

IGS-M-TP-016(1) : 2007

APPROVED



شرکت ملی گاز ایران

National Iranian Gas Co.

مدیریت پژوهش و فناوری

Research and Technology Management

امور تدوین استانداردها

Standardization Division

IGS

Iranian Gas Standards

مشخصات فنی خرید

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Polymer Modified Bitumen Enamel Coating System for Line Pipe

FOREWORD

This standard is intended to be mainly used by **NIGC** and contractors and has been prepared on interpretation of recognized standards , technical documents , knowledge ,backgrounds and experiences in gas industries at national and international levels.

Iranian Gas Standards (**IGS**) are prepared , reviewed and ammended by technical standard committees within NIGC Standardization Div. 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 div.

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 the mentioned div.

2- "**COMPANY**" : refers to national iranian gas company .

3- "**SUPLIER**" : 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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تاریخ: ۱۳۸۶/۴/۲۷
شماره: م.دب/۰۳۹-۱۴۴۲۷



شرکت ملی گاز ایران



دفتر مدیر عامل

۱- اصل بگوش در دست مدیر عامل
۲- جنب آتشی ارجاع به هیأت مدیره
۳- بگوش

۸۲,۵۱۲

ابلاغ مصوبه هیأت مدیره

به: مدیریت محترم پژوهش و فناوری
مدیر عامل محترم شرکت مهندسی و توسعه گاز ایران

از: دبیر جلسات هیأت مدیره

باسلام،

باستحضار میرساند در جلسه ۱۲۸۲ مورخ ۱۳۸۶/۴/۱۰ هیأت مدیره، نامه شماره گ.۱۱۰۷/۰۰۰/۹ مورخ ۸۶/۲/۲۴ مدیر پژوهش و فناوری در مورد پوشش قیر اصلاح شده پایه نفتی ارجاعی از مدیر عامل شرکت مطرح و مقرر گردید در خطوط لوله حداکثر تا قطر بیست اینچ و بدون لایه محافظ PP استفاده شود. نتایج بررسیهای پژوهشی جهت نهائی شدن سایر اقطار به هیأت مدیره ارائه گردد.

ابراهیم رئیسی

رونوشت: مدیریت محترم عامل و قائم مقام رئیس هیأت مدیره.
اعضای محترم هیأت مدیره/ امور حسابرسی داخلی/ روابط عمومی/ امور بازرسی و پاسخگویی به شکایات.

مدیریت پژوهش و فناوری

۱۳۸۶/۵/۰۴

۵۳۹۹

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1. SCOPE

This standard specification covers the minimum requirements for the materials , performance properties , application , inspection and testing , repair , handling and storage of polymer modified bitumen enamel coating system for corrosion protection of external surface of buried or subsea linepipes .

This standard specification covers the use of modified polymer bitumen enamel when the design temperature is within - 20 to + 70 °C .

Considerable for design engineers :

Note 1 : Regarding to thermoplastic nature of this coating system and application conditions (handling , transportation , storage and etc.) the use of polymer modified bitumen enamel coating system shall not be used for the O.D greater than 20 inches .

Note 2 : Due to limited available data , the application of PP as top layer requires a defined scientific and field investigations .

2. NORMATIVE REFERENCES

Throughout this technical specification the following standards and codes are referred to . The applicability of changes in codes and standards that occur after the date of this standard specification shall be mutually agreed upon by the purchaser and manufacturer and / or applicator.

EN 10300 (2005) " Steel tubes and fittings for onshore and offshore pipelines – Bituminous hot applied materials for external coating "

EN 1426 (2000) " Bitumen and bituminous binder – Determination of needle penetration "

EN 1427 (1999) " Bitumen and bituminous binder – Determination of softening point (ring and ball method) "

EN 1849-1 (2000) " Flexible sheets for waterproofing – Determination of thickness and mass per unit area – Part 1 – Bitumen sheets for roof waterproofing "

DIN EN ISO 8501-1 (2002) " Preparation of steel substrates before application of paints and related products – Visual assessment of surface cleanliness – Part 1 – Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal previous coatings "

BS EN 12311-1 (2000) " Flexible sheets for waterproofing – Part 1 – Determination of tensile properties Bitumen sheets for roof waterproofing "

ASTM G8 (1996) " Cathodic disbonding of pipeline coatings "

ASTM G21 (2002) " Practice for determining resistance of synthetic polymeric materials to fungi "