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

GB/T 17853-2018

Replacing GB/T 17853-1999

Tubular cored electrodes for stainless steels

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0 PA, PB

1 PA, PB, PC, PD, PE, PF, and/or PG

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0.75 - - -

0.75 - - -

0.75 - - -

0.75 - - -

0.75 - - -

0.75 - - -

0.75 - - -

0.75 - - -

0.75 - - -

0.75 - - -

0.75 - - -

0.75 - - -

0.75 - -

0.75 - - -

0.75 - - -

0.75 - - -

4.4 Mechanical properties

307 ≥ 590 ≥ 25

308 ≥ 550 ≥ 25

309 ≥ 550 ≥ 25

310 $\geq 550 \geq 25$

312 $\geq 660 \geq 15$

316 $\geq 520 \geq 25$

317 $\geq 550 \geq 20$

318 $\geq 520 \geq 20$

347 $\geq 520 \geq 25$

409 $\geq 450 \geq 15$

410 $\geq 520 \geq 15$ a

430 $\geq 450 \geq 15$ c

2209 $\geq 690 \geq 15$

2307 $\geq 690 \geq 15$

2553 $\geq 760 \geq 13$

2594 $\geq 760 \geq 13$

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GB/T 17853-1999 "stainless steel flux cored wire". And GB/T 17853-1999 "stainless steel flux cored wire"

The main content changes are as follows.

--- According to ISO 17633.2010 and China's actual application needs, increased 309H and other 12 gas-protected non-metal powder cored welding

Classification of silk chemical components, 316H and other 10 self-protecting non-metallic powder type flux cored wire chemical composition classification and 308L and other 13 gas

Body protection metal powder type flux cored wire chemical composition classification;

--- The requirements for model division, chemical composition and mechanical properties

were adjusted according to ISO 17633.2010;

--- Removed the requirement for longitudinal bending test of welded joints;

--- According to ISO 17633.2010, the T-joint fillet weld test requirements have been added.

This standard uses the redrafting method to modify the use of ISO 17633.2010 "welding material gas protection and self-protection arc welding stainless steel

Flux Cored Wire and Filled Wire Classification (English version).

Compared with ISO 17633.2010, this standard has more adjustments in structure.

Appendix A lists this standard and ISO 17633.2010.

Checklist of changes in the number of chapters;

There are technical differences between this standard and ISO 17633.2010. Appendix B gives the corresponding technical differences and their causes.

Watch list.

This standard also made the following editorial changes.

--- Change the standard name to "Stainless Steel Flux Cored Wire";

--- Added Appendix C flux core wire type control (informative appendix);

--- Added Appendix E protective gas type code (informative appendix).

This standard is proposed and managed by the National Welding Standardization Technical Committee (SAC/TC55).

This standard was drafted. Harbin Welding Research Institute Co., Ltd., Kunshan Jingqun Welding Material Technology Co., Ltd., Guangzhou special pressure equipment inspection

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This standard replaces the previous versions of the standard as follows.

---GB/T 17853-1999.

Stainless steel flux cored wire

1 Scope

This standard specifies the type, technical requirements, test methods, re-inspection and technical conditions of supply of stainless steel flux cored wire and filler wire.

This standard applies to stainless steel flux cored wire for tungsten gas protection and self-shielded arc welding and stainless steel for tungsten inert gas protection welding.

The core filler wire (hereinafter referred to as "welding wire").

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 1954 chrome-nickel austenitic stainless steel weld ferrite content measurement method (GB/T 1954-2008, ISO 8249.2000,

MOD)

GB/T 2652 Weld and deposited metal tensile test method (GB/T 2652-2008, ISO 5178.2001, IDT)

GB/T 3323 metal fusion welding joints radiography

GB/T 4334 Corrosion test method for corrosion of stainless steels of metals and alloys (GB/T 4334-2008, ISO 3651-1.

GB/T 16672 Definition of dip angle and corner of weld working position (GB/T 16672-1996, idtISO 6947.1990)

GB/T 18591 Welding preheating temperature, inter-channel temperature and preheating maintenance temperature measurement guide (GB/T 18591-2001,

ISO 13916.1996, IDT)

GB/T 25774.1 Inspection of welding materials - Part 1 . Preparation and inspection of mechanical properties of steel, nickel and nickel alloys

Inspection (GB/T 25774.1-2010, ISO 15792-1.2000, MOD)

GB/T 25774.3 Inspection of welded materials - Part 3. Preparation and testing of T-joint fillet welds

(GB/T 25774.3-2010, ISO 15792-3.2000, IDT)

GB/T 25775 Welding materials supply technical conditions Product type, size, tolerance and mark (GB/T 25775-2010,

ISO 544.2003, MOD)