

**C-max**

A Guide to \_\_\_\_\_  
**FUJISEIKO**





Clamp



Challenge



Certainty



Combination



Conception



Capability



Confidence



Community



Customer



Charm



Company  
employee



Capital  
investor

# **C-max** What is C-max?

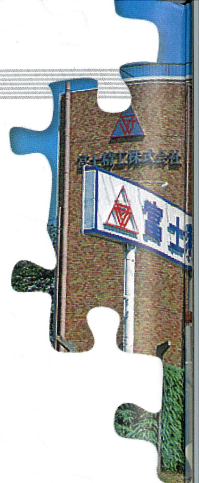
In 1969, about 10 years after FUJISEIKO was founded, "C-max" brand was born with a technical concept of pursuing the ideal clamping to the utmost limit (Clamp + maximum=C-max).

In the mid 1990's "C-max" regenerated and developed a concept of a total service approach for tooling using both hardware and software for the expanding global market.

This transformation into a total business concept lead us into a constant quest of what we call the 7C's, Capability, Certainty, Conception, Challenge, Confidence, Combination, & Charm.

Corporate social responsibility is strongly required in today's business market and "C-max" has evolved into a total management concept to create value for every one of our Customers, Investors, our Community and our Employees.

"C-max" continues to develop in order to respond to the needs of the present and the future.



Even though our main business is designing and manufacturing specialized tools, we go beyond the concept of the specialized manufacturer.

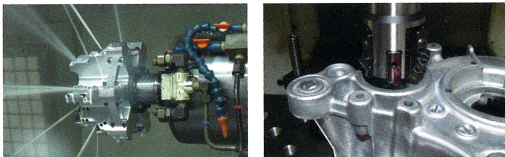
» Company Outline

Established..... March 1958  
 Paid-in Capital... 2.88201 billion yen  
 Stock listings..... Nagoya Stock Exchange, 2nd Section  
 (code 6142)  
 Representative... Makoto Mori (President and CEO)  
 Employees..... Consolidated 1,629  
 Unconsolidated 481  
 Annual sales..... Consolidated 22.0 billion yen  
 Unconsolidated 14.0 billion yen  
 (as of Feb. 2016)

» Sales Items [Unconsolidated]

cutting tools (drills, reamers, tips, cutters)\*1  
 holders\*1, grinding wheels\*2  
 jigs, automobile parts trial  
 injection moldings, work gauges

\*1 including Agency business  
 \*2 Agency business



» Major Customers [Unconsolidated]

■Automobile

Caterpillar Japan Ltd.  
 Daihatsu Motor Co., Ltd.  
 Fuji Heavy Industries Ltd.  
 Hino Motors, Ltd.  
 Honda Motor Co., Ltd.  
 Hyundai Motor Company

Isuzu Motors Limited  
 Komatsu Ltd.  
 Mazda Motor Corporation  
 Mitsubishi Motors Corporation  
 Nissan Motor Co., Ltd.  
 Suzuki Motor Corporation

Toyota Motor Corporation  
 Toyota Motor East Japan, Inc.  
 Toyota Motor Hokkaido, Inc.  
 Toyota Motor Kyusyu, Inc.  
 Yamaha Motor Co., Ltd.

■Automobile parts

Advics Co., Ltd.  
 Aisan Industry Co., Ltd.  
 Aisin AI Co., Ltd.  
 Aisin AW Co., Ltd.  
 Aisin AW Industries Co., Ltd.  
 Aisin Keikinzoku Co., Ltd.  
 Aisin Kiko Co., Ltd.  
 Aisin Kyushu Casting Co., Ltd.  
 Aisin Metaltech Co., Ltd.

Aisin Seiki Co., Ltd.  
 Aisin Takaoka Co., Ltd.  
 Akebono Brake Industry Co., Ltd.  
 Denso Corporation  
 Hiraiwa Iron Works Co., Ltd.  
 Hiroshima Aluminum Industry Co., Ltd.  
 Hitachi Automotive Systems, Ltd.  
 Hosei Brake Industry Co., Ltd.  
 Izumi Machine Manufacturing Co., Ltd.

Jatco Ltd.  
 Koritsu Co., Ltd.  
 Kyusyu Musashi Seimitsu Co., Ltd.  
 NT Techno Corporation  
 Otics Corporation  
 Ryobi Limited  
 Taiho Kogyo Co., Ltd.  
 Toyota Boshoku Corporation  
 Toyota Industries Corporation

■Machinery

DMG Mori Co., Ltd.  
 Enshu Limited  
 Honda Engineering Co., Ltd.  
 Horkos Corp  
 Howa Machinery, Ltd.

Jtekt Corporation  
 Komatsu NTC Ltd.  
 Nachi-Fujikoshi Corp.  
 Nisshinbo Mechatronics Inc.  
 Sakurai Ltd.

Takamatsu Machinery Co., Ltd.  
 Yamazaki Mazak Corporation  
 Yasunaga Corporation

■Electric-appliance

Mitsubishi Electric Corporation

Greetings



In 1958 FUJISEIKO adopted German meister system and began operation under the vision to make Japan's No.1 (FUJI) precise tools (SEIKO). Since then we consider that we have contributed to the development of the industrial world and communal society through the "Manufacturing" of precision tools. We have developed into a global company with operations in 9 countries from a small factory in Aichi prefecture for a half-century and we have to play the role of "Companies are public institutions" more than before. We actively conduct business activities so that worldwide shareholders realize according to the status of each that FUJISEIKO is a Necessary Company / Important Company (= "Good Company").

