

FUKUDA

福田交易株式會社

Company Profile 2021



History



1950-The company resumed operations as, R. Fukuda & Company Ltd., Imports of bearings and cutting tools became an important area of its business activities.

1950' s

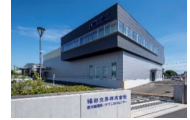


We stopped handling automobile parts in 1977. At that time, import parts business increased to 86%.

1970' s

Atsugi and Kyushu branch offices opened. The company was renamed Fukuda Corporation. Our Business shifted from MRO to OEM.

1990' s



Moves Atsugi Branch Office and Atsugi Factory to Ebina. Renames Atsugi Factory to Technical Center. We celebrated our 70th Anniversary in 2019.

2010' s

1940' s

1940-Rakuo Fukuda (1904-1981) founded his trading company in Tokyo. The Company specialized in imports of bearings, machine tools, automobile and aircraft parts. We closed our company in 1941, due to World War II.

1960' s

Nagoya and Osaka branch offices opened to increase precision bearings for machine tool, electrical machinery parts and automobile parts. At that time, industrial import parts made up 44% of our sales, while automobile parts were 56% of our sales.

1980' s

Hiroshima and Hokuriku branch offices opened. Inventory control center was established in Urayasu. Atsugi factory was opened to manufacture precision lock nuts. Engineering department established to start technical services.

2000' s

Inventory control center moved to Chiba. ISO 9001 and ISO 14001 acquired.

Business Concept

FUKUDA
よりよいものを世界から

We are an import Firm specializing in machine Technology

=Superior Products from All Parts of the World=

We are introducing and offering to the Japanese machine industry unique and exceptional accessory parts and equipment for machinery - produced in Europe and North America.



Business Concept



+

Training School
for Design Engineers



+

Consulting
Specialists



+

Diagnosing •
Testing •
Troubleshooting



+

Technical Seminars
& Presentations



+

Technical Center
Production & Repair
of Machine
Tool Spindles

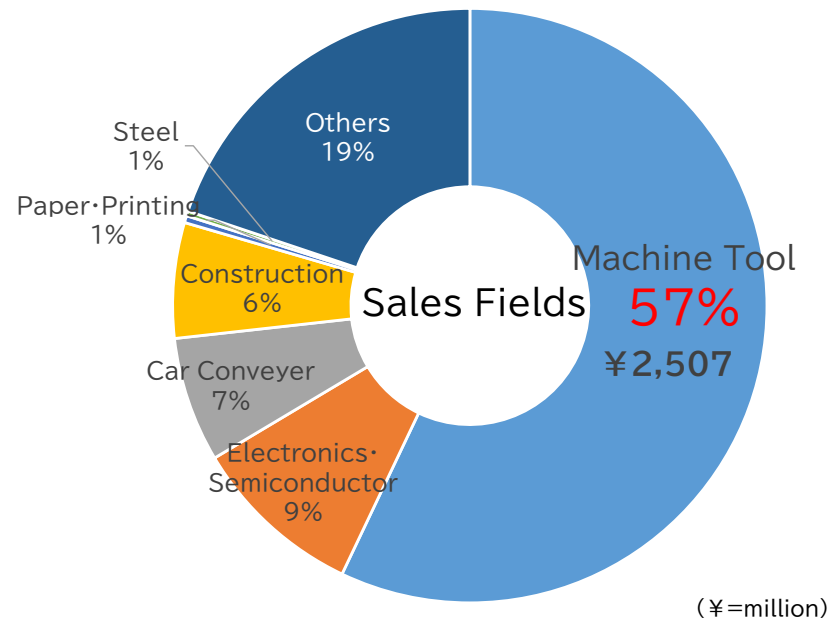
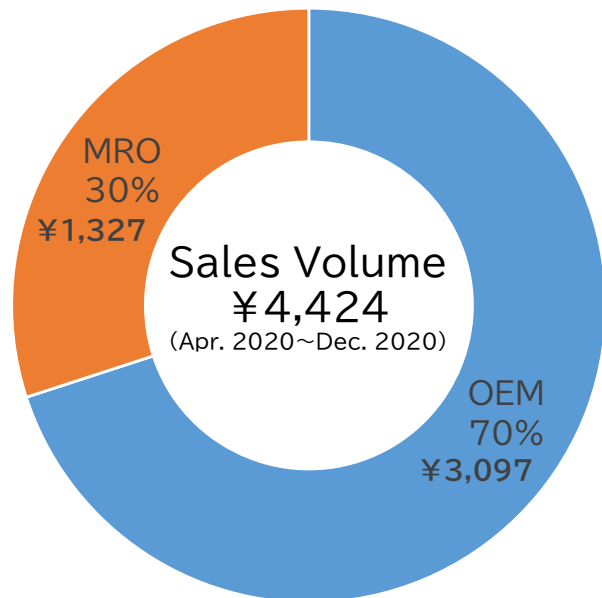


