Loctite G-10 paste --- Clean with Techspray Aqueous Eco-dFluxer Products

DATE: 3/25/15

CLIENT:

DISTRIBUTOR:

OBJECTIVE: Clean test paste on TS vehicle at standard test conditions

ANALYSIS: Using the TS vehicle, the components were assembled on a pre-pasted test board and reflowed using a Novastar DDM reflow oven at the paste manufacturer's recommended profile. Pre- & post-clean pix taken at 120X.

Set #1

Equipment – AAT Aquatherm Jr.

Wash cycle –5 mins @ 140° F.

Rinse cycle – 2X 2 mins/140° F.

Dry cycle – 5 mins/150° F.

Clean pass = 4 microsiemens

Cleaning agent – 1520 @ 10% concentration

Dwell time solder-to-clean = 2 hrs.

RESULTS: All components and areas were clean of flux residues and no white residue was noted.

Background This is part of an ongoing data accumulation using various pastes and cleaning at a (initial) standard set of cleaning conditions (see above).

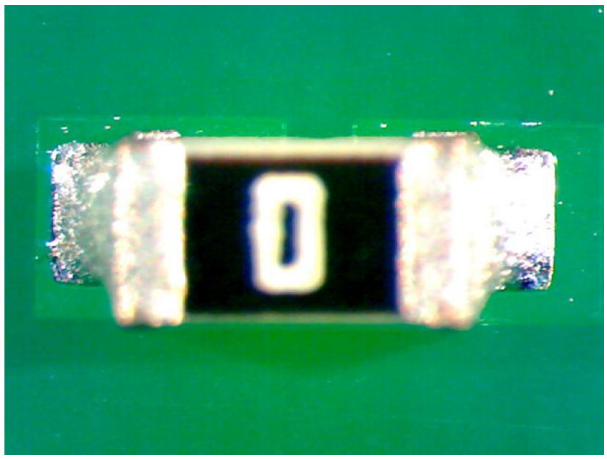

Fig. 1 Cap 0402 preclean

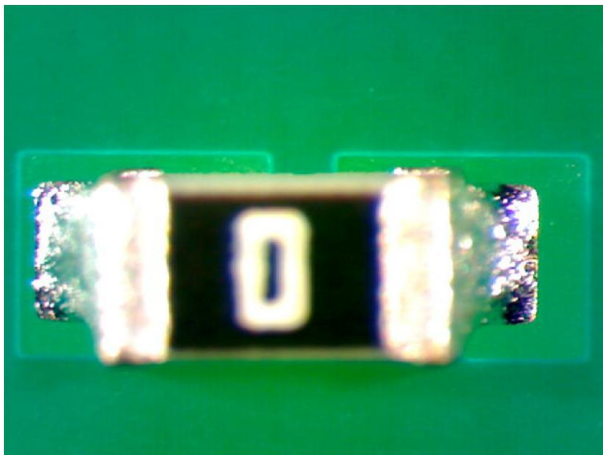

Fig. 2 Cap 0402 postclean

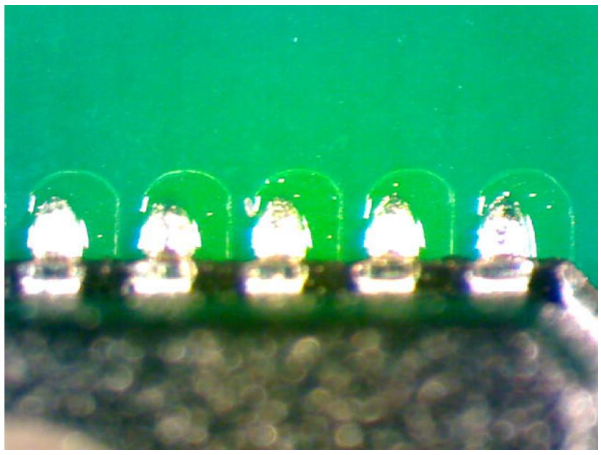

Fig. 3 MLF40 preclean

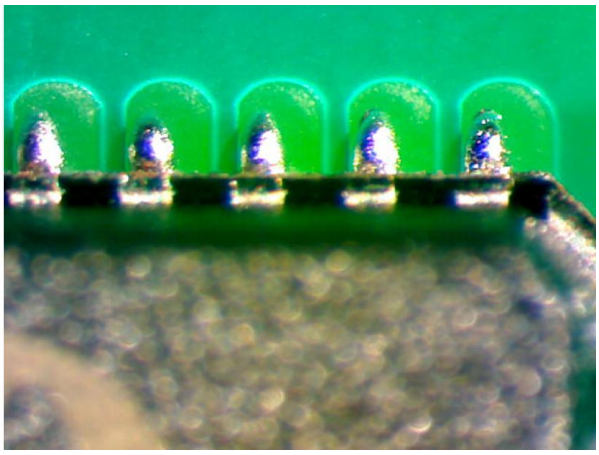

Fig. 4 MLF40 postclean

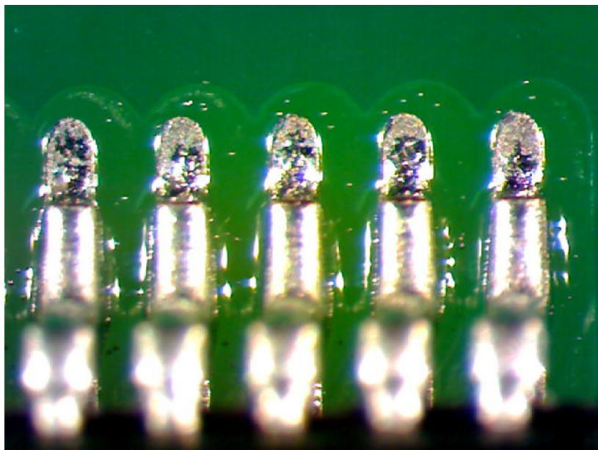

Fig. 5 QFP80 preclean

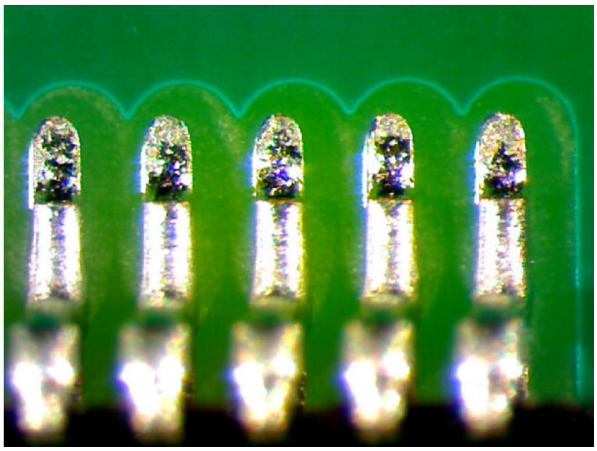

Fig. 6 QFP80 postclean

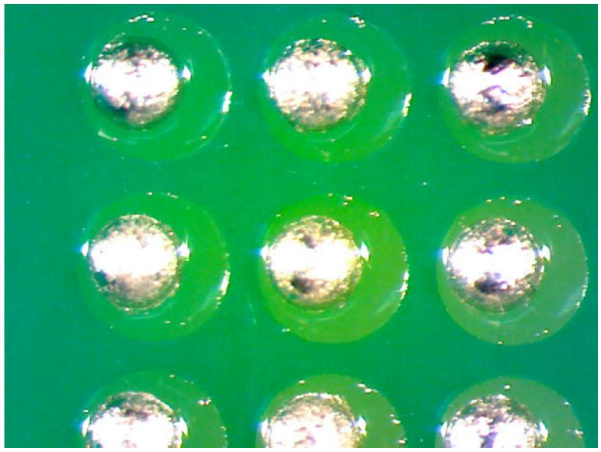

Fig. 7 BGA208 grid array preclean

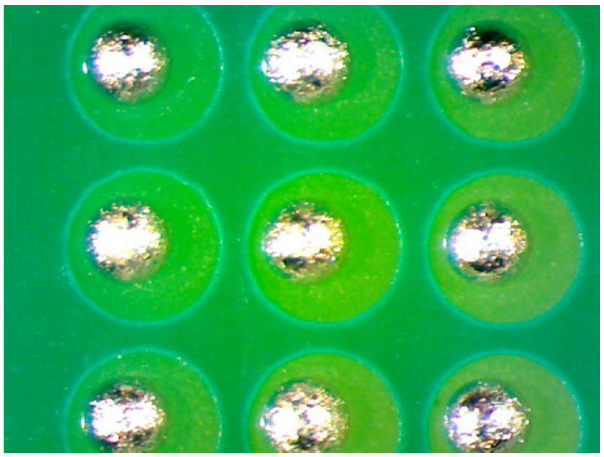

Fig. 8 BGA208 grid array postclean

Set #2

Wash cycle – 5 mins @ 140° F.

Rinse cycle – 2X 2 mins/140° F.

Dry cycle – 5 mins/149° F.

Clean pass = 4 microsiemens

Cleaning agent – 1530 @ 10% concentration

Dwell time solder-to-clean = 2 hrs.