Makoto Mori CEO



» Networks [Domestic Operations]

■ Head Office / Main Plant

26 Hirako, Yoshiwara-cho, Toyota, Aichi 473-8511, JAPAN  
phone 0565-53-6611 fax 0565-53-6601

■ Kumamoto Plant / Kyusyu Office

1613 Muro, Ozu-machi, Kikuchi, Kumamoto 869-1235, JAPAN  
phone 096-293-0001 fax 096-293-5949

■ Kagoshima Plant

1-1, Kokubuenohara technopark, Kirishima, Kagoshima  
899-4317, JAPAN  
phone 0995-46-8686 fax 0995-54-8025

■ Hokkaido Office

2-4-21 Mamachi, Chitose, Hokkaido 066-0045, JAPAN  
phone 0123-40-4061 fax 0123-40-4062

■ Akita Office

60-4 Aza-Higashimatubara, Maegou, Yokote,  
Akita 013-0042, JAPAN  
phone 0182-35-1112 fax 0182-35-1113

■ Kitakanto Office

5469 Ryumai-cho, Ota, Gunma 373-0806, JAPAN  
phone 0276-30-2086 fax 0276-30-2087

■ Kanto Office

5-2-40 Onna, Atsugi, Kanagawa 243-0032, JAPAN  
phone 046-224-1441 fax 046-224-2324

■ Fuji Office

6-26 Yashiro-cho, Fuji, Shizuoka 417-0024, JAPAN  
phone 0545-52-7081 fax 0545-53-3226

■ Osaka Office

3-2-26 Anyouji, Rittou, Shiga 520-3015, JAPAN  
phone 077-551-2058 fax 077-551-2059

■ Hokuriku Office

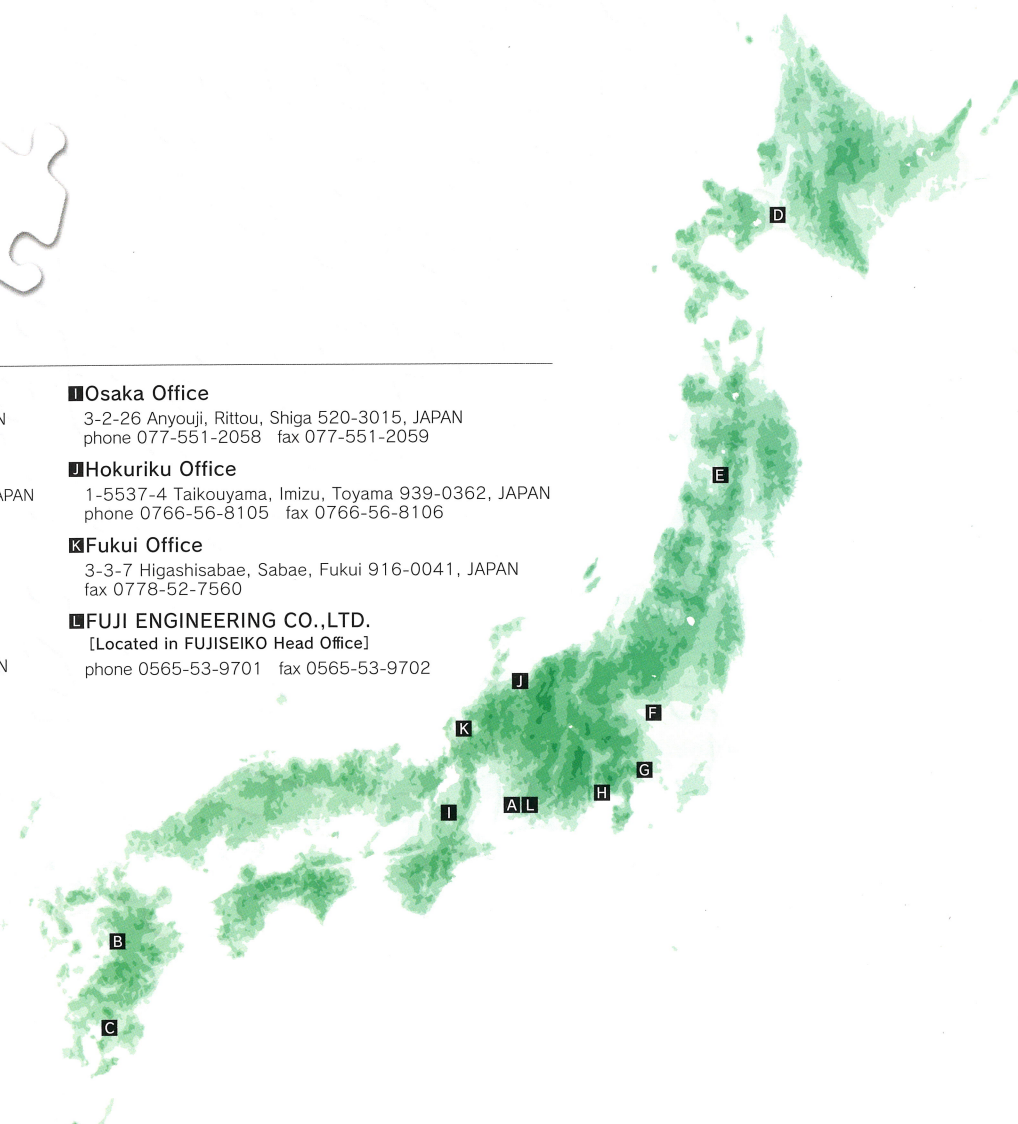
1-5537-4 Taikouyama, Imizu, Toyama 939-0362, JAPAN  
phone 0766-56-8105 fax 0766-56-8106

