

Product Brochure

Fire-Extinguishing System Power Source
Battery Charging Unit For The Startup of Private Power Generation
Various Types of Direct Current Power Source for Emergency Lighting
Large-scale DC Power Source
Industrial battery
Control Panel for Fire Extinguishing System
Integrated Package Type Automatic Fire Extinguishing System



Uninterruptible DC power supply units



Kyoto Research Center in
Kyoto University Katsura Venture Plaza



Head Office Plant



Control Panel for
Fire Extinguishing System

WAKO
Wako Giken Co.,Ltd.

New collaboration schemes (METI-KANSAI NOVEMBER 7,2006 Recognition)

Name of accredited project: 「Development and commercialization of high-reliability fire-prevention equipment through the collaboration of manufacturers of control equipment and mechanical components」

Disaster-prevention system power source supported by and engineers well versed in batteries will provide you

No electric or electronic equipment can work without a power source.

The power source is one of the essential parts of all electric and electronic equipment.

“Emergency light power source” and “General emergency light/fire-extinguishing power source” are used for lighting emergency lights in case of power failure.

To meet today’s increasingly important disaster-prevention measures, we provide you with confidence and safety through our cutting-edge technology and strict quality control system.

Taking our years of experience and know-how of the prevention power source department (now-defunct Hayashi Seisakujo) of Taiko Fire and Security Japan Co., Ltd., we have been authorized by storage battery equipment type certification and registered with the Japan Engine Generator Association (NEGA).

We produce general-purpose equipment for various power sources. As such, we provide you with a system best suited to your needs.

Practical example

Fire-extinguishing system
power source
NCR-24-6



A Shimbudon Company

Independent power generator
startup power source
L24R600S-N
EHS1-100-10S



K TV station

Fire-extinguishing system
power source
EHS1-24-5L



N public hall



K Prefecture art museum

Emergency lights
power source
EHS1-100-5L



K station building

l by the years of excellence of our technologies
ou with safety in an emergency.



Fire-Extinguishing System Power Source

It supplies power to any fire-extinguishing system control panel in case of power failure due to emergency, disaster, etc

● Characteristics

- Designed for high reliability and long life
- Charging system applicable to various batteries
- Small lot and single-item production available

● Function

- Over-current protection
- Over-charge prevention
- Over-discharge prevention
- Automatic switching between floating charge/uniform charge (Deferred lead battery)

● Use

- Control panel
- Operation equipment
- Automatic fire alarm
- Gas leak/short circuit fire alarm
- Broadcasting equipment
- Emergency bell
- Emergency notification system
- Automated notification system
- Communication equipment

● Option

- Display function for each failure (Fuse blown out, etc.)
- Outer signal output function
- Dropper function

● Specification

Certified type	Model	Output		Storage Battery		
		Voltage	Current	Capacity	Battery applicable	
RM	SGF1-24-7SNB15	24V	6A	15Ah	M (m)	Seal control valve lead battery
RM	SGF1-24-7SNB24		5.4A	24Ah	M (m)	Seal control valve lead battery
RK	NHS1-24-0.14A		3A	3.5Ah	KR	Nickel cadmium battery
RK	NHS1-24-0.24A		5A	6.0Ah	KR	Nickel cadmium battery
RK	NHS1-24-0.32A		6A	8.0Ah	KR	Nickel cadmium battery
RK	NHS1-24-0.4A		8A	10.0Ah	KR	Nickel cadmium battery
RMP	NCR-24-6		4A	6.5, 15, 24Ah	M (m)	Seal control valve lead battery
RMP	NCR-24-3		2.5A/2A	6.5, 15Ah	M (m)	Seal control valve lead battery
RK	NHS1-24-2x0.24A		10A	6.0Ahx2P	KR	Nickel cadmium battery
RK	NHS1-24-2x0.32A		12A	8.0Ahx2P	KR	Nickel cadmium battery
RK	NHS1-24-2x0.4A		15A	10.0Ahx2P	KR	Nickel cadmium battery
RK	NHS1-24-3x0.4A		20A	10.0Ahx3P	KR	Nickel cadmium battery
RL-E	EHS1-24-5L		3A/2A	30, 40Ah	□-E	Stationary lead battery
RL-E	EHS1-24-7L		4A/3.5A	40, 50Ah	□-E	Stationary lead battery
RM	L24R24D-N		3A	24Ah	M (m)	Seal control valve lead battery



