



SLOVENSKI STANDARD
SIST EN ISO 14532:2017
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Nadomešča:
SIST EN ISO 14532:2005

Zemeljski plin - Slovar (ISO 14532:2014)

Natural gas - Vocabulary (ISO 14532:2014)

Erdgas - Begriffe (ISO 14532:2014)

Gaz naturel - Vocabulaire (ISO 14532:2014)

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Natural gas - Vocabulary (ISO 14532:2014)

Gaz naturel - Vocabulaire (ISO 14532:2014)

Erdgas - Begriffe (ISO 14532:2014)

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

The text of ISO 14532:2014 has been prepared by Technical Committee ISO/TC 193 “Natural gas” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 14532:2017 by Technical Committee CEN/TC 238 “Test gases, test pressures, appliance categories and gas appliance types” the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2017, and conflicting national standards shall be withdrawn at the latest by August 2017.

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Natural gas — Vocabulary

Gaz naturel — Vocabulaire

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ISO 14532:2014(E/F)**Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 193, *Natural gas*.

This second edition cancels and replaces the first edition (ISO 14532:2001/Cor. 1:2002).

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Introduction

ISO/TC 193 Natural Gas was established in May, 1989, with the task of creating new standards and updating existing standards relevant to natural gas. This includes gas analysis, direct measurement of properties, quality designation, and traceability.

In these activities, a comprehensive and uniform review of the definitions, symbols, and abbreviations used in the standards was not previously systematically pursued. The development of standards with terminology created to suit specific purposes often resulted in the detriment of uniformity and cohesiveness between standards.

Thus, there is the need for a work of harmonization of the terminology used in the standards pertaining to natural gas. The intention of this International Standard is to incorporate the reviewed definitions into the ISO/TC 193 source International Standard.

As the aim is to create a coherent body of standards which support each other with regard to their definitions, common and unambiguous terms and definitions used throughout all International Standards is the starting point for the understanding and application of every International Standard.

The presentation of this International Standard has been arranged to facilitate its use as follows:

- Major headings pertain to specific fields of the natural gas industry. All definitions that fall under these headings, as gleaned from ISO International Standards issued through ISO/TC 193, are listed under that heading. A review of the contents will serve to facilitate finding specific terms.
- Notes are given under numerous definitions where it was deemed important to give informative guidance for a given definition. The Notes are not considered a part of the definition.

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Natural gas — Vocabulary

1 Scope

This International Standard establishes the terms, definitions, symbols, and abbreviations used in the field of natural gas.

The terms and definitions have been reviewed and studied in order to cover all aspects of any particular term with input from other sources such as European Standards from CEN (The European Committee for Standardization), national standards, and existing definitions in the IGU Dictionary of the Gas Industry.

The definitive intention of this document is to incorporate the reviewed definitions into the ISO/TC 193 source standards.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1 General conditions

2.1.1 Natural gas

2.1.1.1 natural gas NG

complex gaseous mixture of hydrocarbons, primarily methane, but generally includes ethane, propane and higher hydrocarbons, and some non-combustible gases such as nitrogen and carbon dioxide

Note 1 to entry: Natural gas can also contain components or containments such as sulfur compounds and/or other chemical species.

2.1.1.2

raw gas

unprocessed gas taken from well heads, through gathering lines, to processing or treating facilities

Note 1 to entry: Raw gas can also be partially processed well-head gas, taken from basic upstream processing facilities.

2.1.1.3

substitute natural gas

SNG

gas from non-fossil origin which is interchangeable in its properties with natural gas

2.1.1.4

manufactured gas

synthetic gas

gas which has been treated and can contain components that are not typical of natural gas

Note 1 to entry: Manufactured (synthetic) gases can contain substantial amounts of chemical species that are not typical of natural gases or common species found in atypical proportions as in the case of wet and sour gases.

Note 2 to entry: Manufactured gases fall into two distinct categories, as follows:

a) those that are intended as synthetic or substitute natural gases, and that closely match true natural gases in both composition and properties;

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b) those that, whether or not intended to replace or enhance natural gas in service, do not closely match natural gases in composition.