■ Fukui Office

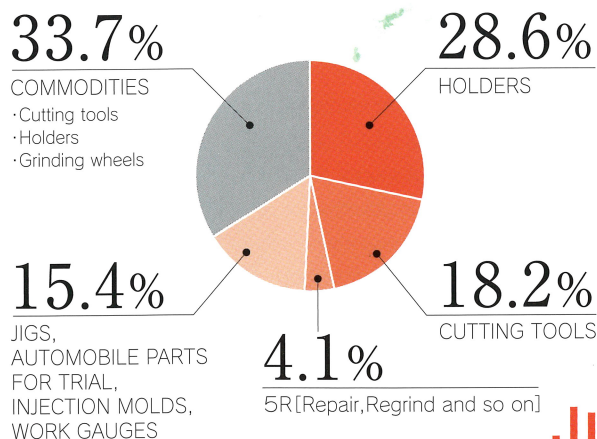
3-3-7 Higashisabae, Sabae, Fukui 916-0041, JAPAN  
fax 0778-52-7560

■ FUJI ENGINEERING CO.,LTD.

[Located in FUJISEIKO Head Office]  
phone 0565-53-9701 fax 0565-53-9702

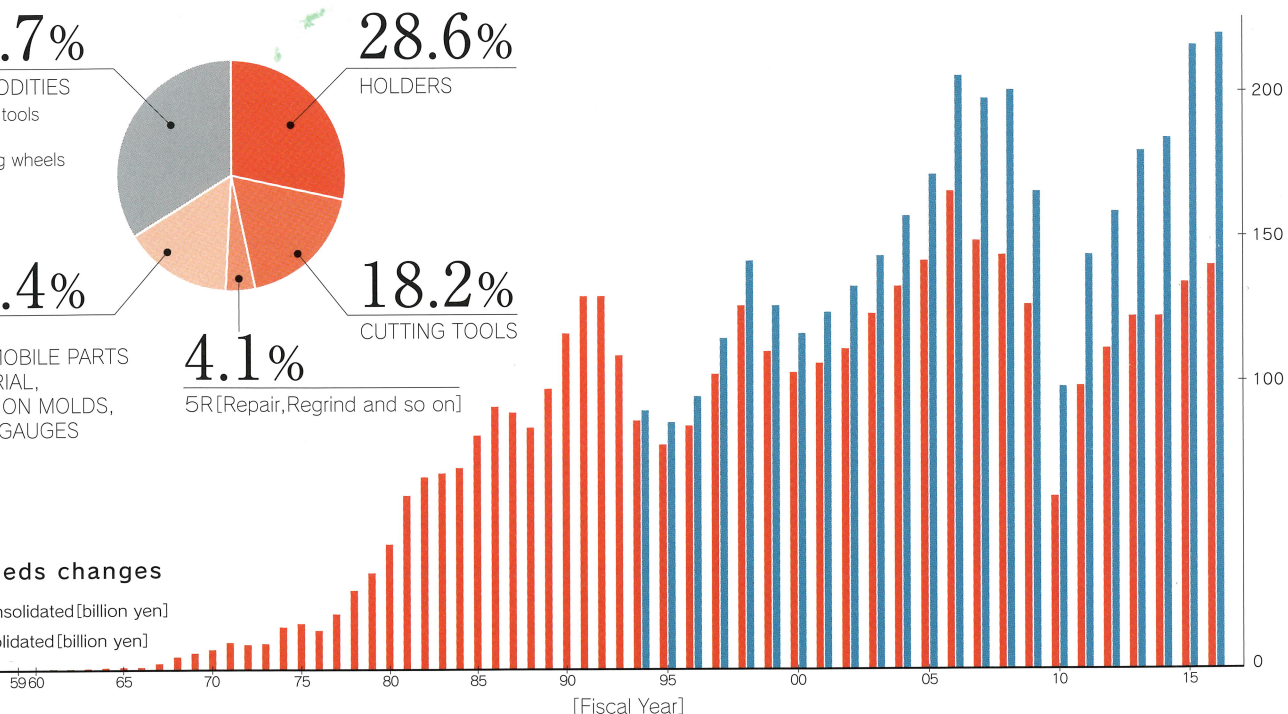


» Sales by products [as of Feb.2016 Unconsolidated]



» Proceeds changes

■ Unconsolidated [billion yen]  
■ Consolidated [billion yen]

