

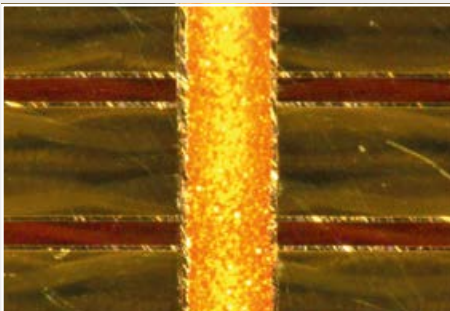
# Reliable Through-hole Plating in the Lab

## LPKF Contac S4

- Homogeneous copper layer buildup
- Easy operation
- Microvia cleaning step
- Tin option



### Reliable through-hole plating in the development lab



Not only double-sided PCBs but also multilayer PCBs can be reliably and uniformly through-plated with the LPKF Contac S4.

# Through-hole Plating for Labs – LPKF Contac S4 for a Reliable Galvanic Process

Reliable through-hole plating is key to the success of the challenging PCB prototyping process. The new LPKF Contac S4 unites various galvanic and chemical processes in one compact safety housing.

## Galvanic Through-hole Plating

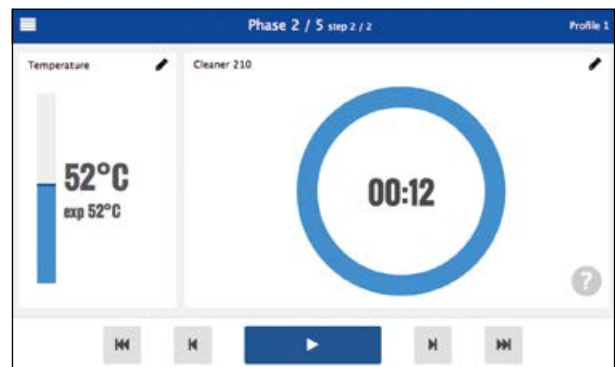
Interconnection of two or more layers is an indispensable part of PCB prototyping. The compact LPKF Contac S4 with six baths reliably performs this task: the board is passed through each stage of a bath cascade. This yields reliable copper layers on the surfaces of all existing vias, even in multilayer boards. The Contac S4 can process up to eight layers with a maximum aspect ratio of 1:10 (hole diameter to PCB thickness). The LPKF Contac S4 offers a subsequent tin bath step for surface protection and improved solderability.

## Improved Copper Layer Buildup

The LPKF Contac S4 incorporates powerful techniques for improving copper layer buildup. Optimized anode plate and pulse reverse plating ensure homogeneous deposition, and carbon activation using black hole technology, integrated air blow-in, and an additional process step for via cleaning ensure reliable connections to the copper surface without the problem of layer detachment. The result is a homogeneous layer thickness in the holes and on the flat metal surface of the substrate.

## Easy to Use

The integrated touch panel with wizard and parameter administration safely guides even inexperienced users through the galvanization process. Ambitious developers can customize the settings at any time. The process requires no knowledge of chemistry and no bath analyses, as the system automatically indicates the necessary maintenance steps. Another new feature is the chemical-resistant housing – the Contac S4 combines functionality, good looks, and practicality.



An intuitive graphical user interface guides through all process steps

## LPKF Contac S4

<b>Max. material size (X x Y)</b>	230 mm x 330 mm (9" x 13")
<b>Max. layout area (X x Y)</b>	200 mm x 300 mm (7.8" x 11.8")
<b>Reverse pulse plating</b>	Adjustable
<b>Tolerance</b>	± 2 µm (0.08 Mil), copper coating
<b>Minimum hole diameter</b>	≥ 0.2 mm (8 mil)
<b>ViaCleaner</b>	Included
<b>Chemical tinning</b>	Included
<b>Process time</b>	Approx. 90 – 120 min
<b>Electrical consumption</b>	115/230 V, 50 – 60 Hz, 0.6 kW
<b>Dimensions (W x H x D)</b>	856 mm x 446 mm x 542 mm (33.7" x 17.5" x 21.3")
<b>Weight</b>	~ 80 kg unfilled, ~ 115 kg filled

