



# **MK** **ELECTRIC** **BOILER**

756 Gyeongsu-road, Jangan-gu, Suwon City, Gyeonggi-do. R. O. KOREA

Tel. 1600-1126 Fax. 82-31-225-1217

Web. [www.mkboiler.com](http://www.mkboiler.com)

E-mail. [dsegs1211@mkboiler.com](mailto:dsegs1211@mkboiler.com)





Electric  
Boiler

## HISTORY

- 1973. Boiler coal production
- 1987. Production of oil-fired boilers
- 1995. Electric Steam Boiler research and development
- 1999. Electrical Appliance type approval (steam boiler)
- 2000. Midnight electric boiler produce
- 2001. Production of negative ions far infrared heater
- 2004. 01. Industrial electric boilers produce (small, medium)
- 2005. 05. Dongsung Energy.Co.Ltd established
- 2006. 12. Wall electric boiler production (8kw-24kw)
- 2009. 01. Brand name : Industrial electric boiler → MK Electric boilers change
  - 02. Large-scale electric boiler production (200 ~ 1,400kw)
  - 02. Electric boilers electrical safety certification
  - 03. Agricultural machinery agricultural electric boiler Registration  
(Korea Agricultural Machinery Industry Cooperative)  
Government support to the selection of the target farm machinery
  - 04. Agricultural market electric heater (OEM. 12 ~ 72kw)  
Governmentsupport to the selection of the target farm machinery
  - 08. ISO 9001:2008 certification (steam boiler)
  - 10. Trademark, Design Registration (KIPO)
  - 09. Electric steam boiler pressure 40kg / cm<sup>2</sup> Developed
  - 09. MK Electric Boiler China exports
  - 11. Extended factory (steam boiler)
  - 11. MK Electric Boiler Mongolian exports
- 2010. 03. Established sales Dongsung Energy. Co.Ltd
- 2011. 10. ISO 9001:2008 International certification (TSMK CO.LTD)
  - 10. Renamed Dongsung Energy. Co.Ltd → TSMK.Co.Ltd
  - 11. Factory Registration (Namyangjoo Factory)