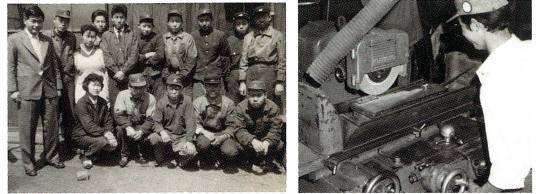


# Chasing the grand dream to produce the tools that we are proud of them to the world FUJISEIKO 's history for a half-century

since  
**1950**

## Chasing a grand dream in cutting tool manufacturing

In March 1958, the late Mr. Kiyoshi Mori who was inspired by German meister system established the brazing tool company "FUJISEIKO". He had a grand dream to raise staff to be excellent tool meisters through cutting-tool manufacturing and produce Japan's most precise cutting tools as Germany, in the future.



since  
**1960**

## C-max of foresight

There was an episode where Mr. Mori found lots of "Throw away tools" (replaceable tip type) at the leading motorization company Ford in America in 1969, then he immediately shortened the trip and went back to Japan to instruct his staff to develop "Throw away tools". Moreover he focused on recycling expensive carbide material and commercialized recycled cutting tools by regrinding used "Throw away tools" and special holders. Then these tools were released as "C-max grooving tools" in 1971 and become successful products as industry standard. That set the groundwork for our company's subsequent growth.



since  
**1970**

## Turn to domestic production of cutting tools and development of our technology

Even in the domestic high wave of motorization in the early 1970s, machine tools and industrial tools for engine parts depended on imports but Toyota Motor Company, our biggest customer, desired to turn them to domestic products. That was our participation of Toyota Motors' Domestic Tool Manufacturing Project and we aggressively tried to turn to domestic production by introducing American precise jig grinding machines, Swiss cylinder grinding machines and electric discharge machines and German 3D measuring machines. Therefore we achieved accuracy assurance like imported tools (in other words, domestic production) and that defined us as "The company who performs difficult tasks".

Furthermore we produced a large number of epoch-making tools that answered the needs of the age such as "Quick Change Holders" and "Fine-tuning Holders" etc.



**1950s**

**1958** FUJISEIKO LIMITED is founded in Nagoya city. Cutting cemented carbide inserts, tools and cutters etc. are released.

**1960s**

**1963** Designing business starts.  
**1964** Takaoka plant (Address of current head office) is completed. Formed tools and reamers are launched.  
**1968** Head office moves to Takaoka plant.  
**1969** "Through away tools" are launched.

**1970s**

**1970** Succeeds in domestically producing foreign ultraprecise tools.  
**1971** C-max grooving tools are announced.  
**1973** Micro adjustment holders are developed.  
**1974** Quick change holders are developed (serialized later). Becomes a member of the Japan Cemented Carbide Tool Manufacturers' Association.  
**1977** Diamond tools are launched.  
**1979** Enters the automotive trial parts business.



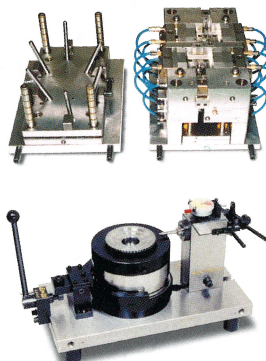
since  
**1980**

## Expansion of business field / Decision to become a public company

In the 1980s we tried to expand our technology in order to match the needs of customers. By adding tool peripherals, injection molds and work gauges etc. to our line of products, we progressed from a simple specialized tool manufacturer.

However we had a big problem with human resources because we produced and sold unknown tools in general, in addition our head office is located at Mikawa area, where many leading companies were established. "We hoped to have capable human resources with senses of pride in the company and to improve company quality."

For these reasons we listed on the second section of the Nagoya Stock Exchange in October 1982.



since  
**1990**

## For the customers all around the world

In the middle of 1980s we set up overseas subsidiaries starting with in Korea and the United States because Japanese auto companies stepped up overseas production. In the 1990s they accelerated overseas expansion and we consistently established group companies in Indonesia, China and Thailand. Having double duty as "Local production/service center" and "Plants for FUJISEIKO products" from the beginning, each company has strengthened their abilities and grown to FUJISEIKO group's main factories since 2000.



since  
**2000**

## From a simple tool manufacture to a total engineering company

Japanese auto companies accelerated overseas operation even more in the late 1990s and that started exposing a new problem of personnel shortages in each company.

In 2000, recognizing this problem as customers' needs, we launched a new business, "FTE Business (Fuji Total Engineering Business)" that undertook the processes from preparation for production to tool management after line off. Nowadays, we strive for restructuring of business model in a broad context (formulation of a consistent structure from upstream of machining process field "trial parts product" to midstream "preparation for production" and downstream "tool management") as "total engineering company of the processing".



**1980s**

- 1982 Lists on the second section of the Nagoya Stock Exchange.
- 1983 Announces entering the mold business. G drills are announced (serialized later).
- 1984 FUJI ENGINEERING CO., LTD. is founded. Kumamoto plant is completed.
- 1988 HANBOO ENGINEERING CO., LTD. is founded. SANSETSU AUSTRALIA Pty. Ltd. (currently Sancell Pty. Ltd.) is founded.
- 1989 ACCUROMM U.S.A. INC. is founded.

