氣體燃料工業

Gas Industry

3.1 一般名詞

3.1.1 流率;輸出量;輸送量 單位時間內流經管線之氣體燃料量。

- 3.1.2 負荷曲線;產量曲線 以負荷量等對時間所作之曲線。
- 3.1.3 基本負荷 在一定期間(日、月、年)內總需求量 不變動之部分。

3.1.4 偶發率

一羣天然氣用具或用戶在一特定期間內 同時使用之最大需求量與同一期間內個 別使用之最大需求量總和之比,以數值 或百分率表示之。不等率之倒數。

3.1.5 氣體燃料體積 在特定的條件下,某一定質量之氣體燃 料所占之空間。

3.1.6 公制標準狀態;標準狀態;標準參照狀 態

氣體燃料之容積或其他性質所參照之狀態。「公制標準狀態」為 1.01325 bar (101,325Pa),乾基;「標準狀態」可照各國所規定的國家標準,以公制或其他單位,乾或飽和表示之;「標準參照狀態」為 30 in, Hg, 60°F,飽和。

3.1.7 氣體燃料量

在規定的狀態下所計量的氣體燃料量體 積。

3.1 General Terms

3.1.1 Flow; rate of flow; output; throughput; flow rate

The quantity of gas flowing through a pipe in unit time.

3.1.2 Load curve; output curve
A graph showing load, output etc. against time.

3.1.3 Basic load

That part of total demand that does not vary over a given period (day, month, year).

3.1.4 Coincidence factor

The ratio, expressed as a numerical value or as a percentage, of the simultaneous maximum demand of a group of gas appliances or consumers within a specified period, to the sum of their individual maximum demands within the same period. Diversity factor is the reciprocal of the coincidence factor.

3.1.5 Gas volume

The space occupied by a specified mass of gas under specified conditions.

- 3.1.6 Metric standard conditions; standard conditions; standard reference conditions

 The conditions to which the gas volume or other properties of the gas are referred.

 "Metric standard conditions" are 1.01325

 bar (101,325 Pa), 15°C,dry; "standard conditions" may be in terms of metric or other units, dry or saturated, as specified in the national standards of the country concerned; "standard reference conditions" are 30 in. Hg, 60°F, saturated.
- 3.1.7 Quantity of gas

The gas measured as a volume under specified conditions

3.1.8 氣體燃料消費

氣體燃料器具所消耗之錶計氣體燃料 量。

3.1.9 氣體燃料批購量

一氣體燃料機構自另 一氣體燃料供應機 構購入之氣體燃料量。

3.1.10 氣體燃料需求量

在單位時間內,氣體燃料消費者或一特 定用途(例如當地的供應站、器具)所 需的氣體燃料量。就負荷預測而言,氣 體燃料需求稱為預期需求。

3.1.11 配氣體燃料

自一特定點(例如工場或計量站)送至 另一交貨地或配氣系統。

3.1.12 氣體燃料購入量

購氣者在交貨地點所收受之氣體燃料 量。

3.1.13 氣體燃料損耗量;損耗率

氣體燃料送出量與銷售量之差額,以立 方公尺/小時或類似單位表示之。

3.1.14 相對密度

在溫度與壓力條件相同下,單位同體積 乾氣體燃料之重量與同體積乾空氣重量 之比,也稱為比重。

3.1.8 Gas consumption

The metered quantity of gas intended for consumption in gas appliances.

3.1.9 Wholesale gas purchase

The quantity of gas purchased by one gas supply undertaking from another.

3.1.10 Gas demand

The amount of gas required in unit time by a consumer or at a specific point (e.g. local point of supply, appliance). Gas demand in the context of load forecasting would be termed anticipated demand.

3.1.11 Distribution; send out (USA); output(USA)
Gas delivered to a delivery or distribution
system from a specific point (e.g. plant or
metering station).

Note in some countries these terms have more specific meanings attached to them than indicated above.

3.1.12 Gas purchase

The quantity of gas received by a purchaser at his supply point.

3.1.13 Unaccounted-for gas; leak rate; leakage rate

"Unaccounted-for gas" is the difference between send-out and gas sold or otherwise usefully accounted for, "Lead rate" and "leakage rate" require to be stated in m³/h or analogous units.