24-V battery unit for a fire-extinguishing system
(1) SGF1-24-7SWB24



Storage battery unit
(2) NHS1-24-0.14A



For with built-in storage battery unit
(3) NCR-24-6



Storage battery unit
(4) NHS1-24-3x0.4A



Storage battery unit
(5) EHS1-24-5L

	Input	Installation method	Availability	Photo	Certification/Registration status	Remarks
Single phase AC100V or AC200V 50 Hz or 60 Hz		Wall-hung	Standard		Storage battery equipment certified	
		Wall-hung	Standard	(1)	Storage battery equipment certified	
		Wall-hung	Standard	(2)	Storage battery equipment certified	
		Wall-hung	Standard		Storage battery equipment certified	
		Wall-hung	Standard		Storage battery equipment certified	
		Wall-hung	Standard		Storage battery equipment certified	
		Built-in	Standard	(3)	Storage battery equipment certified	
		Built-in	Standard		Storage battery equipment certified	
		Stand-alone	Standard		Storage battery equipment certified	
		Stand-alone	Standard		Storage battery equipment certified	
		Stand-alone	Standard		Storage battery equipment certified	
		Stand-alone	Standard	(4)	Storage battery equipment certified	
		Stand-alone	Standard	(5)	Storage battery equipment certified	
		Stand-alone	Standard		Storage battery equipment certified	
	Stand-alone	Standard		Storage battery equipment certified		

Battery charging unit for the startup of private power generation

A startup storage battery charger is equipment for charging a startup storage battery. Its battery supplies the stable power necessary for an independent generator to start up.

● Characteristics

- Designed for high reliability and long life
- Charging system applicable to various batteries
- Small lot and single-item production available
- Space saving (built-in type)

● Function

- Over-current protection
- Over-charge prevention
- Over-discharge prevention
- Automatic switching between floating charge/uniform charge (Deferred lead battery)

● Use

- Diesel generator
- Gas turbine generator

● Option

- Display function for each failure (Fuse blown out, Battery temperature, Battery liquid level, MCB trip, Earth warning)
- Outer signal output function
- Dropper function

● Specification

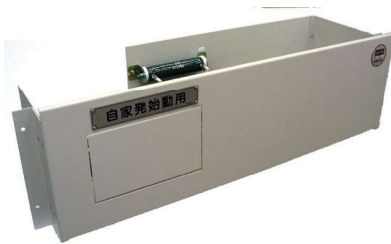
Certified type	Model	Output		Storage Battery		
		Voltage	Current	Capacity	Battery applicable	
C-EG	L12H200C-N (ES12V6ED)	12 V	2~5.4A	30~200Ah	HS	Bent stationary lead battery
CEG	L12H200S-N (ES12V6ES)	12 V	2~5.4A	30~200Ah	MSE	Valve controlled stationary lead battery
C-EG	L24H300C-N (ES24V7E)	24 V	1~6A	50~300Ah	HS	Bent stationary lead battery
CEG	L24H300S-N (ES24V7ES)	24 V	1~6A	50~300Ah	MSE	Valve controlled stationary lead battery
CH-109	L24H600C-N (ES24V15E)	24 V	3~13A	100~600Ah	HS	Bent stationary lead battery
CH-109	L24H600S-N (ES24V15ES)	24 V	3~13A	100~600Ah	MSE	Valve controlled stationary lead battery
CH-109	L24H800C-N (ES24V20E)	24 V	4~18A	100~800Ah	HS	Bent stationary lead battery
CH-109	L24H800S-N (ES24V20ES)	24 V	4~18A	100~800Ah	MSE	Valve controlled stationary lead battery
CH-109	L12H200C-CNS	12 V	0~5A	50~300Ah	HS	Bent stationary lead battery
CH-109	L24H200C-CNS	24 V	0~5A	50~300Ah	HS	Bent stationary lead battery
CH-109	L24H150S-NS	24 V	0~3A	150Ah	MSE	Valve controlled stationary lead battery
CH-109	L24H200S-NS	24 V	0~8A	200Ah	MSE	Valve controlled stationary lead battery
CH-109	L24H300S-NS	24 V	0~6A	300Ah	MSE	Valve controlled stationary lead battery
CH-109	L24H400S-NS	24 V	0~8A	400Ah	MSE	Valve controlled stationary lead battery
CH-109	L24R600S-N	24 V	15A	600Ah	MSE	Valve controlled stationary lead battery



