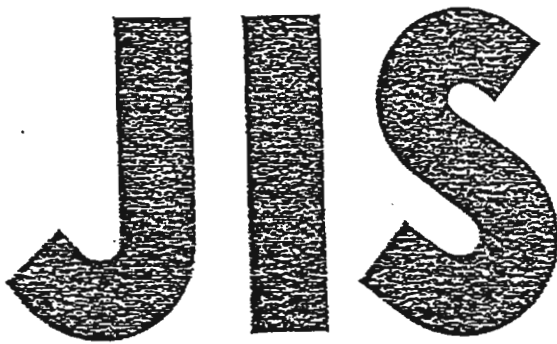


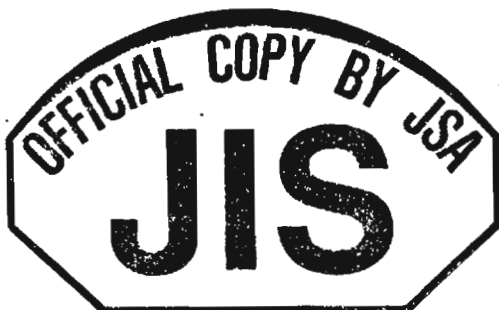


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JAPANESE INDUSTRIAL STANDARD

Glossary of Gas and Kerosine Appliances, and Accessories for Domestic Use

JIS S 2091-1985



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Translated

by

Japanese Standards Association

JAPANESE INDUSTRIAL STANDARD

J I S

Glossary of Gas and Kerosine Appliances,
and Accessories for Domestic Use

S 2091-1985

1. Scope

This Japanese Industrial Standard specifies terms and their meanings relating to gas and kerosine appliances, and accessories mainly for general domestic use out of burning appliances using gaseous fuel and liquid fuel.

Further, for informative reference, this indicates terms used hitherto and their corresponding English.

Remark: In this Standard units and numerical values shown in { } are in accordance with the International System of Units (SI) and are appended for informative reference.

2. Classification

Terms of burning appliances and accessories for domestic use shall be classified as follows:

(1) Terms relating to fuel

(1.1) Fuel

(1.2) Physical values relating to fuel, and the like

(2) Terms relating to combustion

(2.1) Combustion phenomena

(2.2) Shape of flame

(2.3) Combustion condition

Applicable Standards:

JIS K 2203-Kerosine

JIS K 2204-Gas Oil

JIS K 2205-Fuel Oil

JIS K 2240-Liquefied Petroleum Gases

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- (2.4) Combustion products
- (2.5) Combustion system
- (2.6) Combustion calculation
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 - (5.2) Water supply and hot water supply
 - (5.3) Air supply and exhaust
 - (5.4) Kitchen installation appliance
 - (5.5) Space-heater installation appliance
 - (5.6) Others
- (6) Other terms

3. Number, Terms and Meanings

The number, terms and meanings shall be as follows:

- Remarks
1. In the case where two or more words are described together, these are synonyms, and any of them may be used.
 2. Terms shown in parentheses of the term column are abbreviated terms or idioms and in the case where there is no confusion particularly in judgement from environmental condition, these may be used.
 3. Terms attached with underline in meaning column indicate terms specified in this Standard.

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(1) Terms Relating to Fuel

(1.1) Fuel

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
11001	燃料	NENRYŌ	Generic name of material which <u>burns easily and the heat of combustion is utilized.</u>		fuel
11002	気体燃料	KITAI NENRYŌ	The fuel mainly composed of combustible gas. There are <u>town gas</u> , <u>liquefied petroleum gas</u> , <u>acetylene</u> , etc.		gaseous fuel
11003	液体燃料	EKITAI NENRYŌ	The fuel to be dealt as liquid or fluid at ordinary temperature and ordinary pressure, and there are <u>kerosine</u> , <u>gas oil</u> , <u>heavy oil</u> , <u>alcohol</u> , etc.		liquid fuel
11004	家庭用燃料	KATEIYŌ NENRYŌ	The fuel mainly used in general households and the like. There are <u>town gas</u> , <u>liquefied petroleum gas</u> , <u>kerosine</u> , etc.		domestic fuel
11005	可燃性ガス	KANENSEI GASU	The gas capable of <u>being burned in air.</u>		combustible gas
11006	ガス	GASU	<u>Gaseous fuels such as town gas</u> , <u>liquefied petroleum gas</u> , etc.		gas



Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
11007	都市ガス	TOSI GASU	The fuel to be supplied through piping to households, and factories which is gas of gas family shown in the Ministerial Ordinance relating to verification and the like of gas articles based on the Gas Utility Industry Law.		town gas, city gas
11008	天然ガス	TENNEN GASU	Generic name of <u>combustible gas</u> of which main component is methane generated naturally.		natural gas
11009	液化天然ガス, (LNG)	EKIKA TENNEN GASU, (LNG)	<u>Natural gas</u> in the cooled and liquefied condition. It is at a low temperature before or after -160°C at ordinary pressure.		liquefied natural gas
11010	液化石油ガス, (LP ガス)	EKIKA SEKIYU GASU, (LP GASU)	The liquefied gas of which main components are propane, butane, propylene, etc.	LPG, PUROPAN GASU	liquefied petroleum gas

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Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
11011	い号液化石油ガス, 液化石油ガス I 種 1 号	IGŌ EKIKA SEKIYU GASU, EKIKA SEKIYU GASU ISSYU ITIGŌ	The liquefied petroleum gas in which content rate of total amount of propane and propylene is 80 % or more, content amount of total amount of ethane and ethylene is 5 % or less, and content rate of butadiene is 0.5 % or less. [Reference] It called "IGŌ EKIKA SEKIYU GASU" in enforcement for Law Concerning the Securing of Safety and the Optimization of Transaction of Liquefied Petroleum Gas, hereinafter referred to as the "liquefied petroleum gas law", and called "EKIKA SEKIYU GASU ISSYU ITIGŌ" in JIS K 2240.		
11012	ろ号液化石油ガス, 液化石油ガス I 種 2 号	ROGŌ EKIKA SEKIYU GASU, EKIKA SEKIYU GASU ISSYU NIGŌ	The liquefied petroleum gas in which content rate of total amount of propane and propylene is 60 % or more, that of ethane and ethylene is 5 % or less and the content rate of butadiene is 0.5 % or less.		



