



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

GB/T 879.1-2018

Spring-type straight pins -- Slotted -- Heavy duty

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Foreword

GB/T 879 "Spring-type straight pins" consists of the following 5 parts:

- GB/T879.1, Spring-type straight pins - Slotted - Heavy duty;
- GB/T879.2, Spring-type straight pins - Slotted - Light duty;
- GB/T879.3, Spring-type straight pins - Coiled - Heavy duty;
- GB/T879.4, Spring-type straight pins - Coiled - Standard duty;
- GB/T879.5, Spring-type straight pins - Coiled - Light duty.

This Part is Part 1 of GB/T 879.

This Part was drafted in accordance with the rules given in GB/T 1.1-2009.

This Part replaces GB/T 879.1-2000 "Spring-type straight pins - Slotted, heavy duty". Compared with GB/T 879.1-2000, the main technical changes are as follows:

- changed the codes of nominal diameters (see Clause 1, Figure 1 and Table 1);
- added the provisions on "non-interlocking spring-type pin (N type)" (see Figure 1 and Table 2);
- added the provisions on hardness test of steel, martensitic stainless-steel spring-type pin (see Table 2);
- for steel spring-type pin, added that technical requirements for non-

electrolytic zinc flake coating is according to GB/T 5267.2 (see Table 2);

-- for stainless steel spring-type pin, added that technical requirements for passivation treatment is according to GB/T 5267.4 (see Table 2).

This Part uses redrafting method to modify and adopt ISO 8752:2009 "Spring-type straight pins - Slotted, heavy duty".

Compared with ISO 8752:2009, the technical differences and reasons are as follows:

-- in normative references, used Chinese national standards to replace International standards (see Clause 2); added GB/T 879.2 (see Clause 1), GB/T 5267.2 (see Table 2), GB/T 5267.4 (see Table 2), GB/T 11376 (see Table 2), GB/T 15519 (see Table 2)), GB/T 90.2 (see Table 2) and GB/T

1237 (see 6.1) as reference standards, so as to meet the basic standards

of China's fasteners;

-- modified the descriptive text in Table 1 to the note in the table "NOTE: The preferred length range shall be between the ladder solid lines." (see Table 1), consistent with other current national standards;

-- for steel spring-type pin, added that the technical requirements of non-electrolytic zinc flake coating are in accordance with GB/T 5267.2 (see Table 2), so as to meet the anticorrosion requirements of steel elastic pins;

-- for stainless steel spring-type pin, added that the technical requirements for passivation treatment are in accordance with GB/T 5267.4 (see Table 2), so as to meet the requirements of stainless steel spring-type pin surface anticorrosion;

-- added "If other technical requirements or surface treatments are needed, it shall be agreed by the supplier and the purchaser" (see Table 2), so as to expand the use of products;

-- added the technical requirements for packaging (see Table 2), so as to

meet the basic standards of China's fasteners;

-- in Table 2, added the note "b When using electroplating or phosphating treatment, hydrogen embrittlement is unavoidable, and hydrogen flooding treatment shall be taken immediately (see GB/T 5267.1).", so as to meet the requirements of GB/T 5276.1 (see Table 2);

-- modified marking examples as simplified marking example (see 6.2), so as to meet the requirements of GB/T 1237.

This Part was proposed by China Machinery Industry Federation.

This Part shall be under the jurisdiction of National Technical Committee on Fasteners of Standardization Administration of China (SAC/TC 85).

Main drafting organizations of this Part: China Machine Productivity Promotion Center.

The drafting organizations of this Standard: Shanghai Qiuming Standard Parts Co., Ltd., Anhui Ningguo Dongbo Fastener Co., Ltd., Shanghai Jiyoubiao Five High Strength Fastener Co., Ltd., Yuhuan Tiancheng Machinery Co., Ltd., Quality Supervision and Inspection Center for General Parts and Components of Machinery Industry.

This Part shall be interpreted by National Technical Committee on Fasteners of Standardization Administration of China.

Versions of standard substituted by this Part are:

Spring-type straight pins - Slotted - Heavy duty

1 Scope

This Part of GB/T 879 specifies type sizes, applications, technical specifications and markings for straight slotted, heavy-duty spring-type straight pins.

This Part is applicable to spring-type straight pins of which the nominal diameter is $d_1 = 1\text{mm} \sim 50\text{mm}$, the material is steel, austenitic and martensitic stainless steel, with straight groove and withstanding heavy load.

NOTE: The selection of nominal diameter shall consider that: the spring-type pin can be

installed in another pin or used in combination with the light pin specified in GB/T 879.2.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 90.1, Fasteners - Acceptance inspection (GB/T 90.1-2002, idt ISO 3269:2000)

GB/T 90.2, Fasteners - Marking and packaging

GB/T 879.2, Spring-type straight pins - Slotted - Light duty (GB/T 879.2-2018, ISO 13337:2009, MOD)

GB/T 1237, Designation system for fasteners (GB/T 1237-2000, eqv ISO 8991:1986)

GB/T 4340.1, Metallic materials - Vickers hardness test - Part 1: Test method (GB/T 4340.1-2009, ISO 6507-1:2005, MOD)

GB/T 5267.1, Fasteners - Electroplated Coatings (GB/T 5267.1-2002, ISO 4042:1999, IDT)

GB/T 5267.2, Fasteners - Non-electrolytically applied zinc flake coatings (GB/T 5267.2-2002, ISO 10683:2000, IDT)

GB/T 5267.4, Passivation of corrosion-resistant stainless-steel fasteners (GB/T 5267.4-2009, ISO 16048:2003, IDT)

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