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Pre-insulated composite plastic pipes with polyethylene casing

聚乙烯外护管预制保温复合塑料管

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Foreword

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5.1.1 and a continuous multi-layer thermal insulation composite pipe, The use of a patent

related to corrosion-resistant low-temperature direct-buried thermal insulation heating pipes. The issuing agency of this document has no position on the authenticity, validity and scope of the patent. The holder of the patent has assured the issuing organization of this document that it agrees to license any organization free of charge on a fair, reasonable, and non-discriminatory basis Or an individual implements a patent when implementing the national standard. The statement of the patent holder has been filed with the issuing agency of this document. Relevant information can be Obtained through the following contact information. Name of the patent holder for "a continuous multi-layer thermal insulation composite pipe". Zibo Jieli Plastic Pipe Co., Ltd. Address. No. 6, Qingtian Road, Qilu Chemical Industrial Park, Linzi District, Zibo City, Shandong Province Contact. Xue Yanchao Name of patent holder for "a corrosion-resistant low-temperature direct-buried thermal insulation heating pipe". Tianjin Zhongcai Profile Co., Ltd. Address. No. 55, 11th Street, Economic and Technological Development Zone, Binhai New Area, Tianjin Contact. Gao Yuanjie Please note that in addition to the above patents, certain contents of this document may still involve patents. The issuing agency of this document is not responsible for identifying patents responsibility. Polyethylene outer protective pipe prefabricated thermal insulation composite plastic pipe

1 Scope

China's national standard for pre-insulated composite plastic pipes with a polyethylene casing. It specifies the terms and definitions, the symbols and the requirements. The pipe is a factory-made assembly of three layers: a service pipe carrying the fluid, a layer of rigid polyurethane foam around it, and a polyethylene casing sealing the whole. It is the standard construction for buried district heating and cooling mains, and the reason it is made in a factory rather than insulated in the trench is that the foam must be dry and continuous - insulation applied in a wet trench absorbs water, and wet insulation conducts heat as well as it insulates. The casing is the component that determines the system's life: it is the only barrier between the ground water and the foam, and a puncture during backfilling admits water that migrates along the pipe. District heating networks in northern China run to thousands of kilometres, so the heat lost through this pipe is a national quantity.

This document specifies the structure, classification, code, marking, general regulations, requirements, and tests of prefabricated thermal insulation composite plastic pipes for polyethylene outer protective pipes. Methods, inspection rules, marking, transportation and storage. This document applies to prefabricated thermal insulation composite plastic pipes with polyethylene outer protective pipes used in heating and cooling systems.

2 Normative references

The contents of the following documents constitute the indispensable clauses of this document through normative references in the text. Among them, dated quotations Only the

version corresponding to that date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to This document.

GB/T 1033.1 Determination of the density of plastic non-foam plastics Part

3 Polyolefin pipes

GB/T 8806 Determination of the dimensions of plastic parts in plastic piping systems

GB/T 8810 Determination of Water Absorption of Rigid Foam Plastic

GB/T 8813 Determination of the compressive properties of rigid foam

GB/T 9345.1 Determination of ash content of plastics Part