3.1.14 Relative density

The ratio of the weight of unit volume of dry gas to that of unit volume of dry air under the same conditions of temperature and pressure. Also called specific gravity.

3.1.15 總卡路里值;總熱值

在特定條件下,一種氣體燃料之單位容積經完全燃燒所釋出之熱量,但須假定此氣體燃料燃燒產生之水完全凝結與釋出潛熱,其他燃燒產品參照各國之標準試驗條件,通常特定的條件之英國與美國是 30 in. Hg 與 60°F,在使用公制或SI制之國家為 1.01325 bar 或 101,325 pa 與 0oC。在英國與美國熱值通常以Btu/cu ft 表示;在使用公制或 SI 制的國家以 kcal/Nm3 或 KJ/Nm3 表示。

3.1.16 淨卡路里值;淨熱值

一種氣體燃料之單位容積在特定條件下 完全燃燒所釋出之熱量,該氣體燃料燃 燒產生之水,但須假定保持於蒸汽狀 態,其他燃燒產品參照各國之標準試驗 條件,是以淨熱值為總熱值減去氣化 熱。參閱 3.1.15。

3.1.17 韋比指數; Wobbe 指數; Wobbe 值 氣體燃料總(或淨)熱值與其相對密度 平方根之比。在恒壓下,氣體燃料量與 燃燒所釋熱之一種計算值,釋熱量與噴 嘴面積和 Wobbe 值成正比。

- 3.1.15 Gross calorific value; gross heating value The amount of heat liberated by complete combustion, under specified conditions, of unit volume of a gas, the water produced by the combustion of the gas being assumed to be completely condensed and its latent heat released, the other products of combustion being referred to the standardised test conditions as applied in different countries. The specified conditions are generally, in the UK and USA, 30 in. Hg and 60°F and, in countries using the metric system or SI system, 1.01325 bar or 101,325 Pa and 0°C. In the UK and USA calorific value is normally expressed in Btu per cu ft; in countries using the metric or SI system, in kcal per Nm³ or kJ per Nm³.
- 3.1.16 Net calorific value; net heating value

 The amount of heat liberated by the complete combustion, under specified conditions, of unit volume of a gas, the water produced by the combustion of the gas being assumed to remain as a vapour, the other products of combustion being referred to the standardised test conditions as applied in different countries. Hence the net calorific value less the latent heat of evaporation of the water that formed during combustion of the fuel. See also under 3.1.15 above.
- 3.1.17 Wobbe Index; Wobbe number

 The ratio of the gross (or net) calorific value
 of the gas to the square root of the relative
 density of the gas. It presents a measure of
 the heat release when a gas is burned at
 constant gas supply pressure. The heat
 release is then directly proportional to the
 orifice area and the Wobbe number.

3.1.18 水蒸氣露點

在一定壓力下,氣體燃料中所含水蒸氣凝結時之溫度。

3.1.19 烴露點

在一定壓力下,氣體燃料中所含烴蒸氣 凝結時之溫度。

3.1.20 燃燒速度

相對於未燃燒氣體而言,火焰尖端沿平 面法線方向行走之最大速 度,為氣體之 物理特性。

3.1.21 燃燒界限;爆炸界限

可燃氣體在空氣或氧氣中,混合濃度之 上下限在上下限範圍內,可引爆或燃 燒,其下限隨溫度及壓力而變動。

- 3.1.22 設計壓力 氣體燃料設備設計之壓力。
- 3.1.23 操作壓力 氣體燃料設備操作之壓力。
- 3.1.24 氣體燃料壓力 又稱錶壓力,大於大氣壓力。
- 3.1.25 試驗壓力 設備試驗時之壓力。
- 3.1.26 壓力範圍

操作壓力可細分為低壓、中壓及高壓等 範圍。 3.1.18 Water vapour dewpoint

The temperature at which at a given

pressure water vapour in the gas condenses.

3.1.19 Hydrocarbon dewpoint

The temperature at which at a given pressure hydrocarbon vapours in the gas condense.

- 3.1.20 Combustion velocity; burning velocity
 A physical characteristic of a gas; it is the maximum velocity, relative to the unburned gas, with which a plane, one-dimensional flame front travels along the normal to its surface.
- 3.1.21 Flammability limits; explosion limits; explosive limits

The upper and lower limits of the concentration of a combustible gas in air or oxygen, between which the mixture is explosive or flammable; such limits may vary according to prevailing temperature and pressure.