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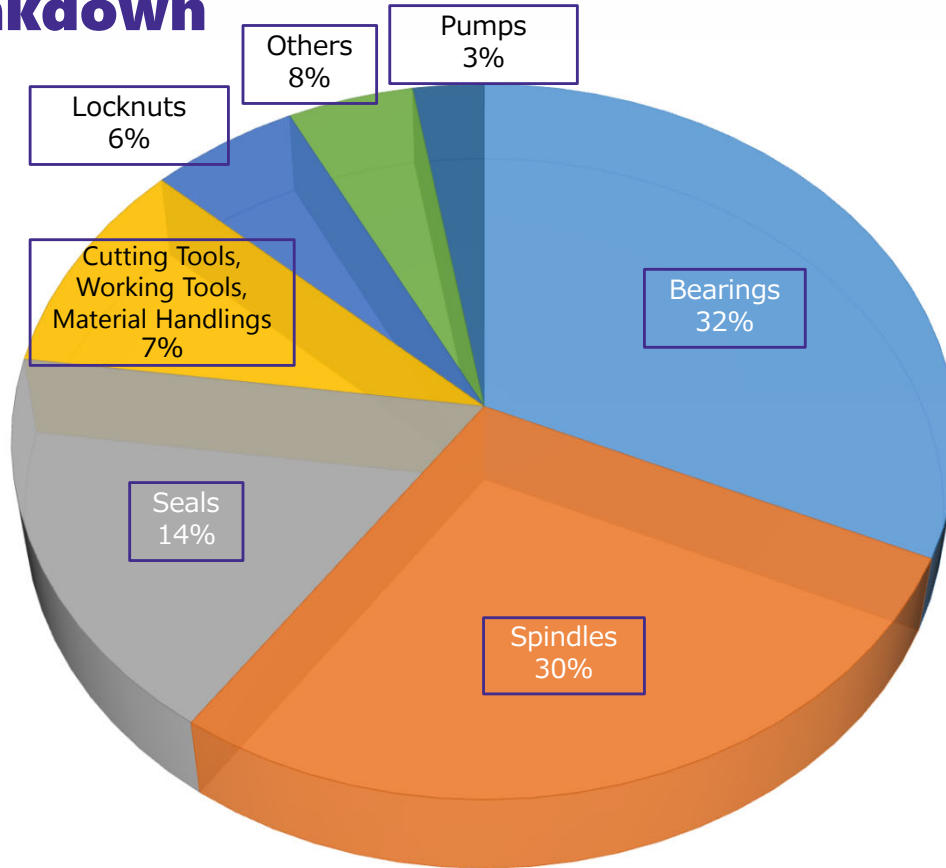
Providing Technical
Data and Information