Switching Method Charger
 (1) ES24V7ES
 ES24V15ES
 ES24V20ES



Pump Startup Switching Method Charger
 (2) L24H200C-CNS



Switching Method Charger
 (3) L24H150S-NS



Battery unit for outdoor start-up
 (4) L24R600S-N

	Input	Installation method	Availability	Photo	Certification/Registration status	Remarks
	Single phase AC100V or AC200V 50 Hz or 60 Hz	Built-in	Standard		Storage battery equipment certified/Registered to NEGA	
		Built-in	Standard		Storage battery equipment certified/Registered to NEGA	
		Built-in	Standard		Storage battery equipment certified/Registered to NEGA	
		Built-in	Standard	(1)	Storage battery equipment certified/Registered to NEGA	
		Built-in	Standard		Registered to NEGA	
		Built-in	Standard	(1)	Registered to NEGA	
		Built-in	Standard		Registered to NEGA	
		Built-in	Standard	(1)	Registered to NEGA	
		Built-in	Standard		Registered to NEGA	To start up pump
		Built-in	Standard	(2)	Registered to NEGA	To start up pump
	Single phase AC200V 50 Hz/60 Hz	Built-in	Standard	(3)	Registered to NEGA	
		Built-in	Standard		Registered to NEGA	
		Built-in	Standard		Registered to NEGA	
		Built-in	Standard		Registered to NEGA	
		Stand-alone	Made-to-order	(4)	Registered to NEGA	

Various Types of Direct Current Power Source for Emergency Lighting

It supplies power to any emergency lighting, etc. in case of power failure due to disaster, etc.

● Characteristics

- Designed for high reliability and long life
- Charging system applicable to various batteries
- Small lot and single-item production available

● Function

- Over-current protection
- Over-charge prevention
- Over-discharge prevention
- Automatic switching between floating charge/uniform charge (Stationary lead battery)

● Use

- Emergency lighting
- Automated fire alarm
- Various types of disaster-prevention control equipment
- Independent generator control

● Option

- Switching between AC/DC
- Display function for each failure (Fuse blown out, Battery temperature, Battery liquid level, MCB trip, Earth warning)
- Outer signal output function
- Dropper function

● Specification

Certified type	Model	Output		Storage Battery		
		Voltage	Current	Capacity	Battery applicable	
RLE	EHS1-100-5S	100V	5A	30~60Ah	HSE	Valve controlled stationary lead battery
RL-E	EHS1-100-10L		10A	80~120Ah	HS	Bent stationary lead battery
RM	L48R7D-N	48V	1.5A	7Ah	M(m)	Small sealed lead battery
RM	L48R15D-N		1.5A	15Ah	M(m)	Small sealed lead battery
RK	NHS1-12-0.24A	12V	4A	6Ah	KR	Nickel cadmium battery
	MSP-4LC	24V/6A, 28V/3.5A, 5V8A, 24V/1.5A		10Ahx2		Nickel cadmium battery
	MSP-8LC	24V/6A, 28V/3.5A, 5V8A, 24V/1.5A		6Ahx5		Nickel cadmium battery
RM	EHS1-100-10S	100V	10A	100Ah	MSE	Valve controlled stationary lead battery



Storage battery equipment
for emergency lighting
(1) EHS1-100-10L



Storage battery equipment
for emergency lighting
(2) L48R7D-N



Storage battery equipment
for security system
(3) NHS1-12-0.24A



Storage battery equipment
for security system
(4) MSP-4LC



Storage battery equipment
for private departure control
(5) EHS1-100-10S

Input	Installation method	Availability	Photo	Certification/ Registration status	Remarks
Single phase AC100V or AC200V 50 Hz or 60 Hz	Stand-alone	Made-to-order		Storage battery equipment certified	For emergency lighting
	Stand-alone	Made-to-order	(1)	Storage battery equipment certified	For emergency lighting
	Wall-hung	Made-to-order	(2)	Storage battery equipment certified	For emergency lighting
	Wall-hung	Made-to-order		Storage battery equipment certified	For emergency lighting
Single phase AC200V 50 Hz or 60 Hz	Panel built-in	Made-to-order	(3)	Storage battery equipment certified	For security system
	Panel built-in	Made-to-order	(4)		For security system
	Panel built-in	Made-to-order			For security systems
1ΦAC200V50/60Hz	Stand-alone	Made-to-order	(5)	Storage battery equipment certified	For independent generator control

