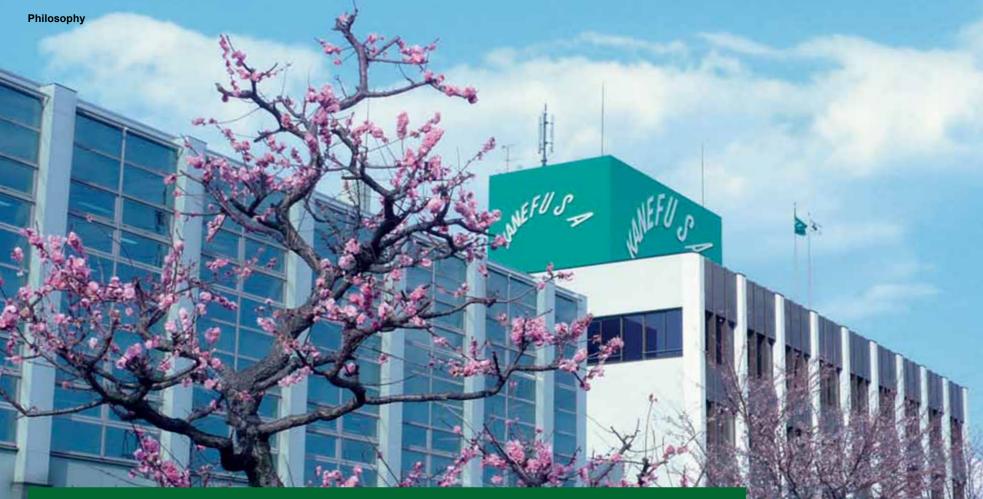


A new **Dimension** of Performance



KANEFUSA CORPORATION







Masato Watanabe, President

Comprehensive cutting tooling solutions and true customer service - that's what we aim to provide.

We would like to express our continued appreciation to all Kanefusa users worldwide for using our products. Cutting tools are widely used in any and all industries from the housing industry to the automobile industry. In other words, they are as essential to the manufacturing industry as rice is to Japanese food culture.

As developments of new materials and high precision mechanization proceed due to technological advancement, exponential improvements in tool performance are increasingly demanded. We are required to respond in every direction to customers' needs with products in high quality and precision.

We strive to comply flexibly with the demands of the future and aim to continuously provide value added cutting tools and customer service.

Thank you again for your continued business with us.



Original Technology Original Products These are the principles upon which we have established our company.

Innovation from tradition

Master blacksmith Kankichi Kamiya founded the company Uchihamonishi Kanefusa in 1896. In 1931, his son Suzuo Watanabe took over the company the start of a new era. With his enthusiasm for modern production techniques, innovative technologies and his ability to think ahead, Suzuo Watanabe set the course for the successful development of the company. In 1937, he founded "Kanefusa Hamono Ltd" and ultimately "Kanefusa Hamono Kogyo Co. Ltd" in 1948, which was renamed "Kanefusa Corporation" in 1990.

Suzuo Watanabe's enthusiasm for finding better solutions, innovative technologies and cutting tools to provide users with real value added is characteristic of Kanefusa through to the present day and can be felt throughout the whole company. The culture creates milestones in the field of cutting technology, is expressed in unique products, lives through our modern research center and is carried on by a highly qualified and committed management and staff.

It is this enthusiasm that makes us what we are: Japan's largest industrial knife and circular saw blade manufacturer, the epitome of innovative power and of quality for our customers around the world. This is a company with a great tradition that is ideally equipped for the challenges of the future. Welcome to Kanefusa.