FUKUDA's Business Fields



Sales Breakdown



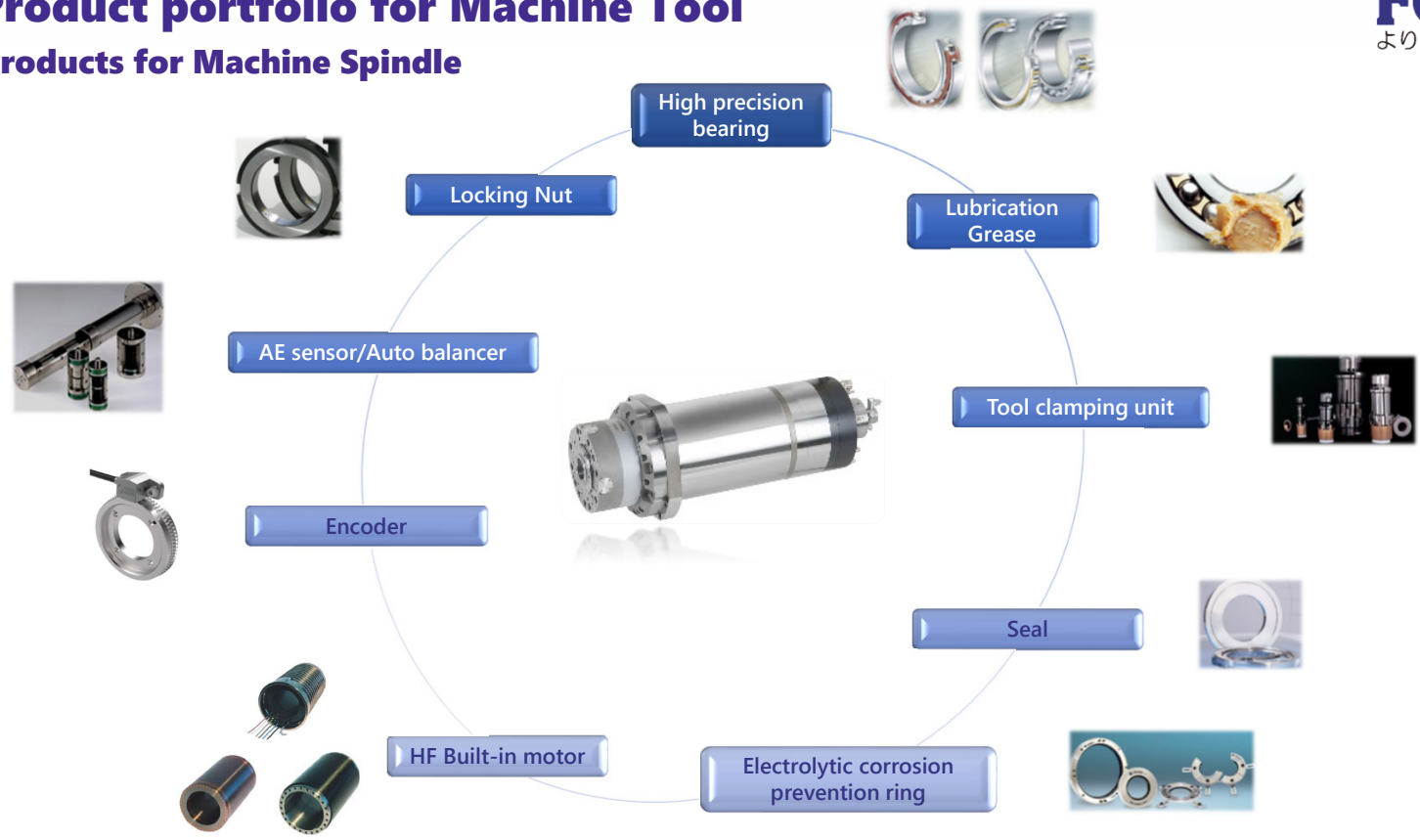
Product portfolio for Machine Tool

Products for Machine Tool



Product portfolio for Machine Tool

Products for Machine Spindle



Main Customers

AISIN AW CO., LTD.

Amada Co., Ltd.

BRIDGESTONE CORPORATION

CITIZEN MACHINERY CO., LTD.

DENSO CORPORATION

DMG Mori Seiki Co., Ltd.

EBARA CORPORATION

FANUC LTD

FUJI CORPORATION

HONDA MOTOR CO., LTD.

HORKOS CORP

IHI Corporation

ISUZU Motors LIMITED

JAXA

JFE Steel Corporation

JTEKT CORPORATION

Kashiyama Industries, Ltd.

Kawasaki Heavy Industries, Ltd.

KUBOTA Corporation

Kobe Steel, Ltd.

MAKINO MILLING MACHINE CO., LTD.

Mazda Motors Corporation

MICRON MACHINERY CO., LTD.

MITSUI SEIKI KOGYO CO., LTD.

Mitsubishi Motors Corporation

MITSUBISHI HEAVY INDUSTRIES, LTD.

Mitsubishi Heavy Industries Machine Tool Co., Ltd.

Panasonic Corporation

Mitsubishi Electric Corporation

MITSUBISHI MATERIALS CORPORATION

NACHI-FUJIKOSHI CORP.

Nagase Integrex Co., Ltd.

NIKON CORPORATION

NISSAN MOTOR CO., LTD.

Komatsu NTC Ltd.

Okuma Co., Ltd.

OKK CORPORATION

Okamoto Machine Tool Works, Ltd.

ROKU-ROKU SANGYO, LTD.

SHIBAURA MACHINE CO., LTD.

SHIMADZU PRECISION TECHNOLOGY, Ltd.

Shin Nippon Koki Co., Ltd.

SUBARU CORPORATION

Sumitomo Heavy Industries, Ltd.

Hitachi, Ltd.

TAIYO KOKI Co., Ltd.

THK Co., Ltd.

TOKYO SEIMITSU CO., LTD.

TOYO ADVANCED TECHNOLOGIES Co., LTD.

TOYOTA MOTOR CORPORATION

TSUDAKOMA Corp.

TSUGAMI CORPORATION

Union Tool Co.

WAIDA MFG. CO., LTD.

YAMAZAKI MAZAK CORPORATION

YASDA PRECISION TOOLS K.K.

Yanmar Co., Ltd.

Zeon Corporation

FKD Precision Lock Nuts

In 1985, Gewinde Ziegler Swiss and FUKUDA concluded a precision lock nut license agreement. We started manufacturing Precision Lock Nut under FKD brand name in our Atsugi factory (Technical Center). Subsequently, manufacturing of the Precision Lock Nut went to our domestic subcontractor.