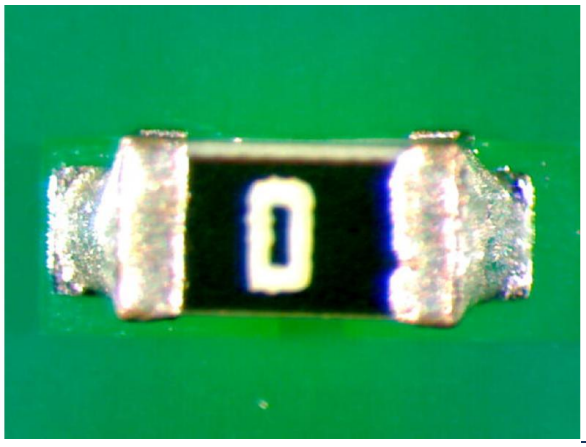

Fig. 1 Cap preclean

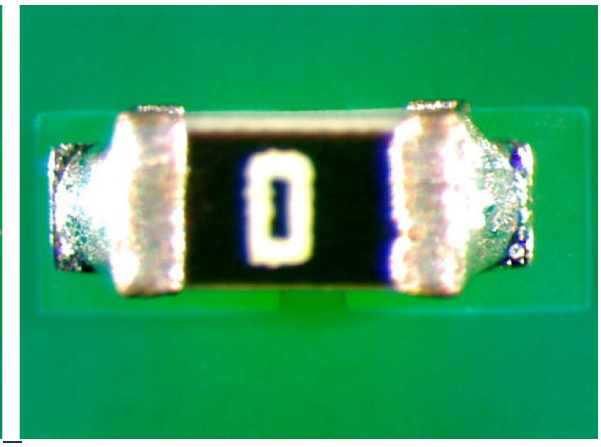

Fig. 2 Cap postclean

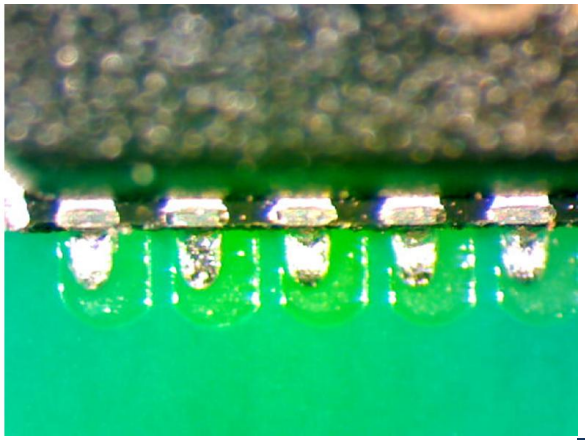

Fig. 3 MLF40 preclean

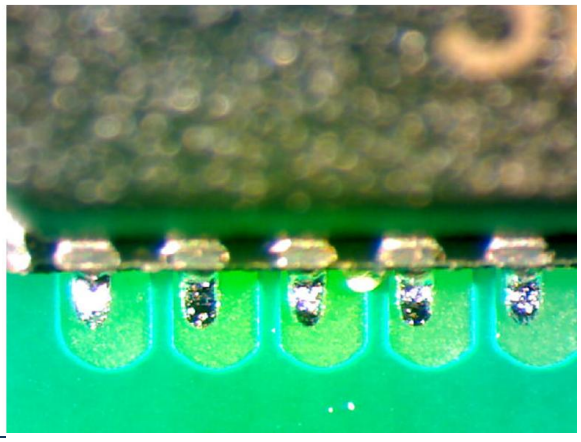

Fig. 4 MLF40 postclean

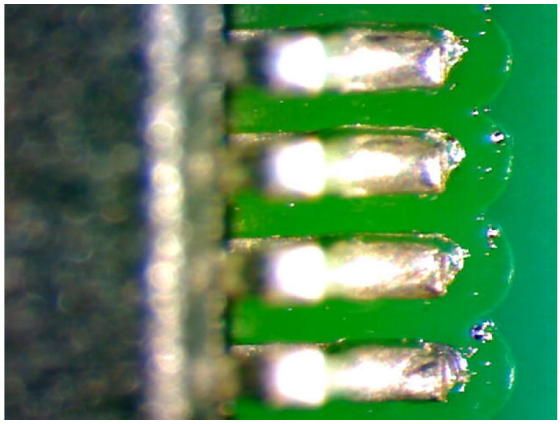

