



WST

PULSE PLATING SYSTEMS FOR ELECTROPLATING

- Higher throughput,
decreased cycle times:
faster metal deposition rate
- Substantial improvement
in throwing power and
surface distribution at
higher current densities
- Capital equipment
savings: enhanced
throughput of existing
equipment
- Reduced process engi-
neering- concurrent
multiple frequencies
provide wider operating
window virtually elimi-
nating ongoing process
engineering
- 5-Year Warranty





Pulse Plating made simple.

Varying thicknesses, aspect ratios, surface features (line widths and spaces)
ALL run with an identical waveform (recipe)! Can your system do that?

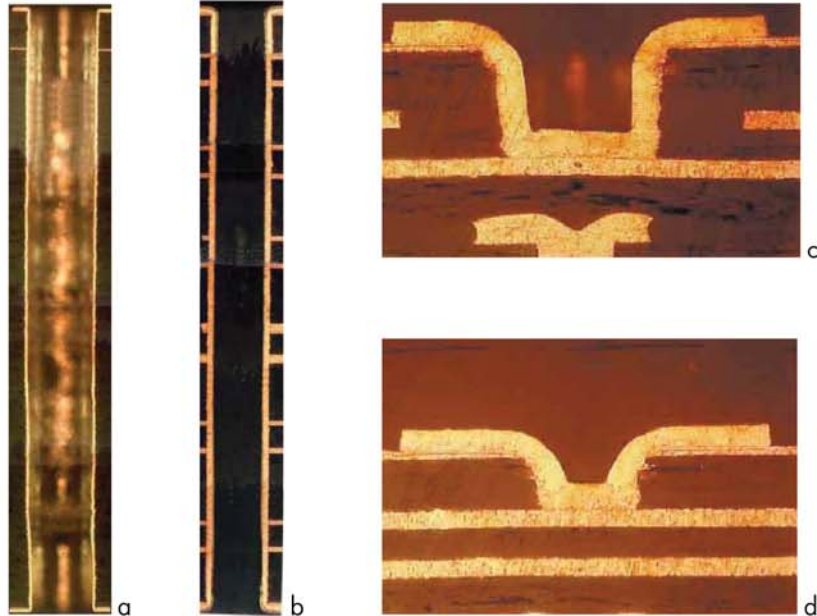
www.bakertech.com

Main Office

1512 16th St.
Suite 2
Santa Monica, CA 90404
310-478-1752

Rectifier Division

1918 Don Lee Place
Escondido, CA 92029
760-233-0382



a: .0247" thick, 29ml hole
b: .0145" thick, 10ml hole
c: 9ml diameter, 9ml deep
d: 6ml diameter, 4ml deep

WST System Specifications

- Standard single or dual output systems from 100A to 1000A/output (side).
- Customized sizes for higher currents or multiple synchronized outputs.
- Input voltages for worldwide compatibility, in the range of 100VAC – 480VAC, 50/60Hz, single or 3-phase, depending on output power rating.
- Control interface: Via RS-232/RS485 and analog I/O: Full local or remote.
- Control mode: Constant current, constant voltage with auto crossover.
- Onboard computer stores downloaded recipes in the event of power failure.
- Recipe readback enables user to verify recipe presently in operation.
- Cooling: Water or air cooled with standard operating temperatures 0°C – 40°C

WST System Benefits

- Ability to save \$ by purchasing DC units first and adding pulse later.
- Pulse Process Engineering Support.
- Enhanced physical properties, i.e. ductility, elongation and tensile strength.
- Lower total installation costs, no need for coaxial cabling, etc.
- Manufactured at ISO9001:1994 Certified Factory.
- Five (5) Year Factory Warranty.
- Regional service centers worldwide.



Baker Technology's

WST™

Multi-Frequency Pulse System



0.247" (6.3 mm) Panel Thickness

0.029" (0.74 mm) Hole Diameter

8.5:1 Aspect Ratio

1:1 surface/hole ratio

2 mil (51 μ m) copper (hole center)

+/- 0.0002" (5 μ m) Thickness Tolerance

Plated for 180 minutes at 20 ASF (2 ASD)

This and other complex panel types:

- **Processed concurrently 24/7 on older PAL line**
- **>90% of panel types run with a single multifrequency recipe**
- **Eight (8) Panels Across (18"x24") (460 mm x 610 mm)**
- **Mild Air Agitation**
- **1.5" (38 mm) Total Horizontal Mechanical Agitation Stroke**
- **Floating Panel Shields**

For Further Information Contact:

