

ICS 25.160.20
CCS J 33



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

GB/T 29713-2026

Replacing GB/T 29713-2013

**Wire electrodes, strip electrodes, wires and rods for arc welding
of stainless steels**

不锈钢实心焊丝和焊带

(English Translation)

Issued on: July 30, 2026

Implemented on: February 1, 2027

Issued by: State Administration for Market Regulation

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document replaces GB/T 29713-2013 "Stainless Steel Welding Wire and Strip". Compared with GB/T 29713-2013, except for structural adjustments and...

Aside from editorial changes, the main technical changes are as follows.

a) Added the terms and definitions for "solid welding wire," "solid filler wire," and "solid welding strip," and deleted the terms and definitions for "filler wire" and "welding strip." (See Chapter 3, Chapter 3 of the 2013 edition);

b) The model designation method has been changed (see 4.2, 2013 version 4.2).

c) Added technical requirements and test methods for weld strip camber (see 5.2 and 6.2);

d) Four new chemical composition classifications were added. 308N2, 347H, 2307, and 2394L. The classifications for 307, 308, 308H, 308L, and 308Mo were modified.

308LMo, 309, 309L, 309LNb, 309LNbD, 309Mo, 309LMo, 310, 312, 316, 316H, 316L,

316LMn, 317, 317L, 318, 318L, 321, 330, 347, 347Si, 347L, 409Nb, 420, 446LMo, 16-8-2, 19-

e) Added requirements for specimen preparation, including sampling location and size requirements for tensile specimens, as well as test methods, and added normative references.

GB/T 25774.1 and GB/T 2652 (see 6.4);

f) Added revision rules (see Chapter 7);

g) The inspection rules have been changed (see Chapter 8, Chapter 7 of the 2013 edition);

h) The requirement for "packaging, marking and quality certificates" has been removed (see Chapter 8 of the 2013 edition);

i) Added requirements for "Technical Conditions for Supply" (see Chapter 9).

This document is modified to adopt ISO 14343:2025 "Welding materials - Arc welding wire, filler wire and welding filler wire for stainless steel and heat-resistant steel".

With categories.

Compared with ISO 14343:2025, this document has undergone many structural adjustments. A comparison of the structural numbering changes between the two documents can be found in [link to document].

Appendix A.

The technical differences between this document and ISO 14343:2025, and the reasons therefor, are as follows.

--Added terms and definitions defined in GB/T 3375 as referenced in normative documents, and deleted terms and definitions related to welding wire, filler wire, and welding strip.

The definition has been expanded to include terms and definitions for "solid welding wire," "solid filler wire," and "solid welding strip" (see Chapter 3) to better suit my country's technological needs.

Require;

--The method of classifying System A according to its nominal components (see Chapter 4) has been removed to meet my country's technical requirements;

--The model designation method has been changed (see 4.2) to adapt to my country's technical requirements;

--Added technical requirements and test methods for the dimensions and surface quality of welding wire and strip, and added the normative reference GB/T 25775.

(See 5.1 and 6.1) to adapt to my country's technical requirements;

--Added technical requirements and test methods for weld strip camber (see 5.2 and 6.2) to adapt to my country's technical requirements;

To meet the actual production situation in our country;

--The C content of 308LMo has been modified (see 5.3) to meet the actual production conditions in my country;

--Explanatory content regarding factors affecting chemical composition and mechanical properties has been removed, and reference values for the tensile properties of weld wire deposited metal have been clarified.

(See 5.4 and Appendix C) to adapt to my country's technical requirements;

--The technical requirements and test methods for the corrosion resistance of the deposited metal have been added (see 5.5 and 6.5) to adapt to my country's technical requirements;

--The technical requirements and test methods for the ferrite content of the deposited metal have been increased (see 5.6 and 6.6) to adapt to my country's technical requirements;

--The requirement for sampling the raw materials used in manufacturing products for chemical composition analysis of welding wire and welding strip has been removed (see 6.3) to meet the actual needs of my country.

Production status;

--Added requirements for specimen preparation, including sampling location and size requirements for tensile specimens, as well as testing methods; added normative references.

GB/T 25774.1 and GB/T 2652 (see 6.4) facilitate standard implementation;

-- Replace with section 3.2 of GB/T 8170-2008, which is consistent with the rounding rule A of B.3 in ISO 80000-1:2022.

The ISO standard reference clauses have been updated to align with the rounding rule B.4 in ISO 80000-1:2022, in GB/T 8170-2008.

Section 3.3 (see Chapter 7) facilitates the implementation of the standard;

--Added batching rules, test levels, and sampling requirements; added the normative reference GB/T 25778; and removed the requirement for retesting.

The requirements are detailed in Chapter 8, to facilitate the implementation of the standard;

--ISO 544 has been replaced by the normatively referenced GB/T 25775, and ISO 14344 has been replaced by GB/T 25778 (see Chapter 9).

To meet my country's technical requirements.

The following editorial changes have been made to this document.

--To align with existing standards, the standard name has been changed to "Stainless Steel Solid Welding Wire and Strip";

--The nominal component classification category of system A (see Table C.1) has been deleted to facilitate standard implementation.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed and is under the jurisdiction of the National Technical Committee on Standardization of Welding and Related Processes (SAC/TC 55).

1 Scope

This document specifies the types, technical requirements, test methods, rounding rules, and inspection procedures for stainless steel solid welding wire, solid filler wire, and solid welding strip.

Inspection rules and supply technical conditions, etc.

This document applies to gas metal arc welding (GMAW), non-consumable electrode gas metal arc welding (GEAW), submerged arc welding, electroslag welding, plasma arc welding, and...

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are listed below.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 1954 Method for determining ferrite content in welds of chromium-nickel austenitic stainless steel (GB/T 1954-2008, ISO 8249:2000) MOD) GB/T 2652 Destructive testing of welds in metallic materials-Longitudinal tensile test of weld metal in fused welded joints (GB/T 2652-2022) ISO 5178:2019 (IDT) GB/T 3375 Welding Terminology GB/T 4334 Corrosion of metals and alloys - Test method for intergranular corrosion of austenitic and ferritic-austenitic (duplex) stainless steel (GB/T 4334-2020, ISO 3651-1:1998; ISO 3651-2:1998, MOD) GB/T 8170-2008 Rules for rounding off numerical values and the representation and determination of limiting values GB/T 25774.1 Inspection of Welding Materials - Part 1: Preparation of Test Specimens for Mechanical Properties of Steel, Nickel and Nickel Alloy Deposited Metals (GB/T 25774.1-2023, ISO 15792-1:2020, MOD) GB/T 25775 Technical Conditions for the Supply of Welding Materials. Product Type, Dimensions, Tolerances and Marking (GB/T 25775-2010) ISO 544:2003, MOD) GB/T 25778 Guidelines