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**Glossary of terms for thermal
power plants—Boilers and auxiliary
equipment**

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee, as the result of proposal for revision of Japanese Industrial Standard submitted by Thermal and Nuclear Power Engineering Society (TENPES)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS B 0126 : 1994** is replaced with this Standard.

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Glossary of terms for thermal power plants—Boilers and auxiliary equipment

1 Scope This Japanese Industrial Standard specifies the principal terms and their definitions concerning boilers and their auxiliary equipment used in thermal power plants.

2 Normative references The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 0130 *Glossary of terms for thermal power plant (general)*

JIS B 0132 *Glossary of terms for fans, blowers and compressors*

JIS B 0140 *Glossary of terms relating to conveyors—Kinds of conveyors*

JIS B 8222 *Land boilers—Heat balancing*

JIS B 8223 *Water conditioning for boiler feed water and boiler water*

3 Classification of terms Classification of terms shall be as follows:

- | | |
|---|--|
| <p>a) Boiler</p> <ol style="list-style-type: none">1) Types and models2) Structure3) Auxiliary equipment4) Boilers in general5) Performance and test | <p>b) Firing equipment</p> <ol style="list-style-type: none">1) Types and models2) Structure3) Auxiliary equipment4) Firing in general5) Performance and test |
| <p>c) Piping</p> <ol style="list-style-type: none">1) Types and models2) Structure3) Auxiliary equipment4) Piping in general | <p>d) Coal conveying and ash handling equipment</p> <ol style="list-style-type: none">1) Types and models2) Structure3) Auxiliary equipment4) Coal conveying and ash handling in general5) Performance and test |
| <p>e) Draft equipment</p> <ol style="list-style-type: none">1) Types and models2) Structure3) Auxiliary equipment4) Drafting in general5) Performance and test | <p>f) Dust collector</p> <ol style="list-style-type: none">1) Types and models2) Structure3) Auxiliary equipment4) Dust collecting in general5) Performance and test |

- g) **Flue-gas desulfurization equipment**
 - 1) Types and models
 - 2) Structure
 - 3) Auxiliary equipment
 - 4) Flue-gas desulfurization in general
 - 5) Performance and test
- i) **Nitrogen oxide (NO_x) reduction combustion in general**
 - 1) Types and models
 - 2) Structure
 - 3) Nitrogen oxide (NO_x) reduction combustion in general
 - 4) Performance and test
- k) **Waste gasification equipment**
 - 1) Types and models
 - 2) Structure
 - 3) Auxiliary equipment
 - 4) Waste gasification in general
- h) **NO_x removal equipment**
 - 1) Types and models
 - 2) Structure
 - 3) Auxiliary equipment
 - 4) NO_x removal in general
 - 5) Performance and test
- j) **Coal gasification equipment**
 - 1) Types and models
 - 2) Structure
 - 3) Coal gasification in general
 - 4) Performance and test

4 Terms and definitions Terms and definitions shall be as follows.

Conventional expressions and equivalent English expressions are shown as reference.

- NOTES
- 1 In the Term fields, parenthesised parts of term may be omitted unless it is confusing.
 - 2 In the Reading fields, Roman characters show how to pronounce the Japanese terms.
 - 3 In case more than one term are shown in one Term field, terms shall be used by priority according to the order they are shown.
 - 4 In Conventional expression fields, descriptions in [] show the domain.

a) **Boiler**

1) **Types and models**

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1101	水管ボイラ	SUIKAN BOIRA	boiler of which heating surface consists of water tubes		water tube boiler
1102	自然循環ボイラ	SIZEN ZYUNKAN BOIRA	boiler in which boiler water circulates naturally by the density difference of steam in the boiler		natural circulation boiler
1103	強制循環ボイラ	KYÔSEI ZYUNKAN BOIRA	boiler in which boiler water is circulated forcibly by the pump		forced circulation boiler
1104	貫流ボイラ	KANRYÛ BOIRA	boiler in which water is fed into one end of the tube by the pump and steam is obtained from the other		once-through boiler
1105	廃熱ボイラ	HAINETU BOIRA	boiler which utilizes the waste heat of exhaust gas from the furnace or others	YONETU BOIRA	waste heat boiler
1106	排熱回収ボイラ	HAINETU KAISYÛ BOIRA	boiler which generates steam by recovering the heat of exhaust gas from the gas turbine	HAIGASU BOIRA	heat recovery steam generator, HRSG, exhaust gas boiler
1107	排気再燃ボイラ	HAIKI SAINEN BOIRA	boiler which utilizes exhaust gas from the gas turbine as combustion air		fully fired steam generator
1108	過給ボイラ	KAKYÛ BOIRA	boiler which increases the furnace pressure by supercharging air by operating the compressor by the gas turbine run on exhaust gas		supercharged boiler

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1109	石炭燃焼ボイラ	SEKITAN NENSYÔ BOIRA	boiler fired by coal NOTE: In case coal is used in “pulverized coal”, or in case “bagasse” or “bark” is used as the solid fuel, “coal” shall be substituted by these terms.	SEKITAN DAKI BOIRA, BOIRA, SEKITAN BOIRA	coal fired boiler
1110	重油燃焼ボイラ	ZYÛYU NENSYÔ BOIRA	boiler fired by fuel oil NOTE: In case “crude oil” or “asphalt” is used as liquid fuel, “fuel oil” shall be substituted by these terms.	ZYÛYU DAKI BOIRA, ZYÛYU BOIRA	oil fired boiler
1111	ガス燃焼ボイラ	GASU NENSYÔ BOIRA	boiler fired by gas	GASU DAKI BOIRA, GASU BOIRA	gas fired boiler
1112	回収ボイラ	KAISYÛ BOIRA	boiler which recovers reusable chemicals by firing and condensing the “drain (black liquor)” generated in the manufacture of craft pulp In this occasion, waste heat is also used.	SÔDA KAISYÛ BOIRA	chemical recovery boiler
1113	専焼ボイラ	SENSYÔ BOIRA	boiler which uses only one kind of fuel		single-fuel fired boiler
1114	混焼ボイラ	KONSYÔ BOIRA	boiler which uses more than one kind of fuel at the same time		multi-fuel fired boiler
1115	COM 燃焼ボイラ	KOMU-NENSYÔ BOIRA	boiler fired by COM, which is the liquefied mixture of pulverized coal and oil		COM ⁽¹⁾ fired boiler
1116	CWM 燃焼ボイラ	SÎDABURUEMU-NENSYÔ BOIRA	boiler fired by CWM, which is the liquefied mixture of pulverized coal and water		CWM ⁽²⁾ fired boiler
1117	超臨界圧ボイラ	TYÔ RINKAIATU BOIRA	boiler of which steam pressure exceeds the critical pressure		supercritical pressure boiler