Precision Lock Nut - 200,000 pcs. per year

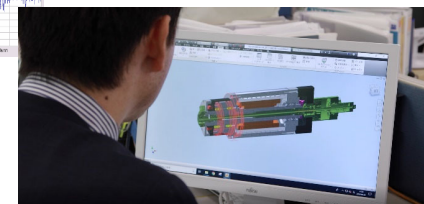
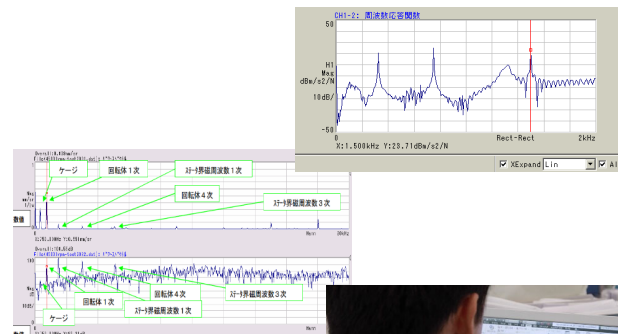
We also supply Precision Turning Nut for various applications.



Engineering for Sales Support

| Division | Mechanical Engineers | Electrical Engineers |
|---------------|----------------------|----------------------|
| Bearing | 8 | — |
| Spindle | 5 | 4 |
| Seal/Tool | 6 | |
| Linear Motion | | 2 |

- ▶ Bearing calculation by PC.
- ▶ Design Analysis by 3D CAD.
- ▶ Design of Inverter control systems.
- ▶ Spindle repair, Bearing measurement.
- ▶ Vibration Analysis.
- ▶ Technical Seminars (6 times/year).
- ▶ Spindle Technical Seminars (3 times/year).





FKD Training School

Six times a year in Tokyo, Nagoya, Osaka and Hiroshima, we hold our “TRAINING SCHOOL” to help machine tool design engineers keep pace with developments in their fields. This helps them broaden and further their knowledge; from the fundamentals to the appropriate selection of bearings for machine tool design. During the past 127 sessions of training (as of March, 2019), 2,048 engineers, from 345 companies have attended.



Spindle Training School

In 2014 we started our “SPINDLE TRAINING SCHOOL” for machine tool design engineers.

This session includes covering extensive knowledge of the components, mainly spindle elements, drive technologies of the built-in motors / inverters, spindle incidental sensors as well as the evaluation procedure of the spindle. We introduce cutting-edge technologies from Europe to help machine tool design engineers in their field.

※It was held on the web in 2020.

Seminars for Machine Tool Design Engineers

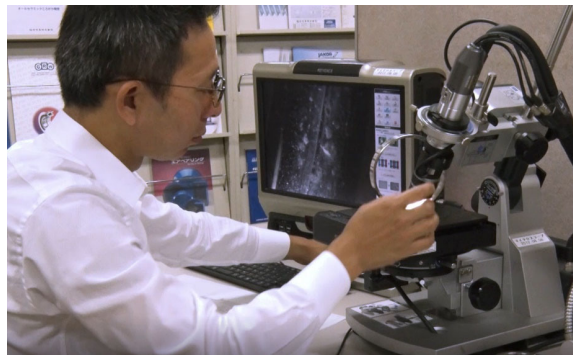
Companies that have attended FKD training school - more than 10 people.

| | | | | | | | |
|--------------------------------------|----|-------------------------------|----|--|----|-----------------------------------|----|
| YAMAZAKI MAZAK CORPORATION | 58 | TAIYO KOKI CO., LTD. | 29 | MICRON MACHINERY CO., LTD. | 18 | DENSO CORPORATION | 13 |
| TOYOTA MOTOR CORPORATION | 45 | Howa Machinery, Ltd. | 27 | WAIDA MFG CO., LTD. | 17 | AISIN AW INDUSTRIES CO., LTD. | 13 |
| NISSAN MOTOR CO., LTD. | 43 | THK CO., LTD. | 25 | TAKEDA MACHINERY CO., LTD. | 17 | Mitsuboshi Kogyo Co., Ltd. | 13 |
| SHIN NIPPON KOKI CO., LTD. | 41 | AMADA MACHINE TOOLS CO., LTD. | 22 | YUTAKA SEIMITU KOGYO, LTD. | 17 | OKAMOTO MACHINE TOOL WORKS, LTD. | 13 |
| Komatsu NTC Ltd. | 41 | BIG DAISHOWA SEIKI CO., LTD. | 22 | Kashifuji Works, Ltd. | 17 | Takatori Corporation. | 13 |
| Honda Engineering Co., Ltd. | 40 | YASDA PRECISION TOOLA K.K. | 21 | MAKINO SEIKI CO., LTD. | 16 | Yamashina Seiki Co., Ltd. | 13 |
| OKK CORPORATION | 39 | HORKOS CORP | 20 | Ikegai Corp | 15 | YAMAZAKI INDUSTRY CO.,LTD. | 13 |
| Toyo Advanced Technologies Co., Ltd. | 38 | THK INTECHES CO., LTD. | 20 | Nakamura-tome Precision Industry Co., Ltd. | 15 | SEIWA CORPORATION | 12 |
| Honda Motor Co., Ltd. | 34 | SHIBAURA MACHINE CO., LTD. | 20 | CITIZEN MACHINERY CO., LTD. | 15 | Okuma Corporation | 12 |
| AISHIN AW CO., LTD. | 33 | TSUDAKOMA Corp. | 20 | NSS Co., Ltd. | 15 | Kohzu Precision Co., Ltd. | 11 |
| SHIGIYA MACHINERY WORKS LTD. | 31 | Minebea Co., Ltd. | 20 | Mitsubishi Motors Corporation | 14 | Matsuura Machinery Corporation | 11 |
| Mazda Motor Corporation | 31 | UNION TOOL CO. | 19 | ONO SOKKI CO., LTD. | 14 | OKAMOTO MACHINERY COMPANY LIMITED | 10 |
| YASUNAGA CORPORATION | 30 | Mitsui Seiki Kogyo Co., Ltd. | 19 | ENSHU Limited | 14 | SHIN-OH ELECTRIC CO.,LTD. | 10 |
| KANZAKI KOKYUKOKI MFG Co., Ltd. | 29 | KITAGAWA IRON WORKS Co., LTD. | 19 | Nagase Integrex Co., Ltd. | 14 | NISHIJIMA CORPORATION | 10 |
| MAKINO MILLING MACHINE Co., LTD. | 29 | JTEKT CORPORATION | 18 | Brother Industries, LTD. | 14 | | |