- 3.1.22 Pressure rating; rated pressure

 The design pressure of gas equipment.
- 3.1.23 Working pressure

 The gas pressure at which the equipment it operated.
- 3.1.24 Gas pressure

The pressure of the gas above atmospheric pressure, more accurately termed gauge pressure.

3.1.25 Test pressure

The pressure to which equipment is tested.

3.1.26 Pressure range

The subdivision of the working pressure into low, medium and high pressure ranges.

3.1.27 額定輸入熱量

製造廠商在燃燒器具所標示之單位時間 內允許輸入最大熱量。其熱量按規定以 淨熱值或總熱值之計算。

3.1.28 額定有效熱量

在額定輸入熱量之操作下,單位時間內 燃燒器所釋放之熱量。

3.2 氣體燃料之類別

- 3.2.1 燃料氣;氣體燃料;可燃氣體 與空氣或氧氣混合能燃燒之氣體。主要 供作熱源。
- 3.2.2 氣體燃料族群

氣體燃料之燃燒特徵大致相類似,韋比 指數亦相似可以替換。第一族氣體燃料 包括城鎮(含氫氣較多之燃料),第二 族氣體燃料包括天然氣、與石油伴產、 及介於兩者間可互相替換之氣體;第三 族氣體燃料包括液化石油氣(丙烷、 烷)。氣體燃料族群的韋比指數如下: 族群 韋比指數 千焦耳/立方公尺 英熱 單位/立方呎 s.r.c.

- 1 24.4-28.8 600-785
- 2 48.2-53.2 1040-1450
- 3 72.6-87.8 1940-2300

3.2.3 天然氣

產於地下的天然礦產之氣體,主要含甲 烷。 3.1.27 Rated heat input; heat input rating

The quantity of potential heat calculated on the basis of calorific value (net or gross according to specification) supplied to the burner in unit time that, according to the manufacturer's name plate, may not be exceeded.

3.1.28 Rated useful heat; rated useful heat output The quantity of heat liberated by the burner in unit time when operating at its rated heat input.

3.2 Types of Gas

- 3.2.1 Fuel gases; gaseous fuels; combustible gases Gases or gas mixtures that burn with air or oxygen and are used mainly for heat generation.
- 3.2.2 Families of gases

Gaseous fuels whose combustion characteristics are in large measure similar, i.e. they have similar Wobbe numbers, which make them interchangeable. The first family of gases comprises town gas (hydrogen-rich gaseous fuels); the second family of gases comprises natural gases, gases associated with petroleum and gases interchangeable with these; and the third family of gases comprises liquefied petroleum gases (propane and butane). The Wobbe numbers of the families of gases are as follows:

Family Wobbe Number (MJ/standard m³) (Btu/ft³ at s.r.c.)

- 1 24.4-28.8 600-785
- 2 48.2-53.2 1040-1450
- 3 72.6-87.8 1940-2300
- 3.2.3 Natural gases

Gases, consisting mainly of methane, occurring naturally in underground deposits.

3.2.4 伴產氣;井口天然氣

油層伴產之天然氣,可能含大量高分子煙,在油層之溫度與壓力下,此等氣體可溶解在油中呈溶解氣,或在油層頂部形成游離氣帽,即氣帽氣。在美國及加拿大「伴產氣」指油層中與原油緊密接觸而非溶解於原油之游離天然氣。

3.2.5 液化石油氣(LPG);液化煉製氣(LRG)

輕烴混合物,在常溫及常壓下呈氣態, 增壓或減溫時則維持液態,主要成分為 丙烷、丁烷、丁烯。

3.2.6 煉製氣

在石油及石油產品煉製及處理過程中, 生產之氣體燃料,主要成分為 C1 至 C4 烴及不定量之游離氫、氮,有時含硫 化氫。

3.2.7 煤焦爐氣

產自煉焦爐之氣體燃料。

3.2.4 Associated gases; casinghead gases (USA, Can.)

Natural gases associated with oil accumulation; they may contain large fractions of higher hydrocarbons. The gases may be dissolved in the oil under the reservoir temperatures and pressures (solution gas) or may form a cap of free gas above the oil in the reservoir (gas cap gas). In the USA and Canada the term "associated gas" is applied to free natural gas in immediate contact, but not in solution, with crude oil in the reservoir.

