## 5 Minute Introduction to FURUKAWA



### History

FURUKAWA's roots lie in the operation of copper mines and we have been contributing to industrial development in Japan for over 130 years. Let us tell you about our history from the beginning.

1868 - 1912 Meiii

**Company Foundation to Expansion of Copper Mine Operations** 

1912 - 1989

**Further Diversification** 







# FURUKAWA - Aha!

FURUKAWA's roots lie in the operation of copper mines and we have been contributing to industrial development in Japan for over 130 years.

Let us tell you about our history from the beginning.

## 1868 ► 1912 Meiji

## From Company Foundation to Expansion of Copper Mine Operations

Both the times and industry were changing dramatically. FURUKAWA was born in this time of changes and achieved significant development with the operation of copper mines.



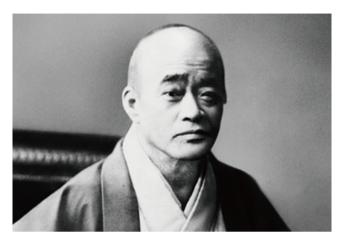






**1868 ► 1912** Meiji **1875** [Meiji 8]

## The foundations of FURUKAWA's development lie in the industry of the time – the Operation of Copper Mines



Founder Ichibei Furukawa

The history of FURUKAWA dates back to when Ichibei Furukawa began the Kusakura Copper Mine operation in Niigata Prefecture in 1875. And two years later, when he obtained the management rights for the Ashio Copper Mine in Tochigi Prefecture in 1877, he decided to focus on the mining business.

At that time, when the world was about to enter the Era of Electricity, copper mine operation was a key industry as it produced copper, a raw material essential for electrical appliances.

**1884** [Meiji 17]

## Proactively adopted leading-edge Western technologies The Ashio Copper Mine produced the largest amount of copper in Japan



The Ashio Copper Mine at that time

Thanks to revolutionary technologies that were introduced one after another, improved work efficiency and the discovery of veins, the Ashio Copper Mine produced the largest amount of copper in Japan in 1884. At one time, almost 50% of copper produced in Japan was produced there and the success at Ashio became the foundation for the development of FURUKAWA.

In addition, our initiatives at Ashio served as experiments on many leading-edge technologies, and through these we made significant contributions to the development of modern industry in Japan.



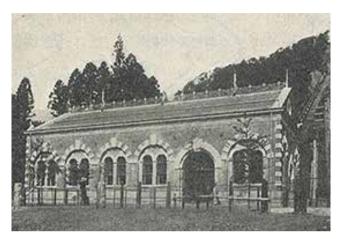




**1868 ► 1912** Meiji

1890 [Meiji 23]

### Constructed Japan's first hydro-electric power plant Subsequently commenced the construction of a large hydro-electric power plant in Nikko

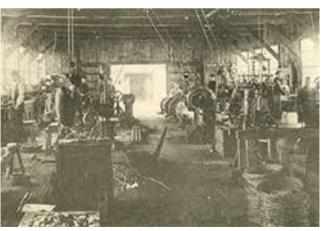


No.1 Hoso-o Hydro-electric Power Plant

As the mining and smelting technologies at the Ashio Copper Mine advanced, we aggressively improved and developed power supply and transportation methods. We focused on hydro-electric power as a new energy source and invited engineers from Siemens in Germany to help us construct, in 1890, the Mato Hydro-electric Power Plant at the Ashio Copper Mine, the first hydro-electric power plant in Japan. We also completed Hoso-o Hydro-electric Power Plant in Nikko in 1906.

**1900** [Meiji 33]

## Set up a machinery works at the Ashio Copper Mine and entered into the machinery business



Ashio Electric Machinery Repair Works

At Ashio, we began using imported rock drills in 1885. Compared to conventional excavation by hand, rock drills tripled the monthly excavation distance, improved work efficiency and dramatically reduced the burden on drilling workers.

The Manufacturing Section was set up to repair machinery, and in 1900, a machinery works was set up and the company entered into the machinery business.