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1118	超々臨界圧ボイラ	TYÔTYÔ RINKAIATU BOIRA	supercritical pressure boiler with particularly high steam pressure		ultra supercritical pressure boiler, advanced supercritical pressure boiler
1119	亜臨界圧ボイラ	A-RINKAIATU BOIRA	boiler of which steam pressure is not over but comparatively near to the critical pressure		subcritical pressure boiler
1120	ドラムボイラ	DORAMU BOIRA	boiler with a steam drum, such as the naturally or forcedly circulating boiler		drum boiler
1121	定圧運転ボイラ	TEIATU UNTEN BOIRA	boiler operated under the constant steam pressure at the turbine inlet for all loads		constant pressure operating boiler
1122	変圧運転ボイラ	HEN'ATU UNTEN BOIRA	boiler operated by varying steam pressure at the turbine inlet according to the load to improve thermal efficiency at partial load		variable pressure operating boiler, sliding pressure operating boiler
1123	所内ボイラ	SYONAI BOIRA	auxiliary boiler installed in power plants to supply steam for heating fuel oil at starting up power generating boilers	HOZO BOIRA	house boiler, auxiliary boiler
1124	流動層燃焼ボイラ	RYÛDÔSÔ NENSYÔ BOIRA	boiler in which fluidized bed combustion takes place	RYÛDÔSYÔ NENSYÔ BOIRA	fluidized bed combustion boiler
1125	常圧流動層ボイラ	ZYÔATU RYÛDÔSÔ BOIRA	boiler in which fluidized bed combustion takes place at the normal pressure in the furnace Generally, atmospheric fluidized bed combustion boiler is designated unless described as pressurized fluidized bed combustion boiler.	ZYÔATU RYÛDÔSYÔ BOIRA	atmospheric fluidized bed combustion boiler
1126	加圧流動層ボイラ	KAATU RYÛDÔSÔ BOIRA	boiler of which pressure in the furnace is increased by enclosing the furnace of the fluidized bed combustion boiler in a vessel	KAATU RYÛDÔSYÔ BOIRA	pressurized fluidized bed combustion boiler

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1127	気泡流動層ボイラ	KIHÔ RYÛDÔSÔ BOIRA	boiler in which bubbling fluidized bed combustion takes place	KIHÔ RYÛDÔSYÔ BOIRA, BIEHUBI	bubbling fluidized bed boiler
1128	循環流動層ボイラ	ZYUNKAN RYÛDÔSÔ BOIRA	boiler in which circulation fluidized bed combustion takes place	ZYUNKAN RYÛDÔSYÔ BOIRA, SÊHUBÎ	circulation fluidized bed boiler
1129	バイオマス燃焼ボイラ	BAIOMASU NENSYÔ BOIRA	boiler fired by biomass, which is the organic substance derived from animals and vegetables and can be used as the energy source		biomass fired boiler
1130	RDF 燃焼ボイラ	ÂRUDEEHU NENSYÔ BOIRA	boiler fired by RDF, i.e. fuel manufactured by crushing and drying common combustible refuse and mixing and hardening it with lime This includes fuel manufactured by solidifying plastics or plastics and used paper.		RDF ⁽³⁾ fired boiler
1131	ストーカ燃焼ボイラ	SUTÔKA NENSYÔ BOIRA	boiler in which stoker combustion takes place		stoker boiler

Notes ⁽¹⁾ Coal-oil mixture⁽²⁾ Coal-water mixture⁽³⁾ Refuse derived fuel

2) Structure

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1201	火炉	KARO	part of the boiler to fire the fuel	NENSYÔ SITU	furnace
1202	単一炉	TAN'ITU RO	type of furnace with one furnace per boiler	TANRO	single furnace
1203	双炉	SÔRO	type of furnace with two furnaces per boiler		twin furnace
1204	分割炉	BUNKATU RO	furnace which is almost perfectly divided by division wall	KAKUHEKI RO	divided furnace
1205	乾式炉	KANSIKI RO	furnace in the coal fired boiler from which ash is taken out in unmolten states		dry bottom furnace
1206	湿式炉	SISSIKI RO	furnace in the coal fired boiler from which ash is taken out in molten states This type of furnace includes two staged furnace and cyclone furnace.		wet bottom furnace, slag tap furnace, cyclone furnace
1207	主燃焼炉	SYU-NENSYÔ RO	furnace in the fluidized bed combustion boiler mainly to fire fuel		main bed cell
1208	再燃焼炉	SAI-NENSYÔ RO	furnace in the fluidized bed combustion boiler to fire unburned carbon collected by the dust collector		carbon burn-up cell
1209	炉壁	ROHEKI	wall which forms the furnace		furnace wall
1210	水冷壁	SUIREI HEKI	water tube wall arranged on the furnace wall to absorb radiated heat and reduce wall temperature		water wall
1211	蒸冷壁	ZYÔREI HEKI	steam tube wall which constitutes the furnace wall or the rear pass to reduce wall temperature		steam cooled wall
1212	耐火れんが壁	TAIKA RENG A HEKI	furnace wall formed by firebrick		firebrick wall