Grand Total 2048 Engineers,
345Companies

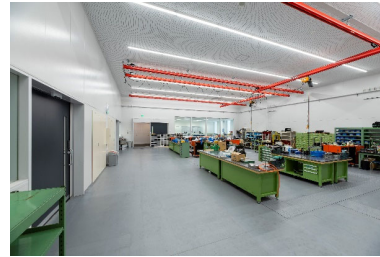
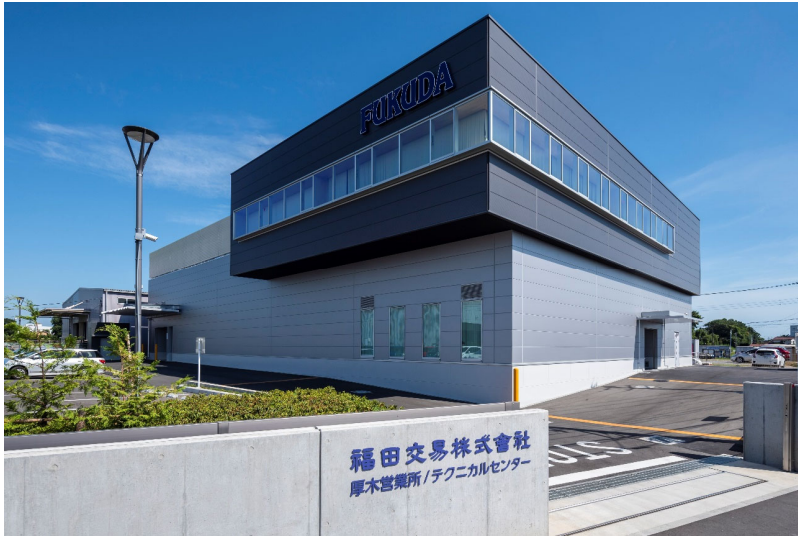
Damaged Bearing / Spindle Analysis For Customer Satisfaction

Customer service = ● Quicker response
● More precise advise ⇒ **New Demands**



Technical Center

In July 2019, Our new Technical Center was opened in Ebina, Kanagawa.
It has an expanded working area for spindle overhauls, trial runs and machine shop.
It is fully equipped with temperature-controlled inspection rooms for bearings, spindle components and spindle performance in dynamic behavior, and a soundproof room for acoustics noise measurement of spindles.



