INTERNATIONAL STANDARD

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Second edition
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Ductile iron pipes, fittings, accessories and their joints — External zinc-based coating —

Part 2: Zinc-rich paint

Tuyaux, raccords et accessoires en fonte ductile et leurs assemblages — Revêtement extérieur à base de zinc —

Partie 2: Peinture riche en zinc

Reference number
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 5, *Ferrous metal pipes and metallic fittings*, Subcommittee SC 2, *Cast iron pipes, fittings and their joints*.

This second edition cancels and replaces the first edition (ISO 8179-2:1995), which has been technically revised. The following changes have been made:

— the minimum quantity of Zn has been increased from 130 g/m^2 to 200 g/m^2;

— the revision recognizes the technological advancements in the field regarding zinc-based coatings to increase the lifetime and reliability of ductile iron pipelines, improving protection to different types of corrosion (including general and localized) and the use of new alloy enrichments.

A list of all parts in the ISO 8179 series can be found on the ISO website.

Ductile iron pipes, fittings, accessories and their joints — External zinc-based coating —

Part 2: Zinc-rich paint

1 Scope

This document specifies an external protective coating system which is factory-applied to ductile iron pipeline components as specified in ISO 2531, ISO 7186 and ISO 16631. This coating system comprises a zinc-rich paint followed by a finishing layer that can be bituminous paint or synthetic resin compatible with zinc rich paint coating.

NOTE ISO 8179-1 addresses metallic zinc-based coatings.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

4 Materials

The coating materials shall be zinc-rich paint with organic or/and inorganic binder and zinc content of at least a mass fraction of 85 % in the dry film followed by a finishing layer that can be bituminous paint or synthetic resin compatible with zinc-rich paint coating.

5 Zinc-rich paint coating

5.1 Pipeline component surface condition

The pipeline component surface shall be dry and free from rust or any non-adhering particles or foreign matter such as oil or grease.

The zinc-rich paint coating shall be applied to the as-cast annealed external surface of the pipeline component or to a blast-cleaned or ground surface at the manufacturer's discretion.

5.2 Method of application

The zinc-rich paint coating shall be applied by a spraying or brushing process onto the pipeline component surface.

The design and construction of the spray equipment are not within the scope of this document.