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1213	裸水管壁	RASUIKAN HEKI	furnace wall on which bare water tubes are arranged		bare tube wall
1214	スペースドチューブ壁	SUPÊSUDO TYÔBU HEKI	furnace wall on which water tubes or superheater tubes are arranged with a constant space to each other		spaced tube wall
1215	タンゼントチューブ壁	TANZENTO TYÔBU HEKI	furnace wall on which water tubes or superheater tubes are arranged in close contact with each other		tangent tube wall
1216	垂直管火炬壁	SUITYOKU KAN KARO HEKI	furnace wall consisting of vertical tubes		vertical tube wall
1217	スパイラルチューブ壁	SUPAIRARU TYÔBU HEKI	furnace wall with helical structure on which water tubes or superheater tubes are arranged with a constant space or in close contact with each other	HERIKARU TYÔBU HEKI, SUPAIRARI WAUNDO HEKI	spiral tube wall
1218	板状溶接壁	ITAZYÔ YÔSETU HEKI	tube wall of welded fine tubes or bare tubes to keep airtightness		membrane wall, panel wall, mono-wall, welded wall
1219	火炉分割壁	KARO BUNKATU HEKI	dividing wall in the form of a vertical plate consisting of continuous water tubes or superheater tubes from the bottom to the top of the furnace	KARO KAKUHEKI	division wall, center wall
1220	ノーズ	NÔZU	projected wall provided on the upper part of the furnace to deflect the firing gas	DEHUREKUSYON ÂTI	nose, deflection arch
1221	アーチ	ÂTI	arched structure used in the furnace of the stoker boiler to promote fuel ignition and combustion		arch

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1222	炉底	ROTEI	bottom part of the furnace		furnace bottom
1223	蒸気ドラム	ZYÔKI DORAMU	drum provided in the upper part of the boiler to separate and extract steam from water	KISUIDÔ, KISUI DORAMU	steam drum
1224	水ドラム	MIZU DORAMU	drum provided on the lower part of the boiler to distribute water	SUIDÔ	water drum
1225	管板	KANBAN, KUDAITA	plate to mount many tubes by welding or roller spreading		tube plate
1226	胴板	DÔBAN	plate which constitutes the shell of drum		shell plate
1227	鏡板	KYÔBAN	dish-shaped plate which constitutes both ends of drum		end plate
1228	ドラム内部装置	DORAMU NAIBU SÔTI	generic name for equipment installed in the steam drum		drum internals
1229	給水内管	KYÛSUI NAIKAN	water feed pipe installed in the steam drum		internal feed pipe (in drum)
1230	ドラム水面計	DORAMU SUIMEN KEI	gauge to monitor water level in the steam drum This includes polarization 2-colour level gauge and magnetic 2-colour level gauge.		drum water level gauge
1231	気水分離器	KISUI BUNRIKI	equipment to separate steam and water from the mixture		steam separator, water separator
1232	気水分離器ドレン タンク	KISUI BUNRIKI DOREN TANKU	vessel in the once-through boiler to store water (drain) separated by the steam separator		separator drain tank
1233	遠心式気水分離器	ENSIN-SIKI KISUI BUNRIKI	steam separator which uses centrifugal force generated by rotating the water-steam mixture		cyclone separator, turbo separator

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1234	反転式気水分離器	HANTEN-SIKI KISUI BUNRIKI	steam separator which rapidly changes the direction of movement of the water-steam mixture by baffle plates		baffle plate type separator
1235	スクラバ	SUKURABA	equipment consisting of layered corrugated plates which eliminate moisture in the steam passed between them	DORAIYA	scrubber, dryer
1236	デミスタ	DEMISUTA	equipment consisting of layered meshed nets which eliminate moisture in the steam passed between them		demister
1237	管寄せ	KAN'YOSE, KUDAYOSE	container to concentrate or distribute tubes	HEDDA	header
1238	混合管寄せ	KONGÔ KAN'YOSE	header to mix feed water, boiler water or steam		mixing header
1239	分配管寄せ	BUNPAI KAN'YOSE	header to distribute feed water, boiler water or steam		distribution header
1240	マニホールド	MANIHÔRUDO	container to concentrate or distribute connecting pipes with relatively small diameters		manifold
1241	アンチクリンカ ボックス	ANTI KURINKA BOKKUSU	header for cooling in coal fired boilers to prevent attachment of clinkers on both sides of the stoker		anti-clinker box
1242	管台	KANDAI	short tube provided in drum, header or piping to mount valves or branch tubes		nozzle stub
1243	点検ニップル	TENKEN NIPPURU	short tube provided in drum or header for monitoring		inspection nipple
1244	検査穴	KENSA ANA	hole for inspecting the inside of the header		inspection hole
1245	蒸発器	ZYÔHATUKI	equipment to evaporate water		evaporator

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1246	火炉再循環管	KARO SAIZYUNKAN KAN	pipe in the once-through boilers used for recirculating the water of the evaporator at start-up and low load conditions		recirculation pipe
1247	スラグスクリーン	SURAGU SUKURĪN	pipe group arranged with wide spacing to lower the temperature of furnace outlet gas to the appropriate value and to solidify molten ash		slag screen
1248	上昇管	ZYÔSYÔ KAN	tube through which the water-steam mixture rises		riser tube
1249	下降管	KAKÔ KAN	tube through which the boiler water flows down	KÔSUI KAN	down comer
1250	支持管	SIZI KAN	tube to sustain the tube group		hanger tube, sling tube
1251	飽和蒸気管	HÔWA ZYÔKI KAN	pipe to extract saturated steam from steam drum		saturated steam pipe
1252	連絡管	RENRAKU KAN	pipe to connect various parts		connecting pipe
1253	フィンチューブ	HIN TYÛBU	tube with fins NOTE: Shapes of fin include planar, flanged and helical shapes.		finned tube
1254	スタッドチューブ	SUTADDO TYÛBU	tube with studs		stud tube
1255	リブドチューブ	RIBUDO TYÛBU	tube with internal helical or flanged shape grooves	RAIHURU TYÛBU	ribbed tube, rifled tube
1256	コンボジットチューブ	KONPOZITTO TYÛBU	tube made of two kinds of different metals metallurgically jointed and in full contact	MITTYAKU NIZYÛ KAN	composite tube
1257	後部伝熱面	KÔBU DENNETSU MEN	heating surface placed downstream of the furnace		heat recovery area