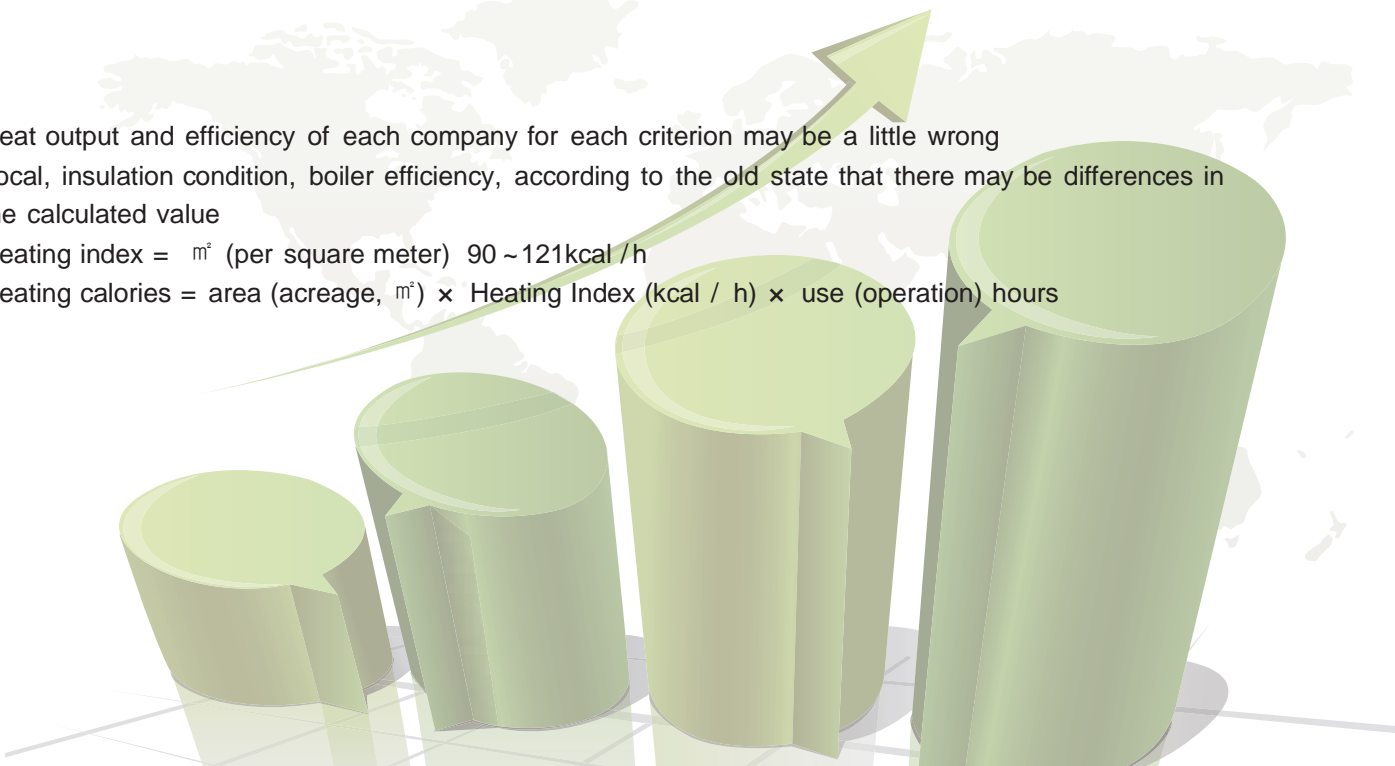


# MK ELECTRIC BOILER

## Feature Comparison by Fuel

Nine minutes	City Gas	LPG	Oil	Electricity	Remark
Thermal efficiency	- Up to 85%	- Up to 85%	- Up to 85%	98%	
Economy Heating	120%	250%	240%	100%	1 day per usage
Convenience	Separate the inconvenience of having to work through the operator			Fully automatic system Operators needed	
Safety	Poisoning, explosion, Gas	Poisoning, explosion, Gas	Gas, fire	Eco-friendly, safety	
Installation	By using a separate gas Equipment and plumbing fixtures	Filling the tank and Gas plumbing fixtures	The large volume of separate Oil tanks and plumbing fixtures	The slim volume, ease of installation, Separate plumbing required	
Fuel Liquidity	Due to fluctuations in international oil prices increases the liquidity bulanjeonham fuel hikes.			Safety and affordability	
Safety	Gas, explosion, fire, and to the risk of having a complex security system, frequent A / S occurs and periodic replacement of parts			Longer durability of parts replacement cycle maintenance costs	
Body ever	Of the	Stand	Stand	Small, medium	

- \* Heat output and efficiency of each company for each criterion may be a little wrong
- \* Local, insulation condition, boiler efficiency, according to the old state that there may be differences in the calculated value
- \* Heating index =  $\text{m}^2$  (per square meter) 90 ~ 121kcal / h  
 Heating calories = area (acreage,  $\text{m}^2$ )  $\times$  Heating Index (kcal / h)  $\times$  use (operation) hours





# MK Electric Hot Water Boiler

## Product Features of MK Electric Boiler

### Highest efficiency

- **Regenerative late General electric boiler heating boiler is not the moment.**
  - Instant heat hot water circulation structure and maximum efficiency through the improvement of the structure and effect.
- **heating, as well as the whole quantity at a constant temperature regardless of the abundant hot water can be used.**
  - The expansion tank and the boiler's integral is small in size, you do not need to install a separate water heater.

### The best economic / durability

- **oil prices, fuel supplements, does not have to worry about fuel leakage, but they lack the economic and jangojang, A long time can be safely used.**
- **Lowest power generating efficiency, so the best oil and gas can not be compared with any boiler as it is economical.**
- **By the use of clean energy, electric smoke, no ash by-product is an environmentally friendly product, etc..**
- **Use of stainless steel is not rust at all.**
- **This consists of a granular product is tailor-made on-site.**

### Complete safety / convenience

- **Toxic gases, explosion, fire, we do not have to worry about**
- **Electronic safety devices, as well as frost protection, overheat protection and various safety devices are available more secure.**
- **Digital electronic control scheme applies a convenient and complete heating control (temperature control, repetition timer) is possible.**
- **Restore feature: Electric power transmission even if there was a power failure the boiler will work automatically.**

### Easy to install / pleasant driving

- **Easy to install and can be installed regardless of the particular place is.**
  - Eliminates the need for a separate boiler room wall hangings, various types of particle shape is a product that can be installed.
  - Replacement of the existing boiler even during normal separate piping can be installed without the need to replace.
- **Can be installed in a large building in.**
  - Separate piping for central heating systems can be installed without the need to replace.
- **By combustion smoke, odor, noise, not at all comfortable living in a clean room environment can be**



# MK Electric Hot Water Boiler

## Point of use electric hot water boiler

Electric boilers use a variety of places, depending on the purpose of the application is possible.

