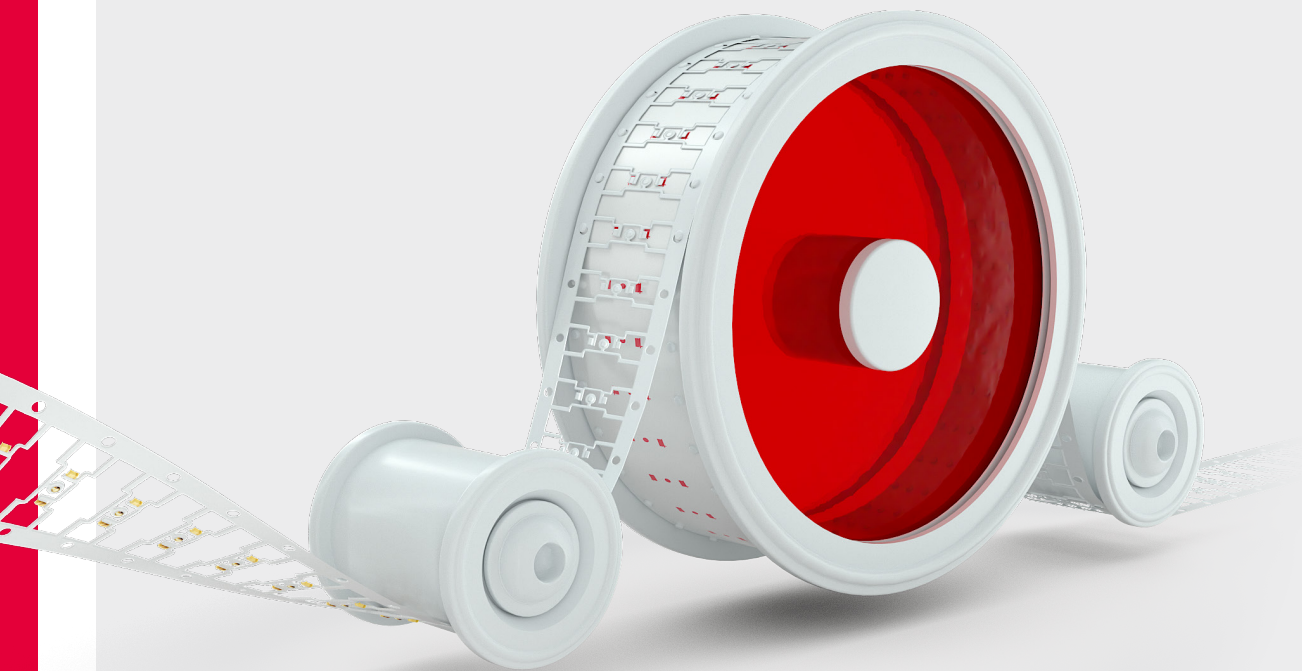


REEL-TO-REEL PLATING SPOT TECHNIQUE

The use of electronics in automotive engineering is constantly increasing. Due to their excellent electrical properties, precious metals are often used in the production of the necessary components. But rising precious metal prices, especially that of gold, call for ever more efficient use.



With the innovative (micro) spot technique, the precious metal plating is limited to the really necessary functional area of the component: The metal is applied to the component selectively (= as a spot). This technique enables highest precision, not only in the field of punctual application, but also in comparison to other processes by reducing position tolerances, so-called run-off areas.

The innovative macro spot technique for precious metal coatings combines the immersion cell and spot technique. Here, two proven processes work hand in hand. This method is not as high-precision and complex as the micro spot technique and is therefore also cheaper.



SPOT TECHNIQUE AREAS OF APPLICATION

In principle, spot technique can be used on all electrical contacts that can be electroplated. The required so-called spot masks generate costs, so that potential products have to be tested with regard to the expected precious metal savings. This technique is ideally suited for single-sided plating and for inner functional surfaces in relation to the underlying stamped lead frame.

SPOT TECHNIQUE TECHNICAL DATA

Plating	<ul style="list-style-type: none"> > gold or silver > nickel undercoat possible or necessary
(Strip) dimensions	<ul style="list-style-type: none"> > Strip width max. 100 mm > Strip thickness max. 1.0 mm > Run-off areas circumferential to the functional area approx. 0.3 mm
(Strip) dimensions with macro spot technique	<ul style="list-style-type: none"> > Strip width max. 150 mm / Strip thickness max. 1.0 mm

SPOT TECHNIQUE SAVING POTENTIALS

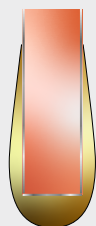
Compared to conventional immersion plating, the micro spot technique allows for a more efficient use of the precious metal, which in the case of gold plating is still the number one surface in the electrical industry due to its outstanding properties.

The macro spot technique incurs only low set-up costs. Here, the plating is concentrated on the main areas by means of item-specific masking. In the remaining areas, the plating thickness is reduced to approx. 20%. This process can be a good alternative, especially for high stamping grids with a wide feed rate, if the micro spot technique is not profitable or cannot be carried out due to the number of pieces or the geometry. Item-specific spot masks are necessary.

CONVENTIONAL IMMERSION TECHNIQUE



frontal view

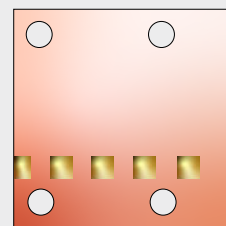


side view

IMO SPOT TECHNIQUE



side view



frontal view

