MARPOSS

PRESS RELEASE

FOR IMMEDIATE RELEASE

Battery Show North America 2024
Booth #222

Marposs Demonstrates Non-Contact Gauging Solutions for Battery Film

Detroit, Mich., Oct. 7, 2024 – At the Battery Show in Detroit, Marposs will also demonstrate its solutions for non-contact in-line gauging for EV Lithium Battery Production. Marposs offers solutions for monitoring the roll-to-roll (R2R) production process of electrode foils (anode and cathode) used in lithium-ion batteries (LIB). These solutions incorporate several of Marposs' non-contact measurement and inspection technologies to provide fast, high-resolution film thickness and width gauging across the electrode production process, helping to avoid scrap and rework to improve quality and save money.

Confocal Thickness Measurement During Electrode Coating and Calendaring

For electrode formation, copper or aluminum foil and slurry are mixed with as solvent and coated R2R on the metal substrate as a liquid film. Marposs will demonstrate its STIL Chromatic Confocal technology, measuring the thickness of copper film in the roll-to-roll process using a two-channel ZENITH control and 2 confocal point sensors. This system identifies out-of-spec dimensions fast and accurately, helping to reduce excessive scrap rates of electrode coatings.

The Confocal System enable very fast, high-resolution distance and thickness gauging of almost any surface including solid, transparent, and polished mirror surfaces such as foil, laminate, glass and more. Featuring a 4mm measuring range optical sensor within the measuring probe, the accuracy is extremely precise, enabling the identification of very small aberrations in shape, air gap, or paint finish. It is well-suited for manufacturers of electric power transmission products and for PCB assemblers.

Laser Micrometer Inspection of Width During Electrode Slitting

After film production, the electrode mother roll is split into smaller daughter rolls using ceramic blades. Geometric measurement is required to identify the wrong position of the blade or of the electrode.

The Marposs Aeroel laser scanner micrometer can be used to provide efficient and accurate measurement of the daughter roll width during this R2R process. These laser gauges are designed to monitor the diameter and ovality of steel and copper wire during drawing, measuring a range of wire from 0.06 mm up to 149 mm.

For the electric vehicle industry, Marposs offers a wide range of standard and design-to-order solutions to gauge, inspect and assemble the different types of battery cells, modules, and packs, their components, and auxiliary systems.

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You can visit the Marposs website for more on solutions for battery manufacturing or by contacting Marposs toll-free at 1-888-627-7677 or by e-mail to marposs@us.marposs.com.

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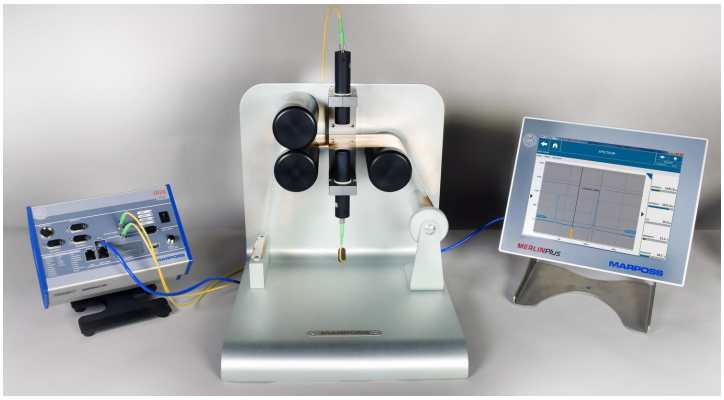
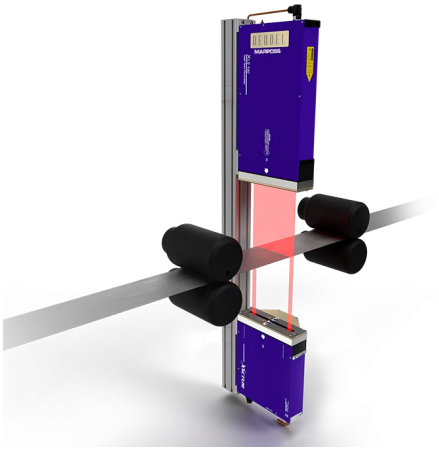


Marposs Confocal measurement system for measuring copper film thickness during the R2R process.



Marposs laser micrometer technology for measuring width of electrode roll slitting.

ABOUT MARPOSS

Marposs, founded in 1952, has distinguished itself by supplying advanced solutions that improve quality and productivity while reducing manufacturing costs through technologies such as process control, machine tool monitoring and precision gauging, as well as leak testing and automated assembly and control lines. A long-time key supplier to the automotive and aerospace markets, Marposs' growth strategy includes the acquisition of high-quality companies that offer innovative products complementary to its portfolio, enabling penetration into new market sectors. The Group currently has over 3700 employees worldwide and is present in 25 countries through more than 80 offices.
www.marposs.com

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