Case b) includes gases such as town gas, coke oven gas (undiluted), and LPG/air mixtures. None of which is compositionally similar to a true natural gas (even though, in the latter case, it can be operationally interchangeable with natural gas).

2.1.1.5**lean gas**

natural gas having a relatively low energy content, close to or lower than that of pure methane

Note 1 to entry: Lean gas typically contains high amounts of nitrogen and carbon dioxide.

2.1.1.6**rich gas**

natural gas having a relatively high energy content, higher than that of pure methane

Note 1 to entry: Rich gas typically contains high amounts of ethane or propane or higher.

2.1.1.7**wet gas**

gas which falls short of qualifying as pipeline quality natural gas by the inclusion of undesirable components such as free water, water vapour and/or high hydrocarbons in such amounts that they can condense at pipeline conditions

2.1.1.8**sour gas**

gas containing significant amount of acid gases such as carbon dioxide and sulphur compounds

Note 1 to entry: The presence of acid compounds is more detrimental in wet gases.

Note 2 to entry: Typically, wet and sour gases can be unprocessed (well head) or partially-processed natural gases and can also contain condensed hydrocarbons, traces of carbonyl sulphide, and process fluid vapours such as methanol or glycols.

Note 3 to entry: Carbon dioxide in the presence of free water can be an important cause of corrosion damage to pipelines.

2.1.1.9**dry natural gas**

natural gas containing a mole fraction of water of no more than 0,005 % [50 ppm (molar)] in the vapour phase

Note 1 to entry: Water vapour content in natural gas can also be expressed in terms of water concentration (mg/m^3).

Note 2 to entry: The correlation between water content and water dew point is given in ISO 18453.^[17]

2.1.1.10**saturated gas**

natural gas that at the specified conditions of temperature and pressure is at its water dew-point

2.1.1.11**compressed natural gas****CNG**

natural gas that has been compressed after processing for storage and transportation purposes

Note 1 to entry: CNG is mainly used as a fuel for vehicles, typically compressed up to 20 000 kPa in the gaseous state.

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2.1.1.12**liquefied natural gas****LNG**

natural gas that has been liquefied after processing for storage or transportation purposes

Note 1 to entry: Liquid natural gas is revaporized and introduced into pipelines for transmission and distribution as natural gas.

2.1.1.13**gas quality**

attribute of natural gas defined by its composition and its physical properties

2.1.1.14**biogas**

generic term used to refer to gases produced by anaerobic fermentation or digestion of organic matter, and without further upgrading nor purification

Note 1 to entry: This can take place in a landfill site to produce landfill gas or in an anaerobic digester to produce biogas. Sewage gas is biogas produced by the digestion of sewage sludge. Biogases comprise mainly methane and carbon dioxide.

2.1.1.15**biomethane**

methane rich gas derived from biogas or from gasification of biomass by upgrading with the properties similar to natural gas

2.1.1.16**biomass**

mass defined from a scientific and technical point of view as material of biological origin excluding material embedded in geological formations and/or transformed to fossil

Note 1 to entry: Biomass is organic material that is plant-based or animal-based, including but not limited to dedicated energy crops, agricultural crops and trees, food, feed and fibre crop residues, aquatic plants, alga, forestry and wood residues, agricultural wastes, processing by-products and other non-fossil organic matter.

Note 2 to entry: See also herbaceous biomass, fruit biomass, and woody biomass.

2.1.2 Pipeline network**2.1.2.1****pipeline grid**

system of interconnected pipelines, both national and international that serve to transmit and distribute natural gas

2.1.2.2**local distribution system****LDS**

gas mains and services that supply natural gas directly to consumers

2.1.2.3**custody transfer point**

location between two pipeline systems where the quantity of energy of the natural gas has to be accounted for

Note 1 to entry: At such location a change of pressure regime can also occur.

2.1.2.4**transfer station**

system of pipelines, measurement and regulation (pressure control), and ancillary devices at a custody transfer point necessary to account for the quantity of gases transferred and the adaptation to the possible different pressure regimes of the networks