

IGS-M-PL-004(2)

Jan.2024

Approved

مصوب



شرکت ملی گاز ایران

مدیریت پژوهش و فناوری

امور تدوین استانداردها

IGS

مشخصات فنی خرید

سه راهی انشعاب ویا تخلیه گاز

Technical Specification of Tee and/or Purging Tee



تاریخ: ۱۴۰۳/۰۱/۰۷

شماره: گ/دب/۰/۲۵-۲۱۸۳۹



شرکت ملی گاز ایران



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باسلام،



به استحضار می‌رساند در جلسه ۲۰۴۹ مورخ ۱۴۰۲/۱۲/۱۳ هیأت مدیره، نامه شماره ۲۲۰۳۶۷ مورخ ۱۴۰۲/۱۲/۰۷ آن مدیریت درمورد تصویب نهایی مقررات فنی شرکت ملی گاز ایران به شرح زیر مطرح و مورد تصویب قرار گرفت.



۱- مشخصات فنی خرید ایستگاه های تقلیل فشار/ اندازه گیری از نوع کابینتی با حداکثر ظرفیت ۱۰۰۰۰ متر مکعب استاندارد بر ساعت



IGS-M-PM-109(0)



۲- مشخصات فنی خرید سه راهی انشعاب و یا تخلیه گاز



IGS-M-PL-004(2)



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رئیس محترم امور مجامع



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 experiences 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 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.

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1. SCOPE

This standard covers minimum NIGC's requirements for Material selection, Manufacturing, Inspection, Testing, Marking and Packaging of the following items:

1.1-Service Tee

A fitting is manufactured in diameters of $\frac{3}{4}$, 1 and 2 inches used to make lateral connection to a branch from top of the pressurized steel pipes of gas distribution network (with a maximum working pressure of 60 PSIG and in diameters of 2, 4 and 6 inches).

1.2- Purging Tee

A fitting used to branch off from top of the pressurized steel gas pipe with a maximum working pressure of 250 PSIG for purging of natural gas to atmosphere.

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. Any changes in references after issuing date of this standard (IGS M-PL-004(2)) are applicable upon the mutual agreement between the purchaser and supplier or manufacturer.

A105/A105M-23:2023,	"Standard Specification for Carbon Steel Forgings for Piping Application".
ANSI/ASME B 1.20.1:2018,	" Pipe Threads, General Purpose (inch)".
ANSI/ASQ Z1.4:2018,	" Sampling Procedures and Tables for Inspection by attributes".
ASTM A 370 :2022,	"Standard Test Method and Definitions for Mechanical Testing of Steel Products"
ASTM A29/A29M-20,	"General Requirement for Steel bars, Carbon and Alloy, Hot-Wrought".
ASTM A961:2020,	"Standard Specification for Common Requirements for Steel Flanges, Forged Fittings, Valves and Parts for piping Applications"
ASTM E381-22,	Standard Method for Macro etch testing Steel bars, Billets, Blooms and Forgings.

ISO 4628-3:2016,

“Determination of Resistance to Chemical Corrosion”

ISO 9227 :2022,

“Corrosion tests in Artificial Atmospheres-Salt Spray Tests”

3. DEFINITIONS

Batch Clearly identifiable collection of units, manufactured consecutively or continuously under the same conditions, using material or compound conforming to the same specification.

BRT (Batch release test)
Test Performed by the manufacturer on a batch of same product which has to be satisfactorily completed before the batch can be released.
The batch size is specified by manufacturer in accordance with ANSI/ASQ Z1.4 or mutually agreement between manufacturer/supplier and purchaser.

IGS Iranian Gas Standard.

NIGC National Iranian Gas Company.

NPS Nominal Pipe Size (inch).

NPT National Pipe Taper thread.

TT Type test:
Testing performed to prove that the material, component, assembly is capable of conforming to the requirements given in this specification.
In addition, relevant type tests shall be carried out and relevant certificate shall be submitted whenever there is a change in design or in the production method other than routine in-process adjustment and any change in raw material such as brand, production designation, production location, production line etc.
In case of no changes in above mentioned items, the certificate of type tests (TT) shall be renewed every five years by an approved independent certification body.