

Our company's unique patented manufacturing method that meets the needs of our generation.

Spiral springs for variable valve timing system

Spiral spring processing

These are used for the intake-exhaust variable valve timing mechanisms of 4-cycle reciprocating engines. Although helical torsion springs have been used conventionally, with the need to create more compact engines, these have been switched to space-saving spiral springs which are able to provide high levels of torque. In order to achieve the functionality required of these springs, production is performed using our unique patented manufacturing process.

Product features

- In-house design using CAE*
- Spiral spring processing performed using types of equipment found only in a few places around the world
- By manufacturing square-shaped materials in-house, high levels of flexibility in regards to material shapes are possible.
- By using steel for valve springs and the same manufacturing process for valve springs, we can provide products that feature superior levels of fatigue strength.

*CAE: Computer Aided Engineering This refers to using computers or similar tools to support design and development processes.

Product applications

Variable valve timing mechanisms of automobile engines, etc.

