



## METAL STAMPINGS

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*Our highly trained tool and die makers use the latest state of the art equipment to produce dies of exacting measurements. Our engineering staff provides exact drawings and specifications for tool construction. Statistical Process Control is used extensively on high volume programs while the more traditional inspection procedures are used for small jobs.*

### ► Solder Alloys

SPM produces a wide variety of solder alloys, melting point less than 425 degrees C. These range from more costly gold alloys to less costly alloys of lead. All are alloyed, cast, rolled and stamped in our Armonk, New York plant under the strictest quality guidelines. Many large fragile parts are individually packaged to ensure perfection upon delivery. Gold tin (80/20), the most commonly used gold solder, is available in thickness ranging upwards from .0005 inches through to .125. Stampings as small as .005 x .005 and as large as 4.000 x 4.000 are continuously produced at SPM.

### ► Braze Alloys

High temperature joining materials, most commonly silver and copper based, are produced by SPM. These braze materials can be rolled and stamped into various shapes including discs, frames, rectangles, squares, washers or your custom specification.

### ► Bond Pads and Clad Materials

Multi-layer materials that can be wire bonded on one side and soldered on the other, as well as other clad materials, are produced at SPM. Copper parts with solder on both sides or one side are used as connectors or bridges. Many combinations of materials are available to be stamped into various sizes and shapes.

### ► Heat Sinks

Materials such as copper/invar/copper, Silvar™, nickel clad or plated moly, copper and other alloys are stamped to provide heat sinks for various size dies. Materials may be selected to match the thermal co-efficient of expansion of the die material whether it be silicon or gallium arsenide. There are numerous shapes and sizes of heat sink parts that are routinely produced.

### ► Lead Frames

Lead frame strips for die mounting and/or wire bonding are stamped from a large variety of materials using either our progressive die or compound die technology. With your specifications in hand we will produce your custom designed lead frame parts.