Documents

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Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
11012	ろ号液化石油ガス、 液化石油ガス 1 種 2 号	(Cont'd)	[Reference] It is called "ROGO EKIKA SEKIYU GASU" in the "liquefied petroleum gas law" and "EKIKA SEKIYU GASU ISSYU NIGO" in JIS K 2240.		
11013	は号液化石油ガス、 液化石油ガス 1 種 3 号	HAGŌ EKIKA SEKIYU GASU, EKIKA SEKIYU GASU ISSYU SANGO	The <u>liquefied petroleum gas</u> in which the content rate of total amount of propane and propylene is less than 60 %, that of ethane and ethylene is 5 % or less and the content rate of butadiene is 0.5 % or less. [Reference] It is called "HAGŌ EKIKA SEKIYU GASU" in the liquefied petroleum gas law and "EKIKA SEKIYU GASU ISSYU SANGO" in JIS K 2240.		
11014	プロパンガス	PUROPAN GASU	The liquefied gas of which main component is propane, and is used as fuel for general households and the like. In some cases it means <u>liquefied petroleum gas</u> .		commercial propane
11015	ブタンガス	BUTAN GASU	The liquefied gas of which main component is butane. It is used as fuel for industry and automobile other than general households.		commercial butane

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Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
11016	灯油	TÖYU	The fraction of approximately 150 to 250°C in boiling point range to be distilled between the gasoline and the gas oil at distillation of crude oil. It means the kerosine specified in JIS K 2203.		kerosine, kerosene
11017	JIS 1号灯油, 白灯油	JIS ITIGÖ TÖYU HAKUTÖYU	The colourless transparent kerosine containing little sulfur content. It is used widely as domestic fuel. It means No. 1 kerosine specified in JIS K 2203.	SEKIYU, TÖYU	white kerosene
11018	JIS 2号灯油, (茶灯油)	JIS NIGÖ TÖYU, (TYATÖYU)	The kerosine of which distillate temperature is high in comparison with white kerosine and containing sulfur is much. It means the No. 2 kerosine specified in JIS K 2203.		
11019	不純灯油	HUZYUN TÖYU	The kerosine in which different class oil and the like are mixed in.		
11020	変質灯油	HENSITU TÖYU	The kerosine varied in property by acceleration of oxidation by ultraviolet radiation, temperature, etc.		



Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
11021	軽油	KEIYU	The fraction of approximately 200 to 350°C in boiling point range distilled next to the <u>kerosine</u> fraction at distillation of crude oil. It means the gas oil specified in JIS K 2204.		gas oil
11022	重油	ZYUYU	The fraction of approximately 350°C or less in boiling point range to be distilled next to <u>gas oil</u> fraction at distillation of crude oil. It means fuel oil specified in JIS K 2205. It is classified into class 1 (A heavy oil), class 2 (B heavy oil) and class 3 (C heavy oil).		heavy oil

(1.2) Physical Values Relating to Fuel, and the Like

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
12001	ガスグループ	GASU CURŪPU	1. Division to express the class of <u>town gas</u> 2. The town gas is divided into families according to <u>combustion characteristics</u>, and is decided into 14 classes by ministerial ordinance concerning articles for gas based on Gas Utility Industry Law.		gas family
12002	燃焼性	NENSYŌSEI	1. Characteristics of <u>fuel</u> relating to <u>combustion</u> 2. Specially in the case of <u>gas</u>, it is characteristics of <u>gas</u> to be determined by specific gravity of <u>gas</u>, <u>colorific value</u>, and <u>combustion speed</u>, it becomes the <u>index</u> indicating the suitability of <u>gas</u> with <u>gas burning appliance</u>.		combustion characteristics, combustion properties
12003	燃焼範囲	NENSYŌ HANAI	The range of mixing ratio of combustible gas with combustible oxygen or air. Ordinarily, it is expressed by volume % of combustible gas in mixed gas of air with combustible gas.		combustible range, limits of inflammability

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
12004	燃烧速度	NENSYŌ SOKUDO	The speed of <u>flame travelling</u> in vertical <u>direction</u> to flame surface in standing-still mixed gas.		combustion speed, burning velocity
12005	火炎伝ば(播)速度	KAENDENPA SOKUDO	The apparent speed of travelling <u>flame</u> without relation to flow of mixed gas.	TYAKKA SOKUDO	flame speed, flame velocity
12006	着火性	TYAKKA SEI	Quality of ignition		ignitability
12007	引火点	INKATEN	The lowest temperature of liquid required for generate combustion when the flame has touched the <u>gas phase</u> part of liquid to generate combustible vapor.	INKA ONDO	flash point
12008	着火温度	TYAKKA ONDO	The lowest temperature to start self-heating combustion when the <u>fuel</u> is gradually raised in temperature in a space with air or oxygen.	HAKKA ONDO	ignition temperature