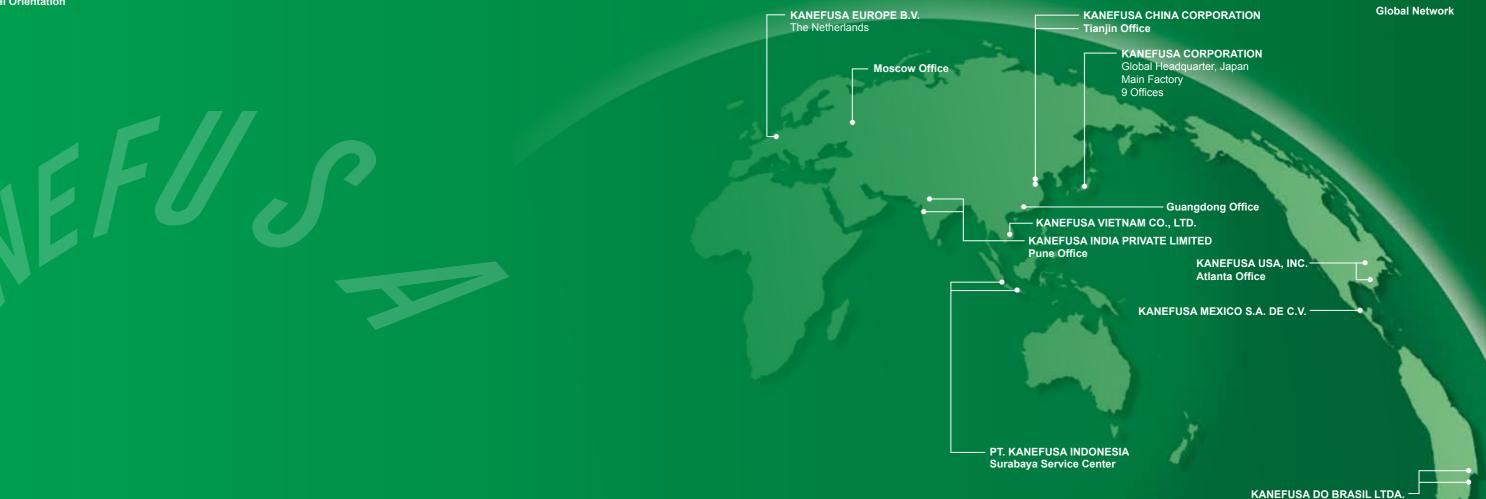
Around 1900 - Kankichi Kamiya

1948 - Employees of the new Kanefusa Hamono Kogyo Co. Ltd



1964 - New construction of the production site in Ohauchi

1973 – Suzuo Watanabe is awarded Japan's second highest accolade. "Raniu Hosho" by Prime Minister Kakuei Tanaka



Wherever cutting is required, we are at home all around the world.

Cutting tools play an important role in the production processes of any industrial sector all over the world, as the success of a production company is literally and frequently on a cutting edge. Kanefusa ensures the success.

With branches in all important industrial area in Japan and seven subsidiary companies abroad, we are able to promptly and reliably meet the increasing demands of our customers and partners all over the world. With our global presence, we are able to provide quick and effective on-site support to technical issues for our customers and partners. We provide end users with training courses on resharpening, maintenance of their machines, and with technical advices to achieve the best value from our tools. We attend various leading trade fairs around the world. Our global network implements assignments and requests from our customers to their satisfactions.

With unique products and reliable service, we make a significant contribution to profit improvement of our customers; no coincident that these customers are the leading companies in the respective industries.

2016 - IWF (USA)

2016 - IMTS (USA)

2017 - Ligna Hannover (Germany)

2015 - EMO (Italy)



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Joinville Service Center

Know-how meets pioneering spirit: Kanefusa Research & Development

Many Kanefusa cutting tools have unique properties, which distinguish them from other solutions for the same application and make them particularly valuable for the user. This advancement is based on consistent and intensive research.

In our research center, which was finished in 1996, engineers and developers deal intensively with modern material science, tool technology, process and application technology, as well as grinding technology.

Low-noise circular saw blade

Ferro Max cold saw blade

Advanced Material Technology

VITECH paper cutting knives



Milestones in Research & Development

- 1952 HSS Super Finishing knives
- 1974 Low-noise circular saw blades 2004 VITECH paper knives
- **1984** ENSHIN planer head
- 1985 Single use circular saw concept 2008 Novametal Pro DIA
- 1988 Advanced Material Technology
- 1990 M-type dowel drill

In other words, they are tackling the question of how to make our tools even sharper, more durable and quieter. To do this, they use the latest equipment such as scanning transmission electron microscopes, experimental coating furnaces, modern simulation software and up-to-the minute CNC processing centers and grinding machines. The discoveries they achieve



- **1997** GranDia PCD grinding machine
- 2008 ECO ENSHIN knives
- 2009 "Ferro MAX" Super Tube
- **2014** PCD Fine Pitch Tooth Face Mill

today will make the work of our customers easier, more convenient and more profitable tomorrow. Whether in technologies such as Advanced Material Technology, PCD micro teeth or the revolutionary single use cold circular saw technology; where knowhow meets the pioneering spirit, the result we produce is always something special and original.



Passion meets precision: The Kanefusa Production

> Innovative products are based both on passionate research and development and on the very latest production methods. At Kanefusa, the production line, like the products themselves, are subject to a continuous process of optimization and development. This also includes ongoing investments in the latest systems and machines with the aim of achieving maximum quality and efficiency over the entire production process. If existing production

technologies and equipment do not meet these high requirements, then the expertise of our developers strike again: over 40% of the machines used in-house are our own developments, "Made by Kanefusa". The latest production systems, sophisticated processes, slim line structures, qualified and motivated staff are the best conditions for creating the quality you expect from Kanefusa.