- 3.2.5 Liquefied petroleum gases (LPG); liquefied refinery gases (LRG) (USA)

 Mixtures of light hydrocarbons, gaseous under conditions of normal temperature and pressure and maintained in the liquid state by increase of pressure or lowering of temperature. The principal components are propane, propene, butanes and butenes.
- Gases produced during the refining and processing of petroleum and petroleum products; they consist mainly of C1to C4 hydrocarbons with variable amounts of free hydrogen, nitrogen and possibly hydrogen
- 3.2.7 Coke-oven gases
 Gases produced in coke ovens.

3.2.6 Refinery gases

sulphide.

3.2.8 高壓氣化氣體燃料

在高壓下,以氣化媒質(如氧/蒸汽混合物)使固態或液態燃料反應,所生產之氣體燃料,亦可在高壓下,將液態燃料經熱或觸媒處理變換而得。

(註)如氣體作為給料,則用其他特定 用語,如重組氣體燃料。

3.2.9 裂煉氣體燃料

液態或氣態烴經熱或熱觸媒轉化所生產 之氣體燃料。

3.2.10 城鎮氣體燃料

生產氣體燃料提供公 用,其韋比指數為 24.4~28.8 千焦耳/立方公尺(600~785 英熱單位/立方公尺)屬於第一族氣體 燃料。

3.2.11 發生爐煤氣;貧氣

在空氣中或在空氣及蒸汽混合物中,將 固體燃料連續氣化所生產之氣體燃料, 為低熱值氣體燃料,故稱為貧氣。

3.2.12 鼓風爐氣

鼓風爐煉鐵所生產之氣體燃料。

3.2.13 水煤氣

用蒸氣與煉焦反應生產之氣體燃料。

3.2.14 合成天然氣

從煤或煙或其他碳質物製造而可與天然 氣替換之氣體燃料。

3.2.8 High-pressure gasification gases

Gaseous fuels produced by reacting solid or liquid fuels with a gasification medium (e.g. oxygen/steam mixture) under high pressure; they may also be gaseous fuels produced by the conversion of liquid fuels by thermal or catalytic processes at high pressure. Note. In cases in which a gas is the feedstock, a more specific term would be used, e.g. reformed gases.

3.2.9 Cracked gases

Gaseous fuels that are produced from liquid or gaseous hydrocarbons by thermal or thermal-catalytic conversion.

3.2.10 Town gas; city gas (USA)

Gases manufactured for public supply with a Wobbe number range of 24.4-28.8 MJ/standard m³ (600-785 Btu/ft³ at s.r.c.); they fall within the first family of gases.

3.2.11 Producer gases; lean gases

Gaseous fuels produced by continuously gasifying solid fuel in air or in a mixture of air and steam. They are gases of low calorific value and hence referred to as lean gases.

3.2.12 Blast furnace gases

Gaseous fuels produced in the production of iron in the blast furnace.

3.2.13 Water gases

Gases produced by reacting coke with steam.

3.2.14 Substitute natural gas (SNG)

Gaseous fuel manufactured from coal or hydrocarbons, or from other carbonaceous material and interchangeable with natural gas.

2 2	_	415	1	. 1	4
3.3	大	狄	氣.	4	產

3.3.1 天然氣礦床/氣層/氣池/生產層/生產層位 產層位 天然聚集氣態經之地下多孔岩屬或岩

天然聚集氣態烴之地下多孔岩層或岩穴。

- 3.3.2 含氣層;氣層(單層)
 天然氣或石油礦產內,含氣之多孔岩層或含穴岩層。
- 3.3.3 天然氣田

一層或一層以上的儲氣層集合或同層個 別地質構造形貌,在若干國家指設有天 然氣採收、處理及運輸設備之礦床上地 面範圍。

3.3.4 天然氣生產;天然氣採收 應用工業技術將天然氣自礦床帶出地 面。

3.3 Natural Gas Production

- 3.3.1 Natural gas deposit/reservoir/pool/producing formation (USA), pay horizon (USA)

 A natural accumulation of gaseous hydrocarbons in underground porous rocks or caverns.
- 3.3.2 Gas-bearing stratum; gas stratum

 A gas-bearing porous stratum or caverncontaining stratum within a natural gas or
 petroleum deposit.
- 3.3.3 Natural gas field

One or more reservoirs grouped in or related to the same individual geological structured feature. In some countries the term relates to the surface area above a deposit on which is located the equipment for extracting, treating, transporting, e4tc., the natural gas.