(2) Terms Relating to Combustion

(2.1) Combustion Phenomena

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
21001	燃 焼	NENSYŌ	It is to generate heat by carrying out chemical reaction of <u>fuel</u> with oxygen in air after the <u>fuel</u> has reached at a definite temperature.		combustion
21002	燃焼性能	NENSYŌ SEINŌ	The performance relating to <u>combusting</u> of <u>burning appliance</u> .		
21003	点 火	TENKA	It is to attach a fire to <u>fuel</u> .		ignition
21004	着 火	TYAKKA	It is the fact that the <u>fuel</u> is attached with fire.		light up
21005	火 移 り	HIUTURI	It is the fact that the flame transits with burning from a <u>flame hole</u> to a <u>flame hole</u> .		
21006	吹 消 え, (フローオフ)	HUKIKIE (BURŌ OHU)	The phenomenon where a <u>flame</u> is quenched by <u>lifting</u> . It means in some cases the <u>phenomenon</u> where a <u>flame</u> is blown off by wind.		blow-off, blow out
21007	逆 火, (フラッシュバック)	GYAKKA, (HURASSYU-BAKKU)	A phenomenon where a <u>flame</u> passes through a <u>flame hole</u> to return with burning to the <u>mixing tube</u> in the case where the <u>combustion speed</u> of mixed gas is <u>quicker</u> than the <u>flowing-out speed</u> .	DAKKU HAIĀ, DAKKU	light-back (direct light back), flash-back

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
21008	ライティング・バック	RAITINGU · BAKKU	A phenomenon where <u>light up</u> is caused in <u>mixing tube</u> at the time of <u>ignition</u> to main burner.		light-back, (indirect light back)
21009	リフティング	RIHUTINGU	A phenomenon where a <u>flame float up</u> from <u>flame hole</u> in the case where the <u>combustion speed</u> of mixed gas is slower than the <u>flowing-out speed</u> from the <u>flame hole</u> .	SENKA	lifting
21010	消火	SYOKA	Generic name to <u>extinction of flame</u> or <u>quenching of flame</u> .		extinction of flame, quenching of flame
21011	立消え	TATIKIE	Generic name of phenomenon where the <u>flame extinguishes</u> when the <u>combustion</u> must be continued.	SIKKA, SYOKA, TOTYU SHOEN, HUKIKIE	flame failure
21012	断火	DANKA	The condition where the <u>flame detector</u> has become impossible to <u>detect the flame</u> .		
21013	残火 (ざんひ)	ZANKA (ZANBI)	The condition where the <u>flame</u> is remaining, even after carrying out the operation of <u>extinction of flame</u> .	HINOKORI	.
21014	着火音	TYAKKAON	The sound generated by <u>light up</u> .		noise of ignition
21015	燃烧音	NENSYOON	The sound generated by <u>combustion</u> .		flame noise

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
21016	消火音	SYŌKAON	The sound generated by <u>extinction of flame.</u>		noise of extinction

(2.2) Shape of Flame

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
22001	炎	HONHO	Gaseous part in emission by becoming high temperature according to <u>combustion.</u>	KAEN	flame
22002	内炎	NAIEN	A part strong in light in an internal layer of <u>flame.</u>		inner corn luminous flame
22003	外炎	GAEN	A part forming outer layer of <u>flame.</u>		non-luminous flame
22004	酸化炎	SANKAEN	A <u>flame</u> having oxidizing action.		oxidizing flame
22005	還元炎	KANGENEN	A <u>flame</u> having reducing action.		reducing flame
22006	黄炎	ŌEN	A <u>flame</u> having a degree of yellow color where made in <u>combustion</u> in insufficient condition of <u>primary air.</u> If this <u>flame</u> contacts a cool surface, generally soots are generated.		yellow flame

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
22007	イエローチップ	IERŌ TIPPŪ	A yellow part appearing at tip of <u>flame</u> .		yellow tip
22008	炎	KIEN	A luminous flame by <u>radiation of solid</u> , when liberated carbon is generated in the <u>flame</u> .		luminous flame

(2.3) Combustion Condition

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
23001	完全燃焼	KANZEN NENSYŌ	A combustion remaining no combustible materials such as carbon monoxide and others in the <u>combustion products</u> .		complete combustion
23002	不完全燃焼	HUKANZEN NENSYŌ	A combustion containing combustible materials such as carbon monoxide and others in the <u>combustion products</u> .		incomplete combustion
23003	正常燃焼	SEIZYŌ NENSYŌ	A combustion maintaining designed performance.		normal combustion
23004	異常燃焼	IZYŌ NENSYŌ	A combustion in not <u>normal combustion condition</u> .		abnormal combustion
23005	定常燃焼	TEIZYŌ NENSYŌ	A combustion at the time point when the <u>excessive combustion</u> is completed and the <u>fuel</u> , <u>air</u> , <u>temperature</u> , <u>draft</u> , etc. have become steady condition.		steady combustion

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
23006	過渡燃焼	KATONENSYŌ	A <u>combustion</u> at the transition time until becoming <u>steady combustion</u> condition.		transitional combustion
23007	安定燃焼	ANTEI NENSYŌ	A <u>combustion</u> in which the flame maintains the <u>stable condition</u> .		stable combustion
23008	振動燃焼	SINDŌ NENSYŌ	A <u>combustion</u> where the flame varies periodically in a <u>combustion chamber</u> .	MYAKUDŌ NENSYŌ	oscillated combustion
23009	いきづき燃焼	IKIZUKI NENSYŌ	An <u>instable combustion</u> generated by variation of <u>light up part</u> .		combustion instability
23010	片燃え	KATAMOE	A <u>combustion</u> of uneven flames in <u>wick combustion</u> .		
23011	良好燃焼	RYŌKŌ NENSYŌ	A <u>combustion</u> where the <u>combustion</u> performance values are <u>maintained</u> in a specified range.		
23012	連続燃焼	RENZOKU NENSYŌ	A <u>combustion</u> without interruption.		continuous combustion
23013	断続燃焼	DANZOKU NENSYŌ	The fact that a <u>combustion</u> is continued with interrupting at certain intervals.		intermittent combustion
23014	過剰燃料燃焼	KAZYŌ NENRYŌ NENSYŌ	A <u>combustion</u> with supplying a fuel of larger amount than the rated fuel consumption of appliance to the burner.	KAHUKA NENSYŌ, KADO NENSYŌ	excessive combustion