**1990s**

- 1990 Work gauges are launched.
- 1991 Acquires capital in FSK (THAILAND) CO., LTD.
- 1992 Kagoshima plant is completed.
- 1993 PT.FUJI PRESISI-TOOL INDONESIA is founded.
- 1995 DALIAN FUJI TOOL CO., LYD. Is founded.

**2000s**

- 2000 Starts FTE business.
- 2003 TT FUJI TOOL SUPPORT CO., LTD. is founded.
- 2004 ACCUROMM Central Europe Sp.z o.o. is founded. GUANGZHOU FUJI TOOL CO., LTD. is founded. Work chuck jigs are launched.
- 2005 CHANGCHUN HAN BOO ENGINEERING CO., LTD. is founded.
- 2012 ACCUROMM MEXICO, S.A. DE C.V. is founded.

# Contribute to solve problems with “Superior tools” at production

Our products/technologies are used in production lines of automotive parts.

These are widely used in the mechanical processing for engine, transmission, steering, drive shaft, propeller shaft and so on.

Our products are seldom seen in public, but we have one of the best technical capabilities in the industry and are recognized by automobile manufactures world wide and we have the lineup of many products as “Reliable FUJISEIKO”. We have become indispensable for parts processing.

## » Examples of Engine Tooling



## ■ User's (the auto industry) perennial challenge :

User's approach in production line	Expected main requirements of tools
<p><b>“Highly-efficient processing”</b>  <b>“Manpower saving, space saving”</b>  <b>“Downsizing”</b></p> <p>We need to solve the following issues to produce automobiles at low cost.</p> <ul style="list-style-type: none"> <li>①To shorten working hours</li> <li>②To raise machine operation rates (Reduction of machine stoppage hours)</li> <li>③To produce with few workers and little equipment</li> <li>④To downsize equipment</li> </ul>	<p>Tools that reduce downtime of production line</p> <p>High-speed processing tools</p> <p>Process concentration tools</p> <p>Automatization</p> <p>Weight saving of tools</p>
<p><b>“High-precision processing”</b></p> <p>It is needed to maintain accuracy on each part when assembling in order to improve performance of automobile parts (especially engine and transmission etc). To achieve this, working machines and tools are also required high accuracy and quality.</p>	<p>Ultraprecise processing tools</p> <p>Specialized tools to process each part</p>

## 5R Business

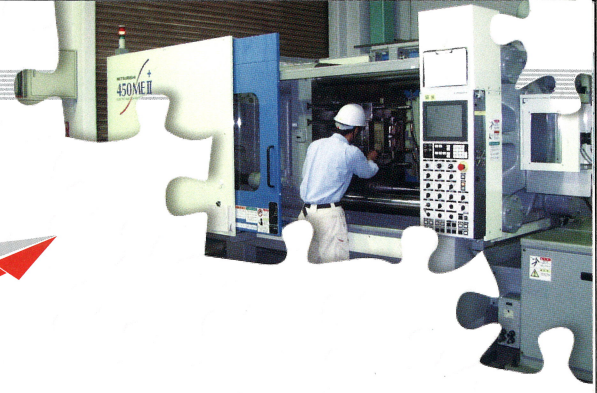
Since we produce highly customized tools, cost and delivery deadline are two major challenges which we must confront. We have applied various measures to deal with these issues, including the recycling of products, which has been a key element of our approach.

Today, our efforts in this regard have been organized into what we call our “5R Project”. With a strong emphasis on environmental consideration, this has become one of our major undertakings.

- 5 R**
- Repair
- Recycle
- Regrind
- Reuse
- Reduce



action line.



## Low cost, high quality and quick delivery

Examples of FUJISEIKO tools

### ■ FUJI Quick Change System

This is a tool holder that can replace the point of the cutting tool quickly. It contributes to reduce of downtime of production line. There are lineups to meet the needs; placed Kaben Type, etc., PPL Type, VDI Type, Taper Key Type and so on.



### ■ Monolithic Milling Cutter

This is a cutter that has a rib structure to secure lightweight and high rigidity with minimal length. It contributes to downsizing of equipment.



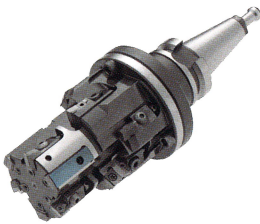
### ■ 1 Pass Honing Reamer

This is a precise and combined processing tool that can ream and hone Cast Iron parts simultaneously. It contributes to reduce the number of machines and increase in efficiency.



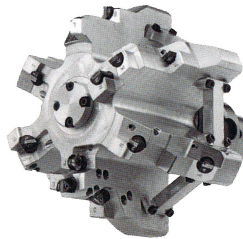
### ■ OS Tool [One-Shot Cutting Tool]

This is a tool that can finish with one-shot from roughage (bearing hole for gearbox casing, etc.) It contributes to reduce the number of machines in production line.



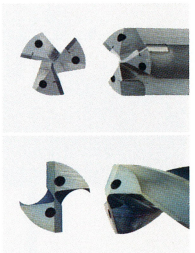
### ■ GH Tool

This is a tool that performs plural rough processings at one time. It contributes to reduce the number of machines and increase in efficiency.



### ■ GPT Drill, TFH Drill

This is a precise and combined processing tool that can roughly process of drilling and finishing simultaneously. It (GPT) contributes to reduce the number of machines and increase in efficiency. It (TFH) achieves a low-resistance cutting edge and contributes to increase in efficiency.



