

ESPEY

Mfg. & Electronics Corp.

Capabilities



PROTOTYPING

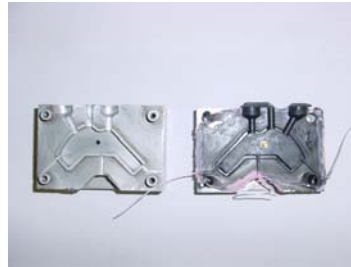
- **Rapid Prototyping support of engineering development**
- **Electronic component and assembly realization**
- **Mechanical fabrication**



The Espey Hardware Prototyping and R&D Lab is in direct support of all the engineering disciplines. The prototyping group has a broad range of technical expertise to call upon in pursuit of this goal.

The lab was originally chartered to support High Voltage potting and encapsulation in solid epoxy, dielectric gas, gels and liquids. The prototyping facility has grown to become a versatile electronics model shop. Some of the capabilities include circuit layout, rapid PCB fabrication, circuit assembly and test, automated PCB testing, solder reflow characterization, component and circuit failure analysis, new materials evaluation and qualification, chemical engineering, master machine shop, and surface mount lab with MCM assembly.

The prototyping lab operates autonomously to the production line, while supporting as required. It has rapid response capability to real time challenges enabling Espey to leverage seamlessly into new products and processes.



Capabilities:

- ✦ Electronic Assembly
- ✦ Printed Circuit Board Manufacture
- ✦ High Voltage Potting and Encapsulation
- ✦ Precision Machining
- ✦ Sub-miniature assembly
- ✦ Vacuum Brazing
- ✦ Tool and Fixture Specialist
- ✦ Process Qualification
- ✦ Process development and specification
- ✦ Component characterization
- ✦ Failure analysis
- ✦ Material evaluation and conformity analysis
- ✦ Exotic Materials Research
- ✦ Special Electronic Testing