Large DC power supply unit for industrial application



Uninterruptible DC power supply units for semiconductor plants



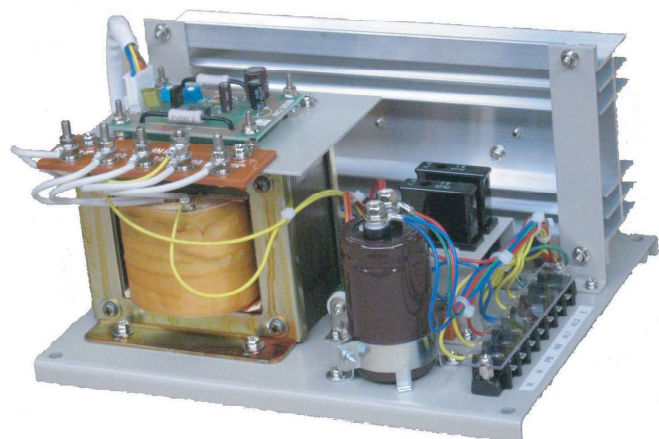
High-capacity DC power supply unit for steel plants
DC 440V 500A

Various Types of Power Source Equipment



DC-DC converter

Model : 24CDT-24-5
Input : DC16V~31V
Output : DC24V±0.1V 5A
Installation : Unit type
Use : Startup engine control power source,
Display power, Lighting equipment



DC power supply unit

Name of product: SGF1-13.3-3C
Input: AC100/200/220/230/240V
Output: DC13.3V 3A
Installation: unit type
Purpose: Power source to control engine

Sales of Industrial Battery

Partner companies

The Furukawa Battery CO., LTD.
 GS Yuasa Corporation
 Panasonic Corporation Energy Company
 Shin-Kobe Electric Machinery Co.,Ltd.



Items available

- Lead battery
- Valve controlled stationary lead battery
- Small control valve lead battery
- Long-life small sealed valve controlled lead battery
- Alkaline battery
- Fire Agency certified nickel cadmium battery
- Fire Safety Center tested nickel cadmium battery
- Automotive battery
- Other (any battery available)



Other sales goods



Timekeeper for symposium

Characteristics

- Time establishes 3 stages.
- The choice by which display time is an elapse/remaining time
- By a buzzer lamp, time confirmation
- A stop of a timer and resumption are possible.

Partner companies

YP SYSTEM CO.,LTD



Control panel for a fire-extinguishing system and an automatic fire-extinguishing system

Erroneous spraying of fire extinguishant is reduced to zero through the addition of a de-noising function on the control panel (patent pending).

Mounted digital displays show the delay time on the control panel, the control box, and the automatic fire-extinguishing unit.

Compatible with fire extinguishants such as halogenated substances, new gases, carbon dioxide, foam, and powder.

Product models have been approved by the Fire Protection Equipment and Safety Center of Japan



Control panel
(for 1 to 2 circuits)



Operation box
(exposed type)



