KUROI

Our motto
Our mission statement
We will infinitely produce new products with our originality and ingenuity and serve the society
Our principle
We will devote ourselves to the joy of production, become unified to improve the world best quality and techniques
Our spirit
With everlasting sincerity, gratitude and courtesy, we will build character as beloved members of society, and we will strive to become cherished members of society
Our management philosophy

Believing in quality and developing techniques which are peerless in the world. We will perform production activities in union to acquire customer satisfaction and trust.

[Our philosophy of quality]

- 1. Good quality satisfies the customers
- 2. Good quality contributes to society
- 3. Good quality gives us joy as manufacturers

The quality policy

- 1. Making full use of our development capability and production capacity we provide products that meet customer needs and expectations.
- 2. Obeying the laws and regulations required by industrial associations, and meeting the requirements of customers, we will acquire customer satisfaction and trust.
- 3. Meeting the requirements of quality management and improving continuously, we manage effectively and improve quality.

The environment policy

Kuroi Electric Co. Ltd. is located in Kyoto which has a historical legacy. We develop, produce and sell lighting fixtures, information appliances, and parts related to them.

Through these business activities, we aim for co-existence with the environment. To make the transition from resource consumption production and mass disposal to resource recycling, in conformity with the environment management system we will put these into effect and improve continuously.

Changing our passion to techniques

Since our foundation, we have been producing new products with the spirit of serving.

people well in the half century since the days when Japan was called "a technology superpower." In any age the original point of manufacturing was for humans.

When we put our whole heart and soul into the products, they will serve customers well.

To make it happen, we innovate constantly at our production site.

We always go back to where we started, review whether we are serving our customers' needs, and make every effort to light up the spirits of as many people as we can.





Human Electronics & Lighting

From the day of establishment in 1952, Kuroi Electric has been growing as an innovative company, maintaining originality and ingenuity. We have always given the highest priority to the development of new products.

Our products have taken the Japanese lighting industry by storm. We have developed epoch-making products, such as wooden lamps with see-through ribbed patterns incorporating Japanese traditional handicraft, microprocessor controlled dimmer switches and electronic ballasts, which have become very popular in the Japanese market. Following our company slogan, "Human Electronics and Lighting", we combine high-tech and high-touch in the ancient capital city of Kyoto.

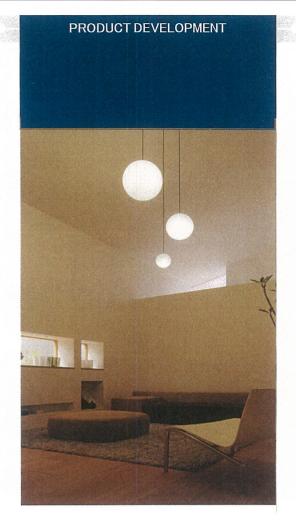
The core competence of our company is that we can design and manufacture the final products as requested by our customers and that integration of development and manufacturing brings speed, low cost, and high quality to our products.

We are now being requested to reduce our load on the environmental. We have cultivated energy-saving and resource-saving technologies in the lighting industry and we are applying them to other fields.

Humanity is our most important concern. Conserving the global environment, upgrading our high-tech and high-touch skills, we will introduce products to light up our customers' hearts and contribute to humanity and the global environment.

President Takashi Kuroi

Kuroi Electric Co.,Ltd.



Lighting fixtures for houses



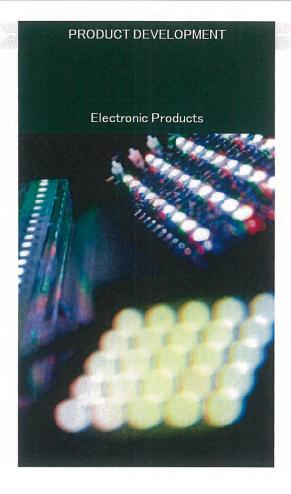
What sort of lighting fixtures will be required in the future?
We will answer to this question with our products…

We realize that as people's lifestyles change, their tastes for living spaces change and become more diverse. We have been designing products which harmonize with various interiors and create comfortable spaces. As a result, we have developed lighting fixtures using various materials and ones with compact electronic control circuits.



