

E-Brite™ 30/30 Troubleshooting

<u>PROBLEMS</u>	<u>POSSIBLE CAUSES</u>	<u>REMEDIES</u>
Discolored plating, chalky, brick red to black and sometimes peels off.	Organic contamination dragged in from cleaners or due to poor cleaning.	Change carbon filters or peroxide/carbon batch treatment. Improve cleaning and rinsing.
	Cyanide contamination - from previous copper cyanide process or other cyanide plating processes in the vicinity.	Temporary treatment with peroxide. LCD dummyming. Trace and eliminate the sources of cyanide - such as cracked racks.
Non-adherent plating, particularly in LCD areas or upon bending.	Low E-Brite 30/31	Add E-Brite 30/31 1 to 2% by volume at a time - check Hull Cell plating results, then add to bath.
	Poor cleaning and surface preparation.	Ensure proper soak, electroclean and acid along with good, counter-flow rinsing.
Copper plating adhesion okay but copper and nickel plated parts, upon bend testing fail - problems more particular to barrel plating	Low E-Brite 30/31	Add E-Brite 30/31 , 1 to 2% volume at a time and check Hull Cell plating results. Carry out adhesion tests.
	Low pH	Add E-Brite 30/35 to raise pH to 9.8 to 10.0.
	Copper metal too high	Lower the copper metal by plating out of bath using graphite anodes or a combination of copper and graphite anodes.

Dark, spongy deposits in HCD areas accompanied by poor adhesion in LCD areas.

Iron contamination

Ensure good double counterflow rinsing after acid pickling and before plating to minimize acid and iron contamination of plating bath.

HCD dummy plate to remove iron.

Remove fallen parts - fish out plating bath tank bottom with a magnet.

Black non-adherent plating in HCD areas.

Lead contamination from leaded brass or leaded steel parts being plated

HCD dummy plate to remove lead on a periodic basis.

Note: **E-Brite 30/30** should not be used to barrel plate over pure lead. Example: bullets

Burned deposits in HCD areas

Too much current

Lower Current

No, or insufficient air agitation.

Ensure good vigorous air agitation.

Too low temperature

Raise temperature to 120 to 140°F.

Too low copper metal (below 0.5 oz/gal.)

Raise copper metal to at least 0.8 oz/gal. (preferably 1.0 oz/gal.) by adding **E-Brite 30/30**.

Low **E-Brite 30/32** concentration if being used in a particular bath.

Add **E-Brite 30/32**.