



# Lead Free (LF) Solder Pot Purge Program

Metallic Resources, Inc. (MRI) offers two programs to facilitate changing soldering equipment to Lead-free. To qualify for these programs the Lead-free solder must be purchased from MRI. The main objective of these programs is to prepare the soldering equipment for Lead-free soldering. This is accomplished by purging the equipment to remove lead and other contaminants from the soldering equipment.

## Pot Purge Programs

### Program #1

#### EXISTING TIN/LEAD OPERATION

- MRI will supply sufficient tin to purge the existing tin/lead system (savings of thousands of dollars to the customer).
- The tin is to be returned to MRI upon completion of the purge (shortages of tin will be charged to the customer at the prevailing tin price).
- The tin must be returned within 30 days.
- In exchange for renting the tin at no charge, the drained tin/lead solder must be returned to MRI within 30 days. (This quantity must be at least 90% of the pot capacity.)
- Metallic Resources pays for all freight charges.

### Program #2

#### NEW/REFURBISHED EQUIPMENT

- MRI will supply sufficient tin to purge the new/refurbished equipment (savings of thousands of dollars to the customer).
- The tin is to be returned to MRI upon completion of the purge. (Shortages of tin will be charged to the customer at the prevailing tin price.)
- The customer has 30 days to return the tin.
- Metallic Resources pays for all freight charges.
- The cost for this service is \$1.00/lb. of tin used for the pot purge.

## Pot Purging Procedures

1. Determine from the hot air leveler or wave solder machine manufacturer if any new parts or equipment will be necessary to convert the equipment to Lead-free.
2. Drain the existing lead bearing solder from the pot into pre-supplied buckets. Perform any necessary preventive or other required maintenance.
3. Remove any residual and/or adhering tin/lead solder from all surfaces. Use soft brass scouring brushes to accomplish this.
4. Fill the solder pot with the supplied tin.
5. Run the solder pot for 4 hours at a temperature of 540°F (or as high as the equipment permits). Ensure all pumps and other working equipment are operating during this time period.
6. Upon completion of the tin wash, drain the tin from the equipment into the pre-supplied buckets.
7. Charge the equipment with the Lead-free solder alloy.
8. Bring the equipment up to operating temperature. Run the pumps for 15 minutes to thoroughly mix the Lead-free alloy melt.
9. Sample the thoroughly mixed solder bath and return the sample to MRI in the provided packaging.
10. An analysis report will be returned to the customer within 24 hours of receipt of the sample to confirm the Lead-free bath meets the applicable standards for lead contained in Lead-free solder.



METALLIC RESOURCES, INC.