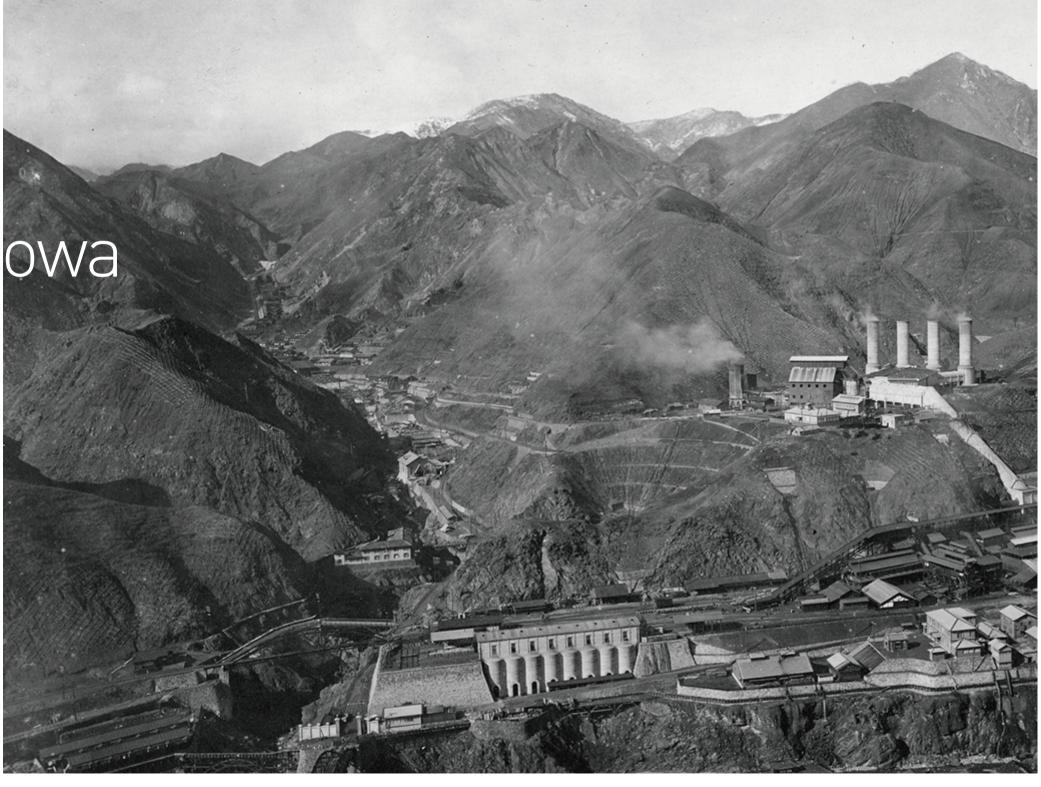


# 1912 ► 1989Taisho to Showa

### **Further Diversification**

Improvement and refinement of work at copper mines led to the diversification of businesses.

FURUKAWA is evolving and developing in diversified fields in response to the demands of the times.









1914
[Taisho 3]

### Manufactured the first rock drill in Japan -

#### the foundation of the subsequent rock drill business





Japan's first rock drill

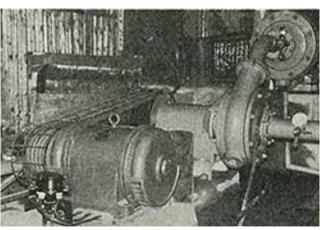
Ashio was mechanized through the use of many imported rock drills. When we were repairing machinery, replacing damaged parts and making new parts to replace them, we started thinking that we wanted to improve rock drills to accommodate the physique of the Japanese operators. In 1914, engineers at Ashio invented a hand-held rock drill. This was the first rock drill made in Japan and was the first step towards FURUKAWA's rock drill business that has become well-known throughout the world today.

**1912 ► 1989**Taisho to Showa

Drilling with imported rock drills

**1954** [Showa 29]

## FURUKAWA pump manufacturing began in the Taisho era from a company-use pump at copper and coal mines



Unmanned pump room at that time

At copper and coal mines, the transportation of water mixed with solids such as stones, mud and metals is as important as excavation. FURUKAWA began manufacturing company-use pumps needed for this transportation in the Taisho era and started selling pumps in the market in 1954.



