# Hyogo "Only-One" Companies (Selected 2016)

# ITOH DENKI CO., LTD.

# Company profile

- Develops, manufactures and sells conveyance-related solutions such as Motor Driven Rollers (MDRs), and control equipment and module units.
- Overseas production and sales subsidiaries are in the U.S.A., France, the U.K., Germany, Hong Kong and China, and are deeply taking root in their respective countries as a global company.

# Unique technology and products

- Boasting 70% global share of internally motorized conveyor rollers, "Power Moller®" has become a vital component of motorized roller conveyor systems. Excelling in safety, noise reduction and energy conservation, our company products are chosen by various manufacturing and logistics businesses worldwide, including the United States Postal Service.
- Handling the highly advanced control systems using network communications and swarm intelligence, the company develops module unit products using these core technologies. These products have been offered ahead of the times since before the recent trend of "Smart Factories" and "high-speed logistics."

## Basic information

Head office: 1146-2 Asazuma-cho, Kasai, Hyogo

Phone: +81-790-47-0995 Fax: +81-790- 47-1325

Website: http://itohdenki.co.jp/english/e\_news.html

Incorporated in: 1965 Capital: 90 million yen



Photo: Case example (Book distribution center in U.S.)

## OKAZAKI MANUFACTURING COMPANY

## Company profile

- Manufacturing company specializing in temperature and heat. Engaged in the manufacture and sales of industrial temperature sensors and electric heaters.
- Operates globally via a representative office in the UK and factories in the United States and Taiwan.

## Unique technology and products

- Centering on mineral insulated (MI) cables, the company is engaged in the development, manufacture and sales of temperature sensors and electric heaters used in all kinds of industrial fields and settings, such as aerospace, electricity, petrochemical, nuclear power plants, textile, and food.
- Japan's only JAXA-certified manufacturer of common components for space development.
   The performance and durability of Okazaki's heaters are also highly evaluated by NASA, and they have been installed in a Mars rover.
- The sheathed thermocouple with an outside diameter of 0.08 mm developed by Okazaki was recognized in the Guinness World Records in 2010 as the world's thinnest sheathed thermocouple.

## Basic information

Head office: 3-1-3 Goko-dori, Chuo-ku, Kobe, Hyogo

Phone: +81-78-251-8200 Fax:+81-78-251-8210

Website: http://www.okazaki-mfg.com/en/

Email: sales@okazaki-mfg.com

Incorporated in: 1954 Capital: 86.5 million yen



Photo: MI Cables

#### OTOWA ELECTRIC CO., LTD.

## Company profile

- Manufactures and sells lightning arresters/surge protectors (to protect electric devices and equipment in households, office buildings, factories, electric companies, railway companies, etc. from lightning surges) and other lightning-related products.
- The company is the only manufacturer in Japan specialized in lightning protection, and the word menrai (meaning "mitigating lightning damage") is a registered trademark of the company.

# Unique technology and products

- Features lightning protection devices installed with high-quality, high-performance zinc oxide (core part of lightning arresters) developed within the company. Also provides suggestions related to lightning endurance and protection that best meet the requirements of customers.
- Houses one of the world's largest lightning testing facilities (Lightning Technology Center, Amagasaki City). In addition to the R&D of the company's own products, commissioned experiments for other companies and lightning endurance tests for Mitsubishi Regional Jet (MRJ) are conducted in this facility.
- Takes part in the creation of international standards as a member of the International Electrotechnical Commission.

#### Basic information

Head office: 3-7-18 Meishin-cho, Amagasaki, Hyogo

Phone: +81-79-562-5661

E-mail:overseas@otowadenki.co.jp

Website: http://www.otowadenki.co.jp/eng/ Incorporated in: 1946 Capital: 81.9 million yen

Number of employees: 290



Photo: Lightning arresters and other lightning-related products

## KAKO TECHNOS CO., LTD.

## Company profile

- Designs, manufactures and sells control systems (brake and safety equipment) for Shinkansen and other trains, as well as equipment related to switchgears and transformers used in power stations and substations.
- Specialized in the technology to stop electricity or movement safely, stably and without fault in any environment and even in abnormal cases.

# Unique technology and products

- Has a domestic market share of 50% in train brake systems. The patented equipment designed and developed in consideration of quakeproof, dustproof, waterproof and corrosion control qualities as well as endurance unfailingly fulfills its function in the harsh environment under the train floors moving at high speed.
- Also engaged in the development of small, robust and highly reliable rotational speed sensors (patented) installed on trains.
- Using the technology used in circuit board design and reliability evaluation testing, Kako develops Li-ion battery protection equipment that is installed in artificial satellites.

# Basic information

Head office: 7-4-2 Ota-cho, Suma-ku, Kobe, Hyogo

Website: http://www.kako.co.jp/index-en

Mail: http://www.kako.co.jp/index-en/contact-en Incorporated in: 1961 Capital: 77 million yen

Number of employees: 212



Photo: Rotational speed sensor

# KATSURA STEEL CO., LTD.

# Company profile

- Manufactures and processes large and special steel frames (built-up H-shapes) used for pillars and beams in building construction and civil engineering.
- Has an abundance of experience, and their products are used in large building structures throughout Japan (skyscrapers, large factories and distribution centers, multipurpose halls, domes, towers, etc.).

