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شرکت ملی گاز ایران

مدیریت پژوهش و فناوری

امور تدوین استانداردها

IGS

دستورالعمل

سیستم پوشش غشایی قیر اصلاح شده پلیمری گرم اجرا برای سرجوش ها و
تعمیرات لوله های فولادی مدفون

Hot-Applied Polymer Modified Bituminous Membrane Coating
System for Field Joints and repairs of Buried Steel Line Pipes



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شرکت ملی گاز ایران



دفتر مدیرعامل

ابلاغ مصوبه هیأت مدیره

مدیر محترم پژوهش و فناوری

باسلام،

به استحضار می‌رساند در جلسه ۲۰۴۳ مورخ ۱۴۰۲/۱۰/۲۴ هیأت مدیره، نامه شماره ۱۸۸۴۷۱ مورخ ۱۴۰۲/۱۰/۱۹ آن مدیریت درمورد تصویب نهایی مقررات فنی شرکت ملی گاز ایران به شرح زیر مطرح و مورد تصویب قرار گرفت.

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۲- دستور العمل سیستم پوشش غشایی قیر اصلاح شده پلیمری گرم اجرا، برای سرجوش ها و تعمیرات لوله های فولادی مدفون

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Foreword

This standard specification is intended to be mainly used by N.I.G.C. and contractors, and has been prepared base on interpretation of recognized standards and technical documents, as well as knowledge, backgrounds and experiences in gas industries at national and international levels.

Iranian Gas Specification (IGS) are prepared, reviewed and amended by technical standard committees within NIGC standardization division of research and technology management and submitted to "the standards council of NIGC" for approval.

IGSs are subjected to revision, amendment or withdrawal, if required, and thus the latest edition of IGS shall be checked / inquired by NIGC'S users.

This standard must not be modified or altered by NIGC employees or its contractors. Any deviation or conflicts between this specification and other applicable standards, codes, procedure or well-known manufacturer's specifications must be resolved in writing by the user or its representative through Manager, Engineering Department or standardization division of NIGC.

The technical standard committee welcomes comments and feedbacks from concerned or interested corporate and individuals about this standard, and may revise this document accordingly based on the received feedbacks.

General Definitions

Throughout this standard the following definitions, where applicable, should be followed:

- 1- "STANDARDIZATION DIV." is organized to deal with all aspects of industry standards in NIGC. Therefore, all enquiries for clarification or amendments are requested to be directed to mentioned division.
- 2- "COMPANY": refers to National Iranian Gas Company (NIGC).
- 3- "SUPPLIER": refers to a firm who will supply the service, equipment or material to IGS specification whether as the prime producer or manufacturer or a trading firm.
- 4- "SHALL ": is used where a provision is mandatory.
- 5- "SHOULD": is used where a provision is advised only.
- 6- "MAY": is used where a provision is completely discretionary.

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1. SCOPE

This standard specification specifies the minimum requirements for field joint membrane and comprises a woven glass fiber carrier incorporating a tough and flexible polymer modified bituminous hot applied for corrosion protection of field joints and field repair of steel line pipes coated with bitumen enamel or polymer modified bitumen enamel in conjunction with cathodic protection.

This standard specification covers the use of hot applied polymer modified bituminous membrane when the design temperature is from -20 °C to +60 °C.

Note 1: This standard withdraws and replaces IGS-M-TP-014-8 (1).

2. REFERENCES

Throughout this standard the following dated and undated standards/codes are referred to. This referenced documents shall, to the extent specified herein, from a part of this standard. For dated references, the edition cited applies. For undated references, the latest edition of the referenced documents applies.

2.1 Normative References

ASME B 31.8 (2018) "Gas transmission and distribution piping systems"

ASTM D 149 (2020) "Standard test method for dielectric breakdown voltage and dielectric strength of solid electrical insulating materials at commercial power frequencies"

ASTM D 4285 (2018) "Standard Test Method for Indicating Oil or Water in Compressed Air"

ASTM D 4940 (2020) "Standard Test Method for Conducti Metric Analysis of Water Soluble Ionic Contamination of Blasting Abrasives"

EN 10300 (2005) "Steel Tubes and Fittings for Onshore and Offshore Pipelines – Bituminous Hot Applied Materials for External Coating"

EN 12068 (1999) "Cathodic Protection – External Organic Coatings for the Corrosion Protection of Buried or Immersed Steel Pipelines Used in Conjunction with Cathodic Protection – Tapes and Shrinkable Materials"

IGS-C-TP-016 " polymer modified bitumen enamel factory coating system for external surface of buried and submerged line pipes"

IGS-M-PL-001-2 "SMLS/HFW/SAWH Carbon Steel Pipes, Part 2- Grades B to X80, Sizes 6 to 56 inches"

IGS-M-PL-001-2 "SMLS/HFW Carbon Steel Pipes, Part 1- Grades B, 0.5 to 4 inches"

IGS-O-TP-001 "Maintenance and Rehabilitation of Coating of Gas Pipeline Under Operation"