Integrated Package Type Automatic Fire
Extinguishing System

● Related facilities



Display light for fire
extinguishant spraying



Loudspeaker

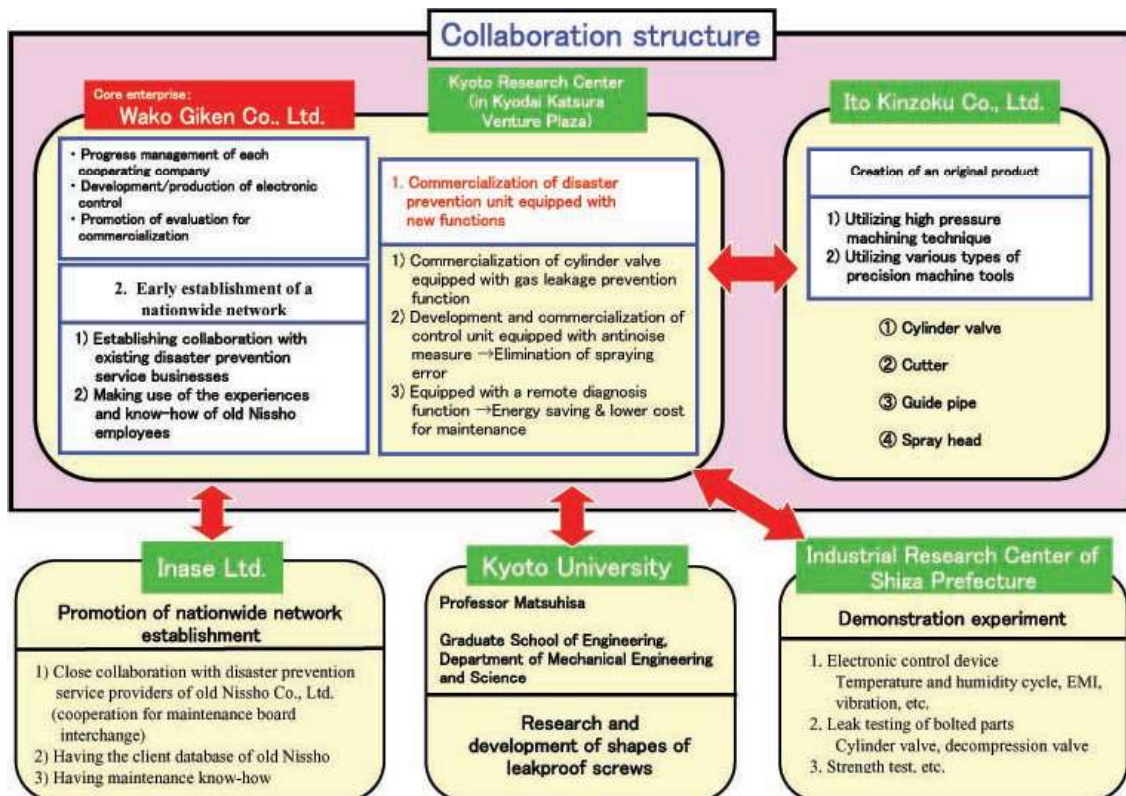
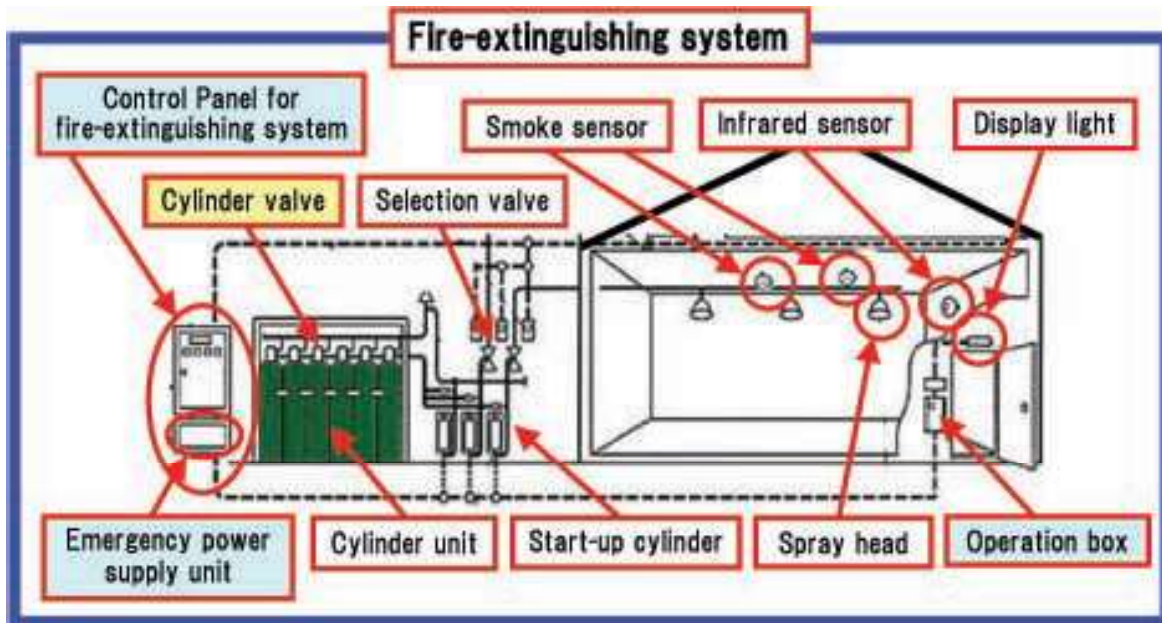


Fire detector

New collaboration schemes (Act for Promoting New Business Activities of Small- and Medium-sized Enterprises)

Name of accredited project: "Development and commercialization of high-reliability fire-prevention equipment through the collaboration of manufacturers of control equipment and mechanical components"

A high-reliability fire-extinguishing system has been realized: Metal parts and components such as container valves and guide pipes developed by Ito Metal Manufacturing Co. Ltd. (partner corporation in the collaboration scheme) are added to fire-prevention equipment developed by us with a control panel that entirely eliminates error



※Under development

- Remote monitoring system (preventive maintenance is targeted by collecting information from control panels remotely through various networks)
- Diagnostic function of battery life

