



**Honeywell Thermal
Spreader and
Mechanical Stiffeners**

Honeywell Thermal Spreaders and Mechanical Stiffeners

MATERIALS FOR THERMAL MANAGEMENT, DIE PROTECTION AND MECHANICAL SUPPORT

BENEFITS

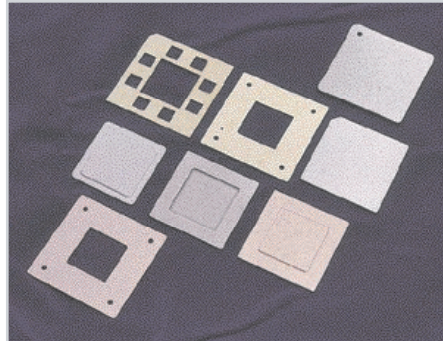
- Quick turn prototyping
- Expertise in metal forming and finishing
- Ability to optimize surface finish for performance
- Integrated material solutions

MATERIALS

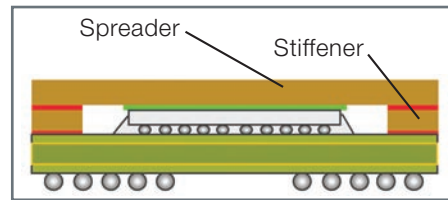
- Copper alloys
- Aluminum alloys
- Advanced composites
- Iron based alloys

OVERVIEW

Honeywell Electronic Materials is the premier supplier of formed and finished components to the semiconductor industry for packaging applications. These components are used in Flip Chip, EPGA and TBGA packages for thermal management, die protection and mechanical support. Metal finishing on packaging components can be tuned for performance on a wide variety of adhesives.



Reproducibility and Consistency



Reproducibility and consistency of metal finishing from lot-to-lot leads to high yield and superior cost of ownership.

CAPABILITIES

Surface Finishes

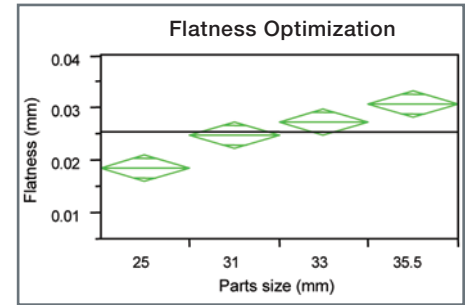
- Nickel
- Gold
- Black Oxide
- Anodizing
- Custom Finishes

Metal Forming

- Stamping
- Fine Blanking
- Machining
- Coining

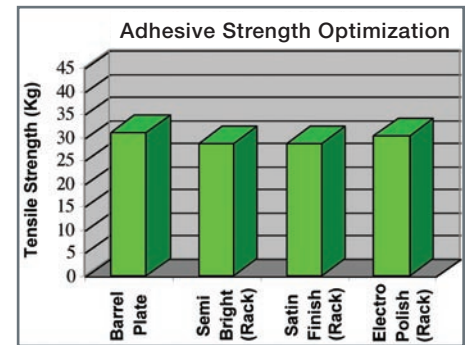
FEATURES

Flatness Capabilities

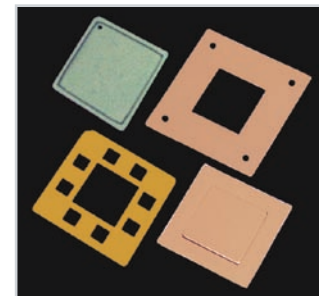


Optimum flatness achieved by tool design and process control using SPC

Plating Adhesion



Ability to optimize surface finish for performance, yield and visual appearance in dull, semi-bright and satin finishes.



RESPONSIBLE CARE
OUR COMMITMENT TO SUSTAINABILITY

Honeywell Electronic Materials

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Germany: 49-5137-999-9199

Japan: 81-3-6730-7092

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