Site area: 3,000 m² Building area: 1,150 m² Total floor area: 1,660 m²

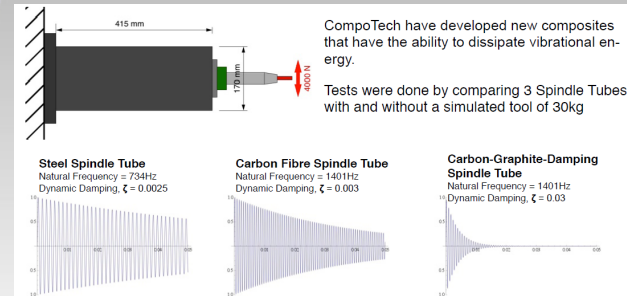
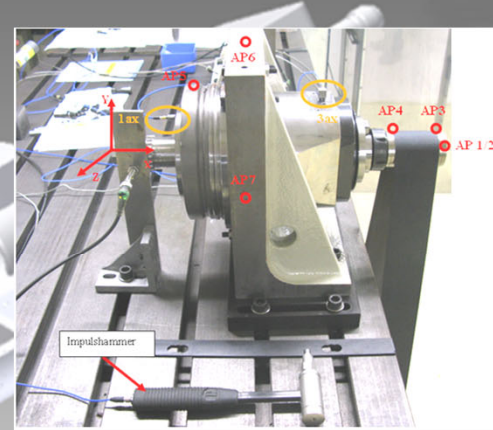
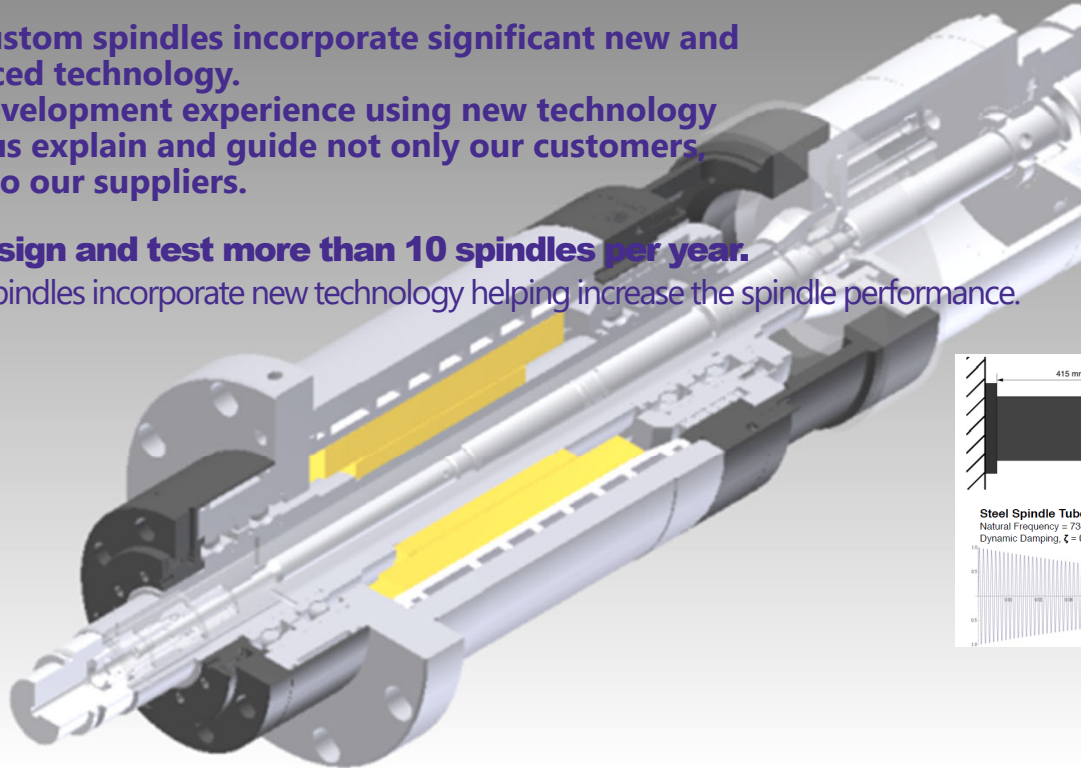
FKD Spindle

- **Quality Control by ISO9001**
- **Designed by Autodesk 3DCAD system**

FKD custom spindles incorporate significant new and advanced technology. Our development experience using new technology helps us explain and guide not only our customers, but also our suppliers.

We design and test more than 10 spindles per year.

These spindles incorporate new technology helping increase the spindle performance.

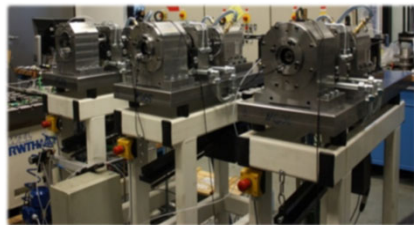


Industry-University Collaboration

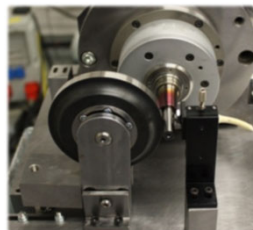
- Joint research with Aachen University of Technology WZL
- Technical exchanges with Darmstadt University of Technology PTW, and Fraunhofer Institute for Manufacturing Engineering and Automation IPA, and Fraunhofer Institute for Production Technology IPT
- We participate in The Japanese Society for Abrasive Technology, and the European Society for Precision Engineering, and also other associations and groups
- Joint research and study meetings with many Engineering Departments of several prominent Japanese Universities
- We host “FKD Innovation Days”, an international cutting-edge technology symposium for Machine Tool Technologies (see right picture below)



FKD Innovation Days



Source: WZL Aachen



Source: WZL Aachen



2nd FKD INNOVATION DAYS

In November, 2019, we invited approximately 100 customers to Shinagawa Prince Hotel in Tokyo, for two days, to attend our “2nd FKD INNOVATION DAYS.”