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1258	過熱器	KANETUKI	equipment to superheat the steam		superheater
1259	接触過熱器	SESSYOKU KANETUKI	superheater using mainly convection heating	TAIRYŪ KANETUKI	convection superheater
1260	放射過熱器	HŌSYA KANETUKI	superheater using mainly radiation heating		radiant superheater
1261	横置き過熱器	YOKOOKI KANETUKI	superheater formed by horizontal loop tubes		horizontal superheater
1262	つり下げ過熱器	TURISAGE KANETUKI	superheater suspended from the boiler ceiling		pendant superheater
1263	板形過熱器	ITAGATA KANETUKI	superheater installed in the furnace consisting of tubes arranged in a planar shape		platen superheater
1264	再熱器	SAINETUKI	equipment to superheat again the high or medium pressure exhaust gas from turbine This includes one-staged and two-staged re-heat systems. NOTE: Types and structures are equivalent to the superheater.		reheater
1265	スペーサ	SUPĒSA	spacing piece used to maintain a constant spacing between water tubes	DESUTANSU PĪSU	spacer
1266	プロテクタ	PUROTEKUTA	protecting plate or tube installed against tube abrasion by ash cutting or corrosion of furnace bottom tubes by splash of ocean water		protector
1267	過熱低減器	KANETU TEIGENKI	equipment to reduce and adjust the temperature of superheated steam	GEN'ONKI, DESŪPAHĪTA	desuperheater, attenuator
1268	スプレー式過熱低減器	SUPURĒSIKI KANETU TEIGENKI	equipment to reduce and adjust the temperature of superheated steam by spraying feed water		spray type desuperheater, spray type attenuator

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1269	表面冷却式過熱低減器	HYÔMEN REIKYAKUSIKI KANETU TEIGENKI	equipment to reduce and adjust the temperature of superheated steam by heat exchange between superheated steam and feed water via cooling tubes		surface type desuperheater, surface type attenuator
1270	スプレーノズル	SUPURÊ NOZURU	nozzle to spray feed water into superheated steam to reduce and adjust the steam temperature		spray nozzle
1271	ボイラ鉄骨	BOIRA TEKKOTU	steel beam to support boilers		boiler structural steel
1272	(ボイラ)ケーシング	(BOIRA) KÊSINGU	steel plate to cover the boiler wall		casing
1273	アウトケーシング	AUTÂ KÊSINGU	casing provided at the outermost of the boiler wall		outer casing
1274	インナーケーシング	INNÂ KÊSINGU	casing provided at the inside of the boiler wall		inner casing
1275	スキンケーシング	SUKIN KÊSINGU	casing closely attached to the rear of the furnace tubes to keep airtightness		skin casing
1276	バックステー	BAKKU SUTÊ	beam to ensure strength required by the furnace wall such as to withstand furnace pressure, as well as to transfer horizontal force such as seismic force to the steel beam of the boiler		buck stay
1277	テンションプレート	TENSYON PURÊTO	plate installed around the water wall to ensure strength required by the furnace wall such as to withstand furnace pressure	TENSYON MENBA, TAI PURÊTO	tension plate, tension bar, tie plate
1278	振れ止め装置	HUREDOME SÔTI	equipment to prevent rolling of the boiler caused by such as seismic	ZISIN UKE KANAGU	seismic tie, seismic damper

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1279	安全弁	ANZEN BEN	valve installed in drum, superheater or reheater which discharges steam to avoid danger when the pressure has risen above the specified value, and closes again when the pressure has lowered below the specified value		safety valve
1280	電気式逃し弁	DENKISIKI NOGASIBEN	relief valve which discharges steam automatically by the action of electromagnetic pilot valve to prevent excessive rise of boiler pressure	PÎSÎBUI	power control valve, electric relief valve, power actuated relief valve
1281	ボイラ循環弁	BOIRA ZYUNKAN BEN	valve used in the recirculating system of boiler water		recirculation valve
1282	のぞき窓	NOZOKI MADO	window provided on the outer wall of the boiler for monitoring of combustion or inspection of the inside	PÎPU HÔRU	inspection hole, observation hole
1283	爆発戸	BAKUHAU DO	safety door to release internal gas pressure when a furnace explosion occurred	BAKUHAU TOBIRA	explosion door
1284	後部煙道	KÔBU ENDÔ	pass for combustion gas after going out of the furnace		rear pass, secondary pass
1285	セル	SERU	small chamber in fluidized bed boiler separated by partition boards and where gas can pass individually on fluidized bed		cell
1286	散気管	SANKI KAN	pipe in fluidized bed boilers to inject air into the fluidized bed		sparge pipe
1287	フリーボード	HURÎ BÔDO	part of fluidized bed combustion boilers, i.e. upper space over the fluidized bed		free board
1288	層内伝熱面	SÔNAI DENNETU MEN	heating surface provided in the fluidized bed		immersed heating surface

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1289	空気分散板	KŪKI BUNSAN BAN	flat plate in fluidized bed combustion boilers on which many air nozzles are provided to inject fluidized bed air uniformly into the bed		air distributor
1290	ベッド材抽出管	BEDDOZAI NUKIDASI KAN	pipe in fluidized bed boilers to extract bed material from the fluidized bed		bed material extraction pipe
1291	ベッド材供給管	BEDDOZAI KYŌKYŪ KAN	pipe in fluidized bed boilers to inject bed material into the fluidized bed		bed material injection pipe
1292	ベッド材貯蔵バンク	BEDDOZAI TYOZŌ BANKA	vessel in atmospheric fluidized bed combustion boilers to store bed material		bed material storage bunker
1293	ベッド材貯蔵タンク	BEDDOZAI TYOZŌ TANKU	vessel in pressurized fluidized bed combustion boilers to store bed material		bed material storage tank

3) Auxiliary equipment

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1301	エコノマイザ, 節炭器	EKONOMAIZA, SETTANKI	feed water heater using combustion gas of boilers		economizer
1302	蒸発式エコノマイザ, 蒸発式節炭器	ZYŌHATU-SIKI EKONOMAIZA, ZYŌHATU-SIKI SETTANKI	economizer in which a part of feed water evaporates		steaming economizer
1303	ひれ付きエコノマイザ, ひれ付き節炭器	HIRETUKI EKONOMAIZA, HIRETUKI SETTANKI	economizer consisting of tubes with flanged or plate-type fins		finned tube economizer, gilled ring type economizer