### ■ GB Tool

This is an ultraprecise processing tool to adjust blade edge diameter easily.



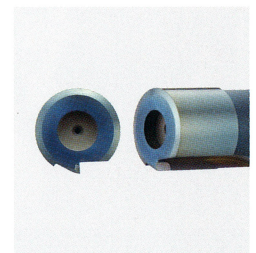
### ■ QT Tool [Automatic Compensation Tool for Diameter]

This is a tool that can automatically compensate blade edge diameter in the machine. It significantly reduces downtime of machines.



### ■ Manmaru Z Reamer

This is an ultraprecise processing tool that is developed for finish processing of drilling where high circularity is required.



### ■ Valve Finisher

This is a specialized tool for finish processing of engine cylinder head.



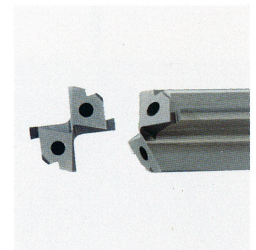
### ■ Honing Head

This is a tool for finish processing of cylinder block bore diameter of engine.



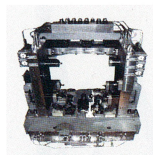
### ■ G7X Drill

This is a precise processing drill that achieves surface-roughness like a reamer level.



## Jigs

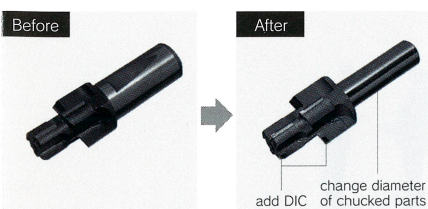
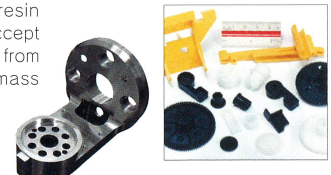
As the only tool manufacturer that can design and produce jigs in this country, we provide work-clamping fixtures that boast a high affinity.



## Parts Processing/Injection Molding

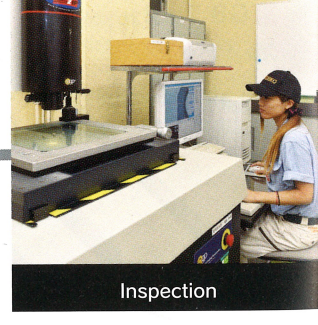
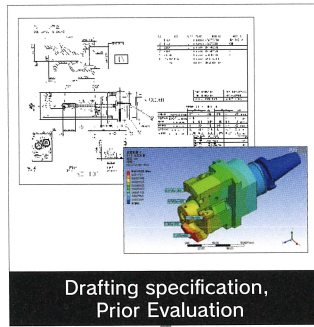
We undertake in the machining of work trial parts and assembly parts applying manufacturing techniques as a tool manufacturer.

In addition, in the field of resin molding, we consistently accept the needs of resin moldings from production trial molds to mass production molds.



# We connect technique and people with all business and work to ensure customer satisfaction

We construct "ABS(After & Before Services)" as concept and complete each task to fulfill obligations for manufacturers to deliver better products and let customers use them for a long time.  
All of our work is connected to customer service.



# Before

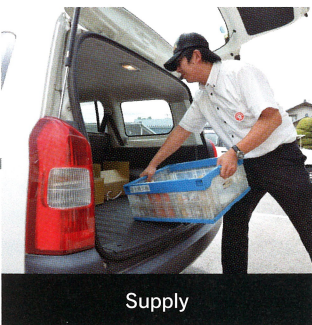




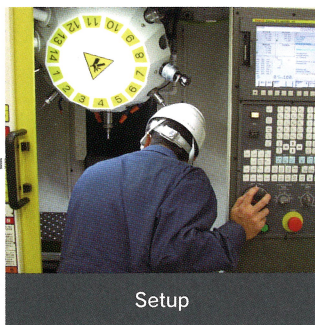
Maintenance  
Supplies Procurement



Tools Improvement



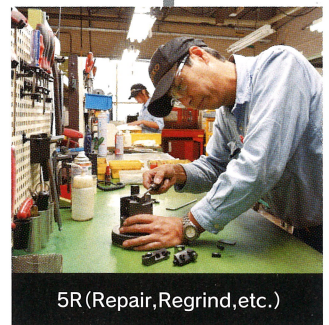
Supply



Setup



Inventory Control



5R (Repair, Regrind, etc.)



Tools Budgetary Control



Quality Control



# After



# From upstream to downstream of the machining process field, we continue to challenge our new business models.

General specialized tool manufacturers produce tools one by one while negotiating with customer engineers. For this reason they have a good footwork & skill, several hundreds of workers at most and treat specific items with a really good advantage.

Meanwhile, we are currently "Total engineering company of the processing".

Even being a special tool manufacturer, we deal with the consistent service from upstream of machining process field (trial parts product) to midstream (preparation for production) and downstream (tool management) with more than one thousand workers including our group companies and we are challenging the structure of new business model beyond common sense of the machinery tool industry.

