Immersion Coatings

With Ionic Liquids
Immersion Silver onto Copper Using Ionic Liquids

An immersion Ag process has been developed giving a high quality solderable Ag finish for PCB applications.

This is now a viable alternative to conventional acid-based autocatalytic electroless coatings. The process benefits are:

- Reduced solder-mask interface attack
- No colloidal catalyst is required to sustain silver deposition
- Bright silver surface
- Solder testing shows good solder adhesion with no interfacial voids at copper-solder join
- Good solder surface wetting
- Simple to handle immersion solution

Ionic Liquids are simple to handle and recycle.
Immersion Copper onto Aluminium Using Ionic Liquids

Immersion coatings of Cu on Al and alloys are also now made possible using the same liquid / process technology. Thin binding layers of Cu on water sensitive substrates (applied from ionic liquid solution) enable conventional electroplating of a variety of metal finishes from aqueous electrolytes e.g. Zn, Ni, Cr.

What Can Scionix Offer?

Scionix can help by providing all the necessary technical back-up for process development including:

- New manufacturing or finishing processes
- Integration of Ionic Liquids into existing technologies
- Provision and recycling of materials, liquids, additives etc.

Scionix aims to develop drop-in replacements for conventional aqueous finishing solutions / electrolytes. The ionic liquids are air and moisture stable and operate under similar conditions as conventional processes.
Scionix aims to embrace Sustainable Development to provide economic, environmental and social benefits from its new technology. All the opportunities we are currently involved in add benefits associated with eco-efficiency and social business ethics.

We produce ionic liquids for a large number of ongoing collaborations, partners include consumer product manufacturers, automotive and aerospace materials finishers, mining conglomerates and pharmaceutical companies. We are already one of the world’s largest, per volume, manufacturers and distributors of these types of liquids.