3.3.4 Natural gas production; natural gas extraction

The application of industrial technology to bring the natural gas to the surface from the deposit.

3.4 氣體燃料製造

3.4.1 碳化

固體燃料控制在斷絕空氣下加熱以產製 氣態、液態與固態產品。

3.4.2 煉焦

固體燃料控制在斷絕空氣下加熱至 900 ℃以上以產製焦炭。

3.4 Gas Manufacture

3.4.1 Carbonisation

The heating under controlled conditions and in the absence of air of solid fuels to produce gaseous, liquid and solid products.

3.4.2 Coking

The heating under controlled conditions and in the absence of air of solid fuels at temperatures in excess of 900°C to produce coke.

3.4.3 氣化

將固體或液體燃料以一種氣化媒質諸如 蒸汽、空氣或氧與其反應轉化為氣態燃 料之製程,亦可由熱或觸媒製程將液

3.4.4 高壓氣化

在高壓下將固體或液體燃料 以一種氣化 媒質 (例如氧/蒸汽混合物)與其反應 轉化為氣體燃料之製程,亦可在高壓下 由熱或觸媒製程將液體燃料轉化 為氣體 燃料。

3.4.5 裂解

液態或氣體燃料由熱或熱觸媒轉化以產 製氣體燃料。

3.4.6 轉化

氣體燃料中之 CO 含量,由觸媒法以蒸 汽將其轉化為 CO2 與 H2 之製程。

3.5 氣體燃料處理

- 3.5.1 燃料氣、氣態燃料、可燃性氣之精裂 自氣體燃料去除雜質之製程。
- 3.5.2 脱水

自天然氣去除凝結水之製程。

3.4.3 Gasification

The conversion of solid or liquid fuels to gaseous fuels by reaction with a gasification medium such as steam, air or oxygen; it can also be the conversion of liquid fuels to gaseous fuels by thermal or catalytic processes. It may be conducted at atmospheric, medium or high pressure. See note to 3.4.4.

3.4.4 Gasification under pressure; pressure gasification

The conversion of solid or liquid fuels to gaseous fuels by reaction with a gasification medium (e.g. oxygen/steam mixture) under high pressure. It can also be the conversion of liquid fuels to gaseous fuels by thermal or catalytic processes at high pressure.

Note to 3.4.3 and 3.4.4 above in processes in which a gas is the feedstock the process is generally referred to by a more specific term, e.g. reforming, methanation.

3.4.5 Cracking

The production of gaseous fuels by the thermal or thermal-catalytic conversion of liquid or gaseous fuels.

3.4.6 Conversion; shift reaction

A process for reducing the CO-content of gaseous fuel by catalytically converting it with steam to CO2 and H2.

3.5 Gas Processing

- 3.5.1 Purification of fuel gas/gaseous fuel/combustible gasThe removal of impurities from the gas.
- 3.5.2 Water removal; demisting
 A process for removing condensed water
 from natural gas.

3.5.3 脫硫;去硫

去除氣體燃料中的硫化合物之製程。

3.5.4 汽油脫除

在天然氣生產中,去除所含液態或氣態 的汽油分。

3.5.5 脫水

自氣體燃料去除水蒸氣。

3.5.6 調製

添加其他氣體或液體以調整氣體燃料的特性至如所需之一種製程。在美國,此術語包括去除所要的成分與添加所需的成分。

3.5.7 增加熱值

將氣體燃料混合入另一種高熱值氣體燃 料以提高其熱值的製程。

3.5.8 液化

將天然氣轉化為液態之製程。

3.5.9 加臭

氣體燃料中添加一種易揮發之液 態化學物質,使其具有臭味而容易分辨;此為 法律所規定者。

3.6 氣體燃料輸送及分配

3.6.1 輸氣幹線;氣體燃料管線

高壓長程運送氣體燃料之管線,通常包 括其輔助設備。

3.5.3 Sulphur removal; desulphurization; desulphurizing process

A process for removing sulphur compounds contained in gaseous fuels.