Services

Overhaul of power-supply unit for electric power company,
Maintenance and checkup of emergency power source
Replacement of emergency power source
Superannuated update of control board for fire extinguishing system,
Exchange of storage batteries

Main end users

■ Government and other public offices

Defense Agency, Japan Coast Guard, Foreign Ministry,
Land, Infrastructure, and Transportation Ministry, Japan
Meteorological Agency, Osaka Prefectural Police, Osaka
Prefectural Government, NHK, Others

■ Private enterprises

Broadcast stations, Electric power companies, Tokyo Gas
Co., Ltd., Osaka Gas Co., Ltd., IBM, Kansai International
Airport, Others

Main customers

Panasonic Electric Works Co.,Ltd. • Nippon Steel Corporation
• MEIDENSHA CORPORATION • EBARA DENSAN LTD. •
Kobelco Construction Machinery Co.,Ltd. • Hitachi,Ltd. •
Nippon Dry-Chemical Co., Ltd. • Miyata Co.,Ltd. •
HATSUTA SEISAKUSHO CO., LTD. • Nittan Seiki •
Denyo Co.,Ltd. • Toyota Turbine and Systems inc. •
YAMATO PROTEC CORPORATION • DENSO CHUBU
CORPORATION • TOYO ELECTRIC MFG. CO. LTD •
TERASAKI Electric Co.,Ltd • Kyoto University •
OKI DENKI BOHSAI CO.,LTD, • AIR WATER SAFETY
SERVICE INC. • Koito Industries,Ltd. • Komatsu Diesel
Co.,Ltd. • SANYO DENKI CO.,LTD. • JALTechno Service
Co.,Ltd. • SHINKO ENGINEERING CO., LTD. • Nabtesco
Corporation • HORIBA, Ltd. • SHINKO ELECTRIC CO., LTD. •
GS Yuasa Corporation • SEIWA ELECTRIC MFG. CO.,LTD. •
TAKAMATSU TEISAN • TOHATSU CORPORATION •
NISHISHIBA ELECTRIC CO., LTD. • Nisho Seisakujo •
DAIHATSU DIESEL MFG.Co.,Ltd. • NISSAN DIESEL MOTOR
CO.,LTD. • NISSIN ELECTRIC Co., Ltd. • HOKUETSU
INDUSTRIES CO., LTD. • Fenwal Controls of Japan,Ltd. •
MORIYA CORPORATION • Mitsubishi Electric System &
Service Co., • Hochiki Corporation • YANMAR ENERGY
SYSTEM,Co.,Ltd. • YASKAWA MOTOR CORPORATION

250 companies of other ones

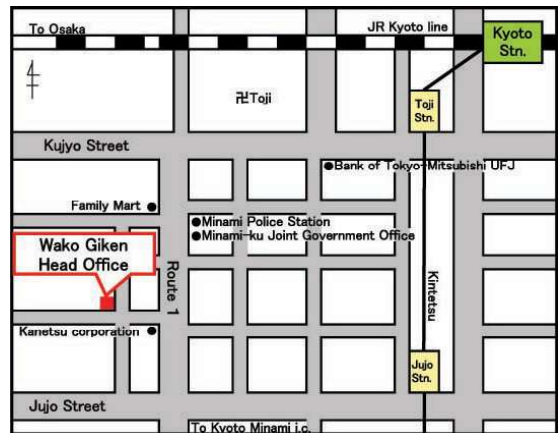
WAKO
Wako Giken Co.,Ltd.

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Head Office Plant

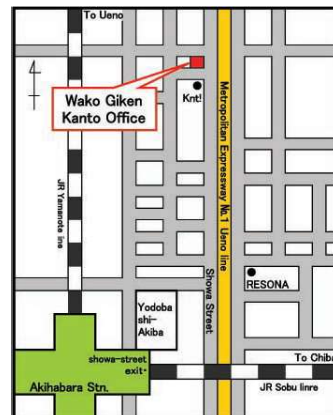
26 Toyota-cho,Nishi Kujo,Minami-ku, Kyoto,
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- Down two streets from the overpass in front of the Minami-ku Joint Government Office along Route 1 and to the West.
- 15-minute walk from Toji Station, Kyoto line, Kintetsu Railways.
- 6-minute walk from muni bus stop, Toji minami-mon mae.
- Go to Kyoto from Kyoto Minami I.C., Meishin Expressway, and up at Jujo along Route 1

Kanto Sales Office

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