- **Industrial facilities** : Dorm, The maintenance, office, Field Office
- **Educational facilities** : Nursery , kindergartens, Institute , training center,  
a school dormitory, and soup kitchens,
- **Welfare facilities** : Geriatric Hospital, Nursing home, Hospital, Social welfare facilities
- **Agricultural fishing facilities** : Greenhouses, mushroom cultivation, drying facilities,  
Four animals, aquaculture
- **Worship** : Temples, Church, Oratory, Dorm
- **Accommodation** : Hotel, Motel, Pension, Villa, The maintenance
- **Use hot water facilities** : Sauna, Baths, Fitness, Barber, Beauty salon
- **Neighborhood Facilities** : Dining room, Cafe, Office, Food service,  
Commercial sports center, etc.
- **Military** : Quarter, Bathing facilities, Mountainous coast guard post

## Reference of MK Electric Hot water Boiler





# MK Electric Hot Water Boiler Specifications

## Small electric boiler (Type)

- ① Basic (Heating hot water combined) ② Built-in expansion tank (Heating hot water combined top-down)  
③ Set-type heat exchanger (For hot water)

Model	Power Consumption (kw)	Heating Area (m <sup>2</sup> )	Heating value(kcal/h)	Efficiency	Piping		Power		Operating pressure	Tank Capacity	Size W×D×H
					Heating	Hot	Heater	Control			
TSMK-08	8	57~76	6,880	Heating 95%, Hot 90%	25A	15A 20A	3Ø 380v	1Ø 220v	Heating 2kgf/cm <sup>2</sup> Under	50L	☒☒ (Combined) 360×650×790 ☒ (For hot water) 560×650×790
-10	10	71~94	8,600								
-12	12	83~112	10,320								
-15	16	106~142	12,900								
-20	20	142~188	17,200								
-24	24	168~224	20,640								
-30	30	211~284	25,800								
-36	36	254~330	30,960								
-40	40	284~376	34,400								
-45	45	323~425	38,700								

\* 1Ø220v, 3Ø220v, 3Ø440v : Order Specifications

\* Specifications are based on quality improvement, there may be slight variations.

## Small electric boiler!



1. Fuel-saving electric boiler is heated directly.
2. Heating and hot water can be used to enrich.
3. There is no use of stainless steel rust.
4. Easy to install, no matter where a particular installation.
5. Low water, overheating, short circuit, a frost protection device is safe to use for safety and protection against lightning safety has become more emphasized.
6. The use of carefully selected materials and extend the life of the heater thermal efficiency scored.
7. Indoor water at room temperature and were able to adjust the temperature, there is a repeating timer function, you can save fuel.

## If the installation is not this good!

Dormitories, maintenance office, temples, prayer house, day care, senior specialist hospitals, social welfare facilities, restaurants, Cafe, on-site office, office, house, barn, Fish farm, Pension, inns, and a health club

Suitable for small buildings



## Medium Electric boilers (Type)

- ① Basic (heating only, combined)  
 ② Heat set type (for hot water supply : built-in expansion tank, heating : expansion tank outside)

Model	Power Consumption (kw)	Heating Area (m <sup>2</sup> )	Heating value (kcal/h)	Efficiency	Piping		Power		Operating pressure	Tank Capacity	Size W×D×H
					Heating	Hot	Heater	Control			
TSMK-050	50	353~472	43,000	Heating 95%	40A	20A 25A	3Ø 380v	1Ø 220v	Heating 3kgf/cm <sup>2</sup>	90ℓ	① 450×700×950 ② 650×700×950
-060	60	426~567	51,600								
-067	67	476~633	57,620								
-075	75	532~709	64,500								
-084	84	594~792	72,240								
TSMK-090	90	637~851	77,400	Hot 90%	50A	32A	3Ø 380v	1Ø 220v	Hot 8kgf/cm <sup>2</sup>	139ℓ	① 750×760×1,100 ② 750×980×1,100
-105	105	742~993	90,300								
-120	120	858~1,122	103,200								
-135	135	957~1,277	116,100								
-150	150	1,063~1,419	129,000								

- \* 1Ø220v, 3Ø220v, 3Ø440v : Order Specifications  
 \* Specifications are based on quality improvement, there may be slight variations.  
 \* Proportional control (SSR, SCR) specifications of the order

### Electric boilers are medium!



1. Fuel-saving electric boiler is heated directly.
2. Heating and hot water can be used to enrich.  
That maximizes efficiency by increasing tangryang.
3. Use the thick end plates can also be used for high pressure.
4. Easy to install, no matter where a particular installation.
5. Low water, overheating, short circuit, safety device, such as a freeze protection can be used safely. In addition, protection against lightning safety has become more emphasized.
6. The use of carefully selected materials and extend the life of the heater thermal efficiency scored.
7. At room temperature to room temperature and water was able to be adjusted, Repeat Timer feature that can save fuel.
8. Heater is divided into two units as needed so that the power consumption of the fine-grained control only way to prevent an overload phenomenon Translation

### If the installation is not this good!

Residences, temples, prayer house, training center, day care center, school, Geriatric hospitals, social welfare facilities, restaurants, cafes, Field office, office, house, barn, fish farm, B & B, inns, hotels, health clubs, etc.