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1304	鋼管形エコノマイザ, 鋼管形節炭器	KÔKANGATA EKONOMAIZA, KÔKANGATA SETTANKI	economizer consisting of steel tubes such as continuous loop tubes and continuous tubes		steel tube economizer
1305	アデシヨナルヒータ	AZISYONARU HÎTA	heat exchanger which recovers heat at the start-up and the low load condition	ENDÔ ZYÔHATUKI	additional heater
1306	空気予熱器	KÛKI YONETUKI	equipment to heat air for combustion	EA HÎTA	air preheater
1307	鋼管式空気予熱器	KÔKAN-SIKI KÛKI YONETUKI	air preheater which exchanges heat between combustion gas and air via tube walls		tubular air preheater
1308	板形空気予熱器	ITAGATA KÛKI YONETUKI	air preheater which consists of many flat plates with a constant spacing and exchanges heat by passing combustion gas and air in layers on the other side of the plates		plate air preheater
1309	再生式空気予熱器	SAISEI-SIKI KÛKI YONETUKI	air preheater which exchanges heat by bringing combustion gas and air into contact with the heating body alternately		regenerative air preheater
1310	蒸気式空気予熱器	ZYÔKI-SIKI KÛKI YONETUKI	air preheater which heats air by steam	SUTÎMU EA HÎTA	steam air preheater
1311	ガス式給水加熱器	GASU-SIKI KYÛSUI KANETUKI	heat exchanger which heats feed water at the economizer inlet by exhaust gas of boilers		exhaust gas feed water heater
1312	加熱エレメント	KANETU EREMENTO	parts such as corrugated plates in regenerative air preheaters where heating takes place		heating element
1313	バスケット	BASUKETTO	case containing a group of heating elements in regenerative air preheater		basket
1314	起動用熱風炉	KIDÔYÔ NEPPÛRO	high-temperature gas generator used to start up fluidized bed combustion boilers		hot gas generator

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1315	スートブロワ	SŪTO BUROWA	equipment to remove soot or slag adhered to heating surfaces by spraying steam or air	SUSU HUKIKI, SŪTU BUROWA	soot blower
1316	デスラッグ	DESURAGGA	soot blower to remove soot or slag adhered to the furnace wall	TAN-NUKISASI SŪTO BUROWA	wall deslagger, wall blower
1317	ガンタイブスート ブロワ	GAN TAIPU SŪTO BUROWA	soot blower to remove ash adhered to heating surfaces using short spray tubes In most cases, spray tubes can be retracted to outside of the wall to protect them from hot gas when not used.		gun type soot blower
1318	ロータリスート ブロワ	RŌTARI SŪTO BUROWA	soot blower to remove soot by rotating a long spray tube	TEITI KAITEN-SIKI SŪTO BUROWA	rotary soot blower
1319	レトラクタブル スートブロワ	RETORAKUTABURU SŪTO BUROWA	soot blower to be used in hot gas zones of boiler NOTE: To protect spray tubes from hot gas, they can be retracted.	TYŌ-NUKISASI SŪTO BUROWA	retractable soot blower
1320	スートブロワ盤	SŪTO BUROWA BAN	panel to remotely control soot blowers		soot blower control panel
1321	火炉出口ガス温度 計	KARO DEGUTI GASU ONDOKEI	equipment to measure gas temperature at the furnace outlet to protect reheaters		furnace temperature probe
1322	ボイラ循環ポンプ	BOIRA ZYUNKAN PONPU	pump used to recirculate the boiler water	KANSUI ZYUNKAN PONPU	boiler circulation pump, boiler water circulation pump
1323	ボイラ自動制御装 置	BOIRA ZIDŌ SEIGYO SŌTI	equipment to control boilers automatically	ÊBĪSĪ	automatic boiler control system
1324	燃焼制御装置	NENSYŌ SEIGYO SŌTI	equipment to control the amount of fuel and air fed to boilers and keep optimal air ratio		automatic combustion control system

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1325	給水制御装置	KYŪSUI SEIGYO SÔTI	equipment to control the amount of feed water to boilers		feed water control system
1326	蒸気温度制御装置	ZYÔKI ONDO SEIGYO SÔTI	equipment to control the superheated and reheated steam temperature of boilers		steam temperature control system
1327	炉内圧力制御装置	RONAI ATURYOKU SEIGYO SÔTI	equipment to control the pressure in the furnace of boilers		furnace pressure (draft) control system
1328	空気予熱器低温度メタル温度制御装置	KŪKI YONETUKI TEIONTAN METARU ONDO SEIGYO SÔTI	equipment to control the temperature of heating metals in cold zones of air preheaters to a specified value		air heater coldend metal temperature control system
1329	ボイラ保護インターロック装置	BOIRA HOGO INTAROKKU SÔTI	equipment to shut off the fuel to the furnace automatically to prevent serious damage of boilers		boiler protection interlock system
1330	ボイラ制御盤	BOIRA SEIGYOBAN	panel to control totally, operate and monitor various equipment of boiler	BOIRABAN	boiler control panel
1331	計器盤	KEIKIBAN	panel on which mainly instruments are mounted		instrument panel
1332	現場盤	GENBABAN	panel installed on the locale to control, operate and monitor	GENTIBAN	local panel
1333	薬液注入装置	YAKUEKI TYŪNYŪ SÔTI	equipment to inject solution of chemical agents into condensed water, feed water or boiler water, in order to keep the water quality in the appropriate condition	YAKUTYŪ SÔTI	chemical dosing equipment
1334	試料採取装置	SIRYÔ SAISYU SÔTI	equipment to collect samples to measure the impurities contained in feed water, boiler water or steam		sampling equipment

4) Boilers in general

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1401	最高使用圧力	SAIKÔ SIYÔ ATURYOKU	maximum working pressure allowed by the design		maximum allowable working pressure
1402	最高使用温度	SAIKÔ SIYÔ ONDO	maximum working temperature allowed by the design		maximum allowable working temperature
1403	伝熱面	DENNETU MEN	surface of which one side touches the fluid to be heated such as water and steam, and of which the other side touches the heating fluid such as combustion gas		heating surface
1404	蒸発伝熱面	ZYÔHATU DENNETU MEN	heating surface where evaporation takes place	KANETU MEN	evaporating heating surface
1405	過熱伝熱面	KANETU DENNETU MEN	heating surface where superheating of steam takes place		superheating surface
1406	放射伝熱面	HÔSYA DENNETU MEN	heating surface based on mainly the radiation heat from such as flame and grate		radiation heating surface
1407	接触伝熱面	SESSYOKU DENNETU MEN	heating surface based on mainly contact with combustion gas	TAIRYŪ DENNETU MEN	convection heating surface
1408	伝熱面積	DENNETU MENSEKI	area of heating surface measured at the side of heating fluid such as combustion gas		heating surface area
1409	火炉容積	KARO YÔSEKI	internal volume of the furnace		furnace volume
1410	火炉有効投影放射面積	KARO YŪKÔ TÔEI HÔSYA MENSEKI	projected area assumed to be effective for radiation heating on each surface constituting the furnace	ÎPÎARUESU	effective projected radiant surface
1411	ボイラ水循環	BOIRASUI ZYUNKAN	water circulation in boilers by the density difference in the steam in the boiler or by the circulating pump		boiler water circulation

