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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 13663.5-2018

Polyethylene (PE) piping systems for water supply -- Part 5: Fitness for purpose of the system

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Foreword

GB/T 13663 "Pipeline system for water supply" is divided into 5 parts.

--- Part 1. General;

--- Part 2. Pipes;

--- Part 3. Fittings;

--- Part 4. Valves;

--- Part 5. System suitability.

This part is GB/T 13663 part 5.

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

This section uses the redrafted method to amend the ISO 4427-5.2007 "Plastic Pipe System Water Supply Polyethylene (PE) Pipes and Pipes

Part 5. System Suitability."

This part has more adjustments in structure than ISO 4427-5.2007. Appendix A lists the number of chapters in this section and

List of ISO 4427-5.2007 chapter numbered controls.

This part has a technical difference compared with ISO 4427-5.2007. Relevant differences have been incorporated into the text and in the terms to which they relate

The margins are marked with a vertical single line (|). A list of these technical differences and their causes is given in Appendix B.

1 Scope

This part of GB/T 13663 specifies terms and definitions, symbols, abbreviations, groups for the suitability of polyethylene (PE) piping systems for water supply.

Part type, sample preparation and requirements.

This part, together with other parts of GB/T 13663, applies to water temperatures not exceeding 40°C and maximum working pressure (MOP) not greater than

2.0MPa, general purpose pressure water delivery and drinking water distribution piping systems and their components.

Note 1. Refer to GB/T 13663.1-2017 Appendix C for the reference pressure reduction coefficient between 20°C and 0°C to 40°C.

Note 2. The purchaser or the purchaser has the responsibility to comply with the requirements of this section in accordance with the requirements of its specific application, in conjunction with relevant regulations, standards or regulatory requirements.

Evaluation.

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 version (including all amendments) applies to this document.

GB/T 6111-2003 Test method for internal pressure resistance of thermoplastic pipes for fluid transport (ISO 1167.1996, IDT)

GB/T 13663.1-2017 Polyethylene (PE) piping system for water supply - Part 1. General (ISO 4427-1.2007, MOD)

GB/T 13663.3-2018 Polyethylene (PE) piping systems for water supply - Part 3. Fittings (ISO 4427-3.2007, MOD)

GB/T 15820-1995 Pull-out test for connection of polyethylene pressure pipe and fittings (eqvISO 3501.1976)

GB/T 19278-2003 General terms and definitions for thermoplastic pipes, fittings and valves

GB/T 19806-2005 Extruded peel test of polyethylene electrofusion assemblies for plastic pipes and fittings (ISO 13955.1997, IDT)

GB/T 19807-2005 Preparation of plastic pipe and fittings for combination of polyethylene pipe and fused pipe fittings (ISO 11413.

1996, MOD)

GB/T 19808-2005 Tensile peeling of polyethylene fused components with a nominal outer diameter greater than or equal to 90 mm for plastics pipes and fittings

Off-Test (ISO 13954.1997, IDT)

GB/T 19809-2005 Preparation of plastic pipes and fittings Polyethylene (PE) pipes/pipes or pipes/pipes Hot-melt butt joint assemblies

(ISO 11414.1996, IDT)

GB/T 19810-2005 Determination of tensile strength and failure mode of hot-melt butt joints of polyethylene (PE) pipes and fittings

(ISO 13953.2001, IDT)

3 Terms and Definitions, Symbols, Abbreviations

Terms and definitions, symbols, and reductions defined in GB/T 13663.1-2017, GB/T 13663.3-2018 and GB/T 19278-2003

Abbreviations and the following terms and definitions apply to this document.

3.1

Fused connection

The way in which the polyethylene fused socket fittings (or fused saddle fittings) are connected to the tubing (or fittings with socket ends). Electrofusion

The Joule effect of the heat-generating element is integrated into the tube, melting the material adjacent to it, and welding the tube to the surface of the tube (or tube).