3.5.4 Gasoline stripping

The removal of gasoline fractions contained in liquid and vapour form in natural gas during production.

3.5.5 Dehydration

The removal of water vapour from gaseous fuels.

3.5.6 Conditioning

A process of adjusting the characteristics of a gaseous fuel as required, by the admixture of other gases or liquids. In the USA the term embraces both the removal of objectionable constituents and the addition of desirable constituents.

3.5.7 Enrichment

Raising the calorific value of a gas by mixing with it a gas of relatively high heating value.

3.5.8 Liquefaction

The conversion of natural gas to the liquid phase.

3.5.9 Odorization; odorizing

The addition of a liquid chemical substance in the vapour phase to a gas so that it becomes identifiable by its disagreeable smell; this can be a legal requirement.

3.6 Gas Transmission and Distribution

3.6.1 Gas transmission line; gas pipeline A pipeline for the transmission of gaseous fuel at high pressure and over long distances; the term normally includes the ancillary equipment.

- 3.6.2 横越一處邊境管線;國際管線;州際管線
 - (註)英文中並無特殊術語,表達管線 僅跨過一個邊境。
- 3.6.3 横越兩處或兩處以上邊境管線;國際管線;州際管線
 - (註)英文中並無特殊術語,表達管線 僅跨過一個邊境。
- 3.6.4 輸配氣系統;輸配網;輸配氣網路 所有的管線或幹線,包括有關組件,如 管件、閥、接頭,家庭用分支管、清管 排放閥等。
- 3.6.5 壓縮機 為輸送或儲之目的而提高氣體壓力及速 率之機器。
- 3.6.6 壓縮機場;壓縮機裝置;壓縮機站 壓縮氣體之場所,設備包括壓縮機、動力、計量、調節及控制設備,附屬管線 及輔助設備、安全設備、土木工程機 械。
- 3.6.7 配氣系統;配氣網;配氣網路 提供當地氣體燃料之管線系統。
- 3.6.8 氣體燃料整壓站;氣體燃料減壓站 將高壓氣體減為低壓之場所。
- 3.6.9 氣體燃料整壓器;氣體燃料減壓器 將高壓氣體減為低壓之一設備。

- 3.6.2 Gas pipeline crossing one frontier; international pipeline; interstate pipeline

 Note. There is no specific term in English denoting a pipeline that crosses one frontier only.
- 3.6.3 Gas pipeline crossing two or more frontiers; international pipeline; interstate pipeline. Note. There is no specific term in English denoting a pipeline that crosses two or more frontiers.
- 3.6.4 Transmission and distribution system/network/grid

 The whole of the pipelines and mains, including associated components, such as pipe fittings, valves, connections, house branch mains, pig traps, etc.
- 3.6.5 Compressor
 A machine in which the pressure or velocity of a gas is increased for the purpose of transmitting or storing it.
- 3.6.6 Compressor plant/installation/station

 Plant for compressing gas, comprising
 compressors, compressor motive power,
 metering, regulation and control equipment,
 associated piping and ancillary equipment,
 safety equipment, civil engineering works.
- 3.6.7 Distribution system/network/grid

 The system of gas mains that provides for the local distribution of gaseous fuel.
- 3.6.8 Gas pressure regulator station; gas governor station
 - A plant that automatically reduces a higher gas pressure to a constant lower value.
- 3.6.9 Gas pressure regulator; gas governor

 A device that automatically reduces a higher
 gas pressure to a constant lower value.

3.6.10 氣體燃料錶

直接測量氣體燃料體質,附帶指示機械 結構之設備。

3.6.11 油輪

為輸送液態貨物(如液化天然氣)而設計之商船,更明確用語,如甲烷油輪、 丙烷油輪、丁烷油輪。

3.6.12 油罐火車

運送液體,如液化石油氣之鐵路貨車。

3.6.13 油罐車

運送液體,如液化石油氣之道路車輛。

3.6.14 運輸用氣罐;運輸用氣體容器 氣體燃料瓶、球形或筒狀容器。

3.6.10 Gas meter

An instrument with an indicating mechanism that directly measures volumes of gas.

3.6.11 Tanker

A merchant ship designed to transport liquid cargoes, e.g. liquefied natural gas; in context the more specific terms methane taker, propane tanker, butane lanker would be used.