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1412	自然循環	SIZEN ZYUNKAN	natural water circulation in boilers by the density difference in the steam in the boiler		natural circulation
1413	強制循環	KYÔSEI ZYUNKAN	forced water circulation in boilers by the circulating pump		forced circulation
1414	循環比	ZYUNKANHI	mass ratio of the inflow at the inlet of the evaporation tube to the generated steam at the outlet		circulation ratio
1415	循環速度	ZYUNKAN SOKUDO	velocity of boiler water to circulate NOTE: Normally denoted by the velocity at the inlet of evaporation tube.		circulation velocity
1416	蒸気体積率	ZYÔKI TAISEKI RITU	volume ratio between steam and steam-water mixture existing in the evaporation tube	BOIDO RITU	void fraction
1417	蒸気質量率	ZYÔKI SITURYÔ RITU	mass ratio between steam and steam-water mixture existing in the evaporation tube	KUORITI	quality, dryness fraction
1418	自己蒸発	ZIKO ZYÔHATU	phenomenon where a part of retained water evaporates when the boiler pressure has dropped		self-evaporation
1419	ボイラ水ブロー	BOIRASUI BURÔ	to discharge all or a part of the boiler water to control the concentration of boiler water or to repair the boiler		blow off, blow off of boiler water
1420	連続ブロー	RENZOKU BURÔ	to blow the boiler water in the steam drum continuously to control the concentration of boiler water		continuous blow down
1421	間欠ブロー	KANKETU BURÔ	to blow the boiler water intermittently to control the concentration of boiler water		periodic blow down, intermittent blow down
1422	ドレン	DOREN	condensed water from steam by the temperature drop of steam tubes		drain

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1423	満水保缶	MANSUI HOKAN	a method of storage where boilers are filled with alkaline and deaerated water while they are turned off in order to prevent corrosion	MANSUI HOZON	wet lay up
1424	乾燥保缶	KANSÔ HOKAN	a method of storage where boilers are evacuated and charged with nitrogen or supplied with desiccant such as silica gel in order to prevent corrosion	KANSÔ HOZON	dry lay up
1425	ホットバンキング	HOTTO BANKINGU	to keep cooling down of boilers minimal by such as closing dampers in gas duct and air duct, in preparation to next start-up	KYÛSOKU REIKYAKU	hot banking
1426	強制冷却	KYÔSEI REIKYAKU	to cool boilers forcibly and stop them		quick cooling, forced cooling
1427	クリーンアップ	KURÛN APPU	to eliminate impurities such as iron to improve water quality in once-through boilers, by discharging water within the system including feed water and condensed water to outside of the system or by circulating it through desalination equipment This includes cold clean up (before ignition) and hot clean up (after ignition).		clean up
1428	炉内パージ	RONAI PÂZI	to purge the furnace just before ignition or just after extinction in order to prevent furnace explosions caused by residual unburned gas or leaked fuel		furnace purge
1429	乾燥だき	KANSÔ DAKI	to heat and dry boilers gradually after construction or repair in order not to generate cracks in the furnace material		furnace drying

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1430	アッシュカッティング	ASSYU KATTINGU	phenomenon in pulverized coal firing boilers where convection heating tubes suffer abrasions by the ash when combustion gas velocity exceeds a certain value	ASSYU ERÔZYON	ash cutting, ash erosion
1431	スチームカッティング	SUTÎMU KATTINGU	phenomenon where heating tubes suffer abrasions by the sprayed steam from steam soot blowers, drain or the blowout steam from defected tubes		steam cutting
1432	スラッキング	SURAGGINGU	adhesion of combustion products to heating surfaces of boilers subjected to radiation heat		slagging
1433	ファウリング	HAURINGU	phenomenon where the outer surfaces of the convection heating tubes of boilers are contaminated by combustion products		fouling
1434	デポジット	DEPOZITTO	impurities or combustion products which have adhered to inner or outer heating surfaces and developed		deposit
1435	バードネスト	BÂDO NESUTO	phenomenon where the ash generated on the stoker or in pulverized coal firing adheres to heating surfaces in molten state and looks like a bird nest		bird nest
1436	ボイラ水濃度	BOIRASUI NÔDO	value designating the concentration ratio of boiler water (see JIS B 8223)	KANSUI NÔDO	concentration of boiler water

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1437	蒸気純度	ZYŌKI ZYUNDO	concentration of impurities contained in the generated steam NOTE: Normally expressed in unit mg/L or µg/L. However, in actual monitoring of operation, this is often estimated by electric conductivity for the convenience of measurement.		steam purity
1438	キャリオオーバー	KYARIŌBA	phenomenon where salts dissolved in boiler water and fluid are carried out accompanying the generated steam	KISUI KYŌHATU, HIMATU DŌHAN	carryover
1439	ブライミング	PURAIMINGU	phenomenon where moisture is discharged from the drum without being separated from steam, by such as the sudden increase of boiler load or abnormal rise of drum water level	MIZUKE DATI	priming
1440	フォーミング	HŌMINGU	phenomenon where a large amount of foam is generated on the water surface of the drum by fat and oil, dissolved salts and suspended matters in the boiler water	AWADATI	foaming
1441	スケール	SUKĒRU	impurities in the boiler water which are deposited and are adhered solidly to the inner wall of drums and tubes		scale
1442	スラッジ	SURAZZI	impurities in the boiler water precipitated to the bottoms of drums and headers		sludge
1443	孔食, ピッチング	KŌSYOKU, PITTINGU	one type of local corrosion of metal NOTE: This occurs scatteredly in pits.	TENSYOKU	pitting
1444	か性ぜい化	KASEI ZEIKA	stress corrosion cracking caused by high alkali concentration		caustic embrittlement

