

FRD has a lot of missions on the world for the next generation.



TO FIND

Creativity, coexistence and transformation – FRD has conducted research and development on our products used in the civil engineering, construction and mining industries based upon these concepts. FRD is always thinking about what FRD should do for the coming generation before the actual needs are clearly apparent. At times, this has been like finding a small seedling of possibility in a wasteland. At Furukawa Rock Drill, FRD devotes all of our know-how and experience to playing a role in the opening a new age.





MACHINE DESIGN AWARD

Special prize of judging committee in 44th machine industrial design award.

2014 in 44th machine industrial design award that was held by Nikkan Kougyou Newspaper Hydraulic Breaker Fxj Series received the special prize of judging committee.

Furukawa's Corporate Principles

Harmony

nuous challenges a

Management Principles that have Consistently Looked to the Future and New Challenges

FRD machines that "drill," "crush," "break" and otherwise open up the earth are widely used in resource development for exploring for and mining underground resources, and for constructing and other infrastructure for society. FRD has been a partner, both

domestically and internationally, in projects that are closely connected with the public welfare and which provide high returns to society, such as crushing rocks and drilling in quarries, mines,



Kiyohito Mitsumura, President

tearing down and constructing the foundations for buildings, and developing tunnels.

FRD stemmed out of the machinery division of Furukawa Co., Ltd. (formerly Furukawa Mining Co., Ltd.) on June 1, 1961. "Furukawa Rock Drill Sales Co., Ltd., " specializing in rock drill sales. On March 21, 2000, we merged with a construction machinery sales company and changed our name to "Furukawa Machinery Sales Co., Ltd." and on March 1, 2005 we integrated the Takasaki and Yoshii rock drill production plants of Furukawa Co., Ltd. and renamed our company to "Furukawa Rock Drill Co., Ltd." This has made us the top manufacturer of rock drills in the world and opens up new challenges for us to maximize the strengths of a company that combines both production and sales.

We have a long history and tradition that we value. One of the reasons that we have won the trust of our customers both in Japan and abroad is because our entire company has inherited the Furukawa corporate principles of "revolution," "creation" and "coexistence." "Revolution" is necessary to face the continuous challenges to the future. We shall contribute to the development of resources and the social foundation by combining "revolution" with technological innovation. "Creation" means "making attractive products" with technology that customers trust and having the imagination to materialize products that meet the needs.

"Coexistence" means developing together with our customers and local society. It means improving customer satisfaction and being friendly to the earth's environment, conducting corporate activities that people appreciate with confidence and pride, and contributing to people around the world. The current times require ideas based on a global viewpoint and competitiveness over the borders. However, our company will maintain its corporate principles whatever the current conditions and will always maintain its position of "customers come first. In order to create a better future we are confident that we can continue to spreading the circle of empathy and development through "sincere actions and challenges." We shall make further efforts to directly connect a new page of Furukawa Rock Drill to the satisfaction of all of our customers.

TO CHALLENGE

FRD provides high value-added products and services on a global scale such that only a company that knows the land could provide. "Drilling," "crushing" and "breaking": Those machines are indispensable for opening up the earth. FRD supports the development of infrastructure both domestically and overseas with its machines. These include hydraulic crawler drills, hydraulic breakers, hydraulic crushers. Supplying these machines makes work more efficient and helps reduce manpower needs, and they also contribute to improved ease of operation and safety. These products and services are used in Japan and over one hundred countries around the world. They allow new challenges and the expansion of our



- ① FURUKAWA ROCK DRILL USA
- **②** FURUKAWA ROCK DRILL USA SOUTH CAROLINA BRANCH
- **③** FURUKAWA ROCK DRILL LATIN AMERICA (PANAMA)
- **④** FURUKAWA ROCK DRILL EUROPE B.V.
- **5** FURUKAWA ROCK DRILL ABBRUCHTECHNIK
- **6** FURUKAWA ROCK DRILL EUROPE B.V. MADRID BRANCH

- ⑦ FURUKAWA ROCK DRILL (SHANGHAI) CO., LTD.
- **⑧** FURUKAWA ROCK DRILL (SHANGHAI) CO.,LTD. BEIJING OFFICE
- (9) FURUKAWA ROCK DRILL (SHANGHAI) CO., LTD. CHENGDU OFFICE
- 1 FURUKAWA ROCK DRILL (SHANGHAI) CO., LTD. GUANGZHOU OFFICE
- TURUKAWA ROCK DRILL KOREA CO., LTD.
- D FURUKAWA ROCK DRILL INDIA PRIVATE LTD.