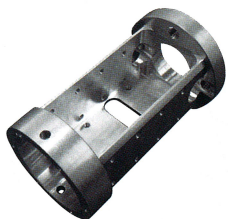
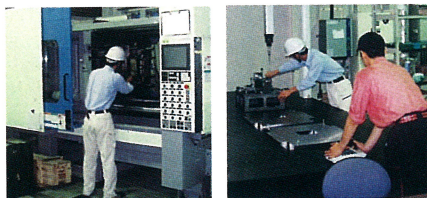
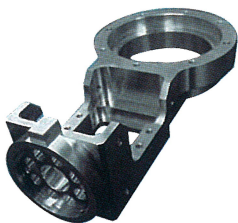
Upstream

 Trial production

## Trial parts products

[parts processing and injection molding]

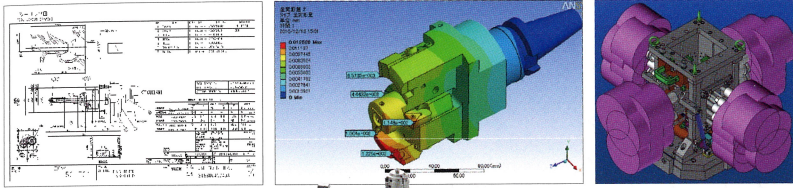
We undertake in the machining of work trial parts and assembly parts applying manufacturing techniques as a tool manufacturer. In addition, in the field of resin molding, we consistently accept the needs of resin moldings from production trial molds to mass production molds.



Examination of Production Equipment

Midstream

Examination of Production Processes



## Preparation for production [tools, jigs and peripheral equipment]

We don't only design and produce specialized tools. We totally support all processes of the preparation for production to check on production lines (machine processing), set the most appropriate specification of tools, jigs and peripheral equipment, procuring them collectively, and set up for eliciting specification condition of machines and operating rate etc. of production lines that upstream planning division set on their equipment examinations soon after starting mass production at downstream production division.



## Tool management business

We undertake tool procurement, inventory control, quality improvement, repairing, regrinding, budgetary control etc., and reduce man-hours of factory operating and administrative expenses as a "Customer Tool Management Office".

Equipment procurement

Starting-up production line

Downstream

Mass production

# Thinking and growing up with customers around the world

Our global network performs two tasks: One is to localize our business, staying close to our customers and providing them with maximum service around the world. The second is to respond to our customers' needs in the most efficient way possible. When we receive an order, we immediately decide which of our FUJISEIKO plants can most effectively secure or manufacture the products, so that customer's demand for high quality, low cost and prompt delivery can be guaranteed.



 **Head Office / Main Plant**

■ **Business Activities**  
Administration of companies, development of advanced technologies, design, manufacture and sales of cutting tools, holders, measuring gauges, jigs, automotive parts for trial, injection moldings, etc.



 **Kumamoto Plant / Kyushu Office**

■ **Business Activities**  
Design, manufacture and sales of cutting tools and holders




 **Kagoshima Plant**

■ **Business Activities**  
Manufacture of holders

**[Others]**

- Hokkaido Office
- Akita Office
- Kitakanto Office
- Kanto Office
- Fuji Office
- Osaka Office
- Hokuriku Office
- Fukui Office
- FUJI ENGINEERING CO.,LTD.




 **HANBO ENGINEERING CO.,LTD.**

70, 3Gondan 1Ro, Seobuk-Gu, Cheon An, Chung Cheong Nam Do, KOREA  
Phone +82-41-621-0543

■ **Business Activities**  
Design, manufacture and sales of cutting tools and holders




 **DALIAN FUJI TOOL CO.,LTD.**

200# Xiangzhou Road,Shahekou Dist. Dalian, CHINA  
Phone +86-411-8665-1777

■ **Business Activities**  
Design, manufacture and sales of cutting tools and holders



 **GUANGZHOU FUJI TOOL CO.,LTD.**

3# Yonghe Economic Zone, Getdd Guangzhou, PR. CHINA  
Phone +86-20-3222-1486

■ **Business Activities**  
Manufacture of cutting tools



 **CHANGCHUN HANBO ENGINEERING CO.,LTD.**

434#, Putian Road, Gaoxin, Changchun, Jilin, CHINA  
Phone +86-431-8580-3088

■ **Business Activities**  
Design, manufacture and sales of cutting tools and holders




 **PT.FUJI PRESISI-TOOL INDONESIA**

EJIP Industrial Park Plot 3B-2, Cikarang Selatan, Bekasi Jawa Barat INDONESIA  
Phone +62-21-897-0212

■ **Business Activities**  
Design, manufacture and sales of cutting tools and holders




 **SANCELL PTY. LTD.**

25-31 Colemans Road, Carrum Downs, Victoria, AUSTRALIA  
Phone +61-3-8796-5555

■ **Business Activities**  
Manufacture and sales of cushioning products for packing and insulation for building and packaging, Sales of cutting tools and holders