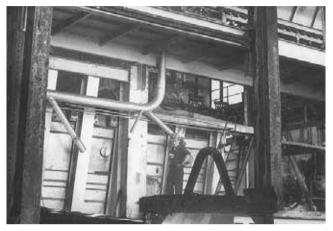




**1956** [Showa 31]

## FURUKAWA's combat against pollution led to the completion of a flash smelting plant at Ashio Smelting and Refining

### 1912 ► 1989 Taisho to Showa



Furukawa/Outokumpu flash smelting furnace

FURUKAWA, who owned the Ashio Copper Mine, was the first company to start to combat pollution.

Our sincere efforts led to our current environmentally-friendly business. Our research and improvement on copper smelting methods produced a no-pollution smelting method that collects sulfur dioxide in a sophisticated manner.

This flash smelting technology has supported our metals business and has been used at many copper smelting plants in Japan and abroad.

1962 [Showa 37]

## Efficient use of by-products generated through the smelting process Research and development of high-purity metallic arsenic



High-purity metallic arsenic

Can we use by-products generated through the smelting process? One of our efforts towards this issue was the efficient use of arsenic. Arsenic started gathering attention as a material for semiconductors and we began research in 1961 and developed high-purity metallic arsenic with 99.999995% purity and commenced sales in 1962. It has become a material indispensable in leading-edge technologies and is the face of our electronic materials business.







1987
[Showa 62]

## Bought UNIC Corporation UNIC has become a synonym for truck-mounted cranes

# **1912** ► **1989**Taisho to Showa



Transportation and cargo-handling functions on a single truck

FURUKAWA bought UNIC Corporation in order to expand into a new field in 1987. A line of UNIC products that revolutionized work efficiency by having transportation and cargo-handling functions on a single truck was added to FURUKAWA's product range. We continued to work on the development of new products in response to the demands of the times and we won the Energy Saving Grand Prize with the environmentally-friendly U-Can ECO series with improved fuel efficiency and low noise. Our efforts for progress will never cease.







1989 ► Heisei onwards

### A Global Furukawa To the world, to the future

Aiming to become a company that contributes to the creation of an affluent society









1989 ► Heisei onwards 1989
[Heisei 1]

## The company's Japanese name changed from Furukawa Kogyo Kabushiki Kaisha to

#### Furukawa Kikai Kinzoku Kabushiki Kaisha

FURUKAWA, having started as a copper mine business, has developed and we have applied our technologies and products in diversified fields, in response to the demands of the times during our history of over 100 years. In 1989, we changed the company name to one that represents what we are more precisely.

1998
[Heisei 10]

### Established a sales company for rock drill products in the Netherlands Made our technologies available on the global market



FURUKAWA's rock drills are used around the world

In the rock drill business, we have strengthened our overseas sales network through various measures such as establishing a sales company in the Netherlands in 1998, etc. We are meeting overseas demands as one of the major international rock drill manufacturers. In the UNIC business, we are focusing on promotional activities in order to accelerate the expansion of our overseas business.

Utilizing the Group's overseas development capabilities, we are aggressively developing the overseas markets for other products such as pumps.

#### A crane can be used even in an indoor space!?

As more and more of our products are exported, they are sometimes used in different ways in other countries. For example, our mini crawler cranes are often used in places that trucks cannot access, such as cemeteries in Japan, but in other countries, they are used to install windows/glass panels in rooms with high ceilings, etc. Our compact UNIC products that can enter through narrow openings are widening















# 1989 > Heisei onwards

**2005** [Heisei 17]

## We spun off and incorporated businesses to enhance the management of the Furukawa Company Group



Head Office. (Marunouchi Nakadori Building)

In an environment where globalization is advancing and speed is an important factor, in 2005, we spun off and incorporated businesses, and have been moving forward as the Furukawa Company Group in order to provide products and services that precisely meet our customers' needs.

By promptly responding based on the characteristics of each business and market, we are aiming to enhance the management culture of the whole Group and to maximize corporate value.

**2008** [Heisei 20]

## Re-established our R&D system towards the introduction of next generation strategic products

In 2008, as part of the enhancement of development capabilities, we set up a new Nitride Semiconductors Department to promote the gallium nitride substrates business. We are working to develop high-value added products in order to respond to markets where rapid growth is expected.