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1445	水素ぜい化	SUIISO ZEIIKA	phenomenon where the hydrogen, which is generated when steam comes in contact with steel pipes under high temperature and high pressure, and the carbon in the steel pipe material react to generate methane, and this methane gradually intrudes into the grain boundaries and generates corrosion similar to alkali corrosion or caustic embrittlement (intergranular corrosion or stress corrosion cracking)		hydrogen embrittlement
1446	応力腐食割れ	ÔRYOKU HUSYOKU WARE	phenomenon where metals subjected to tensile stress are remarkably embrittled and deformed under the influence of corrosive environment	ESUSISŌ	stress corrosion cracking
1447	アルカリ洗浄	ARUKARI SENZYÔ	to pour alkaline chemicals and surface-active agents into boiler or piping system and to circulate them at the appropriate temperature in order to remove fat and oil and silica adhering to the inside	SÔDANI	alkali cleaning
1448	酸洗い	SAN'ARAI	to circulate acidic solution containing oxidation retardant in boilers at the appropriate temperature in order to remove scales inside	SAN'ARAI	acid cleaning
1449	ハイドアウト	HAIDO AUTO	phenomenon which occurs in high pressure boilers when sodium phosphate is used for the boiler water treatment, where the concentration of phosphoric salt in boiler water drops as the load increases and rises suddenly as the load decreases		hide-out phenomena
1450	アルカリ腐食	ARUKARI HUSYOKU	corrosion caused by high concentration of alkali		alkali corrosion, caustic attack

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1451	水蒸気酸化腐食	SUIZYÓKI SANKA HUSYOKU	phenomenon where oxidized scale is generated by superheated steam at the inner surface of superheater and reheater pipes of stainless steel or low alloy steel		steam oxidation
1452	高温腐食	KÔON HUSYOKU	phenomenon where vanadium in the oil, sodium and potassium in coal generate chemical compound of comparatively low melting point during combustion, which adheres to hot heating surfaces such as superheater and reheater pipe wall and is deposited and corrodes metals	[ABURA] BANAZIUMU ATAKKU, [SEKITAN] ARUKARI RYÔSAN'EN HUSYOKU	high temperature corrosion
1453	低温腐食	TEION HUSYOKU	phenomenon where sulfur trioxide (SO ₃) in exhaust gas reacts with steam to generate sulfuric acid (vapour) and solidifies on the metal surface below the dew point and corrodes it	RYÔSAN HUSYOKU	low temperature corrosion
1454	硫酸水素アンモニウム閉そく	RYÔSAN SUISO ANMONIUMU HEISOKU	phenomenon caused when ammonium is injected as the neutralizing agent against low temperature corrosion and as the reducing agent for denitration reaction, where ammonium hydrogen sulphate and ammonium sulphate are deposited in the air preheater and cause blockage	SANSEI RYÔAN HEISOKU	ammonium hydrogen fouling
1455	自動プラント制御	ZIDÔ PURANTO SEIGYO	method to control overall plant cooperatively	ÊPÎSÎ	automatic plant control
1456	ランピング	RANPINGU	operation to switch water/steam flow to once-through system when starting once-through boiler		ramping

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1457	デランピング	DERANPINGU	operation to switch water/steam flow from once-through system to starting system when stopping once-through boiler		deramping
1458	炉内足場	RONAI ASIBA	scaffold installed temporarily in the furnace for its maintenance This includes those built up from the furnace bottom and those suspended from the ceiling.		furnace scaffold
1459	フレキシブル対策	HUREKISIBURU TAISAKU	measures to improve flexibility of header and nozzle stub in order to reduce heat stress generated in them		—
1460	溶射	YÔSYA	to spray abrasion resistant (corrosion resistant) material on the boiler tube surfaces to prevent abrasion (or corrosion)		thermal spray

5) Performance and test

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1501	最大連続蒸発量	SAIDAI RENZOKU ZYÔHATURYÔ	maximum amount of evaporation per hour for the boiler to generate continuously	SAIDAI RENZOKU HUKA, EMUSÎARU	maximum continuous rating
1502	経済負荷	KEIZAI HUKA	load designed to be most economical in power generating plant Generally, rated turbine load is intended to be the economical continuous rating.	ÎSÎARU	economical continuous rating

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1503	換算蒸発量	KANSAN ZYÔHATURYÔ	evaporation volume converted by a fixed reference when comparing boiler volumes of different evaporation pressures and temperatures	SÔTÔ ZYÔHATURYÔ, KIZYUN ZYÔHATURYÔ	equivalent evaporation
1504	ボイラ効率	BOIRA KÔRITU	ratio of amount of heat effectively used in the boiler to that supplied to the boiler		boiler efficiency
1505	ボイラ室効率	BOIRA SITU KÔRITU	ratio of amount of heat effectively used in the turbine in relation to that supplied to the boiler This is identical with the boiler efficiency minus radiation loss of main steam pipe and reheat pipe.		effective boiler efficiency at terminal
1506	ボイラ熱勘定	BOIRA NETU KANZYÔ	amount of heat balance between input and output (absorbed heat and heat loss) of boilers (see JIS B 8222)		boiler heat balance
1507	乾き排ガス損失	KAWAKI HAIGASU SONSITU	heat loss due to the sensible heat of dry gas exhausted to the chimney		heat loss due to dry gas
1508	排ガス水蒸気損失	HAIGASU SUIZYÔKI SONSITU	heat loss due to the amount of heat removed by moisture in exhaust gas On low calorific power base, this includes only the sensible heat of moisture, but on high calorific power base, this includes also the evaporation heat of steam.	SITUBUN SONSITU, SUIBUN SONSITU	heat loss due to moisture in exhaust gas
1509	不完全燃焼ガス損失	HUKANZEN NENSYÔ GASU SONSITU	heat loss due to combustible components (e.g. carbon monoxide and hydrogen) in the combustion gas by incomplete combustion		heat loss due to unburned gas
1510	未燃分損失	MINEN BUN SONSITU	heat loss due to unburned combustible contents in residues and fly ash		heat loss due to combustible in refuse

