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

GB/T 9460-2008

**Copper and copper alloy wires and rods
(English Translation)**

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Foreword

The revision of this standard adopts ISO/DIS 24373.2007 "Welding consumables - Solid wires and rods for fusion welding of copper and copper alloys - Classification" (English version).

This standard was re-drafted in accordance with ISO/DIS 24373.2007.

Considering the actual situation of copper and copper alloy wires and rods in China, the following technical content modifications have been made to ISO/DIS 24373.2007.

- DELETE the normative references ISO 544, ISO 4063, ISO 14344, ISO 31-0.1992;
- ADD Appendix A and Appendix B, brief description of welding wire and comparison table of main international standard models;
- ADD Tables 2, 3, 4, Figure 1.

For ease of use, this standard also makes the following editorial changes.

- CHANGE the standard name to "Copper and copper alloy wires and rods";
- In terms of standard structure, ADD the inspection rules, markings, quality certificates;

- CHANGE "this international standard" into "this standard";
- USE the decimal point "." to replace comma "," which functions as a decimal point;
- DELETE the foreword of international standard.

This standard is a revision of GB/T 9460-1988 "Welding wire and rods of copper and copper alloys". Compared with GB/T 9460-1988, the main revisions are as follows.

- The method of classification of welding wire and model division adopts ISO/DIS 24373.2007;
 - The chemical composition of the welding wire is consistent with the requirements of ISO/DIS 24373.2007; add 18 models of welding wire;
 - ADD the warpage and relaxation diameter requirements of welding wire;
 - MAKE adjustment of the size of welding wire and packaging method accordingly in accordance with the requirements of ISO/DIS 24373.2007;
- Copper and copper alloy wires and rods

1 Scope

This standard specifies the classification and model, technical requirements, test methods, inspection rules, packaging, marking and quality certificate of copper and copper alloy solid welding wires and filler wires.

This standard applies to copper and copper alloy solid wire and filler wire (hereinafter referred to as welding wire) used for welding such as melting electrode gas shielded arc welding, tungsten electrode gas shielded arc welding, gas welding, plasma arc welding.

2 Normative references

The provisions in following documents become the provisions of this Standard through reference in this Standard. For the dated references, the subsequent amendments (excluding corrections) 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 5121 (all parts) Methods for chemical analysis of copper and copper alloys

3.1 Classification of welding wire

Welding wire is divided into 4 categories according to chemical composition.
copper, brass, bronze, nickel-copper.

3.2 Model classification

Welding wire's model is divided by chemical composition (see Table 1).

3.3 Model designation

The welding wire's model consists of three parts. The first part is the letter "SCu", which means copper and copper alloy welding wire; the second part is a 4-digit number, which indicates the welding wire's model; the third part is an optional part, which indicates the chemical composition code. For a brief description of