

ICS 77.140.60

H44



**National Standard of the People's Republic of China**

GB 1499.2-2007

Replace: GB/T 1499-1998

---

Steel for the Reinforcement of Concrete—

Part 2: Hot Rolled ribbed Bars

钢筋混凝土用钢

第 2 部分：热轧带肋钢筋

Issue Date: Aug 14, 2007

Implementation Date: Mar 01, 2008

---

Jointly Issued by General Administration of Quality Supervision, Inspection and Quarantine  
of the People's Republic of China and Standardization Administration of the People's  
Republic of China

---

**Contents**

<b>Foreword</b> .....	1
<b>1 Scope</b> .....	1
<b>2 Normative Reference</b> .....	1
<b>3 Definition</b> .....	2
<b>4 Classifications and Brand</b> .....	3
<b>5 Order Content</b> .....	4
<b>6 Dimension, Shape Weight and Tolerance</b> .....	4
<b>7 Specifications</b> .....	8
<b>7.1 Brand and chemical composition</b> .....	8
<b>7.2 Delivery mode</b> .....	9
<b>7.3 Mechanical property</b> .....	9
<b>7.4 Processing property</b> .....	10
<b>7.5 Fatigue property</b> .....	10
<b>7.6 Welding property</b> .....	10
<b>7.7 Grain size</b> .....	10
<b>7.8 Surface quality</b> .....	10
<b>8 Testing Method</b> .....	11
<b>8.1 Testing items</b> .....	11
<b>8.2 Tensing, bending and reverse bend test</b> .....	11
<b>8.3 Dimension Measurement</b> .....	12
<b>8.4 Measurement of weight tolerance</b> .....	12
<b>9 Test Rules</b> .....	12
<b>9.1 Characteristic value inspection</b> .....	12
<b>9.2 Delivery inspection</b> .....	12
<b>10 Packaging, Label and Quality Certificate</b> .....	13
<b>Annex A</b> .....	14
<b>Annex B</b> .....	15
<b>Annex C</b> .....	17

## Foreword

GB 1499 is divided into three parts;

- Part I: Hot rolled plain bars;
- Part 2: Hot rolled ribbed steel bars;
- Part 3: Steel bar welting net.

This is Part 2 of GB 1499, corresponding to the international standard ISO 6935-2:1991 Steel Ribs of Steel for the reinforcement of concrete, while with nonequivalent conformity; moreover, this part refers to revision draft of the international standard "ISO/DIS 6935-2 (2005)".

This part replaces GB 1499-1998 Hot Rolling Ribbed Steel Bars for the Reinforcement of Concrete

Compare with GB 1499-1998, there are some significant changes in this part, as follows:

- The hot rolled bar with ultra-fine grain was added in the scope of application;
- Adding three brands of hot rolled bars of fine grain, namely HRBF335, HRBF400 and HRBF500;
- Adding three definitions of 3.1 general hot-rolled reinforced bar, 3.2 hot rolled bar of fine grain and 3.1I characteristic value;
- Adding Chapter 5 of purchasing content;
- Adding three specifications , 7.5 fatigue property, 7.6 welding performance and 7.7 grain size;
- Amending "surface quality". "Weight deviation measuring" and other provisions;
- Amending the brand sign of steel bars; HRB335, HRB400 and HRB500 are replaced by C3, C4 and C5 respectively; while HRBF335, HRBF400 and HRBF500 are replaced by C3, C4 and C5;
- canceling the original Annex B "Reference composition of hot-rolled ribbed steel bars";
- Adding existing Annex B "Test rules of the characteristic value";
- Adding annex C "Computing formula of relative ribs area of steel bar",

This standard's clauses are compulsory, except 6.4.1, 7.3.5, 7.4.2, 7.5. Dimension a and b in Table 3 and Annex C are non-compulsory clauses, the rest clauses are compulsory.

Annex A and Annex B in this part are normative, while Annex C is informative. This part was proposed by China Iron and Steel industry Association.

This part is under the justification of the National Steel Standardization Technical Committee.