Suitable for medium-sized buildings



## Large electric boilers (Type)

① Basic (heating only)

② Heat set type (for hot water supply : built-in expansion tank, heating : expansion tank outside)

Model	Power Consumpt ion (kw)	Heating Area (㎡)	Heating value (kcal/h)	ficiency	Piping		Power		Operating pressure	Tank Capacity	Size W×D×H
					Heating	Hot	Heater	Control			
TSMK-167	167	1,185~1,577	143,620	Heating 95%  Hot 90%	65A	40A	3Ø 380v	1Ø 220v	Heating 3kgf/㎝ <sup>2</sup>  Hot 8kgf/㎝ <sup>2</sup>	297ℓ	①850×900×1,500 ②850×1,250×1,500
-200	200	1,419~1,881	172,000								
-234	234	1,660~2,211	201,240								
-267	267	1,895~2,524	229,620								
-300	300	2,129~2,838	258,000								
-334	334	2,370~3,158	287,240								
367	367	2,604~3,471	315,620								
TSMK-400	400	2,838~3,781	344,000		80A	50A	3Ø 380v	1Ø 220v		660ℓ	① 1,030×1,230×1,950 ② 1,030×1,630×1,950
-434	434	3,079~4,105	373,240								
-467	467	3,314~4,415	401,620								
-500	500	3,548~4,728	430,000								
-534	534	3,789~5,049	459,240								
-567	567	4,023~5,362	487,620								
TSMK-600	600	4,257~5,676	516,000	100A	50A	3Ø 380v	1Ø 220v	1,252ℓ	① 1,350×1,500×2,250 ② 1,350×1,900×2,250		
-634	634	4,498~5,996	545,240								
-667	667	4,734~6,309	573,620								
-700	700	4,967~6,619	602,000								
-734	734	5,208~6,943	631,240								
-767	767	5,442~7,253	659,620								
-800	800	5,676~7,566	688,000								

\* 1Ø220v, 3Ø220v, 3Ø440v : Order Specifications

\* Specification are based on quality improvement, there may be slight variations.

\* Proportional control (SSR, SCR) specifications of the order

## Large electric boiler!



1. Fuel-saving electric boiler is heated directly.
2. Heating and hot water can be used to enrich.  
That maximizes efficiency by increasing tangryang.
3. Use the thick end plates can also be used for high pressure.
4. Depending on the application can be installed and construction is simple.
5. Low water shut-off device, overheat cut-off device, safety device, such as a short circuit shut-off device can be used with confidence.
6. The use of carefully selected materials and extend the life of the heater thermal efficiency scored.
7. Temperature control, 24 hour timer function (optional), so to be able to adjust the operating time of the boiler, you can save fuel.
8. Heater is divided into two units as needed so that the power consumption of the fine-grained control only way to prevent an overload phenomenon Translation

**If the installation is not this good!**

School dormitories, offices, hotels, condominiums and large inns, temples, prayer house, training center, training center, schools, hospitals, senior specialist hospitals, welfare facilities, large dining room, cafe, house, barn, fish farms, etc. .

**Suitable for large buildings**



## Wall Mount Electric boilers

(Circulating pump, expansion tank built-in)

MODEL	Power consumption (kw)	Heating area (m <sup>2</sup> )	Heating value (kcal/h)	Efficiency	Piping		Power		Operating Pressure	Tank Capacity	Size W×D×H
					Heating	Hot	Heater	Control			
NSBM-202B	2	14~16	1,720	Heating 95%	15A	20A	1ø 220v	1ø 220v	1kgf/cm <sup>2</sup> Under	1.2ℓ	Heating-only 363×166×606
-203B	3	21~24	2,580								
-204B	4	28~32	3,440								
-205B	5	35~40	4,300								
NSB-2008BH	8	57~65	6,880	Hot 90%	20A	20A	3ø 380v	1ø 220v	1kgf/cm <sup>2</sup> Under	6ℓ	Combine hot water & heating 450×200×717
2012BH	12	85~97	10,320								
2015BH	15	106~121	12,900								
2018BH	18	128~145	15,480								
2021BH	21	149~170	18,060								
2025BH	25	177~202	21,500								

\* 1Ø220v, 3Ø220v, 3Ø440v : Order Specifications

### Wall electric boiler!



1. Fuel-saving electric boiler is heated moment.
2. Proportional control methods of controlling a non-MC noise.
3. Air and water tanks built in window replacements are handled automatically.
4. Built-in circulation pump noise quiet.
5. Where there is no space available for the installation and construction is simple.
6. Low water, overheating, short circuit, safety device, such as a freeze protection can be used safely.
7. Temperature control, a 1 hour repeat timer function, you can save fuel.

