

Professional PCB Electroplating Tanks  
LPKF Contac RS and LPKF MiniContac RS





# Professional Quality Through-hole Plating

The LPKF Contac RS and MiniContac RS, professional through-hole plating systems, are ideal for prototyping and small production run printed circuit boards, and their small footprints are perfect for labs and production areas where space is a premium. Both systems feature Reverse Pulse Plating and reliable Blackhole® Technology for direct metallization.



Ideal for plating the most common circuit board materials, including FR4 (G10) and microwave substrates such as RO3000®, RO4000® and TMM® as well as for creating multilayer printed circuit boards.

## Easy to Use

These microprocessor-controlled electroplating tanks feature a hands-on interface with a simple-to-use four-line display and menu-driven interface.

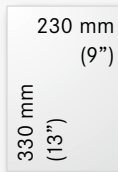
## Easy Process and Simple Chemistry

The through-hole plating process starts with a pre-treatment of the circuit boards. They are cleaned, degreased, pre-treated, and activated. A galvanic bath adds the copper coat and after another rinse and cleaning step, the boards are ready for soldering.

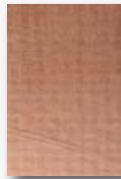
# Choose the Right Tank for the Right Application

## LPKF MiniContac RS

### Substrate size

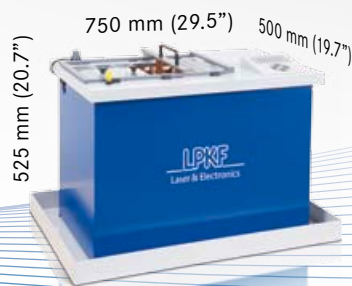


### Plating and tinning



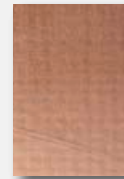
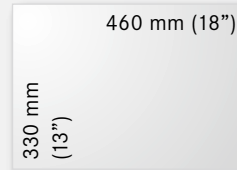
Copper

### Dimensions



## LPKF Contac RS

460 mm (18")

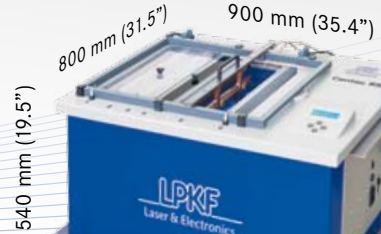


Copper

+



Tin



- High quality through-hole plating for production or the lab
- Uniform copper deposition with Reverse Pulse Plating (RPP)
- No special chemical knowledge needed

The LPKF MiniContac RS uses only four easy-to-change baths to complete a plating process. The LPKF Contac RS offers two additional baths: a rinsing bath and a bath for tin plating. No chemical knowledge or background is required to operate either system.

### Galvanic Through-hole Plating, Step-by-step

The LPKF Contac RS and MiniContac RS are identical in all but scale to professional PCB electroplating systems. LPKF uses a step-by-step menu-driven system to walk a user through every step of the process nearly automatically in approximately 90 – 120 minutes.

### Three simple steps

1. Washing and degreasing: In the first cycle of baths absolutely all contaminants are cleared away.
2. Activator application: A carbon activator is applied to the printed circuit board.
3. Electroplating: The LPKF electroplating sequence includes full digital control. The user simply has to load the PCB and the computer controls the rest of the process.

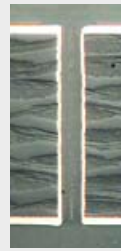
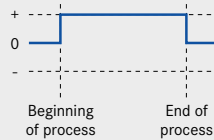
## Advantage of Reverse Pulse Plating

Both systems feature Reverse Pulse Plating, which assures consistent, even coverage of conductor on the plated surface. This is especially useful for through-holes with high aspect ratios.



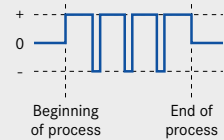
### Typical electroplating

Typical electroplating uses current flowing in one single direction to perform the copper deposition.



### Reverse Pulse Plating

With Reverse Pulse Plating, the electroplating process is punctuated by brief current reversals, preventing dimensional copper build-up that can cause trouble with high aspect ratio holes.



Technical Data	LPKF Contac RS	LPKF MiniContac RS
<b>Part #</b>	120742	119987
<b>Activator</b>	Carbon	Carbon
<b>Max. substrate size</b>	460 mm x 330 mm (18.0" x 13.0")	230 mm x 330 mm (9.0" x 13.0")
<b>Max. board size</b>	430 mm x 290 mm (16.9" x 11.4")	200 mm x 290 mm (7.9" x 11.4")
<b>Hole diameter</b>	>0.2 mm (8 mil)	>0.2 mm (8 mil)
<b>Number of plated holes</b>	Unlimited	Unlimited
<b>Max. number of layers</b>	8	8
<b>Max. resistance</b>	<10 mΩ	<10 mΩ
<b>Environmental compatibility</b>	Good	Good
<b>Processing reliability</b>	Very good	Very good
<b>Process duration</b>	Approx. 90 – 120 min	Approx. 90 min
<b>Substrate types</b>	FR4, RO3000®, RO4000®, TMM® *	FR4, RO3000®, RO4000®, TMM® *
<b>Power supply</b>	115/230 V, 50 – 60Hz, max. 1.5 kW	115/230 V, 50 – 60Hz, 0.6 kW
<b>Ambient temperature</b>	18 – 25 °C (64.4 – 77 °F)	18 – 25 °C (64.4 – 77 °F)
<b>Dimensions (W x H x D)</b>	900 mm x 540 mm x 800 mm (35.4" x 19.5" x 31.5")	750 mm x 525 mm x 500 mm (29.5" x 20.7" x 19.7")
<b>Chemical tinning</b>	Yes	No
<b>Reverse pulse plating</b>	Yes	Yes
<b>Weight</b>	85 kg (154 lbs) unfilled; 150 kg (330 lbs) filled	42 kg (92 lbs) unfilled; 71 kg (156 lbs) filled

\* Further materials upon request.

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