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**Corrosion of metals and alloys - Cathodic protection of steel in
concrete**

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Foreword

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

The translation method used in this standard is equivalent to ISO 12696.2016 Cathodic Protection of Steel Bars for Concrete.

The Chinese documents that have a consistent correspondence with the international documents of the normative reference documents in this standard are as follows.

---GB/T 4208-2017 enclosure protection level (IP code) (IEC 60529.2013, IDT);

---GB/T 17045-2020 Electric shock protection devices and general parts of equipment (IEC 61140.2001, IDT);

---GB/T 19212.3-2012 Safety of power transformers, power supplies, reactors and similar products Part 3.Control transformers

Special requirements and tests for power supplies with built-in control transformers (IEC 61558-2-2.2007, IDT);

---GB/T 19212.5-2011 transformers, reactors, power supply devices and similar products

with a power supply voltage of 1100V and below

Safety Part 5.Special requirements and tests for isolation transformers and power supply devices with built-in isolation transformers (IEC 61558-2-4.2009, IDT);

---GB/T 19212.14-2012 Transformers, reactors, power supply units and similar products with a power supply voltage of 1100V and below

Safety Part 14.Special requirements and tests for autotransformers and power supply devices with built-in autotransformers (IEC 61558-2-13.2009, IDT);

---GB/T 19212.17-2019 Transformers, reactors, power supply units and similar products with a power supply voltage of 1100V and below

Safety Part 17.Special requirements and tests for switching power supply devices and transformers for switching power supply devices (IEC 61558-2-16.2013, MOD);

---GB/T 20138-2006 The degree of protection of electrical equipment enclosures against external mechanical collisions (IK code) (IEC 62262.2002, IDT).

This standard has made the following editorial changes.

--- In order to be consistent with the existing standards, the standard name was changed to "Cathodic Protection of Steel Bars for Corrosion of Metals and Alloys".

This standard was proposed by the China Iron and Steel Association.

This standard is under the jurisdiction of the National Steel Standardization Technical Committee (SAC/TC183).

Drafting organizations of this standard. China Metallurgical Construction Research Institute Co., Ltd., Metallurgical Industry Information Standards Research Institute, Zhejiang Transportation Planning and Design Research Institute

Research Institute Co., Ltd., Hangzhou Benchuang Technology Co., Ltd., Shenzhen University, China Metallurgical Testing and Certification Co., Ltd.

1 Scope

This standard specifies the technical requirements for cathodic protection of steel bars in new and existing concrete structures, and is applicable to concrete structures.

Steel bars, prestressed steel bars, uncoated steel bars and organic coated steel bars in the structure.

This standard applies to steel in structures exposed to the atmosphere, buried, underwater and in a tidal environment.

Note 1.Appendix A describes the principle of cathodic protection and its application in concrete reinforcement.