Power Products Division

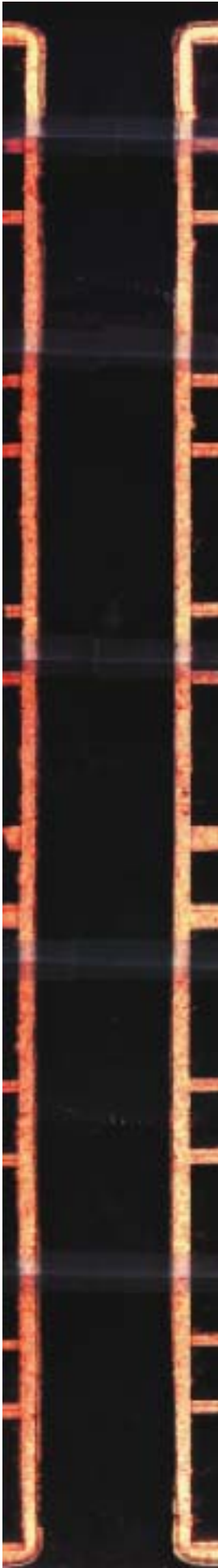
760.233.0382 x301

powerproducts@bakertech.com

Corporate Office

310.458.1752

www.bakertech.com



Baker Technology's WST™ Multi-Frequency Pulse System



This and other complex panel types:

- Processed 24/7 on older PAL line
- >90% of panel types run with a single multifrequency recipe
- Eight (8) Panels Across (18"x24") (460 mm x 610 mm)
- Mild Air Agitation
- 1.5" (38 mm) Total Horizontal Mechanical Agitation Stroke
- Floating Panel Shields

- 0.145" (3.68 mm) panel thickness
- ..1.1 mil (28 μm) copper deposit
- ...Plated for 150 minutes at 15 ASF

- 0.010" Hole Diameter (0.25 mm)
- 14.5:1 Aspect Ratio
- 1:1 surface/hole ratio

For Further Information Contact:

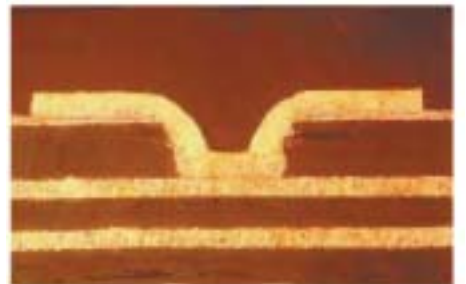
Power Products Division
760.233.0382 x301
powerproducts@bakertech.com

Corporate Office
310.458.1752

www.bakertech.com



0.009" x 0.009" blind via (230 x 230 μm)



0.006" x 0.004" blind via (150 x 100 μm)



Baker Technology's WST™ Multi-Frequency Pulse System



0.334" (8.5 mm) Panel Thickness
0.022" (0.56 mm) Hole Diameter
15:1 Aspect Ratio

1.5 mil (38 μm) copper (surface)
1.4 mil (36 μm) copper (hole center)**
1.1:1 surface/hole ratio
Plated for 180 minutes at 18 ASF (1.8 ASD)

**Approx. 130 minutes for 1 mil (25 μm) in hole center

- Basic copper plating cell design (NOT optimized for pulse plate!)
- Mild Air Agitation
- 1.5" (38 mm) total horizontal stroke
- No airless/eductor agitation

For Further Information Contact:

Power Products Division
760.233.0382 x301
powerproducts@bakertech.com

Corporate Office
310.458.1752

www.bakertech.com

A vertical, rectangular microscopic image showing a textured, reddish-brown surface with two parallel vertical lines, likely representing a plated metal surface with a specific pattern or structure.

Baker Technology's WST™ Multi-Frequency Pulse System

0.153" (3.89 mm) Panel Thickness
0.014" (0.36 mm) Hole Diameter
11:1 Aspect Ratio

0.75 mil (19 μm) copper (surface)
0.9 mil (23 μm) copper (hole center)
0.9:1 surface/hole ratio
Plated for 75 minutes at 20 ASF (2 ASD)

- **Basic copper plating cell design (NOT optimized for pulse plate!)**
- **Airless eductor agitation**
- **1.5" (38 mm) total horizontal stroke,**
- **Solution turnover, no filtration**
- **7" (180 mm) anode-cathode spacing (face to face)**

For Further Information Contact:

Power Products Division
760.233.0382 x301
powerproducts@bakertech.com

Corporate Office
310.458.1752

www.bakertech.com