# Unique technology and products

- Japan's leading manufacturer of built-up H-shapes, taking a domestic market share of 35%.
- Adopts an integrated production management system, covering all processes from ordering materials to fusion cutting, welding, processing, coating and shipping, thus providing one-stop service.
- For the welding process, which is particularly influential to the quality of the product, the company develops and introduces many kinds of mechanical equipment such as the gullwing automated welding device (patented) enabling high-speed and high-quality welding.
- The company also promotes automation in other processes, and continuously enhances the stability in quality, while maintaining the accuracy of their product dimensions at a high level.

#### Basic information

Head office: 165 Kubo-cho, Himeji, Hyogo

Phone: +81-79-281-9001

Website: http://www.katsura-steel.co.jp/english/ Incorporated in: 1985 Capital: 57.5 million yen

Number of employees: 200



Photo: Gullwing automated welding machine

## SANTOKU CORPORATION

## Company profile

- Engaged in the manufacture and sales of rare earth elements, alloys and inorganic materials. A
  comprehensive manufacturer of rare earth elements, handling all processes from raw material
  processing to the completion of high-purity compounds and alloys.
- Globally develops business via factories in China and a Belgian company with which Santoku has made a partnership agreement regarding rare earth elements.

# Unique technology and products

- World-leading manufacturer that holds over 200 patents related to the production of rare earth elements and alloys. Offers licenses to alloy makers both in Japan and around the world.
- High quality rare earth alloys and other products manufactured by Santoku are widely used in hybrid vehicles and MRI machines, among others.
- Has a domestic market share of 35% for the neodymium magnet alloy. Santoku is the only company in Japan engaged in the recycling of magnet grinding powder and solid scraps generated in the process of manufacturing magnet products.

## Basic information

Head office: 4-14-34 Fukae-kitamachi, Higashinada-ku,

Kobe, Hyogo

Phone: +81-78-431-0531 (main number)

Fax: +81-78-431-6522

Website: http://www.santoku-corp.co.jp/english/ Incorporated in: 1949 Capital: 1.5 billion yen

Number of employees: 236



Photo: Flakes of neodymium iron boron alloy produced by strip casting method

# TAJIMA TSK INC.

# Company profile

 Engaged in the manufacturing and sales of control cables for industrial machinery (for cars, motorbikes, etc.) and components used in low current products (made of metals, resin, rubber and composites of these).

# Unique technology and products

- Boasts a highly sophisticated cold forging technology. The-company has established a unique technique for deep hole processing (over 25 times as long as the hole's diameter; top-class technology in the industry) using uniquely developed tools. With this technique, hole-drilling, which was the most difficult process, is no longer necessary. The technique also reduces costs and streamlines the production process.
- Using one of Japan's most advanced and newest cold forging facilities, the company is making efforts to achieve deep hole processing of larger products. Thus Tajima TSK, the industry's frontrunner, is always seeking the possibilities of cold forging.

#### Basic information

Head office: 1150 Kirino, Izushi-cho, Toyooka, Hyogo

Phone: +81-796-52-2339 (main number)

Fax: +81-796-52-5687

Incorporated in: 1973 Capital: 56 million yen

Number of employees: 209



Photo: Vertically sliced samples of primary-processed products made by cold forging (after the plating process)

# HAMANAKA CHAIN MFG. CO., LTD.

# Company profile

- Manufactures and sells chains for ships and offshore structures.
- Supplies Hamanaka products all over the world.

# Unique technology and products

- The only manufacturer in Japan that produces large chains that connect offshore oil drilling facilities with the sea bottom. Has a technology for manufacturing high strength chains (Grade R5) using special steel jointly developed with a steel manufacturer.
- Maufactured mooring chains used in the Fukushima Floating Offshore Wind Farm Demonstration Project.

# Basic information

Head office: 770 Ko, Shirahama-cho, Himeji, Hyogo

Phone: +81-79-245-5151 Fax: +81-79-246-0270

Website: http://www.hamanaka-chain.co.jp Incorporated in: 1950 Capital: 50 million yen

Number of employees: 70



Photo: Anchor chain

# MITSU SEIKI CO., LTD.

## Company profile

- Engaged in machining components of aerospace devices, medical and welfare devices (prosthetic joints and legs, etc.) and shipboard devices.
- Has abundant experience of processing components of jet engines and landing gear used in SDF and civil aircrafts.

# Unique technology and products

- Boasts one of the country's highest-level of processing technology for aircraft components (made of titanium and other difficult-to-cut materials, and have complex shapes).
- The company has determined to invest 10% of their sales into their facilities, and 1% into employee training, and has thus continuously introduced cutting-edge machine tools and inspection equipment and promoted human resources development for many years. Over 80% of the employees possess national certification for their trade.
- Mitsu owns diverse machines, including five-axis machining centers, combined processing machines, and cutting tool grinders, and boasts top-class production capacity and technical skills in the industry, allowing the processing of various precision components ranging from ultralight parts of 0.05 g to heavy parts of 1 ton.

# Basic information

Head office: 301 Shimogawai, Awaji, Hyogo Incorporated in: 1962 Capital: 49.5 million yen

Number of employees: 248



Photo: Exterior of the factory