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شرکت ملی گاز ایران - مدیریت پژوهش وفناوری

امورتدوین استانداردها

IGS

Iranian Gas Standards

مشخصات فنی خرید

غلافهای حرارتی انقباضی برای دمای تا ۶۰ درجه سانتیگراد

Heat Shrinkable Sleeve System (Hot Melt Adhesive) for Service Temperature up to 60 C.

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براي استفاده ازاستانداردها فقط به آخرین نسخه منتشرشده درسایت استانداردها مراجعه گردد

Fax:(9821)-8131-5679 http://igs.nigc.ir/igs igs@nigc.ir

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ابلاغ مصوبه هیأت مدیره

مدیر محترم پژوهش و فناوری

باسلام،

به استحضار می رساند در جلسه ۱۳٤٦ مورخ ۲٤/ ۹/ ۱۳۸۷ هیأت مدیره، نامه شماره گ۹ / ۰۰۰ / ۱۱۹۸٥٤ مورخ ۸۷/۹/۱۸ آن مدیریت در مورد تصویب نهایی استانداردهای "مشخصات فنی خرید غلافهای حرارتی انقباضی برای دمای تا ۸۰ درجه سانتی گراد" به شماره استاندارد IGS –M-TP-014-3(1) و " مشخصات فنی خرید غلافهای حرارتی انقباضی برای دمای تا ٦۰ درجه سانتی گراد" به شماره استاندارد IGS –M-TP-014-6 (0) و" مشخصات فنی خرید غلافهای حرارتی انقباضی برای دمای تا ٥۰ درجه سانتی گراد" به شماره استاندارد IGS –M-TP-014-7 (0) مطرح و مورد تصویب قرارگرفت .

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FOREWORD

This standard is intended to be mainly used by NIGC and contractors and has been prepared on interpretation recognized standards , technical documents , knowledge , backgrounds and experiences in gas industries at national and international levels .
Iranian gas standards (IGS) are prepared , reviewed and amended by technical standard committees within NIGC Standardization division and submitted to the NIGC's "STANDARDS COUNCIL" for approval .
IGS Standards are subject to revision , amendment or withdrawal , if required , thus the latest edition of IGS shall be checked/inquired by NIGC users .
This standard must not be modified or altered by the end users within NIGC and her contractors . Any deviation from normative references and/or well known manufacturers specifications must be reported to Standardization division .
Any comments from concerned parties on NIGC distributed IGS are welcome to technical standards committees and will receive serious attention and consideration should a revision to standards is recommended .

GENERAL DEFINITIONS :

Throughout this standard the following definitions , where applicable , should be followed :
1- "STANDARDIZATION DIV." has been organized to deal with all aspects of industrial standards in NIGC . Therefore , all queries for clarification or amendments are requested to be directed to mentioned div.
2- "COMPANY" : refers to national Iranian gas company .
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 covers the minimum requirements of hot melt type heat shrinkable sleeve used for external corrosion protection on the field girth weld areas of linepipes that has been mainly factory coated with three layer extruded polyethylene coating system .

Notes :

1 : The hot melt type heat shrinkable sleeve shall be used for the pipeline projects with the maximum operating temperature of up to 60 ^{0}C .

2 : The materials for field repair of main coating (melt stick , filler mastic and repair patch) are covered in Annex A .

3 : For use on other types of pipe coating systems compatibility shall be verified accordance to relevant engineering codes and standards .

2. REFERENCES

Throughout this standard specification , the following standards and codes are referred to , the edition of them , that are in effect at the time of issues of this standard specification (2008) shall , to the extent specified herein , form part of this standard specification . The applicability of changes in standards and codes that occur after the date of standards that referred , shall be mutually agreed upon by the purchaser and manufacturer or supplier .

2.1 Normative References

BS 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"

ASTM D 570 (1998) "Test method for water absorption of plastics"

ASTM D 638 (2002) "Test method for tensile properties of plastics"

ASTM D 870 (2002) "Practice for testing water resistance of coatings using water immersion"

ASTM D 1000 (1999) "Test method for pressure-sensitive adhesive-coated tapes used for electrical and electronic applications"

ASTM D 1044 (1999) "Test method for resistance of transparent plastics to surface abrasion"

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ASTM D 2240 (2002) "Test method for rubber property-durometer hardness"

ASTM D 2671 (2000) "Test method for heat shrinkable tubing for electrical use"

ASTM E 28 (2002) "Test method for softening point of resins derived from naval stores by Ring-and-Ball apparatus"

ISO 1183 (1999) "Plastics-Methods for determining the density of non-cellular plastics-Part 3: Gas pyknometer method supersededs method A and B of BS 2782-6: Method 6 "

ISO 21809-3 (2006) "Materials , equipment and offshore structures for petroleum , petrochemical and natural gas industries "

2.2. Informative References

NACE RP0303 (2003) "Field-applied heat-shrinkable sleeves for pipelines : Application , and quality control"

3. TERMS AND DEFINITIONS

Heat shrinkable sleeve
Coating that will reduce in dimensions from an expanded size to a predetermined size by the application of heat .

Hot melt adhesive
A family of adhesive based on semi–crystalline polymers .

Coating repair material
Pre–manufactured patches , fillers , etc. , compatible with and made from similar materials as the heat shrinkable sleeve .

Coating system
The complete number and types of coats applied to a substrate in a predetermined order .

Filler Material
Compatible material used under a heat shrinkable sleeve or repair patch to fill voids if any .

Factory coating (mill coating)
Coating applied to pipe length in a factory or yard before delivery .

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