(2.4) Combustion Products

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
24001	燃焼生成物	NENSYŌ SEISEIBUTU	Substances generated by <u>combustion</u> . These mean the water, steam, carbon dioxide, etc.		combustion products
24002	燃焼ガス	NENSYŌ GASU	A gas generated at the time of <u>combustion</u> , which contains <u>combustion products</u> .	NENSYŌ HAIGASU, HAIGASU	combustion gas, waste gas
24003	燃焼排ガス, (燃焼排気)	NENSYŌ HAIGASU, (NENSYŌ HAIKI)	A <u>combustion gas</u> exhausted from an appliance.	HAIKI GASU	exhaust gas, flue gas
24004	未燃ガス	MINEN GASU	A <u>combustible gas</u> contained in <u>combustion gas</u> .		unburned gas
24005	ばい煙	BAIEN	An <u>exhaust gas</u> containing soot and smoke dust.		smoke
24006	ばい煙濃度	BAIEN NODO	Density of smoke detected from <u>exhaust tube</u> , <u>exhaust flue</u> , etc.	BAIEN NODO, YUEN NODO	smoke density

(2.5) Combustion System

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
25001	燃焼方式	NENSYŌ HOSIKI	Burning method of <u>fuel</u> .	NENSYŌ HOHO	combustion system
25002	予混合燃焼	YOKONGŌ NENSYŌ	Combustion by preliminarily mixing <u>fuel</u> and <u>air</u> .		premixed combustion
25003	拡散燃焼	KAKUSAN NENSYŌ	Combustion without preliminarily mixing <u>fuel</u> and <u>air</u> .		diffuse combustion
25004	低空気比燃焼	TEIKŪKIHI NENSYŌ	A combustion system intending complete <u>combustion with a little excess air</u> .	TEIKAZYŌ KŪKI NENSYŌ, TEISANSO NENSYŌ	low excess air combustion
25005	二段燃焼	NIDAN NENSYŌ	System of combustion by supplying <u>combustion air</u> with dividing into two stages in a combustion room.		two stage combustion
25006	専焼	SENSYŌ	<u>Combustion of fuel</u> of only one class.		mono fuel combustion
25007	混焼	KONSYŌ	Combustion of <u>fuels</u> of two or more classes at the same time.		multi fuel combustion
25008	全一次空気燃焼	ZENITIZI KŪKI NENSYŌ	A combustion system to take-in the whole amount of <u>air</u> required for <u>combustion as primary air</u> .		totally aerated combustion system

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
25009	ブンゼン燃焼	BUNZEN NENSYŌ	A combustion system by sucking <u>primary</u> air according to kinetic energy when <u>injecting gas</u> from <u>nozzle</u> , by mixing in a mixer tube, by <u>forming clear inner</u> <u>corn luminous flame</u> when burning at <u>port hole</u> , and further by air around <u>the flame</u> .		Bunsen combustion system
25010	セミブンゼン燃焼	SEMI BUNZEN NENSYŌ	A combustion system of comparatively <u>small amount in primary air</u> out of Bunsen combustion, in which the <u>division of inner corn luminous flame</u> and the <u>non-luminous flame</u> cannot be made clear.		semi Bunsen combustion system
25011	表面燃焼	HYŌMEN NENSYŌ	Such combustion that the <u>totally</u> <u>aerated combustion system</u> is carried out at the surface of a special burner (infrared burner, or the like), and its surface is made high temperature.	KAIMEN NENSYŌ	surface combustion
25012	触媒燃焼	SYOKUBAI NENSYŌ	Combustion by the aid of catalyst at ordinary combustion temperature or under.	SESSYOKU HANNO NENSYŌ	catalytic combustion.
25013	パルス燃焼	PARUSU NENSYŌ	A combustion system where the mixture of gas and air is supplied intermittently to combustion chamber and the <u>explosive combustion</u> is carried out repeatedly.		puls combustion, pulsating combustion



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Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
25014	爆発燃焼	BAKUHATU NENSYO	A combustion to cause large variation of pressure in circumference by rapid reaction of mixed gas in the combustible range.		explosive combustion
25015	しん燃焼	SIN NENSYO	Generic name of combustion system by sucking-up petroleum according to wick and by vaporizing.		wick combustion
25016	ポット燃焼	POTTO NENSYO	A combustion system by dropping oil into a pot by using an oil control device or the like, by evaporating it by heat of combustion and by mixing it with air supplied from environment of pot.	SIZEN TEKIKASIKI NENSYO, ZYOHATU SIKI NENSYO	pot combustion
25017	圧力噴霧燃焼	ATURYOKU HUNMU NENSYO	A combustion system by spraying oil pressurized by a pump or the like from nozzle and by contacting it with air to mix.	GANTAIPU- SIKI NENSYO ATURYOKU MUKASIKI NENSYO	pressure spraying combustion
25018	ジェット噴霧燃焼	ZIETTO HUNMU NENSYO	A combustion system by atomizing fuel according to air jet.	HUNRYU MUKASIKI NENSYO	jet spraying combustion



Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
25019	回転雾化燃烧	KAITEN MUKA NENSYO	A <u>combustion system</u> by atomizing the oil according to centrifugal force and by mixing with air.	KAITEN HUNMUSIKI NENSYO, ROTARISIKI NENSYO, ENSIN MUKASIKI NENSYO	rotary atomizing combustion
25020	雾化燃烧	KIKA NENSYO	A combustion system to vaporize by heating <u>liquid fuel</u> in a vaporizing chamber.		vaporizing combustion
25021	白炎燃烧	HAKUEN NENSYO	A <u>combustion</u> by opaque white <u>flame</u> with <u>supplying comparatively small amount</u> air in the process of high temperature decomposition in combustion of <u>kerosine</u> or the like.		white-flame combustion
25022	青炎燃烧	SEIEN NENSYO	A combustion by transparent blue <u>flame</u> with supplying a comparatively large amount air in process of high temperature decomposition in <u>combustion of kerosine</u> or the like.		blue flame combustion

(2.6) Combustion Calculation

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
26001	理論空気量	RIRON KUKIRYŌ	A theoretical air amount required for complete combustion of <u>fuel</u> .		theoretical air requirement
26002	過剰空気量	KAZYŌ KUKIRYŌ	The difference between the air amount actually supplied at <u>combustion</u> and the theoretical air requirement.		excess air
26003	空気比	KUKIHI	The ratio of actually used air amount to the theoretical air requirement.	KŪKI KAZYŌ KEISU	excess air ratio (factor), air factor
26004	過剰空気率	KAZYŌ KUKIRITU	A ratio of <u>excess air</u> to <u>theoretical air requirement</u> , which is expressed by volume percentage ordinarily. It means the percentage of digit subtracted by 1 from <u>excess air ratio</u> .	KAZYŌ KUKI KEISU	percentage of excess air
26005	理論燃焼ガス量	RIRON NENSYŌ GASU RYŌ	A theoretical quantity of <u>combustion gas</u> generated at the time of <u>complete combustion</u> at <u>theoretical air requirement</u> .	RIRON HAIGASU- RYŌ	theoretical quantity of combustion gas
26006	燃焼温度	NENSYŌ ONDO	A temperature of <u>combustion gas</u> generated by <u>combustion</u> .		combustion temperature

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
26007	理論燃焼温度	RIRON NENSYŌ ONDO	A temperature of <u>combustion gas</u> at the time of <u>complete combustion</u> at <u>theoretical air requirement</u> with taking <u>dissipation heat</u> as zero.		theoretical combustion temperature
26008	燃焼用空気	NENSYŌYŌ KŪKI	Air to be used for <u>combustion</u> .		combustion air
26009	一次空気	ITIZI KŪKI	In the case of supplying in division of <u>combustion air</u> , the air to be mixed with <u>fuel</u> before reaching the <u>flame hole</u> .		primary air
26010	二次空気	NIZI KŪKI	<u>Combustion air</u> required other than <u>primary air</u> .		secondary air
26011	燃焼置負荷	NENSYŌSITU HUKA	Generating calorific value of <u>fuel</u> per unit area of combustion chamber and per unit time.	NENSYŌSITU NETUHASSEI RITU	heat liberation rate, calorific capacity of combustion chamber
26012	炎口負荷	ENKŌ HUKA	Generating calorific value of <u>fuel</u> per unit area of <u>flame hole</u> , and per unit time.		calorific capacity for burner port area

(3) Terms Relating to Heat and Heat Transfer

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
30001	顕熱	KENNETU	A heat amount to be used for temperature rise of substance when heat is applied to the substance.	KANNETU	sensible heat
30002	潜熱	SENNETU	A heat amount to be used for change of condition of substance (solid ↔ liquid, liquid ↔ gas, etc.) at a definite temperature.		latent heat
30003	燃焼熱	NENSYŌNETU	Heat generated by combustion reaction.		heat of combustion
30004	発熱量	HATUNETURYŌ	Heat amount discharged when a fuel is performed with complete combustion of a unit amount under the specific pressure. There are gross heating value and net heating value. (In oil burning appliance, it means the heat amount of fuel consumed by the appliance per 1 h.)		calorific value, heating value
30005	総発熱量, (高発熱量)	SŌ HATUNETURYŌ (KŌ HATUNETURYŌ)	A calorific value generated by combustion in the combustion gas, including the latent heat of steam.	KŌI HATUNETU- RYŌ	gross heating value, gross calorific value

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
30006	真発熱量, (低発熱量)	SIN HATUNETURYŌ, (TEI HATUNETURYŌ)	A calorific value generated by combustion in <u>combustion gas</u> , including no <u>latent heat of steam</u> .	TEI HATUNETU- RYŌ	net heating value net calorific value
30007	熱交換	NETU KŌKAN	Giving and taking of heat between substances different in temperature.		heat exchange
30008	熱損失	NETU SONSITU	Heat amount not utilized effectively.		heat loss
30009	熱効率	NETU KŌRITU	Percentage of effective heat to entering heat.		thermal efficiency
30010	熱伝導	NETU DENDŌ	A phenomena where the heat transfers from high temperature part to low temperature part in the substance.	DENDŌ	thermal conduction
30011	対流熱	TAIRYU NETU	A heat to transfer together with the flow of fluid generated by difference of specific gravities due to temperature difference or the like.		convection heat, transferred heat by convection
30012	放射熱	HŌSYA NETU	A heat which is discharged in heat line shape from substance high in temperature and transmitted to other substance low in temperature through the space.	HUKUSYA NETU	radiation heat, transferred heat by radiation
30013	熱源	NETUGEN	When utilizing heat, the source to supply the heat.		heat source

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Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
30014	熱媒	NETUBAI	A medium to be used for transporting heat when heating a substance.		heat carrier heating medium
30015	冷媒	REIBAI	A medium to make low temperature by utilizing condition change of liquid phase - gas phase.		refrigerant
30016	ヒートポンプ	HITO PONPU	An apparatus to utilize the heat sucked-up from low temperature side by utilizing phase change of refrigerant.	NETU PONPU	heat pump
30017	予熱	YONETU	Preliminarily heating of fuel and the like.		preheating

