

ICS 21.060.50



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

GB/T 119.1-2000

Parallel pins, of unhardened steel and austenitic stainless steel

圆柱销 不淬硬钢和奥氏体不锈钢

(English Translation)

Issued on: September 26, 2000

Implemented on: February 1, 2001

Issued by: SAMR; SAC

Table of Contents

Foreword	3
1 Scope	6
2 Normative references	6
3 Dimensions	6
4 Requirements and reference International Standards	8
5 Designation	8

Foreword

This standard is identical to the international standard ISO 2338:1997 "Parallel Pins, of Unhardened Steel and Austenitic Stainless Steel".

This standard is a part of the national standard series of "Pin" products, and this series includes the following.

- a) Cotter. GB/T 91;
- b) Taper pin. GB/T 117, GB/T 118, GB/T 877 and GB/T 881;
- c) Straight pin. GB/T 119.1, GB/T 119.2, GB/T 120.1, GB/T 120.2, GB/T 878 and GB/T 880;
- d) Axis pin. GB/T 882;
- e) Spring pin. GB/T 879.1, GB/T 879.2, GB/T 879.3, GB/T 879.4 and GB/T 879.5;
- f) Groove pin. GB/T 13829.1, GB/T 13829.2 and GB/T 13829.3;
- g) The packing technical requirements are not specified in ISO 2338, but specified in this standard (Table 2);
- h) Simplified marks are not specified in ISO 2338. But this standard provides the example of simplified marks (Article 5.2) in accordance with the simplification principle of GB/T 1237.

This standard is one of the revised editions of GB/T 119-1986, and the main changes are as follows.

- a) Delete A, C and D types; cancel the diameter tolerance of h11 and u8 and specify that other tolerances shall be agreed between the supplier and the purchaser (Figure 1 and Table 1);
- b) Add the specification that nominal length l greater than 200mm shall be ascended by 20mm (Table 1).

- c) Adjust the specification about material and heat treatment (Table 2) in complete way;
- d) Add non-surface treatment and phosphating for steel pin (Table 2);
- e) Specify clearly that all the tolerances are applicable to the tolerance before coating and plating only (Table 2).

From the implementation data hereof, this standard will replace the related part of GB/T 119-1986.

4 Requirements and reference International Standards

Table 2 - Requirements and reference International Standards

Material 1): Steel; Austenitic stainless steel.

Hardness: 125 HV30 to 245 HV30; A1 (GB/T 3098.6) hardness 210 ~ 280 HV30.

Surface roughness: tolerance m6: $Ra \leq 0.8 \mu m$; tolerance h8: $Ra \leq 1.6 \mu m$.

Surface discontinuities: Pins shall be free of irregular or detrimental defects. No burrs shall appear on any part of the pin.

Surface treatment: Without treatment; Oxidation; Zinc plating and purification shall be in accordance with GB/T 5267; Phosphating shall be in accordance with GB/T 11376; Simple treatment; Other surface plating or surface treatment shall be agreed between customer and supplier.

All tolerances are applicable to the tolerance before coating and plating only.

Acceptance and package: GB/T 90.

1) Other materials as agreed between customer and supplier.

5 Designation

5.1

The designation methods shall be in accordance with specifications in GB/T 1237.

5.2 Designation illustration

An unhardened steel parallel pin, with nominal diameter $d = 6 \text{ mm}$, tolerance class m6 and nominal length $l = 30 \text{ mm}$ is designated as follows.

Pin GB/T 119.1 6 m6 x 30

An unhardened austenitic stainless steel pin of grade A1, with nominal diameter $d = 6 \text{ mm}$, tolerance class m6 and nominal length $l = 30 \text{ mm}$ is designated as follows.

Pin GB/T 119.1 6 m6 x 30-A1