

# Difficult-to-manufacture thin plates made to specification

## Accordion springs

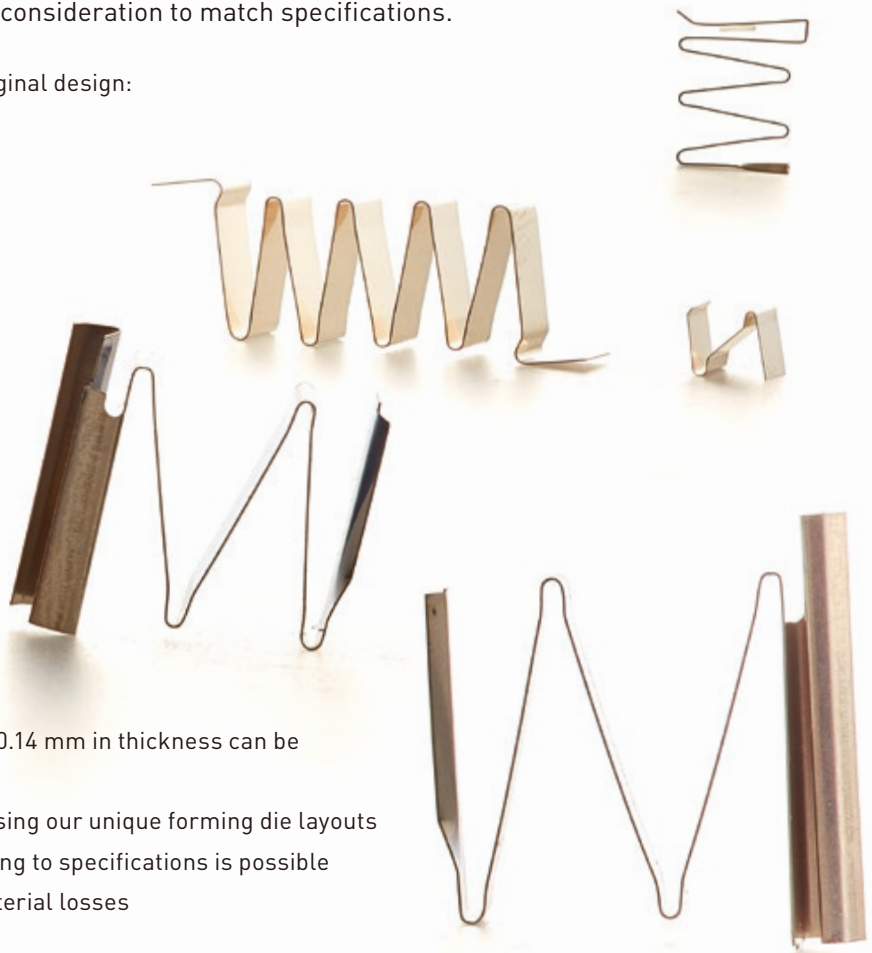
Forming

Press

These bellows-shaped springs are used in various types of automobiles as parts for automatic transmissions. Highly elastic thin plates formed from difficult-to-machine 0.05 mm plates can be manufactured with stability into complex shapes using our company's unique forming die layouts. While manufacturing according to the exact designs of customers is possible, we can also provide original designs that take stress mitigating treatments into consideration to match specifications.

○Specifications necessary for an original design:

Spring installation space,  
required load and point of origin,  
stroke length, durability



### Product features

- Highly elastic thin plates of 0.05 to 0.14 mm in thickness can be formed into stable shapes
- Complex shapes can be achieved using our unique forming die layouts
- Provision of original design according to specifications is possible
- Multi-forming for reductions in material losses

### Product applications

One-way clutches for automatic transmission vehicles,  
starter clutches for motorcycles