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Technical representation of springs

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Spring Manufacturers Association (JSMA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS B 0004:1995** is replaced with this Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

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In the event of any doubts arising as to the contents,
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Technical representation of springs

1 Scope This Japanese Industrial Standard specifies the graphical representation methods and the indication methods of design and product specifications of springs.

NOTE : Unlike other parts of machine elements, springs and spring elements are often designed and produced according to the designation of the dimension under the prescribed force or of the force generated by the prescribed dimension. Therefore, simple indication of the dimensional shape is insufficient and the principal technical specifications are also provided in this Standard.

2 Normative references The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 0001 *Technical drawings for Mechanical Engineering*

JIS B 0103 *Glossary of terms used in springs*

JIS Z 8114 *Technical product documentation—Terms relating to technical drawings*

ISO 2162-1 *Technical product documentation—Springs—Part 1: Simplified representation*

3 Terms and definitions For the purposes of this Standard, the definitions given in **JIS B 0103** and **JIS Z 8114**, and the following definition shall apply.

- a) **tabular** common name of the table which describes the details of the design and product specification items difficult to be expressed as a figure

4 Graphical representation method of spring

4.1 Classification and example of spring The classification of springs and examples thereof shall be as follows. The graphical representation method of springs shall be in accordance with **JIS B 0001** and attached figures 1 to 53.

Further, the simplified figures (attached figures 11, 12, 15, 18, 20, 22, 27, 30, 32, 34 and 36) shall be in accordance with **ISO 2162-1**.

- a) Helical compression spring (hot formed, cold formed) (attached figures 1 to 12)
- b) Helical extension spring (attached figures 13 to 15)
- c) Helical torsion spring (attached figures 16 to 18)
- d) Leaf spring (attached figures 19 to 25)
- e) Torsion bar spring (attached figures 26 and 27)
- f) Stabilizer (attached figure 28)
- g) Volute spring (attached figures 29 and 30)