



شرکت ملی گاز ایران
مدیریت پژوهش و فناوری
امور تدوین استانداردها

IGS

مشخصات فنی خرید

اتصال سه راهی انشعاب گرم

Hot Tapping Split Tee



تاریخ: ۱۳۹۵/۸/۲۴
شماره: گ.دب/۰-۲۲۵-۱۷۷۶۱



دفتر مدیر عامل

ابلاغ مصوبه هیأت مدیره

مدیر محترم پژوهش و فناوری

باسلام،

به استحضار می‌رساند در جلسه ۱۷۰۳ مورخ ۱۳۹۵/۷/۲۵ هیأت مدیره، نامه شماره گ.۹۸۵۴۸/۰۰۰/۹ مورخ ۹۵/۰۷/۱۹ مدیر پژوهش و فناوری درمورد تصویب نهایی استانداردهای زیر مطرح وبا عنایت به اخذ تاییدیه شورای استاندارد مورد تصویب قرار گرفت.

این مصوبه برای کلیه شرکت‌های فرعی لازم الاجرا می‌باشد.

۱. استاندارد تحت عنوان "دستورالعمل ارزیابی آزمایشگاهی ضد کف‌های

سیلیکونی مورد استفاده در واحدهای شیرین سازی گاز طبیعی" به شماره

استاندارد (IGS-M-CH-059(0))

۲. استاندارد تحت عنوان "مشخصات فنی خرید اتصال سه راهی انشعاب گرم"

به شماره استاندارد (IGS-M-PL-033(1)).

۳. استاندارد تحت عنوان "مشخصات فنی خرید تجهیزات ارسال و دریافت پیگ"

به شماره استاندارد (IGS-M-PL-028(1)).

۴. استاندارد تحت عنوان "مشخصات فنی خرید آلومینای فعال بعنوان جاذب در

کاربردهای نم زدایی" به شماره استاندارد (IGS-M-CH-020(1)).

ناصر آبگون

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FOREWORD

This standard is intended to be mainly used by NIGC and contractors, and has been prepared based on interpretation of recognized standards, technical documents, knowledge, backgrounds and experience in natural gas industry 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 employees and contractors.

This standard must not be modified or altered by NIGC employees or its contractors. Any deviation from normative references and/or well-known manufacturer's specifications must be reported to Standardization division. The technical standard committee welcomes comments and feedbacks 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.

Website: <http://igs.nigc.ir>

E-mail: igs@nigc.ir

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1. SCOPE

This standard specification defines NIGC's mandatory requirements for design, material selection, fabrication, testing and marking of flanged split tees for hot tapping branch connection and stopple fittings furnished with Lock-O-Ring Flanges, for sizes of 4 inches through 56 inches, concerning pressure class rating of 150, 300 and 600 to be used in sweet natural gas services.

2. REFERENCES

The selection of material and equipment, and the design, construction, maintenance, and repair of equipment and facilities covered by this standard shall comply with the latest edition of the references listed below, unless otherwise noted.

2.1 Normative References

Iranian Gas Standards (IGS)

IGS-M-PL-022-1:2000"Butt Welding Ends Carbon Steel Fitting"

American Petroleum Institute

API SPEC 5L: 2012"Specification for Line Pipe"

API 1104:2013"Welding of Pipelines and Related Facilities"

American Society of Mechanical Engineers

ASME B16.5: 2013"Steel Pipe Flanges and Flanged Fittings"

ASME B16.9: 2007"Factory-Made Wrought Butt Welding Fittings"

ASME B16.47:2006"Large Diameter Flanges"

ASME B31.4:2012"Liquid Petroleum Transportation Piping Systems"

ASME B31.8:2012"Gas Transmission and Distribution Piping Systems"

ASME B36.10:2004 " Welded and Seamless Wrought Steel Pipe"

ASME Sec II: 2010"Materials"

ASME Sec V: 2013"Nondestructive Examination"

ASME Sec VIII 2013"Rules for Construction of Pressure Vessels"

ASME Sec IX: 2013"Welding and Brazing Qualification"

American Society for Testing and Materials

ASTM A 105:2012 "Specification for Forgings Carbon Steel for Piping Components"

ASTM A 106:2011 "Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service"

ASTM A 193: 2012 "Standard Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service or both"

ASTM A 194 : 2012 "Standard Specification for Carbon and Alloy Steel Nuts for Bolts for High Pressure or High Temperature or both"

ASTM A 216: 2012 "Specification for Steel Castings"

ASTM A 234 :2011 "Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and High Temperature Service"

ASTM A 350:2012 "Standard Specification for Carbon and Low Alloy Steel Forging"

ASTM A 370:2012 "Standard Test Methods and Definitions for Mechanical Testing of Steel Products"

ASTM A 516:2004 "Specification for Pressure Vessel Plates, Carbon Steel"

ASTM A 537:2006 "Specification for Pressure Vessel Plates, Heat-Treated Carbon-Manganese-Silicon Steel"

ASTM A 578 :2007 "Standard Specification for Straight-Beam Ultrasonic Examination of Plain and Clad Steel Plates for Special Applications"

ASTM A 694:2003 "Specification for Forgings, Carbon Steel and Alloy Steel"

ASTM A 860:2000 "Standard Specification for Wrought High-Strength Low-Alloy Steel Butt-Welding Fittings"

ASTM E 92:2000 "Standard Test Method for Vickers Hardness"

ASTM E 165 :2002 "Standard Test Method for Liquid Penetrant Examination"

Manufacturers Standardization Society

MSS SP-44:2001 "Steel Pipeline Flanges"

MSS SP-75:2008 "Specification for High Test Wrought Butt-Welding Fittings"

American Welding Society

AWS A5.1:1993 "Specifications for Carbon Steel Electrodes for Shielded Metal Arc Welding"