Fig. 5 QFP80 preclean

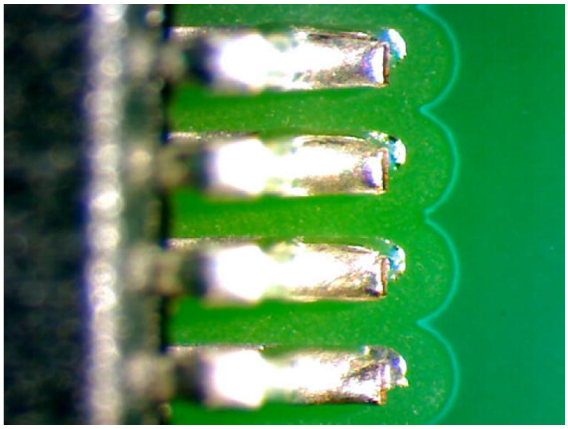

Fig. 6 QFP80 postclean

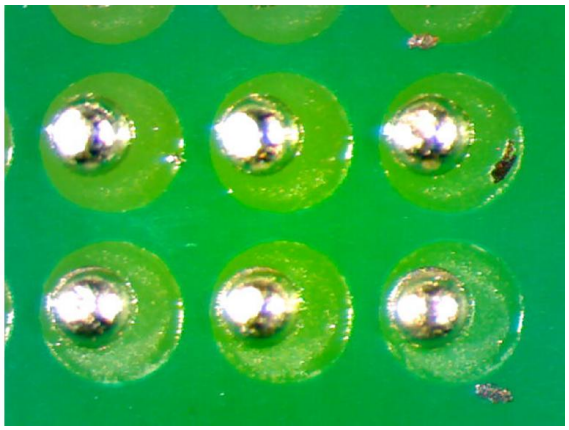

Fig. 7. BGA208 grid array preclean

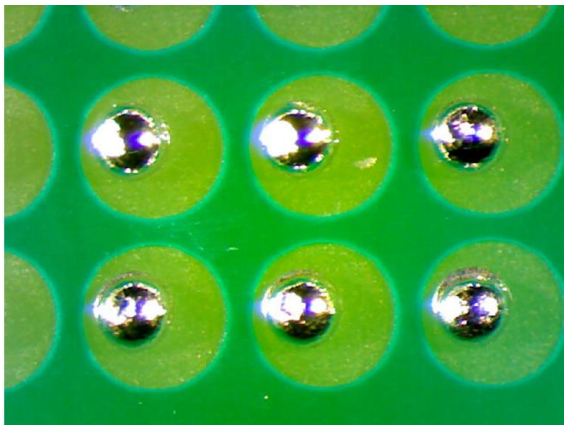

Fig. 8 BGA208 grid array postclean

Set #3

Equipment – AAT Aquatherm Jr.