***If the installation is not this good!***

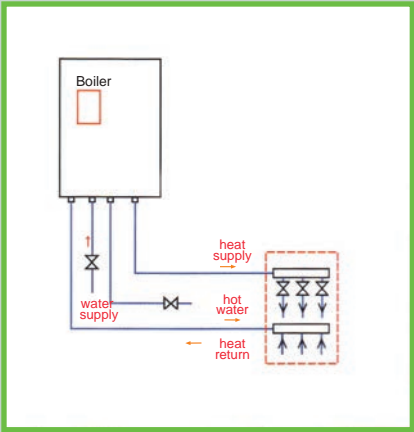
Studio, sukjksil, temples, prayer house, dormitory, power houses, restaurants, cafes, field offices, etc.

**Suitable for small buildings**

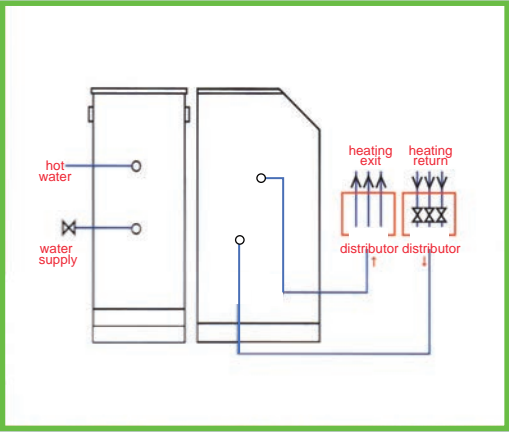


# Electric Hot Water Boiler

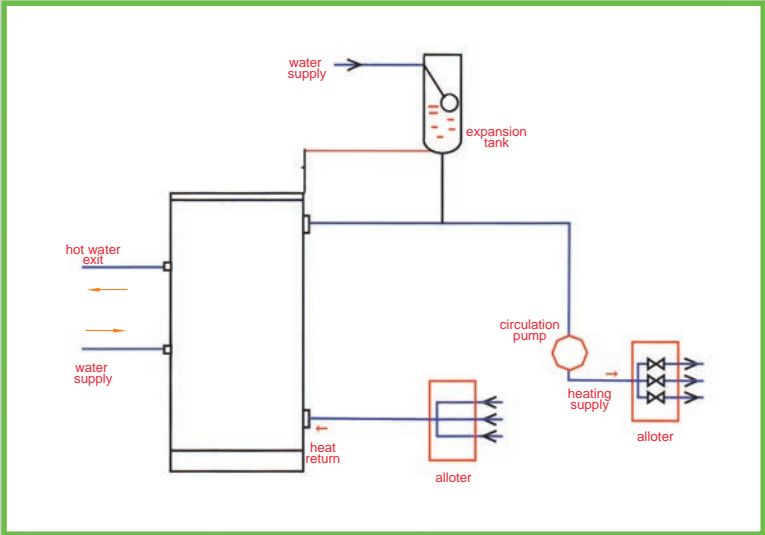
## PIPING DIAGRAM



WALL MOUNTED TYPE, DOWNWARD SYSTEM



VERTICAL BOILER, CIRCULATION PUMP, EXPANSION TANK, DOWNWARD SYSTEM



VERTICAL BOILER, BASIC OUTER MOUNTED



# MK Electric Steam Boiler

## Special of MK Electric Steam Boiler

### ■ Economic

- 98% of the high thermal efficiency, flexible working pressure is reached within 7 minutes, dryness and high thermal efficiency of the steam rising supply safe because you can significantly reduce fuel.
- Applicable condensate: occurring after use of waste steam condensate recovered and re-used to reduce fuel costs by applying the method scored.

### ■ Durability

- The use of carefully selected high quality materials scored life permanently.

### ■ Safety

- Can drive safely in the safe design, 3-4 risk factors of safety devices removed. Earth leakage protection device, block device, pressure, temperature shut-off device
- Sequentially detects the vapor pressure of a more secure supply enough power to the system is a little more granular control scheme.

### ■ Ease

- Compact design with a small space can be used, Easy ON / OFF switch, easy operation, even beginners can use it.

### ■ Distinctiveness

- Special internal structure of the boiler fully automatic control and you can use the steam geonjeung.
- Proportional Control System (Optional): SCR power control scheme to improve the power factor is applied to power efficiency.