Lighting fixtures for facilities and exteriors





| Electronic products

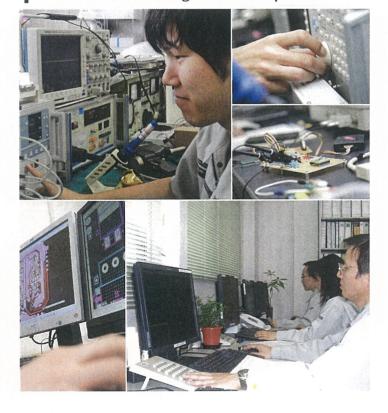


We contribute to building a more comfortable society with our electronic technology.

- We create spaces of comfort which are safe and secure.
 - We develop emergency products and security equipment
- •We offer comfortable spaces which are eco-friendly. We develop solar powered products, sensors, and digital transmitters.
- As well as being energy efficient, our products offer a richer lifestyle to our customers.
 - We develop optical units, optical control units, and electrical control units.



Electronic circuit design and development



Kuroi Electric Co.,Ltd.



Electric powered garage doors [garage-door openers.]



With originality and ingenuity we expand our manufacturing know-how.

With our knowledge and expertise, which we have acquired in the lighting fixtures and electric appliances fields, we take up the challenge to serve our customers in pursuing new projects.

Delivery boxes



Manufacturing Technology

We have development, manufacturing, and evaluation technologies for all parts, finished lighting fixtures and electrical equipment.

Basic Technology

Development Technology

Lighting fixture technology Information and security equipment Power supply parts



Manufacturing Technology

Assembly technology Processing parts technology



Manufacturing Standards

Evaluation based on the IEC standards, Electrical Appliances and Material Safety Act, and technological standards such as JIS

Water resistance evaluation Evaluation of environmental effects on Power supplies Coating technology evaluation etc.



Lighting fixture technology

Water proof design, optical design, thermal analysis, stress analysis. 3D CAD

Electronic circuit board technology

Emergency light circuits, inverter circuits, phase control circuits, inverter circuits, DC converter circuits, sound memory power output circuits, sensor technology, LED control circuits, infrared remote control, wireless remote control, switching power circuits, digital data transmission circuits, magnetic card utilization technology, solar control circuits.

Electronic circuit board assembly technology

Discrete implementation technology, chip implementation technology, chip and discrete mixed implementation, image processing implementation inspection technology, specially formed parts implementation, flow and re-flow soldering technology (lead-free soldering), substrate cleaning technology, automatic electronic block inspection system (incircuit function), electronic block water proof technology, image processing soldering inspection technology

Surface Treatment Technology

Powder coating technology, silk-screen printing technology, UV printing

Sheet Metal Press Work Technology

Stamping press forming, transfer press forming, robot line press forming, all-round screw cutting technology, turret punch press

Appliances Assembling Technology

Inverter emergency light automatic electric testing technology, lighting fixture assembling technology, small lot cell manufacturing system, packing machines for multiple shapes, control panel wiring assembling technology, manufacturing process inspection machine

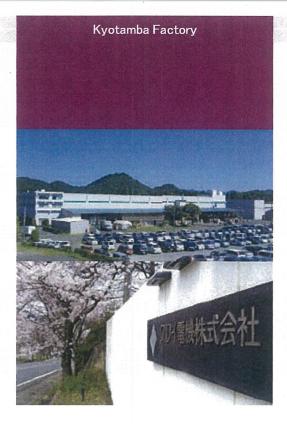
Woodwork Processing Technology

Wooden shade assembling technology, six axes molder technology, NC router processing, sandblast processing (see-through ribbed patterns), wrapping processing, wood coating technology, wooden frame high frequency adhesive machine, punching (Thomson) processing, round-bar chamfering caulking processing, urethane coating, resin impregnation of wood

Molding Processing Technology

Pressure forming (even thickness), vacuum forming, direct pressure forming, injection forming, globe-panel heat fusion cutting technology, die-cast aluminum

Kuroi Electric Co.,Ltd.