Wash cycle – 3 mins @ 140° F.

Rinse cycle – 2X 2 mins/140° F.

Dry cycle – 5 mins/149° F.

Clean pass = 4 microsiemens

Cleaning agent – 1550 @ 15% concentration

Dwell time solder-to-clean = 2 hrs.

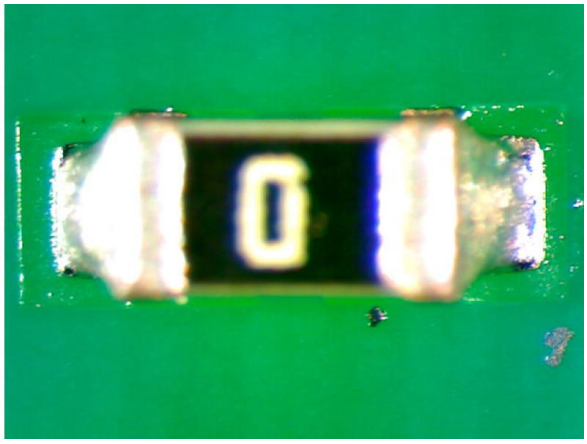

Fig. 1 Cap preclean

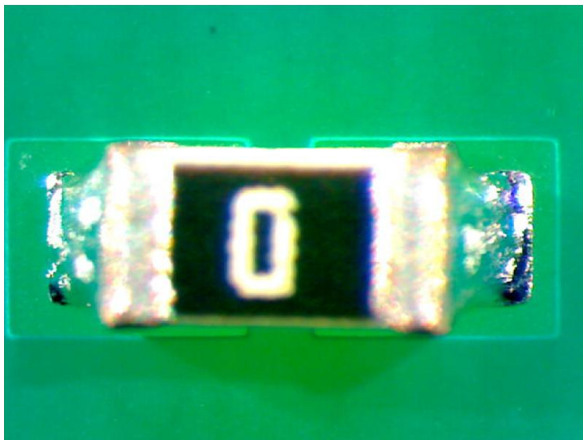

Fig. 2 Cap postclean

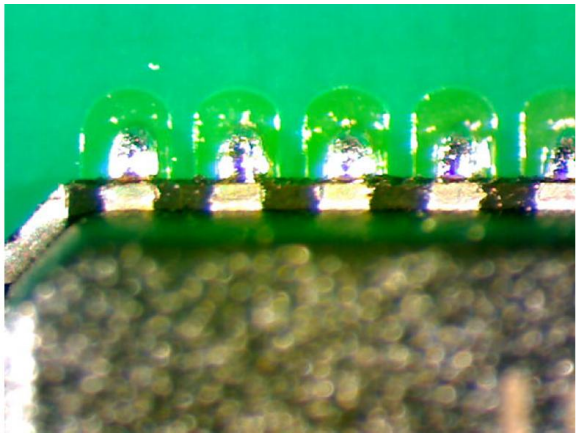

