

Translated English of Chinese Standard: GB/T342-2017

www.ChineseStandard.net → Buy True-PDF → Auto-delivery.

Sales@ChineseStandard.net

GB

NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA

ICS 77.140.65

H 49

GB/T 342-2017

Replacing GB/T 342-1997

Dimension, shape, mass and tolerance of cold-drawn round, square and hexagonal steel wires

(ISO 22034-2:2016, Steel wire and wire products –

Part 2: Tolerances on wire dimensions, NEQ)

Issued on: November 1, 2017

Implemented on: July 1, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the PRC;**

Standardization Administration of the PRC.

Table of Contents

Foreword.....	3
1 Scope	5
2 Normative references	5
3 Section diagram and labeling symbol	5
4 Classification, codes.....	7
5 Dimension, sectional area, and theoretical weight	7
6 Dimension tolerance.....	9
7 Shape	10
8 Length and tolerance of straight strip steel wire	11

Foreword

This Standard is drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard replaces GB/T 342-1997 “Dimension shape mass and tolerance for cold-drawn round square and hexagonal steel wires”. As compared with GB/T 342-1997, the main changes of this Standard are as follows:

- MODIFY the scope;
- ADD normative references;
- ADD codes;
- ADD the classification of steel wires;
- DELETE marking example;
- MODIFY the nominal dimension, sectional area, and theoretical weight of steel wires;
- MODIFY the dimension tolerance of steel wires;
- MODIFY the application range of dimension tolerance level of steel wires;
- MODIFY the shape requirements of steel wires;
- MODIFY the length and tolerance of straight strip steel wires.

This Standard uses the redraft law to refer to ISO 22034-2:2016 “Steel wire and wire products - Part 2: Tolerances on wire dimensions” for preparation. The degree of consistency with ISO 22034-2:2016 is not equivalent.

This Standard was proposed by China Iron and Steel Association.

This Standard shall be under the jurisdiction of China National Technical Committee for Steel Standardization (SAC/TC 183).

Drafting organizations of this Standard: Hangzhou Chuangyu Metal Technology Co., Ltd., China Metallurgical Information and Standardization Institute, Jiangsu Goodroller Machinery Co., Ltd., Jiangsu Fasten Group Co., Ltd.

Main drafters of this Standard: Hong Yazhou, Xu Honglin, Ren Cuiying, Wang Lingjun, Mu Kaihong, Zhou Xiaohong, Zhu Weijun, Wang Huan.

The previous releases of versions of the standard replaced by this Standard are:

Dimension, shape, mass and tolerance of cold-drawn round, square and hexagonal steel wires

1 Scope

This Standard specifies the dimension, shape, mass and tolerance of cold-drawn round, square and hexagonal steel wires.

This Standard is applicable to the cold-drawn round steel wire with a diameter of 0.05 mm~20 mm, the cold-drawn square steel wire with a side length of 0.50 mm~10 mm, and the cold-drawn hexagonal steel wire with an opposite side distance of 1.60 mm~10 mm.

2 Normative references

The following documents are indispensable for the application of this document. For the dated references, only the versions with the dates indicated are applicable to this document. For the undated references, the latest version (including all the amendments) are applicable to this document.

GB/T 321-2005 Preferred numbers - Series of preferred numbers

GB/T 1800.1-2009 Geometrical product specifications (GPS) - Limits and fits
- Part 1: Bases of tolerances deviations and fits

3 Section diagram and labeling symbol

3.1 The section diagram and labeling symbol of round steel wires are shown in Figure 1.

Keys:

b - Straightness of steel wire;

L_t - Sampling length of steel wire.

Figure 4 -- Measuring diagram of straightness of straight strip steel wire

Table 4 -- Maximum sampling length for the measurement of straightness of straight strip steel wire

Nominal diameter D/ mm	Sampling length L_t / mm
$2.00 \leq D \leq 6.00$	500
$6.00 < D \leq 13.00$	500 or 1000
$13.00 < D \leq 20.00$	1000
Note: Steel wires less than 2.00 mm in diameter are not sufficiently hard to measure the straightness. If it is measured, it shall be determined by negotiation between the supply and the demand sides.	

Table 5 -- Straightness of straight strip steel wire

Classes	$L_t=500$ mm	$L_t=1000$ mm
Class I	$b \leq 0.5$ mm	$b \leq 2.0$ mm
Class II	$b \leq 1.0$ mm	$b \leq 4.0$ mm
Class III	No requirements	

7.4 The steel wire discs shall be regular; and made up of one piece of steel wire. When unfastening the bundling line, it shall not be scattered or be in the shape of “∞”.

8 Length and tolerance of straight strip steel wire

The length and tolerance of straight strip steel wire shall conform to the provisions of Table 6.

Table 6 -- Length and tolerance of straight strip steel wire In millimeters

Length of straight strip steel wire L	Length tolerance		
	Class I	Class II	Class III
$L \leq 300$	± 0.50	$\pm 0.50\% L$	$\pm 1.00\% L$
$300 < L \leq 1000$	± 1.00		
$L > 1000$	$\pm 0.10\% L$		

This is an excerpt of the PDF (Some pages are marked off intentionally)

Full-copy PDF can be purchased from 1 of 2 websites:

1. <https://www.ChineseStandard.us>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Select your country (currency), for example: USA (USD); Germany (Euro).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Tax invoice can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with download links).

2. <https://www.ChineseStandard.net>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Add to cart. Only accept USD (other currencies - <https://www.ChineseStandard.us>).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with PDFs attached, invoice and download links).

Translated by: Field Test Asia Pte. Ltd. (Incorporated & taxed in Singapore. Tax ID: 201302277C)

About Us (Goodwill, Policies, Fair Trading...): <https://www.chinesestandard.net/AboutUs.aspx>

Contact: Wayne Zheng, Sales@ChineseStandard.net

Linkin: <https://www.linkedin.com/in/waynezhengwenrui/>

----- The End -----