- 3.6.12 Rail tanker; rail tank car

 A railway freight car for the transport of liquids, e.g. liquefied petroleum gases.
- 3.6.13 Road tanker; tank truck (USA)

 A road vehicle for the transport of liquids;
 e.g. liquefied petroleum gases.
- 3.6.14 Transportable gas holder; transportable gas container; gas cylinder

 A container in bottle, spherical or cylindrical form for the transport and distribution of liquefied gases.

3.7 氣體燃料儲藏

- 3.7.1 地下儲氣槽;地下儲氣系統 儲藏於適合儲存氣體燃料之多孔地層, 自然的或人為產生的岩穴。
- 3.7.2 多孔岩內儲藏

儲藏於適合儲存氣體燃料之多孔岩層, 例如儲藏於水層、已耗竭之乾井或油氣 層。

3.7.3 地窖儲藏

天然的或人工構築的地下洞 穴儲藏,例如鹽穴、天然岩窖、廢棄礦坑、冰凍土層。

3.7 Gas Storage

3.7.1. Underground gas storage; underground gas storage systemStorage in porous geological formations,

natural or artificially created cavities, suitable for the storage of gaseous fuels.

3.7.2 Storage in porous rock

Storage in porous rock formation suitable for the storage of gas; examples are storage in aquifers, depleted gas wells or reservoirs.

3.7.3 Storage in underground cavities

Underground storage in natural or artificial integral cavities; examples are storage in saline cavities, natural caverns, disused mine workings, frozen earth.

3.7.4 岩窖儲藏

儲藏於人工洗除之水溶性岩層(如鹽 岩)形成之岩窖內。

3.7.5 裂縫內儲藏

儲藏於因構造應力極端裂開之油氣層而 適合儲存氣體燃料的洞穴內。

3.7.6 流動氣量;有效氣量

指地下氣體燃料儲藏在儲存限度內可供 應之氣量,為平衡該系統可用氣量與需 求量間之差異。

3.7.7 制壓氣 (墊氣)

儲槽內無法完全回收之氣量。

3.7.8 儲氣槽

置於地表或近地表之儲存氣態或液態氣 體燃料之容器。

3.7.9 低壓儲氣槽

一般指鐘式、活塞式或無水儲氣槽。

3.7.10 鐘式儲氣槽

空心圓筒,頂部閉合,底部用液體封塞之儲氣槽,一般多用水槽,氣體燃料以低壓儲存在水面上之圓筒槽內,圓筒槽可隨盛裝之氣量多寡而自由昇降。

3.7.4 Storage in caverns

Storage in cavities artificially created by washing out water soluble layers of rock, e.g. rock salt.

3.7.5 Storage in fissures

Storage in cavities of a kind suitable for gas storage, in which the reservoir rock is very fissured due to tectonic stresses.

3.7.6 Current gas; active gas

The quantity of gas available within the storage range of an underground gas storage, that serves to balance out the differences between gas available in the system and demand.

3.7.7 Cushion gas

The quantity of gas associated with gas storage that can never be completely recovered.

3.7.8 Gas holder

A vessel in which gas is stored at or near the surface in gaseous or liquid phase.

3.7.9 Low-pressure gas holder

A general term for bell-type, piston or waterless gas holders.

3.7.10 Bell-type gas holder

A hollow cylinder closed at its upper end and sealed at its lower end by a liquid, generally water, contained in a tank; the gas is stored at low pressure within the cylinder above the level of the water; the cylinder, being free to rise or fall, is able to accommodate a varying volume of gas.

3.7.11 活塞式儲氣槽;無水儲油槽;乾式儲氣 3.7.11 Piston type gas holder; waterless gas 槽

為高壓容器,平面呈多角形或圓形,內 部有一個盤板或活塞及氣密滑動接頭或 可伸縮薄膜與容器聯接,可自由垂直滑 動,氣體燃料以低壓儲存在盤板或活塞 之下。

3.7.12 高壓儲氣槽;壓力式儲氣槽 固定或活動密閉式定量儲氣槽,儲存壓 力為數個大氣壓。

holder; dry gas holder

A tall vessel, polygonal or circular in plan, inside which a disc or piston, having a gastight sliding joint or flexible diaphragm connection with the vessel, is free to move vertically; the gas is stored in the space beneath the disc or piston, at low pressure.