# MK Electric Steam Boiler

## Place Using Electric Steam Boiler

Industrial	Where high pressure steam is required for various industrial
Aquaculture	Adjustment of the water temperature and various aquaculture farms
Tofu factory	And instant tofu tofu tofu factory for manufacturing businesses
Food Processing	Dumplings, bread, rice cake and other jjimyong between
Brewery	Manufacture of liquor
Textile Factory	Fiber for setting
Plating factory	Plating Process
Dye works	Dyeing Process
Garment factory	Irons Sewing
Concrete Plant	For brick manufacture and curing of concrete
Mushroom cultivation	For mushroom cultivation sterile field
Baths	Bath, sauna, steam room and a health club for
Washing plant	Laundry and Dry Irons Laundry
Hospitals	For hospital sterilization, humidification for





# MK Electric Steam Boiler Product Specification

## Electric steam boiler (Type)

Model	Power (kw/h)	Steam evaporation (kg/h)	Heating value (kcal/h)	Operating pressure (kg/cm <sup>2</sup> )	Size (W× D× H)	Piping (mm)				Temperature
						Main steam	Drain	Pressure Relief Valves	Water	
TSMKS-10	10	13.2	8,600	3~5	380 × 610 × 600	15	15	15	15	140℃
-15	15	19.7	12,900		380 × 610 × 750	15	15	15	15	
-20	20	26.3	17,200		"	"	"	"	"	
-30	30	39.5	25,800		480 × 750 × 1,010	15	20	15	15	
-40	40	52.6	34,400		"	"	"	"	"	
-50	50	65.8	43,000		"	20	20	20	15	
-60	60	78.9	51,600		"	"	"	"	"	

\* Change the size of the award can be made, the pressure 7kg / cm<sup>2</sup> or more optional

\* Pressure pump, safety valve, drain, and set make-up including tank

### Small electrical steam boiler !

1. Fuel-saving electric steam boiler is heated directly.
2. There is no heat loss out a new year economically.
3. Reduced in size than conventional boilers.
4. All components (sets), a built-in installation is simple.
5. Pressure control, temperature control, water level control, overheat cut-off device, such as a safety device can be used safely.
6. The use of carefully selected materials scored life.

***If the installation is not recommended in this !***

Laundry, buns, bread, rice bangahan, garment factory, laboratory, sauna, steam room, etc.

Small businesses need steam



## Electric Steam Boiler (Type)

Model	Power (kw/h)	Steam evaporation (kg/h)	Heating value (kcal/h)	Operating pressure (kg/cm <sup>2</sup> )	Size (W × D × H)	Piping (mm)				Temperature
						Main steam	Drain	Pressure Relief Valves	Water	
TSMKS-75	75	98.7	64,500	3~5	750 × 800 × 1,150	25	25	25	15	140~158℃
-90	90	118.4	77,400		"	"	"	"	"	
-105	105	138.1	90,300		"	"	"	"	"	
-120	120	157.3	103,200		"	"	"	"	"	
-135	135	177.0	116,100		"	"	"	"	"	
-150	150	196.6	129,000		"	"	"	"	"	
TSMKS-167	167	220.4	143,620		900 × 1,050 × 1,560	25	25	25	15	
-200	200	263.1	172,000		"	"	"	"	"	
-234	234	308.9	201,240		"	25	25	32	20	
TSMKS-267	267	352.4	229,620		1,060 × 1,230 × 1,950	32	32	32	20	
-300	300	394.6	258,000		"	"	"	"	"	
-334	334	440.9	287,240		"	"	"	"	"	
-367	367	484.4	315,620		"	"	"	"	"	

\* Change the size of the award can be made, the pressure 7kg / cm<sup>2</sup> or more optional

\* Pressure pump, safety valve, drain, and set make-up including tank

### Medium-sized electric steam boiler !

1. Fuel-saving electric steam boiler is heated directly.
2. There is no heat loss out a new year economically.
3. Reduced in size than conventional boilers.
4. All components are easy to install and is set to.
5. Pressure control, temperature control, water level control, overheat cut-off device, such as a safety device can be used safely.
6. The use of carefully selected materials scored life.

**If the installation is not recommended in this !**

Tofu factory, bakery, bread, bangahgan, garment factory, dyeing factory, brewery, food processing, plating factory, laboratory, concrete curing, fish farms, condominiums, hotels, mushroom, cultivation sterilizers, steam rooms, saunas, etc.

