



Source: adobestock



QUALITY ASSURANCE FOR E-MOBILITY AND BATTERY-APPLICATIONS

At a glance

In the course of electrification in the automotive industry, automated monitoring is increasingly becoming the focus of companies, especially in battery production. In addition to the different types of batteries, material combinations and partially charged processing, manufacturers are also faced with the challenge of a very high number of welds.

Challenge

A typical battery pack for a passenger car consists of approx. 7,000 lithium-ion batteries of type 18650. Even when changing to the next larger type 2170, approx. 2,000 batteries are required to operate an electric vehicle. Each of these individual batteries has a welded contact. Depending on the car model, these batteries are connected in different ways in series and parallel to each other. This is necessary in order to achieve the current and voltage values necessary for the operation of an electric vehicle.

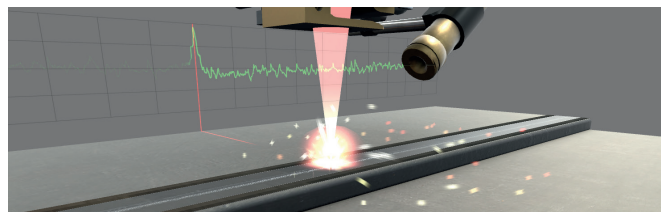
To guarantee the full functionality of the battery, each of these contacts must be tested by the manufacturer. With

a test time of only approx. 2s per weld, even an experienced tester quickly reaches his limits with 2,000 contacts to be tested per battery pack.

If several production systems are now in use, possibly in shift operation, the strain on the inspecting employees increases considerably.

plasma solution

In order to compensate for these deficits, automated process monitoring and inspection systems for quality assurance are increasingly being used in production plants.



The plasma process **observer** is capable of detecting, evaluating, recording and reporting defects in fractions of a second.

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PRODUCE QUALITY. ALWAYS.