This engineering conference featured a Keynote Speech by Dr. Christen Brecher from WZL RWTH Aachen, an authority on advances in machine tool research.

Presentations from important suppliers regarding new technologies were well received.

We also held numerous practical workshops. The reactions to the conference were overwhelming and beyond our best hopes.

Topics & Speakers

「Improving Productivity in the Era of Industry 4.0」
Schaeffler / Dr. Martin Voll

「Turning data into Productivity」- keynote speech
Prof. Dr. Christian Brecher / WZL RWTH Aachen

「Fit for IoT-Machine Tool Spindles evolving from Mechanical Component to Mechatronic System」
Dr. Bernd Moeller / GMN

「Condition Monitoring With RUCOLA」
Dr. Stefan Bonerz / OTT- JAKOB

「Active control of Unbalance and Acoustic Emissions for Touch Control in Grinding Spindles」
Dr. Andrea Guidotti / Balance Systems

「The challenges and opportunities of sensor based machining today and tomorrow」
Mr. Hubertus von Zastrow / pro-micron



Sources of Information We are Providing

FUKUDA
よりよいものを世界から



JIMTOF2018

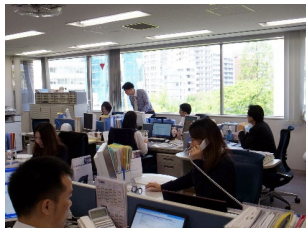
Website

 / Fukuda Corporation



- ▶ We participate in trade shows such as JIMTOF
- ▶ We conduct on site demonstrations at your company
- ▶ Our web-site provides our full company profile along with seven categories of products - with full technical data.

Surpassing Competency in Purchasing



Through close relations with overseas manufacturers and distributors that have been established for over half a century, we are ready to purchase products from all over the world, rapidly and expertly, to help service your needs.

EUROPE

| | | |
|---------------------------|--------------------|---------------------------|
| ABL | Cooper | Lenord+Bauer |
| ATE | Fey | LEVICRON |
| Balance Systems | GAMET | LUBCON |
| Barden UK | GMN | Merkel |
| BEHA | GOETZE | MWM Schmieranlagen |
| BIAX | GRW | OTT-JAKOB |
| BILSING AUTOMATION | Hofmann | PPE |
| CEROBEAR | HUTCHINSON | PEJO |
| Colibri | Hyprostatik | PRECISE France |
| COMPOTECH | INA/FAG | pro-micron |
| Conoptica | JAKOB | Protect Air |

AMERICA

| | |
|-----------------------|-----------------------|
| Barden USA | McGill |
| Danaher Motion | NEWWAY |
| EST | Parker/Trilogy |
| Fenner Drives | RIMTEC |
| Haydon/kerk | SKF |
| INPRO/SEAL | SLADE |
| KAYDON | TIMKEN |
| MCT | TIMKEN/FAFNIR |
| M4Sciences | |

Inventory Control

In August 2007, our New Inventory Control Center was opened. Its aim is to improve the distribution service we provide to our customers.



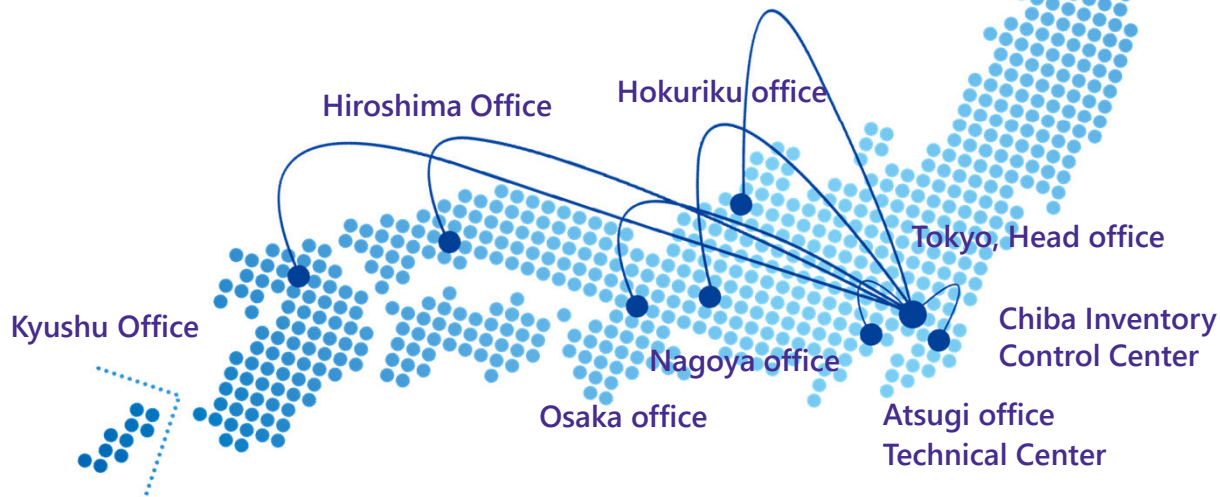
The Inventory Control Center is state of the art including an earthquake absorbing structure. Our large and wide ranging inventory is stored in a temperature and humidity controlled center-24/7.

