

APPROVED



مشخصات فنی خرید

استاندارد مشخصات کیفی گاز طبیعی خط لوله ایران

Pipeline Quality Natural Gas

پیشگفتار

- ۱- این استاندارد/دستورالعمل بمنظور استفاده اختصاصی در شرکت ملی گاز ایران و شرکتهای فرعی وابسته تهیه شده است.
- ۲- شرکت ملی گاز ایران در مورد نیازهای عمومی از استانداردهای وزارت نفت (IPS) و در مورد نیازهای اختصاصی از استانداردهای اختصاصی خود (IGS) استفاده می نماید.
- ۳- استانداردهای شرکت ملی گاز ایران (IGS) توسط کمیته های تخصصی استاندارد متشکل از کارشناسان بخش های مختلف و یا مشاور تهیه می شود و توسط شورای استاندارد (منتخب هیئت مدیره شرکت ملی گاز ایران) به تصویب میرسند.
- ۴- در تنظیم متن استانداردهای (IGS) از کلیه منابع شناخته شده استاندارد، اطلاعات فنی - تخصصی مربوط به صنایع گاز دنیا، مشخصات فنی تولیدات سازندگان معتبر جهانی و نیز از نتیجه تحقیقات و تجربیات کارشناسان و متخصصان داخلی بر حسب مورد استفاده می شود. همچنین بمنظور استفاده هر چه بیشتر از تولیدات داخلی قابلیت های سازندگان داخلی نیز مورد توجه قرار میگیرد.
- ۵- استانداردها از طریق پایگاه اینترنتی شرکت * ویالوح فشرده (CD) در اختیار واحدها و کاربران قرار می گیرد .
- ۶- استانداردها بطور متوسط هر ۵ سال یکبار و یا در صورت ضرورت زودتر، مورد بازنگری و بروزرسانی قرار میگیرند. بنابراین کاربران باید همیشه آخرین نگارش را مورد استفاده قرار دهند.
- ۷- هرگونه نظر و یا پیشنهاد اصلاح در مورد استانداردها مورد استقبال و بررسی قرار خواهد گرفت و در صورت تأیید، استاندارد مربوطه نیز مورد تجدیدنظر قرار خواهد گرفت .

تعاریف عمومی

در متن استانداردهای (IGS) از تعاریف و اصطلاحات زیر استفاده میشود.

- ۱- "شرکت" (COMPANY): منظور از شرکت "شرکت ملی گاز ایران" و یا شرکتهای فرعی وابسته میباشد.
- ۲- "فروشنده" (SUPPLIER/VENDOR): به فرد یا موسسه ای اطلاق میگردد که تعهدی رانست به شرکت تقبل نموده است.
- ۳- "خریدار" (PURCHASER): منظور از خریدار "شرکت ملی گاز ایران" و یا شرکتهای فرعی وابسته میباشد.
- ۴- "SHALL": در مواردی بکاربرده میشود که انجام خواسته مورد نظر اجباری است
- ۵- "SHOULD": در مواردی بکاربرده میشود که انجام خواسته مورد نظر ترجیحی و در عین حال اختیاری است
- ۶- "MAY": در مواردی بکاربرده میشود که انجام کار به شکل مورد بحث نیز قابل قبول میباشد

* آدرس پایگاه اینترنتی (<http://igs.nigc.ir>) ، آدرس الکترونیکی (nigcigs@nigc.ir)

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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CONTENTS

PAGE

PREFACE	1
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SPECIFICATION

1. SCOPE	3
2. SIGNIFICANCE AND USE	3
3. REFERENCES	3
3.1 Standards	3
3.2 Publications	3
3.3 Specifications	4
3.4 Test Methods	4
3.5 Information	5
4. DEFINITIONS	6
5. REQUIREMENTS	7

APPENDICES

APPENDIX A (Informative) “ Equations to Determine Interchangeability Indices”	10
APPENDIX B (Informative) “ A Software Program for Computation Interchangeability Indices “	12
APPENDIX C (Informative) “ Table C-1 “	14

TABLES

TABLE 1 “ Chemical and Physical Properties for Pipeline Quality Natural Gas “	8
TABLE A-1 “ Interchangeability Constants “	11
TABLE C-1 (Informative) “ Physical Properties for Specified Pipeline	14

Quality Natural Gas “

PREFACE

This Standard Specification is the result of a remarkable effort made by a specialized committee consisting of representatives of different departments of National Iranian Gas Company.

The work was originally initiated in 1995 and a preliminary draft was compiled in early 1997. This draft was then distributed to various departments of NIGC for their points and comments.

In late 1999, the committee began to review the received comments and also tried to update the content of the standard, particularly with the use of ISO 13686 International Standard for Natural Gas – Quality Designation and some other European specifications. In this committee some new members, including a representative from RIPI¹ participated.

The importance of present standard becomes more clear when we notice the facts that Iran is the owner of 2nd largest gas reserves in the whole world and NIGC is among the global leading gas companies.

For more than 3 decades, since establishment of the NIGC in 1965, the company has been supplying high quality natural gas to its consumers although no official standard for pipeline quality was established.

But finally it came the time that a standard specification for pipeline quality natural gas became seriously needed. The main reasons for such necessity were:

- Development of new gas resources with different gas compositions and the fact that the gases from these resources have to be mixed in the trunklines,
- The rapid expansion of NIGC which happened at the same time together with construction of new gas processing plants and the continuous trend of this expansion and,
- The government policy for export and import of natural gas.

¹RIPI : Research Institute of Petroleum Industry

To these we may add the varieties of natural gas usage in addition to its use as a fuel , such as feeding chemical and petrochemical complexes and as a reduction agent in steel industry . Furthermore, an important reason was the national environmental requirements for a clean gas and non-pollutant.

Therefore, studies were continued in view of all areas of gas Industry , i.e. , gas processing and conditioning , transmission , distribution , utilization and the national strategy for environmental protection.

The work contained:

- Collecting the latest data concerning physical and chemical properties of existing domestic gas resources
- Utilizing applicable standard units in consideration and conclusions
- Developing a procedure for determining the interchangeabilities of different gases as well as providing a user friendly software and ,
- Proposing the Standard Specifications for “ pipeline quality natural gas” for approval.