Milestones in Production

- **1950s:** Start of industrial knife and cutter production, use of a high frequency induction heating in knife production
- **1960s:** New construction of the main factory, start of tungsten carbide tipped circular saw blade production
- **1970s:** Development of systems and start of saw plate production, use of a state-of-the-art forging line and inert gas furnace
- **1980s:** Start of production of PCD tools, knife heads and metalworking circular saw blades, intro-

Quality control of Cold saw blade





duction of fully automated CNC processing centers, establishment of a production site in Indonesia

- **1990s:** New construction of circular saw blade production with robot technology, establishment of own coating systems, use of PVD furnaces, ISO certifications
- **2000s:** Establishment of a production site in China, expansion of existing plants in Japan and Indonesia
- **2010s:** Start of production of high precision PCD tools for car industry.

CNC processing center

Circular saw blade production

On demand in numerous markets: Ideas from Kanefusa



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WOODWORKING INDUSTRY

Primary:

Plywood, chipboard, OSB, MDF and solid wood board production, sawmill...

Solid wood processing:

Planing works, glued laminated timber and solid wooden furniture production...

Board processing:

Furniture production, production of structural elements...

Handcraft:

Joiners, instrument manufacturers...

METAL INDUSTRY

Ferrous metal: Automotive industry, pipe industry,

railway, mechanical engineering, machine elements...

Non-ferrous metal:

Automotive industry, airplane, railway, mechanical engineering, machine elements, facade engineering...

PAPER INDUSTRY

Pulp preparation: Chipper and flaker Paper production: Graphic paper production, special paper production... Printing industry:

Print shop, bookbinders...

PLASTICS INDUSTRY

cases...

Composite materials: Printed circuit board production, airplane construction... Recycling: Packaging materials, construction materials... Construction elements / other: Polymer worktops, signs, show

Razor-sharp arguments: Kanefusa Woodworking Cutting Tools

Whether in primary industry, solid wood processing, board processing or handcraft: woodwork-processing tools from Kanefusa achieve the highest conceivable level of quality, functionality and efficiency in all disciplines. Our "Advanced Material Technology" coating, the use of new cutting materials and tooth shapes as well as the tool design and, of course, greater precision in production are the keys to product advantages that no other manufacturer is able to provide: drastically extended tool life, constant high cutting quality, effective noise reduction, greater efficiency and profitability. Tools like ENSHIN, BOARD PRO III and Timber Max have defined new standards.





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Setting benchmarks: Kanefusa Metal Cutting Tools

We are the pioneers of single use cold saw blade technology for cutting ferrous pipes and rods. Our Ferro Max cold saw blades are considerably superior to band saws and metal circular saw blades.

Many leading automotive suppliers and manufacturers of machine elements are replacing their ordinary tools with these. The technology is faster, more economical, more accurate, more reliable for processing and more environmentally friendly than alternative processing techniques.

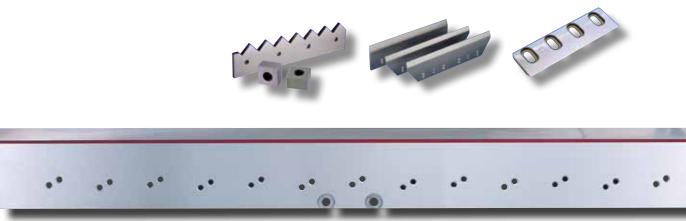
In the processing of non-ferrous metals, the Novametal Pro DIA PCD cold saw blade developed for processing new alloys and the Sash Pro circular saw blades are setting new benchmarks in noise reduction, tool life and surface quality.

Clean-cut: Kanefusa Paper and Plastic Cutting Tools

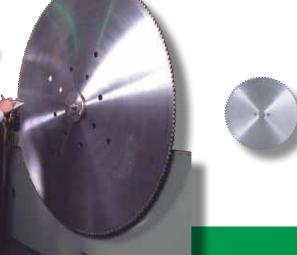
The VITECH series has revolutionized an entire industry, as the VITECH-TC guillotine knives and three-knife trimmer exceeds the performance of ordinary carbide knives many times over. In the field of HSS blades, our VITECH-HS sets a new standard. The pulp industry swears by the durability of the Timber Tec chipper knives and our sheeter knives keep the paper machines

running. recycling industry.









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For the plastics industry, we keep an extensive range of tools, such as Mono DIA milling tools for acrylic glass processing, PCD saw blades for cutting printed circuit boards or hard metal knives for the





"Always respect and cherish customers. Try something new that hasn't been done before. Spend money wisely, and for the common good. Develop deep and meaningful relationships. Always have a dream, and strive to achieve it."



Suzuo Watanabe, Founder of Kanefusa Corporation 30.07.1908 - 09.02.1993