(4) Terms Relating to Burning Appliance

(4.1) Classification of Burning Appliances

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
41001	燃焼機器	NENSYO KIKI	Generic name of appliances having device for <u>burning</u> .		burning appliance
41002	調理機器	TYORI KIKI	Generic name of <u>burning appliances for heat cooking by utilizing heat of combustion</u> .		cooking appliance



Documents

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Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
41003	温水機器	ONSUI KIKI	Generic name of <u>burning appliances</u> for heating water to <u>boiling point</u> or under by utilizing heat of combustion.		water heating appliance
41004	暖房機器	DANBŌ KIKI	Generic name of <u>burning appliances</u> to take heat or to <u>heat space</u> in a room by utilizing heat of combustion.		space heater
41005	湯沸器. 給湯機	YUWAKASIKI, KYUTOKI	A <u>water heating appliance</u> to be used for supplying hot water.		water heater
41006	ふろがま	HUROGAMA	A <u>water heating appliance</u> for heating by <u>direct circulation</u> the water stored in a bath tank. It includes appliances having function to supply hot water.		bath boiler
41007	温水暖房機	ONSUI DANBŌKI	An <u>water heating appliance</u> for space heating. It includes the appliance having function to supply hot water.		
41008	ストーブ	SUTŌBU	A space heater to heat a room by <u>radiation heat</u> and <u>convection heat</u> .		space heater;
41009	ガス機器	GASU KIKI	Generic name of appliances to be used in the case of consuming gas, and includes <u>burning appliances</u> and their relating appliances.	GASU SYOHI KIKI	gas appliance

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
41010	ガス燃焼機器	GASU NENSYŌ KIKI	Generic name of appliances having device for burning <u>gas</u> .		gas burning appliance
41011	石油燃焼機器	SEKIYU NENSYŌ KIKI	Generic name of appliances having device for burning <u>kerosine, gas oil or heavy oil</u> .		oil burning appliance

(4.2) Classification of Gas Burning Appliances

(4.2.1) Gas Cooking Appliances

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
42101	ガス調理機器	GASU TYŌRI KIKI	A <u>cooking appliance</u> using <u>gas</u> as <u>fuel</u> .		
42102	ガスこんろ	GASU KONRO	A <u>gas cooking appliance</u> provided with a <u>grate</u> for carrying out cooking on the <u>upper surface</u> of appliance body by using a container for cooking.		gas cooking stove, gas hotplate
42103	ガスグリル	GASU GURIRU	A <u>gas cooking appliance</u> for baking meat and <u>fish</u> mainly by <u>direct fire</u> .	YAKIMONO KI	gas grill
42104	ガスグリル付こんろ	GASU GURIRUTUKI KONRO	A <u>gas cooking stove</u> provided with a <u>grill burner</u> .	GURIRUTUKI GASU TEBURU	gas hot plate with grill

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
42105	ガスオーブン	GASU ŌBUN	A gas cooking appliance for cooking mainly by baking in a casserole by providing a shelf in a box made of metal, with placing an oven dish containing foods, and by heating foods by <u>radiation heat</u> and <u>convection heat</u> .		gas oven
42106	コンビネーション レンジ	KONBINESYON RENZI	A gas cooking appliance provided with functions of <u>gas oven</u> and <u>electronic range</u> .		combination range
42107	ガスレンジ	GASU RENZI	A gas cooking appliance combined with a <u>gas oven</u> and a <u>gas cooking stove</u> .		gas range
42108	ガス炊飯器	GASU 'SUIHANKI	A gas cooking appliance provided with an <u>apparatus for detecting completion of baking of rice</u> , and for <u>extinction of flame of main burner automatically</u> .	ZIDO SUI- HANKI, GASUGAMA, KAMA	gas rice cooker
42109	ガスクッキングテ ーブル	GASU KUKKINGU TEBURU	A dining table (table) provided with <u>gas cooking appliances such as gas cooking stove, gas grill, etc.</u>		gas cooking table
42110	カセットコンロ	KASETTO KONRO	A gas cooking stove of such structure that the container filled with <u>liquefied petroleum gas</u> can be attached and detached.	KAN'I KONRO	



(4.2.2) Gas Water-Heating Appliance

Number	Term (Japanese character)	Reading	Meaning	Informative reference		
				Terms used hitherto	English	Figure
42201	ガス温水機器	GASU ONSUI KIKI	A gas water-heating apparatus using gas as the fuel.			
42202	ガス瞬間湯沸器	GASU SYUNKAN YUWAKASIKI	A water heater for supplying hot water of such structure that it has function capable of opening and closing the gas passage in interlocking with water passing and water is heated during the water passes through the heat exchanger. These are divided according to system of supplying hot water into main stop type and end stop type.		instantaneous gas water heater	
42203	元止め式ガス瞬間湯沸器, (元止め式ガス湯沸器)	MOTODOMESIKI GASU SYUNKAN YUWAKASIKI, (MOTODOMESIKI GASU YUWAKASIKI)	An instantaneous gas water heater of such structure that only by opening and closing of water faucet at inlet side of appliance the ignition and extinction of main burner can be performed but it is not capable of that of hot water plumbing.		main stop system instantaneous gas water heater	42-01

Number	Term (Japanese character)	Reading	Meaning	Informative reference		
				Terms used hitherto	English	Figure
42204	先止め式ガス瞬間 湯沸器, (先止め式ガス湯 沸器)	SAKIDOMESIKI GASU SYUNKAN YUWAKASIKI, (SAKIDOMESIKI GASU YUWAKASIKI)	An instantaneous gas water heater of such structure that only by opening and closing of hot water plumbing at outlet side of appliance the ignition and extinction of main burner can be performed and it is capable of that of hot water plumbing.		end stop system instantaneous gas water heater	42-02
42205	ガス貯湯湯沸器 (ガスちようとうゆわ かしき)	GASU TYOTÔ YUWAKASIKI	A gas water heater for supplying hot water of such structure as to heat water stored in a hot-water storing tank, having such mechanism to open and to close gas passage in interlocking with hot-water temperature, and of such structure that the heat transfer area where hot water storing part is closed tightly and water head of 10 m or less is applied is not more than 4 m ² . These are divided, according to division of heating speed, into rapid heating type and slow heating type.			
42206	急加熱形ガス貯湯 湯沸器, (急加熱形ガス湯 沸器)	KYŪ KANETUGATA GASUTYOTÔ YUWAKASIKI, (KYŪ KANETUGATA GASU YUWAKASIKI)	A gas hot-water-storing water heater having ratio of marked gas consumption to hot-water storing amount not less than 1000 kcal/h per 1 l of hot-water storing amount.			