The drafting units of this part include China Metallurgical Construction Group Corporation, Capital Iron and Steel Group, Laiwu Iron and Steel Group Corporation, metallurgical Industry Information Standards Institute, Hunan Valin Lianyuan Iron and Steel Co. Ltd, Jinan Iron and Steel Co., Ltd. and Kunming Iron and Steel Co. Ltd.

The participating drafting units of this part include Bao Steel Group Shanghai No.1 Iron and Steel Co. Ltd. and Xingtai Iron and Steel Co., Ltd.

This part is mainly prepared by He Chengjie, Wang Limin, Zhang Bingcheng, Liu Zeyan, Gao Jianzhong, Wang Liping, Du Chuanzhi, Liu Guangmu, Gao Ling, Feng Chao, Li Zhimin and Zhu Jianguo.

This part is participated to be prepared by Wang Jun and Zhang Shaobo.

This part was initially issued in February, 1979, firstly amended in June, 1984, secondly amended in June 1991 and thirdly amended in October 1998.

# Steel for the reinforcement of concrete —

## Part 2: Hot rolled ribbed steel bars

### 1 Scope

This part specifies the definition, type, brand, purchasing content, dimension, shape, weight, tolerance, technical specification, testing method, test rules, packing, sign and certificate of quality of the hot rolled ribbed steel bars of reinforced concrete.

This part is applicable to the hot rolled ribbed steel bars for the reinforcement of concrete, and hot rolled ribbed steel bar of fine grain.

This part is inapplicable to the recycled steel bar re-rolled by finished steel, and remained heat treatment steel bars

### 2 Normative Reference

The following provisions contain provisions which, through reference in this text, constitute provisions of this standard. For dated reference, subsequent amendments to, or revisions of (excluding corrigendum contents), or Revised Edition do not apply. However, it is encouraged that every part of this standard to research the latest edition of these documents. For undated references, the latest edition of the normative document referred to applies.

GB/T222 Permissible Tolerances for Chemical Composition of Steel Products

GB/T 223.5 Methods for Chemical Analysis of Iron, Steel and Alloy-The Reduced Molybdosilicate Spectrophotometric Method for the Determination of Acid-soluble Silicon Content

GB/T 223.11 Methods for Chemical Analysis of Iron, Steel and Alloy-The Ammonium Persulfate Oxidation Volumetric Method for the Determination of Chromium 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/T223.14 Methods for Chemical Analysis of Iron, Steel and Alloy-The N-benzoyl-N-phenylhydroxylamine Extraction Photometric Method for the Determination of Vanadium Content

GB/T 223.17 Methods for Chemical Analysis of Iron, Steel and Alloy-The Diantipyrylmethane Photometric Method for the Determination of Titanium Content

GB/T223.19 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 223.26 Methods for Chemical Analysis of Iron Steel and Alloy-The Thiocyanate Direct Photometric Method for the Determination of Molybderum Content

GB/T223.27 Methods for Chemical Analysis of Iron, Steel and Alloy-The Thiocyanate-butyl Acetate Extraction Spectrophotometric Method for the Determination of Molybdenum Content

GB/T223.37 Methods for Chemical Analysis of Iron Steel and Alloy-The Indophenal Blue Photometric Methods for the Determination of Nitrogen Content after Distillation Separation

GB/T 223.40 Iron, Steel and Alloy-Determination of Niobium Content by the Sulphochlorophenol



北京文心雕语翻译有限公司  
Beijing Lancarver Translation Inc.

---

---

---

## 完整版本请在线下单

或咨询：

TEL: 400-678-1309

QQ: 19315219

Email: [info@lancarver.com](mailto:info@lancarver.com)

<http://www.lancarver.com>

---

---

## 线下付款方式：

### 1. 对公账户：

单位名称：北京文心雕语翻译有限公司

开户行：中国工商银行北京清河镇支行

账 号：0200 1486 0900 0006 131

---

---

### 2. 支付宝账户：[info@lancarver.com](mailto:info@lancarver.com)

---

---

注：付款成功后，请预留电邮，完整版本将在一个工作日内通过电子 PDF 或 Word 形式发送至您的预留邮箱，如需索取发票，下单成功后的三个工作日内安排开具并寄出，预祝合作愉快！

---



银联特约商户