Opening the Earth Around the World. One of the World's Top Manufacturer of and Leading Company in the field of Rock

In addition to expanding our domestic market share, we were one of the first companies in our industry to expand overseas. With our high standards technology and products, we initially expanded into Asia and Oceania, then moved to Europe and Africa, and finally established ourselves in North and South America. We are already exporting FRD products to over 100 countries worldwide and we have established local subsidiaries and sales offices in the major markets. This has made us the top manufacturer and a leading company in rock drills. By promoting aggressive development of our business, we aim to increase our overseas market share and trust.

One of our company's main products is the rock drill. FRD got our start in this business by repairing the imported machines used at the Ashio copper mine that opened in 1887, and later expanded into manufacturing the machines. Late 19th century, imported machines were too large and too heavy for average Japanese. In order to respond for the request of mining industry, FRD has spent numbers of hours to develop smaller and lighter machines that fit for average Japanese physiques. In 1914, FRD has introduced first Japanese-built handheld rock drill and was very well accepted by the mining industry. It is not an overstatement to say that this first machine was the first in a line of machines that cultivated a spirit of challenging new things in manufacturing, creativity and, most importantly, the concept of "for the customer." Since then, FRD has aggressively developed technology and produced innovative new machines one after another, thereby establishing our reputation as the top manufacturer of rock drills. Today, FRD machines are widely used in road construction, highway and railroad tunnels. These machines include Tunnel Drill Jumbo, Hydraulic Crawler Drills, Down-The-Hole Drills, Drill Jumbo for underground mines, Hydraulic Drifters, Hydraulic Breakers, Hydraulic Crushers, etc. Each of these products has new ideas and functions built into them. These products are used around the world and well known to users as "Furukawa's rock drills," and they have received high praise.

In addition to this wide variety of products, we have created a strong sales and after-sales service organization. FRD shall continue to develop as a top manufacturer and global company that possesses world class technology, so that FRD can win more trust and produce even better results.

Creating "Global Brand Rock Drills" that Meet All Needs Based on Our Accumulated Technology and Long History

The Takasaki Yoshii Works was originally the repair shop for the machinery used in the Ashio copper mine. The technological skills accumulated as a user were utilized to produce rock drills, and in 1914 we produced the first domestically made rock drill. Since then, FRD has been supplying easy-to-use and high performance rock drills for the market. In 1949, the factory was moved from Ashio to Takasaki. In 1971, the Yoshii Works was constructed in Yoshii to increase production of rock drills, and in 1976 a new works was built in Takasaki. The products made at these two factories are supplied to Furukawa's customers with confidence as the top manufacturer and leading company in the industry, and they have received high praise in Japan and around the world.



Works Layout





Takasaki Works

The Takasaki Works has machining centers and various numerically controlled machine tools for reducing labor and improving precision. The plant specializes in machining, heat treatment and assembly. This works manufactures : hydraulic drifters, hydraulic breakers and hydraulic crushers.

Overview

- ♦ Works grounds: 50,410 m²
- ♦ Works floor area: 13,357 m²
- Equipment: Machine tools (120 units), heat treatment





Heat processing equipment



Works Layout



Yoshii Works

The Yoshii Works conducts research and development and assembles products such as drill jumbos and hydraulic crawler drills.

In the R&D department, various basic experiments are conducted and product operation data is collected and analyzed to improve performance and quality. It is creating new lines of rock drill products to meet the ever diversifying and advanced needs of the current times. The aim is to ship products to customers around the world that they can use safely by maintaining a strict quality control organization.

Overview

- ♦ Works grounds: 66,000 m²
- Works floor area: 20,000 m²
- Products

Hydraulic breakers, hydraulic crushers, hydraulic and pneumatic crawler drills, down-the-hole drills, hydraulic drilling machines for furnaces, various drill jumbos, concrete spraying machines, powered tunnel loaders, various custom made machinery.



Drill jumbo assembly line



Finished product inspection



Hydraulic crawler drill assembly line



Design using 3D-AD



Management System ISO 9001:2015 ISO 14001:2015

www.tuv.com ID 0910079014

ISO9001 and ISO14001 certified

The Takasaki and Yoshii Works have received the international ISO9001 and ISO14001 certifications for quality assurance systems from the largest German certification organization, TUV CERT.