Number	Term (Japanese character)	Reading	Meaning	Informative reference		
				Terms used hitherto	English	Figure
42207	緩加熱形ガス貯湯 沸器。 (緩加熱形ガス湯 沸器)	KAN KANETUGATA GASUTYOTŌ YUWAKASIKI, (KAN KANETUGATA GASU YUWAKASIKI)	A gas hot-water-storing water heater having ratio of marked gas consumption to hot-water storing amount less than 1000 kcal/h per 1 l of hot-water storing amount.			
42208	ガス常圧貯蔵湯沸 器。 (ガス貯蔵湯沸器)	GASU ZYŌATU TYŌZŌ YUWAKASIKI, (GASU TYŌZŌ YUWAKASIKI)	A gas water heater having purpose for drinking mainly, of such structure as to heat water stored in a hot-water storing tank, having such mechanism as to open and close the gas passage in interlocking with heating water, and of which hot-water storing part is open to atmospheric air.			
42209	ガスふろがま	GASU HURO GAMA	Bath boilers using gas as fuel and are divided according to profile of installation into internal boiler and external boiler. In some cases, it indicates only the heat exchange part.	GASUBĀNA- TUKI HUROGAMA		
42210	内がま形ガスふろ がま。(内がま)	UTIGAMAGATA GASU HUROGAMA, (UTIGAMA)	A gas bath boiler of which heat exchange part is installed in the bath tank.			
42211	外がま形ガスふろ がま。 (外がま)	SOTOGAMAGATA GASU HUROGAMA, (SOTOGAMA)	A gas bath boiler of which heat exchange part is installed outside the bath tank.			

(4.2.3) Gas Space Heater

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
42301	ガス暖房機器	GASU DANDŌ KIKI	A <u>space heater</u> using <u>gas</u> as <u>fuel</u> .		
42302	ガスストーブ	GASU SUTŌBU	A <u>space heater</u> using <u>gas</u> as <u>fuel</u> .		gas space heater
42303	ガス温風暖房機	GASU ONHŪ DANBŌKI	A gas space heater of system to blow out warm wind.		

(4.2.4) Others

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
42401	ガス衣類乾燥機	GASU IRUI KANSŌKI	An appliance to dry clothes by passing air heated by <u>heat of combustion of gas</u> by means of a <u>blower</u> .	DORAIYĀ	gas clothes dryer

(4.3) Classification of Oil Burning Appliances

(4.3.1) Oil Cooking Appliances

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
43101	石油調理機器	SEKIYU TYORIKIKI	A cooking appliance using <u>kerosine</u> or <u>gas oil</u> as <u>fuel</u> .		
43102	石油こんろ	SEKIYU KONRO	An oil cooking appliance provided with a grate for carrying out cooking or the like on the upper surface of body by using a container for cooking.		oil burning cooking stove

(4.3.2) Oil Water-Heating Appliance

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
43201	石油温水機器	SEKIYU ONSUI KIKI	A water heating appliance using <u>kerosine</u> , <u>gas oil</u> , or <u>heavy oil</u> as <u>fuel</u> .		
43202	油だき温水ボイラ	YUDAKI ONSUI BOIRA	A water heater using <u>kerosine</u> , <u>gas oil</u> or <u>heavy oil</u> as <u>fuel</u> to be used for supplying hot water and space heating of using water head of 10 m or less and of heat transfer area of 4 m ² or less.		oil burning water boiler

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
43203	石油小形給湯機	SEKIYU KOGATA KYUYUKI	A <u>water heater</u> using <u>kerosine</u> , <u>gas oil</u> or <u>heavy oil</u> with a <u>heat exchanger</u> of capacity of 30 / or less. These are divided according to division of heating speed into instantaneous type and hot-water storing type rapid heating type.		oil burning water heater for domestic use
43204	瞬間形石油小形給湯機. (瞬間形石油給湯機)	SYUNKAN GATA SEKIYU KOGATA KYUYUKI, (SYUNKAN GATA SEKIYU KYUYUKI)	An oil small type water heater of such structure as to heat water by sensing water flow in water passage of appliance body to start <u>combustion</u> automatically, having heating speed of 45 s or less.		
43205	貯湯式急速加熱形 石油小形給湯機. (貯湯・急速加熱形 石油給湯機)	TYOTOSIKI KYUSOKU KANETU GATA SEKIYU KOGATA KYUYUKI, (TYOTO・KYUSOKU KANETU GATA SEKIYU KYUYUKI)	An oil small type water heater of such structure as to heat water by starting <u>combustion</u> automatically relating to hot-water temperature in the condition where pressure is applied to water in the appliance body.		
43206	石油ふろがま	SEKIYU HUOGAMA	A bath boiler using <u>kerosine</u> , <u>gas oil</u> or <u>heavy oil</u> .		oil burning bath boiler
43207	しん式石油ふろがま	SINSIKI SEKIYU HUOGAMA	An oil burning bath boiler provided with a <u>wick type burner</u> .		wick feed oil burning bath boiler

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
43208	ポット式石油ふろがま	POTTOSIKI SEKIYU HUOGAMA	An oil burning bath boiler provided with a pot type burner.		
43209	圧力式石油ふろがま	ATURYOKUSHIKI SEKIYU HUOGAMA	An oil burning bath boiler provided with a pressure spraying type burner, rotary burner or vaporizing type burner.		

