEE-Reg.-No. DE 69647320 Version 22.02

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