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1511	放散熱損失	HÔSAN NETU SONSITU	heat loss radiated to ambient air from boiler wall		heat loss due to radiation
1512	未動定損失	MIKANZYÔ SONSITU	heat loss due to difficulty or error of measurement	SONOTANO SONSITU	unmeasured loss, residual loss
1513	伝熱面蒸発率	DENNETUMEN ZYÔHATU RITU	amount of evaporation per hour per unit evaporating heating surface area		evaporation rate of heating surface
1514	伝熱面熱負荷	DENNETUMEN NETU HUKA	amount of transferred heat per hour per unit heating surface area	DENNETUMEN NETURYÛ SOKU	heat flux of heating surface
1515	火炉伝熱面熱負荷	KARO DENNETUMEN NETU HUKA	total amount of heat applied to furnace per hour per unit heating surface area of furnace (calorific value of fuel and amount of heat held by combustion air and recirculating gas)		furnace surface liberation rate, net heat release rate
1516	バーナゾーン熱負荷	BÂNA ZÔN NETU HUKA	total amount of heat transferred to furnace per hour per unit effective flame cooling heating surface of burner zone of the furnace (calorific value of fuel and amount of heat held by combustion air and recirculating gas)		burner zone liberation rate
1517	火炉断面熱負荷	KARO DANMEN NETU HUKA	total amount of heat transferred to furnace per hour per cross section area of the furnace (calorific value of fuel and amount of heat held by combustion air and recirculating gas)		furnace cross section liberation rate
1518	火炉熱負荷	KARO NETU HUKA	total amount of heat transferred to furnace per hour per unit volume of furnace (calorific value of fuel and amount of heat held by combustion air and recirculating gas)	KARO HUKA, NENSYÔSITU NETU HASSEI RITU	furnace liberation rate, (furnace volumetric liberation rate), combustion rate
1519	空気予熱器空気漏えい率	KÛKI YONETUKI KÛKI RÔEI RITU	ratio of air leakage to the gas side in air pre-heaters		air leakage ratio

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1520	水圧試験	SUIATU SIKEN	test conducted by applying hydrostatic pressure to pressure parts of boiler and auxiliary equipment		hydrostatic test, hydrostatic pressure test
1521	空気漏れ試験	KÛKIMORE SIKEN	test conducted after installation in which air pressure is applied to check gas leakage from boiler casing	KIMITU SIKEN	air leak test
1522	水張り試験	MIZUHARI SIKEN	test conducted by filling water in pressure vessels to check leakage		leak test by filling water
1523	安全弁作動試験	ANZENBEN SADÔ SIKEN	test to confirm that the safety valve of boiler works in accordance with regulations such as the technical standard for thermal power plants and other regulations		safety valve operation test, popping test of safety valve
1524	安全弁油圧作動試験	ANZENBEN YUATU SADÔ SIKEN	test to confirm the operation of safety valve which is conducted by keeping steam pressure below the working pressure of the safety valve, and by pulling up the valve shaft by hydraulic jack to confirm the popping to obtain popping pressure of the safety valve from the force required to pull up the valve shaft and the steam pressure at that time		hydraulic action test
1525	安全弁設定値	ANZENBEN SETTEITI	set-up values of pressure for the safety valve to start and stop popping in accordance with standards and regulations		set pressure of safety valve
1526	安全弁吹出し圧力	ANZENBEN HUKIDASI ATURYOKU	pressure where safety valve starts popping		popping pressure of safety valve

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
1527	安全弁吹下がり圧力	ANZENBEN HUKISAGARI ATURYOKU	difference between pressures where the safety valve starts or stops popping Otherwise, the pressure difference expressed in percent figure in relation to the popping pressure of the safety valve.		blowdown pressure of safety valve
1528	安全弁吹止まり圧力	ANZENBEN HUKIDOMARI ATURYOKU	pressure where the safety valve stops popping		popping stop pressure of safety valve
1529	負荷試験	HUKA SIKEN	test to confirm that the boiler and auxiliary equipment have the specified capacity for various load		load test
1530	性能試験	SEINÔ SIKEN	test to confirm that the boiler has the specified efficiency and other performances		performance test
1531	負荷変動試験	HUKA HENDÔ SIKEN	test to check the performance of boiler to follow load fluctuation or continued fluctuation		load change test
1532	ボイラ動特性試験	BOIRA DÔTOKUSEI SIKEN	test to check transient response of boiler itself from the controlling viewpoint		boiler dynamic response test

b) Firing equipment

1) Types and models

No.	Term (Japanese character)	Reading	Definition	Informative	
				Conventional expression	English equivalent
2101	石炭燃焼装置	SEKITAN NENSYÔ SÔTI	equipment to fire coals NOTE: In case “bagasse” or “bark” is used as the solid fuel, “coals” shall be substituted by these terms.		coal firing equipment
2102	火格子燃焼装置	HIGÔSI NENSYÔ SÔTI	equipment to fire fuel using stokers		stoker firing equipment
2103	微粉炭燃焼装置	BIHUNTAN NENSYÔ SÔTI	equipment to pulverize coals and feed them to burners and fire them		pulverized coal firing equipment
2104	乾式燃焼方式	KANSIKI NENSYÔ HÔSIKI	firing system in coal firing boilers to fire fuel so that ash is taken out in unmolten states	DORAI HOPPA BOTOMU	dry bottom firing system
2105	湿式燃焼方式	SISSIKI NENSYÔ HÔSIKI	firing system in coal firing boilers to fire fuel so that ash is taken out in molten states This includes cyclone firing system and two staged combustion system.	SURAGU TAPPU	slag tap firing system
2106	直接燃焼式	TYOKUSETU NENSYÔSIKI	system where each boiler has the attached coal pulverizer and pulverized coals are sent directly to burners		direct fired system
2107	単位貯蔵式	TAN'I TYOZÔSIKI	system where each boiler has attached coal pulverizer and pulverized coals are once stored in the storage tank and then sent to burners		semi bin system
2108	中央貯蔵式	TYÛÔ TYOZÔSIKI	system where more than one boiler have a common coal pulverizer and pulverized coals are once stored in the storage tank and then sent to burners		central bin system