



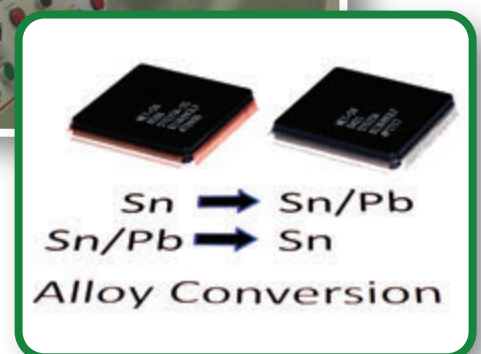
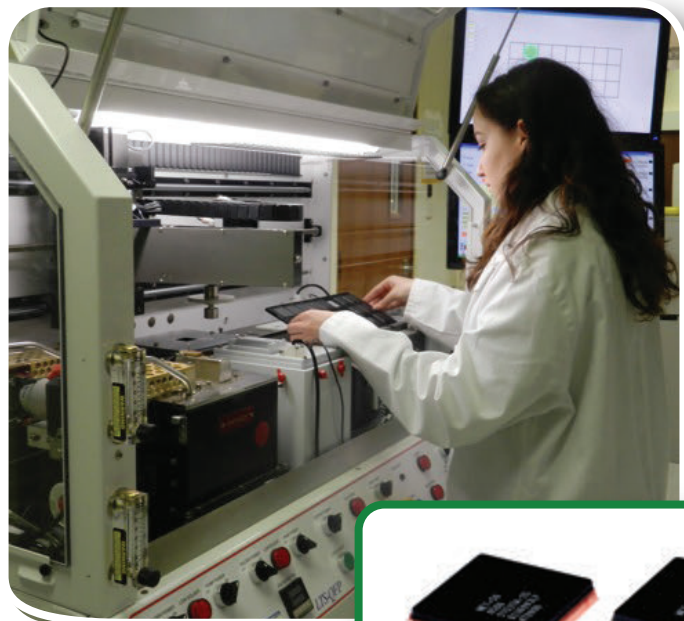
**RETRONIX**  
CONSISTENCY | INNOVATION | QUALITY | PRECISION

# Automated Alloy Conversion & Tinning

Our automated soldering services ensure high quality soldering results, especially in High Reliability Industries such as Defence, Aerospace, Medical and Oil & Gas.

## Applications Include :

- Convert any component from Lead Free to Lead
- Convert any component from Lead to Lead Free
- Retinning of existing alloy to avoid solderability issues
- Double dip tinning for more reliable solder joints in harsh environments; eg. where heat and vibration exist. Double dip tinning suppresses oxidation short term and therefore produces a much stronger solder joint during assembly.
- Remove Gold finish from component terminations to avoid gold embrittlement issues.



**FOR MORE INFORMATION PLEASE CONTACT US:**

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## Leaded Devices

The standard process below describes how a component is managed through the process, ensuring consistent exposure to solder wave (in terms of time and temperature)



The automated vacuum pickup arm transports the component from the carrier tray



The component is fluxed, each side in sequence



The device is pre-heated then temperature checked with a pyrometer.



Each side dipped under nitrogen in wave



The component is returned to the tray, or the process is repeated



Component Cleaning



Re-Baked & Packed

## BGA's

The process below is completely controllable and automatic, and most importantly includes zero reflow cycles, thereby meeting the component manufacturer's specification



Existing spheres removed



Laser Reballing



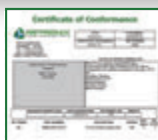
Component Cleaning



Re-Packed and Packed

## Verification Tests

We offer a range of in house tests to verify process conformity (C of C)



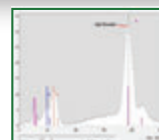
Certificate of Conformity



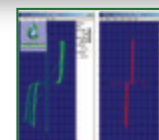
Solderability Test



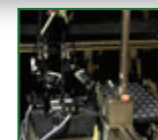
Ionic Contamination Test



XRF Analysis - To Verify Alloy



Electrical Test



Mechanical Test

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