Main Production Facilities

Manufacturing and assembling of lighting fixtures for housing, mainly Japanese style craftwork, and facilities and exteriors

Cell production lines × 42

Assembling of control equipment

Equipment assembly line Cell production lines \times 2

Craftwork lamp shades, plywood presswork, and coating wooden products

High frequency adhesive [binding] machine NC router machine Six axes molder

Molding and printing on sockets, switches, and globes

Injection forming machine Vacuum forming machine Pressure forming machine Printing machine

Metal working, mold making and maintenance

Hybrid bender machine 200t automatic robot Turret punching press machine

Sheet metal coating for lighting fixtures

Powder coating facility



Kuroi Electric Co.,Ltd.

From purchasing materials, processing parts through assembling the final products, we employ manufacturing operations and systems that respond to the changing

Compressed Air Molding



Sheets, such as acrylic, are heated to become soft and are molded into various forms, cutting off the unnecessary portions at the same time. A series of processes are automated, such as conveying sheets, heating, forming, and taking the products out.

(Pulverized-material) Electrostatic Coating Line



We use polyester coating materials that are weather—proof and adhesiveness. In a pretreatment we use zinc phosphate. This coating line has excessive pollution prevention equipment.

200 ton Press Robot Line



We mass produce and convey automatically large sheet metal parts.

Turret punching press machine



Without metal molds, we can punch sheet metal up to 2500mm width of panel.





Main Facilities in the Kusatsu Business

Manufacturing and assembling electronic devices, dimmers, LED related equipment

Discrete parts mounting machine Axial mounting machine (AVB) Radial mounting machine (RHB) Axial sequencer

Radial sequencer
Chip mounter × 4

Glue bond dispenser × 2

Cream solder printing machine

Reflow soldering device × 2

Double jet flow soldering machine × 2 (RBF)

Flux Sprayer × 2

In-circuit tester × 6

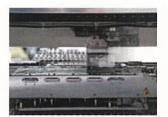
Automatic characteristic inspection device

PC board appearance tester

PC board washer

Stirring and de-foaming and filling machine \times 2

Stirring and de-foaming device



One of our subsidiary companies, Sano Manufacturing, has a factory in Kusatsu, where they make specialty products in smaller lots

Chip Mounter and Implementation Line



We have seven zones that differ in temperature. We solder boards in the most suitable temperature zone. We can cope with high-mix low-volume production and can handle each soldering material individually.



We manufacture a wide variety of products in small quantities to meet our customer demands.

Automated Electrical Feature Inspection



This device inspects the electrical features of our products automatically and has broad versatility for multiple applications. It also manages and saves statistical data.

Kuroi Electric Co. Ltd.

Name: Kuroi Electric Co., Ltd.

Representative: President Takashi Kuroi

Establishment: June 1, 1952 Capital: ¥98,370,000 Employees: 383 Sales figures: ¥9.6 billion

Activities: lighting fixtures (homes, construction sites, shops),

lighting dimmer equipment, wiring equipment, electric parts, lighting control technical products, home security related products, Information related equipments, etc. We plan, research, develop and manufacture electronic products.

Head office and Kyoto R&D Center:

Address: Kyotominami bldg. 4F, 7 Kamitobadaimotsu-cho,

Minami-ku, Kyoto 601-8121 Japan

Head office TEL 075-555-0569 Kyoto R&D Center TEL 075-644-7775 Integration Division and Kyotamba Factory.

Address: 79-1, Toyotachihara, Kyotamba-cho, Funai-gun, Kyoto

622-0231 Japan

TEL 0771-82-1130

Kusatsu Business unit.

Address: 359-1 Aoji-cho, Kusatsu-shi, Shiga 525-0041 Japan

TEL 077-562-2333

Main customer: Panasonic Eco Solutions Company

Our banks: SUMITOMO MITSUI BANKING CORPORATION,

The Bank of Kyoto, Ltd. SHIGA BANK, Ltd.