Location: Inage, Chiba city
Very close to the North Chiba Interchange of the Higashi Kanto Expressway
Lot area 3,640m², Floor space 3,880m²

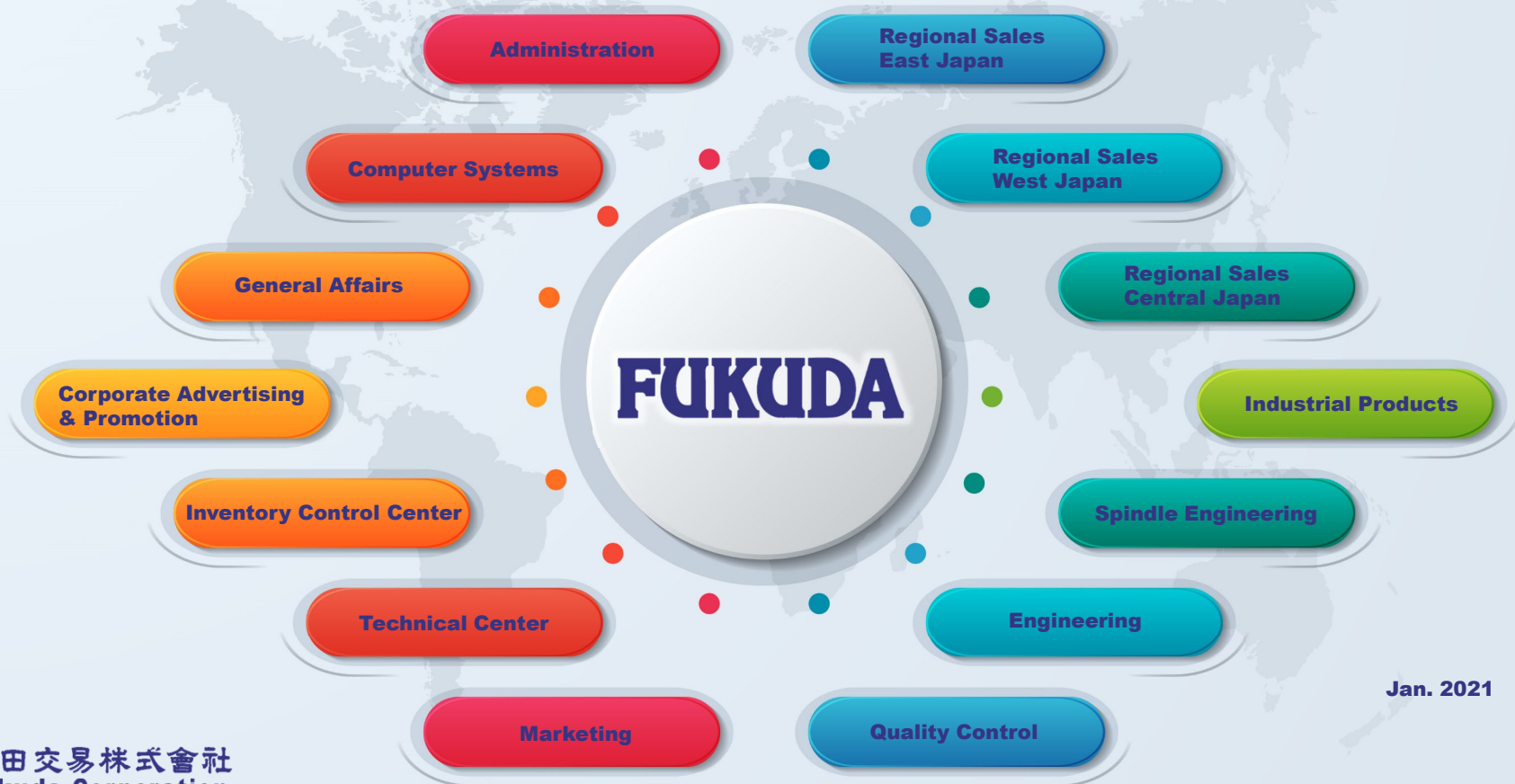


Head office & Branches

FUKUDA
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Organization



Jan. 2021

FUKUDA

www.fukudaco.co.jp

