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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

YB/T 5063-2007

**Heat Treatment Spring Steel Strips
(English Translation)**

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1 Scope

This Standard specifies the classification and code, dimension, shape, technical requirements, test methods, inspection rules, package, marking and quality certificate, etc. of the heat treatment spring steel strips.

This Standard is applicable to the heat treatment spring steel strips with thickness no greater than 1.50mm, width no greater than 100mm for manufacturing the spring parts.

2 Normative References

The provisions in following documents become the provisions of this Standard through reference in this Standard. For dated references, the subsequent amendments (excluding corrigendum) or revisions do not apply to this Standard, however, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable. For undated references, the latest edition of the referenced document applies.

GB/T 222 Method of Sampling Steel for Determination of Chemical Composition and Permissible Variations for Product Analysis

GB/T 223.3 Methods for Chemical Analysis of Iron, Steel and Alloy - The

Diantipyryl Methane Phosphomolybdate Gravimetric Method for the Determination of Phosphorus Content

GB/T 223.12 Methods for Chemical Analysis of Iron, Steel and Alloy - The Sodium

Carbonate Separation-Diphenyl Carbazide Photometric Method for the Determination of Chromium Content

GB/T 223.19 Methods for Chemical Analysis of Iron, Steel and Alloy - The Neocuproine-Chloroform Extraction Photometric Method for the Determination of Copper Content

GB/T 223.23 Methods for Chemical Analysis of Iron, Steel and Alloy - The Dimethylglyoxime Spectrophotometric Method for the Determination of Nickel Content

GB/T 223.58 Methods for Chemical Analysis of Iron, Steel and Alloy - The Sodium Arsenite-Sodium Nitrite Titrimetric Method for the Determination of Manganese Content

GB/T 223.60 Methods for Chemical Analysis of Iron, Steel and Alloy - The Perchloric Acid Dehydration Gravimetric Method for the Determination of Silicon Content

GB/T 223.68 Methods for Chemical Analysis of Iron, Steel and Alloy - The Potassium Iodate Titration Method After Combustion in the Pipe Furnace for the Determination of Sulfur Content

GB/T 223.69 Methods for Chemical Analysis of Iron, Steel and Alloy - Determination of Carbon Contents - Gas-Volumetric Method after Combustion in the Pipe Furnace

GB/T 224 Determination of Depth of Decarburization of Steels

GB/T 228 Metallic Materials - Tensile Testing at Ambient Temperature (GB/T 228-2002, eqv ISO 6892.1998)

GB/T 235 Metallic Materials - Sheet and Strip 3 Mm Thick or less - Reverse Bend Test (GB/T 235-1999, eqv ISO 7799.1985)

GB/T 247 General Rule of Acceptance, Package, Mark and Certification for Steel Plates (Sheets) and Strips

GB/T 1222-1984 Spring Steels

GB/T 1298-1986 Carbon Tool Steels - Technical Requirements

GB/T 2523 Measuring Method of Surface Roughness and Peak Count for Cold-Rolled Metal Sheet (Strip)

GB/T 4340.1 Metallic Materials - Vickers Hardness Test - Part 1. Test Method (GB/T 4340.1-1999, eqv ISO 6507-1.1987)

GB/T 15391 Dimensions, Shape and Tolerances for Cold-Rolled Steel Strips with a Width Less Than 600mm

GB/T 20066 Steel and Iron-Sampling and Preparation of Samples for the Determination of Chemical Composition (GB/T 20066-2006, ISO 14284.1996, IDT)

YB/T 5058-2005 Cold-Rolled Spring and Tool Steel Strips a) Standard number;

b) Designation;

c) Dimension and dimension accuracy;

d) Edge state;

e) Groups of mechanical properties;

f) Surface state;

g) Weight;

h) Package requirements;

i) Other requirements.

6.1 Designations and Chemical Compositions

6.1.1

Steel strips is rolled by the steel with designations of T7A, T8A, T9A, T10A, 65Mn, 60Si2MnA, 70Si2CrA. The chemical compositions of T7A, T8A, T9A, T10A shall conform to the provisions of GB/T 1298-1986. The chemical compositions of 65Mn, 60Si2MnA shall conform to the provisions of GB/T 1222-1984. The chemical compositions of 70Si2CrA shall conform to the provisions of YB/T 5058-2005.

6.1.2

The tolerance of the finished product analysis of steel strips shall conform to the provisions of GB/T 222.

6.1.3 Through the consultation between the supplier and the purchaser, the steel strips

can also be rolled with other designations; the chemical compositions shall be agreed by

the two parties.

6.2 Mechanical properties

6.2.1

The tensile properties of the steel strip shall conform to the provisions of Table 1.

According to the demand of the purchaser, through the negotiation between the two parties, for the steel strips with Level-III strength, its strength value can be specified with the upper limit.

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