Fig. 3 MLF40 preclean

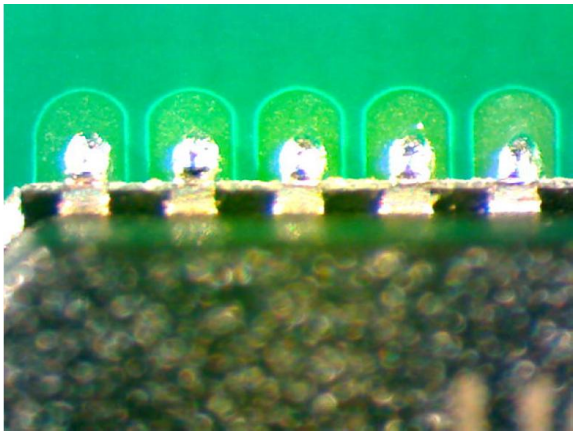

Fig. 4 MLF40 postclean

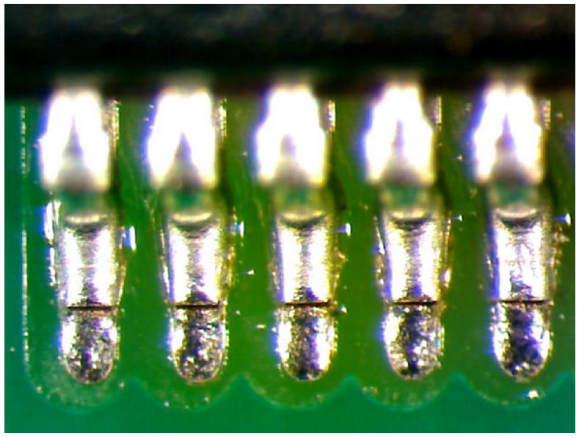

Fig. 5 QFP80 preclean

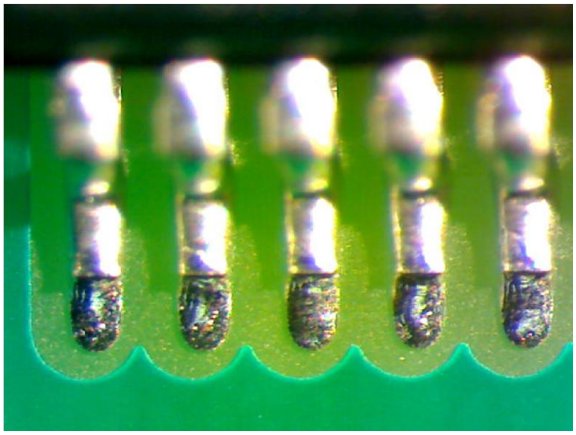

Fig. 6 QFP80 postclean

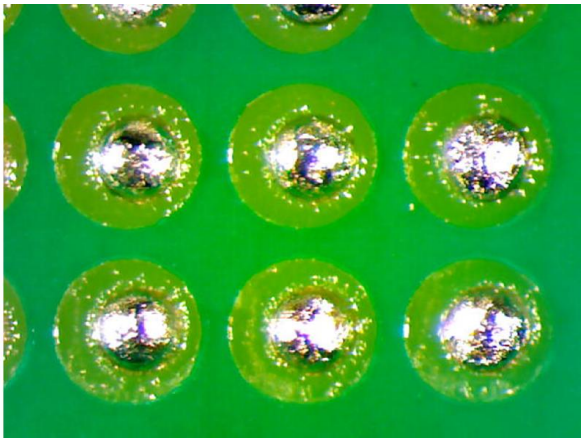

Fig. 7. BGA208 grid array preclean

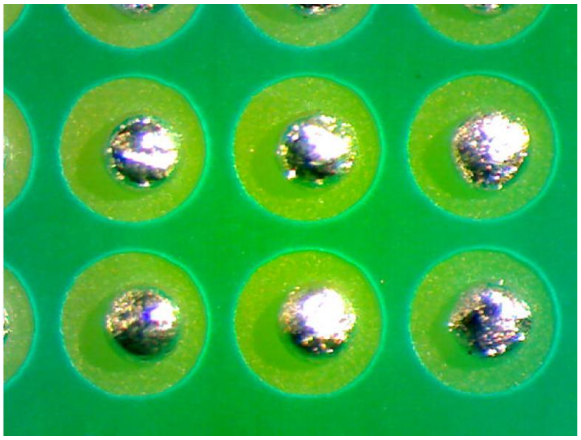

Fig. 8 BGA208 grid array postclean