Subsidiary Companies

Meisei Electric Co..Ltd.

Address: 28,Nakaoguchi-4cyome,Ooguchi-cyo,Niwa-gun Aichi

480-0142 Japan

TEL 0587-95-2341 http://www.msek.co.jp

Sano Co..Ltd

Head office and main factory:

Address: 269-6, yamadera-cyo, Kusatsu-shi, Shiga 525-0041 Japan

TEL 077-569-4130 http://www.sanoss.co.jp

Kusatsu factory:

Address: 359-1,Aoji-cyo,Kusatsu-shi,Shiga 525-0041 Japan

TEL 077-562-4177 TAMBA WINE LTD

Address: 96, Toyotatoriino, Kyotamba-cyo, Funai-gun, Kyoto

622-0231 Japan
TEL 0771-82-2002 http://www.tambawine.co.jp

TAMBA WINEHOUSE LTD.

Address: 83, Toyotachihara, Kyotamba-cyo, Funai-gun, Kyoto

622-0231 Japan

TFI 0771-82-2003

KUROI ELECTRIC HONG KONG CO..LIMITED

Address: Room 301 3/F Sun Hung Kai Centre 30 Harbour Fload

Wanchai, Hong Kong

Human resources we look

Kuroi Electric Co. Ltd. was established in 1952 and has been producing lighting fixtures and electric machinery and appliances. The founder worked for Matsushita Electric Industry Company [current Panasonic Corporation], and then set up his own business. He buried himself in his research development, as he believed developing and producing

energy saving fluorescent lamps would help rebuild Japan after the war. The founder's spirit, the venture spirit, is still powerful. We look for people with leverage and vitality who can cope with difficult times and deliver ideas.



History

Established in Reizen-cho, Kyoto, on June 1, 1952

We supplied fluorescent lamps for ships to a major shipbuilder. In the 1960s, with the cooperation of Matsushita Electronic Co. Ltd (Presently Panasonic Corporation), we mass produced transistor radios. And later we expanded

our business to tuners, antennas, and electronic circuit technology. In the 1970s, we developed Japanese style lighting fixtures which became very popular and sold well. We also developed emergency exit light equipment, and invented lighting dimmers for Matsushita Flectric Works Co. Ltd.

In 1978 the Tamba Factory was completed in the northern part of Kvoto prefecture.

In the 1980s, we established Kuroi Glass Co. Ltd. (Presently Akari Glass Co. Ltd.) to make glassware for lighting fixtures. We developed many sophisticated products, such as Pana-Arm Stand. In 1990 a corporate identity campaign was conducted. The company name, Kuroi, used to be in Chinese characters but it was changed to

In 1991 we received the Labor Minister's Prize for Effort (Hygienic Working Conditions)

In 1993 we received the Labor Minister's Prize in Employment **Development for Senior Citizens Contest**

In 1994 the pressing plant was completed in Tamba factory. We received the Labor Minister's Prize as a leading company for employment development for senior citizens.

In 1996 the paint factory was completed in Tamba factory. In Oct. 1997 we were certified according to ISO-9001 (current Panasonic Eco Solutions Business Consulting & Training Certification).

In Apr. 2000 we were certified according to ISO-14001.

In 2001 we received the Chairman's Prize of the Recycling Council. In 2002 all the lighting fixture production was centralized in the Tamba factory.

In 2007 we were awarded as a Parenting Support Company by Kyoto Prefecture.

In 2008 the main office was moved to Kyotamba-cho.

In 2012 Kyoto R & D Center was opened.

In 2013 the glass department was demerged into Akari Glass Co. Ltd

In 2016 the main office was moved to Minami-ku, Kyoto-city.

In 2018 participation to Kansai SDGs platform

Education system and welfare

In our employee education system, we help the employees to bring out their full potential. Our education system includes general education and job education. We also have on the job training, and a career upgrade system. The employees can take distance learning for self-development and we encourage the employees to obtain national ualifications.

We provide our employees with good employment benefits and, we provide a loan system to help our employees to buy their own homes.

