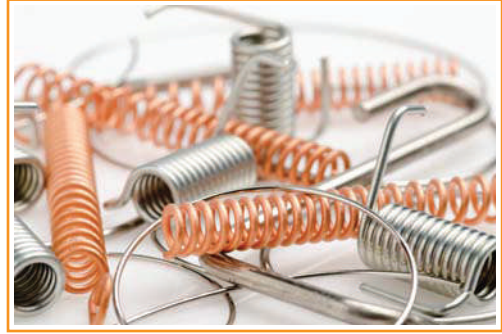


# PRECISION SPRINGS

Made to design conformance and engineering precision

With broad-based experience in spring manufacturing, Unisteel is capable of producing various types of quality-made precision springs. Unisteel maintains a fleet of CNC spring coilers – with on-line tempering process- that is capable of manufacturing coil springs to the highest specifications from 0.15mm to 2.30mm in wire diameter, in cold and hot wound manufacturing processes. Working within customers' parameters of space, corrosion, temperature, weight, reliability, tolerances and cost, our highly experienced engineering team can support your needs in selecting the proper alloy and manufacturing tolerances for your spring components.



## Balance Rings

Balance rings are used to balance the spinning disk platter of a hard disk drive.

### Design specifications

- ~ 0.15mm to 2.30mm in wire diameter

## Torsion Springs

Used in 'pop-up' operations in automotive and electronic industries, torsion springs are helical springs that are designed to rotate parts. Available in single and double versions, they may be custom designed to parameters including positions, end configurations and torque.

### Design specifications

- ~ 0.09mm to 2.30mm in wire diameter
- Helix direction: Left hand and right hand configurations
- Ends: Straight ends are standard. Special end forms are available upon request
- Tolerances: Torque  $\pm 10\%$  / O.D.  $\pm 5\%$

## Compression Springs

Compression springs are open helical springs that offer resistance to compressive force applied axially, and they are the most common metal spring configuration. Used in a wide variety of applications ranging from automotive engines to mobile phones, they are available in straight, conical or barrel shaped with plain or ground ends.

### Design specifications

- ~ 0.09mm to 1.00mm in wire diameter
- Helix direction: Left hand and right hand configurations
- Ends: Straight ends are standard. Special end forms are available upon request
- Tolerances: Torque  $\pm 10\%$  / O.D.  $\pm 5\%$

## Extension Springs

Used in automotive and industrial applications, extension springs are closed-coiled helical springs that offer resistance to a pulling force. A variety of end and hook configurations are available to meet your requirements.

### Design specifications

- ~ 0.40mm to 2.30mm in wire diameter
- Helix direction: Left hand and right hand configurations
- Ends: Straight ends are standard. Special end forms are available upon request
- Tolerances: Torque  $\pm 10\%$  / O.D.  $\pm 5\%$