

# Flat Forms & Strip Forms

The Newcomb Spring Corporation offers a wide range of manufacturing capabilities to produce flat forms and strip forms. Large volumes of forms are often produced using hard tooling, while smaller quantities are fabricated from blanks. Newcomb typically recommends that customers order a short run of parts to verify a component's functionality, avoiding costly design errors.

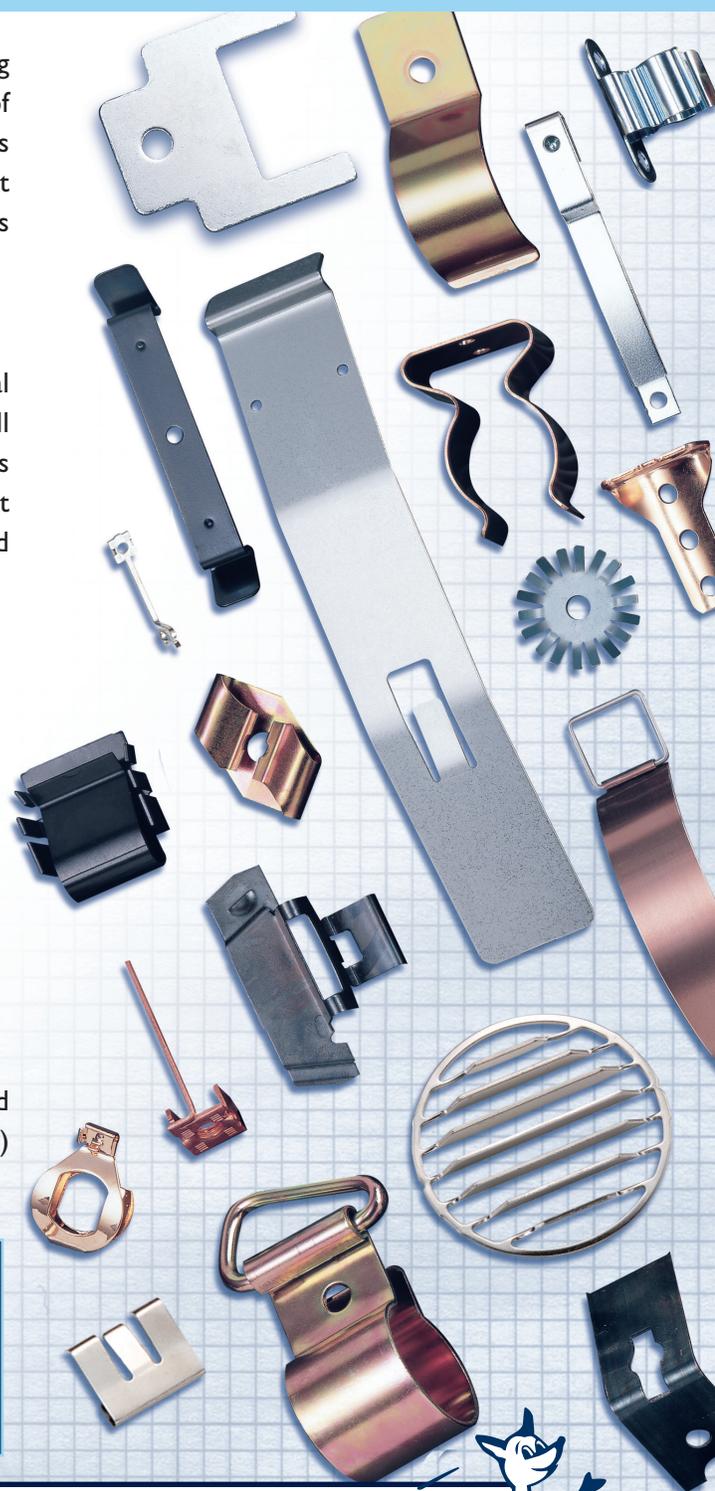
## Material Considerations

Newcomb Spring is capable of manufacturing parts using any material and complying to virtually any specification. Our engineering staff will gladly discuss your part's specific needs. Often, we produce flat forms and strip forms from continuous coil material. The most frequently chosen coil materials are #3 slit edge, #5 deburred edge and #1 round edge. The main differences among these options are:

- #3 slit edge is often used when a die cut eliminates the edge of the material; when edge condition is not critical to a part's fit, form or function; or when costs prohibit other edge options.
- #5 deburred edge is often used when the edge condition is critical to a part's fit, form or function. This edging option offers improved safety in part and stock handling, as the edging process produces broken corners instead of square corners.
- #1 round edge is one of the safest material options in terms of handling parts and stock. As well, this edging increases the cycle life of torsion springs and leaf springs.

## Form Design

Whenever possible strip forms and flat forms should be designed to bend against the grain of material (i.e. perpendicular to the grain) to improve life expectancy and reduce the risk of fracturing.



### Specifications

*Our material size range for flat and strip forms is .004-inches to .125-inches thick and up to 5.0-inches wide.*

### Common Flat Form & Strip Form Manufacturing Materials:

- |                     |                              |             |             |
|---------------------|------------------------------|-------------|-------------|
| • spring steel      | • nickel plated carbon steel | • elgiloy   | • inconel   |
| • high carbon steel | • stainless alloys           | • hastelloy | • titanium  |
| • low carbon steel  | • non-ferrous metals         | • monel     | • and more! |