Medium-sized businesses that require steam





## Electric steam boiler (Type)

Model	Power (kw/h)	Steam evaporation (kg/h)	Heating value (kcal/h)	Operating pressure (kg/cm <sup>2</sup> )	Size (W×D×H)	Piping (mm)				Temperature
						Main steam	Drain	Pressure Relief Valves	Water	
TSMKS-400	400	526.2	344,000	5~7	1,060 × 1,230 × 1,950	40	32	32	25	158~170℃
-434	434	572.9	373,240		"	"	"	"	"	
-467	467	616.4	401,620		"	"	"	40	"	
TSMKS-500	500	653.5	430,000		1,350 × 1,520 × 2,200	50	32	50	25	
-534	534	697.9	459,240		"	"	"	"	"	
-567	567	741.1	487,620		"	"	"	"	"	
-600	600	784.2	516,000		"	"	"	"	"	
-634	634	828.6	545,240		1,350 × 1,520 × 2,200	50	40	Whole quantity equation 32	25	
-667	667	871.8	573,620		"	"	"		"	
-700	700	914.9	602,000		"	"	"		"	
-734	734	959.3	631,240		"	"	"		"	
-767	767	1,002.5	659,620		"	"	"		"	
-800	800	1,045.6	688,000		1,350 × 1,520 × 2,380	50	50	Whole quantity equation 32	32	
-834	834	1,090.0	717,240		"	"	"		"	
-867	867	1,133.2	745,620		"	"	"		"	
-900	900	1,176.3	774,000		"	"	"		"	
-934	934	1,220.7	803,240		"	"	"		"	
-967	967	1,263.9	831,620		"	"	"		"	
-1000	1,000	1,307.0	860,000		Site design	65	50	Whole quantity equation 32	32	
-1500	1,500	1,960.5	1,290,000		"	65	50		"	
-2000	2,000	2,614.0	1,723,000		"	80	50	equation 32	"	

\* Change the size of the award can be made, the pressure 7kg / cm<sup>2</sup> or more optional

\* Units are manufactured to more than 1000kw 100kw (eg: 1,100 kw, 1,200 kw, 1,300 kw)

\* Pressure pump, safety valve, drain, and set make-up including tank



## Large electric steam boiler !

1. Fuel-saving electric steam boiler is heated directly
2. There is no heat loss out a new year economically.
3. Reduced in size than conventional boilers.
4. All components are easy to install and is set to.
5. Pressure control, temperature control, water level control, overheat cut-off device, such as a safety device can be used safely.
6. The use of carefully selected materials scored life.
7. 24 hour timer function, so to be able to adjust the operating time of the boiler (peak management), you can save fuel.
8. Heater operation stages 3-5 into electricity is not helpful to the overload phenomenon.

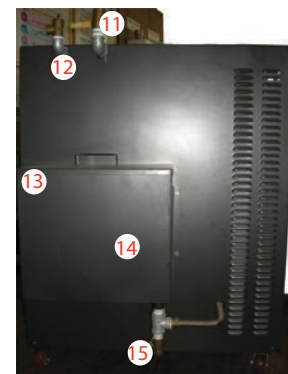
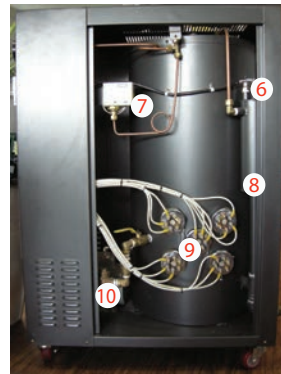
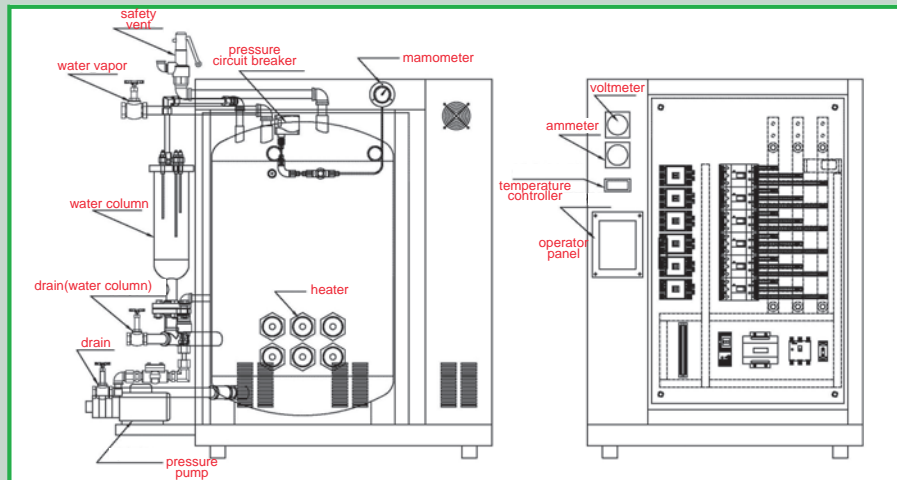
**If the installation is not recommended in this !**