PRODUCTS & STAGES



Since FRD produced the first Japanese-made rock drill, FRD has developed numerous products and established our reputation as the world's top manufacturer and leading company in rock drills. FRD has a wide variety of models in our hydraulic breaker and hydraulic crusher series, and both have received high marks both domestically and abroad.

Blast Hole Drill

Hydraulic Crawler Drills

This is the integrated hydraulic crawler drill HCR series that proposes a new standard by including a new hydraulic drifter and intelligent drilling system. A comfortable cabin and ease of work allow a large reduction in total drilling costs.



Rotary and Down-The-Hole Drills

This is a large-diameter drilling machine series featuring superior drilling ability. Mobility in small faces, the comfort of the cabin, ease of operation, and ease of maintenance have all been greatly improved. The hard work of drilling can be made easily and in a comfortable cabin.



PCR-DTH





PCR200

Hydraulic Breaker

Hydraulic Breaker F Series

This is a high quality and highly reliable hydraulic breaker from the world's top manufacturer that realizes superior durability, crushing power, and work efficiency.

FRD has a wide range of models from small hydraulic breakers to superlarge hydraulic breakers for rock bed drilling that can meet every customer's need.





Fx silent series

F6

Hydraulic Crusher

Hydraulic Crusher V Series

The hydraulic crusher V series can tear down concrete and structural steelwork, and can do many things from crushing to recovering steel bars. Noise and vibrations have been held to the minimum, so that the effect on surrounding neighborhoods is minimized. FRD has a long lineup of various types of hydraulic crushers including the Vs series for secondary crushers, the Vx series for primary crushers, Multi-purpose crusher Vz series and the Vc series combi cutters crusher.





Secondary crusher

Flat-top model





Primary crusher 2 cylinder

Combi cutter crusher





Fxj silent series



Hydraulic rotation model



Multi-purpose crushe



PRODUCTS & STAGES



FRD drill jumbo propelled us into the top three manufacturers in the world, and, at the same time, FRD has by far the largest market share in Japan. These units are used for all kinds of tunneling highway and Shinkansen train tunnels, and FRD has continued to build in the latest technology. FRD has developed various types of drill jumbo units to meet the various construction methods. These units include wheeled units, crawler units, dolly units, impact auger drill units, TWS, etc. FRD develops, manufactures and sells various other tunnel construction machinery to meet our customers' needs, including concrete spraying machines, shaft jumbo units for vertical shafts, and inspection units for checking existing tunnels.

Drill Jumbo

Drill Jumbo

FRD develops and manufactures various types of drill jumbo units to meet the specifications required by customers. These include wheeled and crawler-type drill jumbo units with the new hydraulic drifter HD220, new impact auger drill HIA175. These can be used from small cross section to super-large cross section tunnels.



JTH2100 Wheeled drill jumbo unit HD220 mounted, two-boom, one cage JTH3200R-Ⅲ Wheeled drill jumbo unit HD220 mounted, three-boor two cade

Tunnel Workstation (TWS)

FRD develops and manufactures various types of tunnel workstations that integrate the multiple functions needed in tunnels to meet the specifications required by customers. These include units that treat the tunnel cross section as three dimensional to bore out blast holes,

construct supports, hammer in rock bolts, spray concrete, etc.





T3RW

one cade

Wing boom type

Wheeled drill jumbo

HD220 mounted, three-boom,

Mining Jumbo

deep holes, as well as to accurate drillings.



Concrete Spraying Machine

concrete pump, manipulator, quick setting admixture unit, for concrete spraying work.



CJM1800M Concrete spraying for Mines



FRD custom engineers built to order products to meet the needs of our customers, such as mine drill jumbo, etc. In recent years, FRD has also expanded into hydraulic drilling machines for furnaces and these have received high reputation. The know-how and experience that FRD has accumulated over the years through rock drills has led us to new possibilities of rock field.

Pneumatic tool

Furukawa is proud of the pneumatic tools that have been manufactured since 1917. There is a full-range lineup capable of answering all types of job requirements. Every unit blends the best of long proud tradition. Decades of specialized drill, breaker and related machinery manufacture combine with advanced engineering technology to give you top operation efficiency.





Hydraulic drilling Machine for Furnaces



22D Hand drill







FRD Furukawa reserves right to change specifications without prior notice.



Tel +81-3-3231-6982 Fax +81-3-3231-6994

Company Profile-E1812