(4.3.3) Oil Space Heater

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
43301	石油暖房機器	SEKIYU DANBŌ KIKI	A space heater using kerosine, gas oil, or heavy oil as fuel.		
43302	石油ストーブ	SEKIYU SUTŌBU	A space heater using kerosine, gas oil or heavy oil as fuel.		oil space heater, kerosine space heater
43303	石油温風暖房機	SEKIYU ONPŪ DANBOKI	An Oil Space heater of such system as to blow out warm air.		warm air furnace

(4.4) Classification Method of Burning Appliances

(4.4.1) Classification According to Installation Mode

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
44101	設置形態	SETTI KEITAI	A classification method of <u>burning</u> appliances according to installation mode.		installation mode
44102	卓上形	TAKUZYŌ GATA	A mode of appliance to be used with placing on range table, <u>cooking cabinet</u> , dining table, or the like.		table top type
44103	据置形	SUEOKI GATA	A mode of appliance to be used by installing on a stand or floor surface.		floor type
44104	壁掛形	KABEKAKE GATA	A mode of appliance to be used by attaching to wall surface.		wall type
44105	つり下形	TURISAGE GATA	A mode of appliance to be used by hanging on wall surface or the like.		hang type
44106	組込形	KUMIKOMI GATA	A mode of appliance to be used with being built-in in wall, <u>cooking cabinet</u> or the like.		drop in type, build in type
44107	キャビネット形	KYABINETTO GATA	A mode of appliance to be used by installing on the exclusive-use cabinet.		cabinet type

(4.4.2) Classification According to Installation Place

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
44201	屋内用	OKUNAI YŌ	An appliance to be used with installing indoors.		indoor type
44202	屋外用	OKUGAI YŌ	An appliance to be used with installing outdoors.		outdoor type

(4.4.3) Classification According to Air Supply and Exhaust System

Number	Term (Japanese character)	Reading	Meaning	Informative reference		
				Terms used hitherto	English	Figure
44301	給排気方式	KYŪHAIKI HŌSIKI	System of air supply or exhaust, or a classification method of <u>burning appliances according to the method of air supply or exhaust.</u>		air supply and exhaust system	
44302	開放式	KAIHŌ SIKI	A system to take combustion air from inside of room, and to exhaust combustion gas from the <u>burning appliance as it is.</u>		unvented system	44-01

Number	Term (Japanese character)	Reading	Meaning	Informative reference		
				Terms used hitherto	English	Figure
44303	半密閉式	HAN MIPPEI SIKI	A system to take <u>combustion air</u> from inside of room by using an exhaust flue and to exhaust the <u>combustion gas</u> to outside of room. The <u>natural exhaust type</u> and <u>forced exhaust type</u> belong to this.		vented system	
44304	密閉式	MIPPEI SIKI	A system to carry out <u>air supply</u> and <u>exhaust</u> by penetrating an <u>air supply and exhaust tube</u> through the wall contacting with outer air to go out outdoors and, of such structure to close tightly the combustion chamber to indoor. The <u>natural supply exhaust type</u> and <u>forced supply exhaust type</u> belong to this.		direct vent system	
44305	自然排気式, (C.F.式)	SIZEN HAIKI SIKI, (CF SIKI)	A system to take <u>combustion air</u> from inside of room and to exhaust <u>combustion gas</u> to outdoor according to <u>natural draft</u> by using <u>exhaust tube</u> .	HAIKI TOSIKI	natural exhaust type, natural draught flue type	44-02
44306	強制排気式, (F.F.式)	KYŌSEI HAIKI SIKI, (FE SIKI)	A system to take <u>combustion air</u> from inside of room and to exhaust <u>combustion gas</u> <u>forcedly</u> to outdoor by using an <u>exhaust fan</u> .	YUIN TUHU SIKI	forced exhaust type, fanned draught flue type	44-03

Number	Term (Japanese character)	Reading	Meaning	Informative reference		
				Terms used hitherto	English	Figure
44307	自然給排気式, (BF式)	SIZEN KYŪHAIKI, SIKI (BF SIKI)	A system to carry out air supply and exhaust according to <u>natural draft</u> with protruding a <u>supply</u> and exhaust tube to outdoor by penetrating through the wall contacting with outer air.		natural supply exhaust type, balanced flue type	44-04
44308	強制給排気式, (FF式)	KYŌSEI KYŪHAIKI, SIKI (FF SIKI)	A system to carry out air supply and exhaust <u>forcedly</u> by using a <u>multiple blower</u> with protruding a supply and exhaust tube to outdoor by penetrating through the wall contacting with outer air.		forced supply exhaust type, forced draught balanced flue type	44-05
44309	強制給気式	KYŌSEI KYŪKI SIKI	A system to supply <u>combustion air</u> forcedly from indoor by using an <u>air blower</u> for combustion and to exhaust <u>combustion gas</u> to outdoor.			

(4.4.4) Classification According to Water Supply System

Number	Term (Japanese character)	Reading	Meaning	Informative reference	
				Terms used hitherto	English
44401	給水方式	KYUSUI HOSIKI	A classification method according to water-supply method to water heating appliance from water conduit.		
44402	シスターン式	SISUTAN SIKI	A system to supply water from cistern.		cistern type
44403	水道直結式	SUIDO TYOKKETU SIKI	A system to supply water with connecting pressure reducing and check valves for water and pressure relief valves.		