Tofu factory, garment factory, dyeing factory, textile mills, breweries, food processing, plating factory, drying facilities, concrete curing, fish farms, condominiums, hotels, sterilizing mushroom, cultivation, production facilities, other

Large industrial sites that require steam

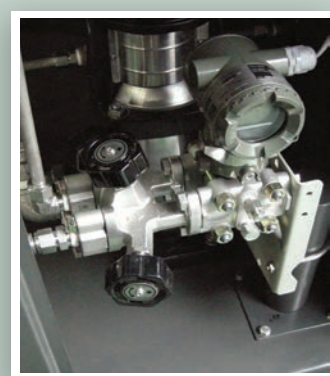


# Electric Steam Boiler PIPING DIAGRAM



## name and performance boiler

- 1.Manometer : display steam pressure of internal tube
- 2.Vmeter : Boiler voltage display
- 3.Circuit breaker : Earth leakage protection management
- 4.Magnet : Magnetic Contactor
- 5.Feed water pump : In the boiler feed pump
- 6.Adjust the water level controller : Controlling the water level within the boiler unit
- 7.Pressure regulator : Device to control the pressure in the boiler
- 8.Water tub : A device for measuring the water level in the boiler exact
- 9.Heater : Water is heated to steam generation unit
- 10.Feed check valve : Valves for preventing back flow of water
- 11.Water vapor changes : The tube body is sent out with the vapor generated by the valve
- 12.Safety vent : Abnormal pressure occurs in the tube, 1.03 times the working pressure of the first automatically ejected
- 13.Water inlet : Supplement the water in the water tank inlet
- 14.Feed tank : Boiler feed water storage tank
- 15.Drain valve : Discharging the water in the water tank





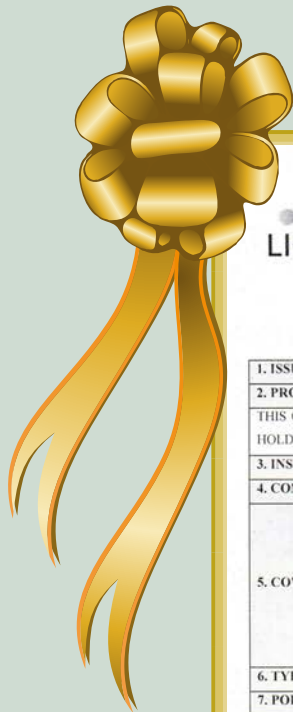
# Test reports and Certificates





# MK Electric Boiler

## CERTIFICATE OF INSURANCE




### CERTIFICATE OF INSURANCE

1. ISSUED DATE(MM/DD/YYYY)	: January 2, 2014	
2. PRODUCER	: LIG INSURANCE CO.,LTD.	
THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFER NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFORDED BY THE POLICIES BELOW.		
3. INSURED	: T.S.M.K	
4. COMPANIES AFFORDING COVERAGE	: LIG INSURANCE CO.,LTD.	
5. COVERAGES	: THIS IS TO CERTIFY THAT POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OF OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN. THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES.	
6. TYPE OF INSURANCE	: PRODUCT LIABILITY(I) - Occurrence Basis (Korean Version)	
7. POLICY NUMBER	: 2014-0007268	
8. POLICY PERIOD	: From January 4, 2014 (24:00) To January 4, 2015 (24:00)	
9. RETROACTIVE DATE	: None-applied	
10. LIMIT OF LIABILITY (CURRENCY: KRW)	Combined single Limit (Aggregate Limit)	KRW 100,000,000
	Combined single Limit (Any One Claim Limit)	KRW 100,000,000
11. DESCRIPTION OF PRODUCTS		
◆ PRODUCT	: Electric Boiler	
◆ TERRITORY COVERED	: KOREA only	
12. INFORMATION	: NOT APPLICABLE	
13. CANCELLATION	: SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL A WRITTEN NOTICE WITHIN 30 DAYS TO THE CERTIFICATE HOLDER NAMED ABOVE. FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE ON NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.	
14. GROSS PREMIUM	: KRW 2,368,000.-flat.	
15. AUTHORIZED REPRESENTATIVE		

보험증권

저희 회사는 해당 보험약관에 의하여 보험계약자와  
보험계약을 체결하고, 그 증거로써 이 보험증권을 드립니다.

 **LIG 손해보험주식회사**  
서울시 강남구 역삼동 649-11번지