 **ACCUROMM Central Europe Sp. zo. o.**

Łęg, ul. Europejska 4, Jelcz-Laskowice, POLAND  
Phone +48-71-381-81-00

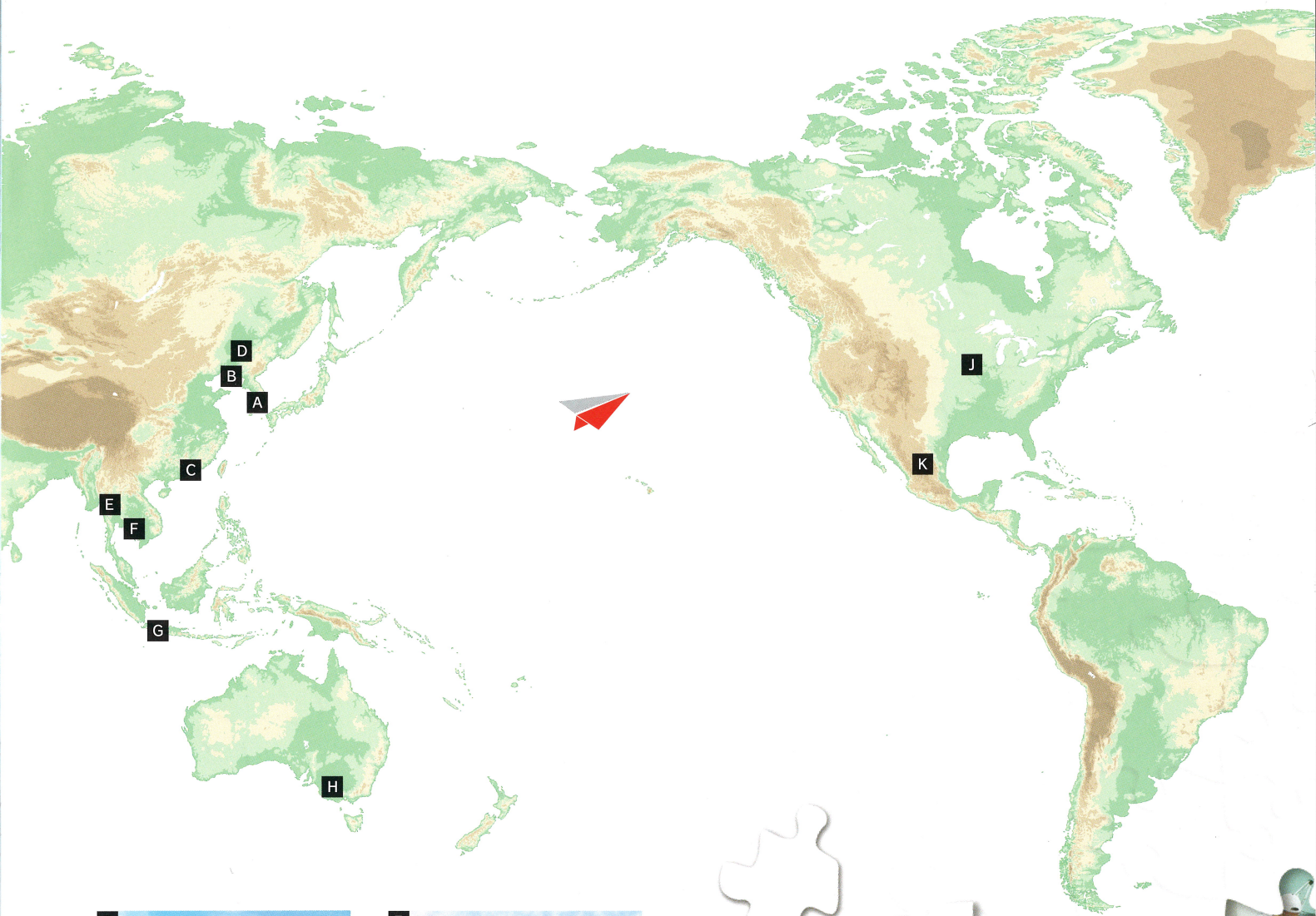
■ **Business Activities**  
Manufacture and sales of cutting tools and holders




 **ACCUROMM U.S.A. INC.**

101 Westhampton Drive, Lexington, Kentucky, U.S.A.  
Phone +1-859-254-4334

■ **Business Activities**  
Design, manufacture and sales of cutting tools and holders




**E**  
 **FUJISEIKO (THAILAND) CO.,LTD.**

101 Moo 1 Hi-Tech Industrial Estate,  
 Asian Highway K.M.59-60, Banlen,  
 Bang PA In, Ayutthaya, THAILAND  
 Phone +66-35-350-766

■ **Business Activities**  
 Manufacture and sales of cutting tools and grinding wheels, Sale of holders



**F**  
 **TT FUJI TOOL SUPPORT CO.,LTD.**

Amata Nakorn Industrial Estate, Phase4  
 700/541 Moo 6, Tambon Don Hua Lor,  
 Amphur Muang, Chonburi, THAILAND  
 Phone +66-38-717-280

■ **Business Activities**  
 Sales of cutting tools and holders



**K**  
 **ACCUROMM MEXICO S.A. de C.V.**

Carretera Panamericana Nte. Km 14  
 C.P.20909, J. Gomez Portugal,  
 Jesus Maria, Aguascalientes MEXICO  
 Phone +52-449-915-3636

■ **Business Activities**  
 Sales of cutting tools and holders





**Aichi  
Quality**



## **FUJISEIKO LIMITED**

〒473-8511

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Aichi 473-8511, JAPAN

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