3.7.12 High-pressure gas holder; pressure type gas holder; pressure holder A fixed or movable, closed vessel of constant volume in which gas is stored at a pressure of several atmospheres.

3.8 氣體燃料利用

3.8.1 配氣管接頭

自輸氣管線及配氣管線間分出之配氣支 管,包括絕緣接頭、開關及建築物外面 之塞閥、減壓器等。

- 3.8.2 配氣管;配氣支管;配氣分管 連接至用戶流量錶及塞閥之管線。
- 3.8.3 工業用戶 氣體燃料公司由共用之配氣管線連接至 用戶使用。

3.8 Gas Utilisation

3.8.1 Service connection

The branch lines between the supply mains and the main service valve or meter cock, the insulating joint, the main service valve or meter cock itself, the service valve or cock located outside the building, if any, and the gas governor of the building.

- 3.8.2 Service pipe; house branch line; house lateral (USA); house dead end line (USA); domestic mains (A ust.) The pipe connecting the supply main to the service valve or meter cock.
- 3.8.3 Consumer's plant; customer's plant A plant that takes gas from the public supply downstream of the main service valve or meter cock.

3.8.4 裝置容量;負荷量

指連接供氣系統或考慮中之系統(例如 用戶裝備),其氣體燃料消費設備之額 定熱量輸入總和。

(註)用戶契約需求量通常等於或低於 其裝置容量或負荷量。

- 3.8.5 氣體燃料裝備;燃氣設備
 通稱有煙道及無煙道燃氣設備。
- 3.8.6 無煙道氣體燃料裝備 不需使用煙道將燃燒廢氣排出而設計之 設備。
- 3.8.7 煙道氣體燃料裝備 需用煙道將燃燒廢棄排出而設計之設 備。
- 3.8.8 煙道;氣體燃料煙道裝置 將氣體燃料燃燒之廢氣排至大氣中之設 備。

3.9 增訂名詞

3.9.1 濕氣

未經提煉之天然氣其含有可冷凝的碳氫 化合物者。

(註)一表示特性的規格規定天然氣在 井口每七十五立方公尺含有超過一公升 以上的凝結油。

3.8.4 Installed capacity; connected load

The sum of the rated heat inputs of the gasconsuming appliances connected to the supplying system or any part of the system under consideration, e.g. the appliances of a consumer.

Note. A consumer's contractual demand would be at most equal to, but generally lower than, his installed capacity/connected load.

3.8.5 Gas appliance; gas-fired equipment; gas-fired installation

A common term for flued and flueless gasburning appliances.

3.8.6 Flueless gas appliance

An appliance designed for use without connection to a flue for venting the products of combustion to the exterior.

3.8.7 Flued gas appliance

An appliance designed for use with connection to a flue for venting the products of combustion to the exterior.

3.8.8 Flue; flue gas installation

The equipment required for venting to atmosphere the products of combustion from flued gas appliances.

3.9 Additional Terms

3.9.1 Wet gas

Unprocessed natural gas the contains condensable hydrocarbons. Note A characteristic specification would be natural gas containing more than one litre of condensate per 75 cubic metres at the well head.

3.9.2 乾氣

- (1)天然氣其含水量業經除水處理減 低。
- (2)天然氣在正常狀況之溫度及壓力下 含有微量或無可回收的商業價值液態碳 氫化合物。
- (註)一表示天然氣特性的規格對如上述(2)之定義規定,天然氣於每七十五立方公尺含有少於一公升之凝結油。

3.9.3 酸氣

天然氣含有硫化或其他腐蝕性硫化物而 於利用前需要淨化者。

3.9.4 甜氣

天然氣含有少量硫化物但利用時無需先 行淨化者。

3.9.2 Dry gas

- (1)Natural gas whose water content has been reduced by a dehydration process.
- (2) Natural gas containing little or no hydrocarbons commercially recoverable as liquid product under normal conditions of temperature and pressure.

Note A characteristic specification for a natural gas as defined under (2) above would be a natural gas containing less than one litre of condensate per 75 cubic metres.

3.9.3 Sour gas

Natural gas that contains hydrogen sulphide, or other corrosive sulphur compounds and requires purification before utilization.

3.9.4 Sweet gas

Natural gas that contains such small amounts of sulphur compounds that it may be utilized without prior purification.