

Various types of metal springs (Wire sizes of 0.02 to 20mm)





Key features of the product

- 1. Can produce various types of springs.
- 2. Advanced quality assurance system in place
- 3. Advanced spring processing technology

Main customers: Defense Agency (Submarines, rockets, F-2 and F-15, etc.) Aircrafts (Boeing 767, 777, 787 and Airbus A-380)

Automobiles (Important safety parts such as clutches and brakes, and seat parts) Electrical equipment (Component parts of laser printers and digital cameras)

Solutions for our clients

Since the founding of the company, we have manufactured and marketed a variety of metal components centering on various types of springs. Particularly, regarding springs that we have manufactured since the founding, we will maintain and provide long-cultivated technologies and quality levels based on rigorous standards. We have obtained JISO9100 certification, which serves as the quality standard in aerospace fields.

Sankyo Seiki Industry Co., Ltd.

http://www.sankyo-seiki.co.jp/ English 3-19-75, Kamishiniyo, Higashiyodogawa-ku, Osaka City, Osaka

ISO 9001 ISO 14001

Neji-saurus









Key features of the product

- 1. It can grab and turn stripped screws.
- 2. It can easily remove even rusted screws.
- 3. It can be also applied to low-profile dome "Truss" head screws.

Although horizontal serration is applied to the jaws of ordinary pliers, this tool has both vertical and horizontal serrations and tilt angled jaws inside that create extremely high friction force to the periphery of screw head. Owing to this design, stripped screws can be easily removed without slip.

Solutions for our clients

When there is a stripped screw that you cannot remove with a screwdriver, even if you try to remove it by grabbing the head of screw with pincers or pliers, you cannot turn it well because the head is hard to grab or becomes slippery. The Neji-saurus will contribute to industrial fields by promoting efficiency in automobile, motorcycle and mechanical maintenance work, as well as help general households with disassembly and recycling of electric appliances and furniture. And, it can contribute to resource-saving and energy-saving as countermeasures to global environmental problems. Because troubles concerning screws occur all over the world, we are convinced that we can help customers in Japan and overseas.

ENGINEER INC.

http://www.engineer.jp/ English /中文/ 한국어 2-8-9 Higashi-Imazato, Higashinari-ku, Osaka City, Osaka

ISO 9001 ISO 14001



Lead-free solder "SN100C"





Key features of the product

- 1. High-reliability product
- 2. Earth-friendly, environment-responsive product
- 3. Uniquely developed patented product

The "SN100C" is a revolutionary lead-free solder made of tin, copper, nickel and germanium. Its superior features have been evaluated ever since it was marketed, and with the start of its use by a major consumer electronics maker, we have expanded sales to the world. At present, this product is widely used for various types of consumer electronics, mobile phones, acoustic equipment, and automobiles.

Solutions for our clients

The "SN100C" realizes a highly reliable joint through a "nickel effect" in which a very small amount of added nickel forms a stable alloy layer in the joint. This product is safe for miniaturized circuit joints of downsized electronic equipment as well as high-stress infrastructure fields. With its reliability being proven in tests by NASA, the product has helped to make electronic equipment lead-free and improve their reliability. We have developed various kinds of product variations for a wide range of applications. We also provide a line of halogen-free products.

NIHON SUPERIOR CO., LTD.

http://www.nihonsuperior.co.jp English /中文 NS Bldg., 1-16-15 Esaka-cho, Suita City, Osaka

ISO 9001 ISO 14001



Automatic polarizing film attaching equipment





Key features of the product

- 1. High-accuracy (error within 0.3 mm)
- 2. Superior tact time
- 3. Having 70% share of the world market for 32 inch or larger

This equipment automatically attaches polarizing film to glass panel as part of the production process of LCD panels. It can be applied to wide-ranging sizes of panels from 2-inch mobile phones to 60-inch bigscreen TVs. It can be also used with thin polarizing film of 0.1 mm in thickness.

Solutions for our clients

We have business deals with most of the world's LCD panel makers and, through our overwhelming market share, we can obtain state-of-the-art information. With added values such as reduced running costs and image processing, we can propose equipment that is most suitable for user needs. We can also provide total solutions that include upstream and downstream processing. Moreover, we can make various proposals for future FPD products including not only LCD panels but also 3D panels, organic ELs and touch panels. With manufacturing bases in Japan and South Korea, we can speedily respond to global needs.

Yodogawa Hu-Tech Co., Ltd.

http://www.yodogawa.co.jp/ English / 한국어 2-4-8 Esaka-cho, Suita City, Osaka

ISO 9001 ISO 14001



"IR sheathed wire" rust-free wire rod





Key features of the product

- 1. High durability owing to complete adhesion
- 2. Uses high-strength core material for lighter weight
- 3. Eco-friendly and excellent workability

This covered wire had a service-life of at least 30 years, which was verified by a public testing institution. As a pioneer in IR sheathing, this wire has been used at various construction sites for steel wire caging and mating for revetments and embankments under the jurisdiction of the national government, falling object prevention fences and entrance prevention fences of expressway companies, prevention nets for falling stone of local governments, and fences surrounding ports.

Solutions for our clients

We produce materials for public engineering works and sell them to building materials makers, processors and trading companies. The features of "IR sheathed wire" are as follows.

- (1) Using actual data on various kinds of wire used in various locations, we have conducted tests to verify performance as sought by customers and compiled a database.
- (2) We can provide the mechanical design for the service-life sought by customers.
- (3) With the use of high-strength core material and highly-functional resin, we can produce products that are light and highly durable and workable, and help reduce total costs.
- (4) Even in the rigorous environment of salt areas and sulfur hot springs where rust and corrosion are easy to occur, our product is safe for construction because of its high durability and lightweight.

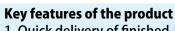
TOWARON Co., Ltd.

http://www.towaron.co.jp/ Japanese only 2-6-13 Chikkoshinmachi, Nishi-ku, Sakai City, Osaka

ISO 9001

Finished Bore Sprocket





- 1. Quick delivery of finished-bore products
- 2. Realize low cost by mass-production
- 3. More than 4,000 kinds of products

Although sprocket wheels have been marketed for a long time, we have added new values to this product. Generally, the gear has to be additionally processed each time for the mating shaft, but to eliminate this processing, we have calculated the size of highly used shafts when making this product. We have an inventory of products of all sizes.

Solutions for our clients

Although it used to take four to five days to deliver products because of the need for additional processing, we have shortened delivery speed by storing products of all sizes. Moreover, we reduced the price of products to one-fifth of conventional products by mass-production. They have become the industry's hottest-selling products. The sprocket wheel has been used for various types of equipment in all fields of industry. Because the product is often used for equipment with driving shafts, it has been highly evaluated in industries that use driving shafts. We can also make unstocked products at a low cost and deliver them auickly.

Katayama Chain Co., Ltd.

http://www.kana.co.jp English 2-3-43, Honjyonishi, Higashiosaka City, Osaka ISO 9001



New industrial-use caster PM series

Key features of the product

1. Long service-life

2. Stable motion

3. Easy operability







Collars (Ultrathin milled products made by NC lathe)





Solutions for our clients

Key features of the product

- 1. Thickness at inside and outside diameter: 0.1mm
- 2. Circularity: 5/1000
- 3. Surface roughness: Not more than 0.8

We have succeeded in cutting SUS304 and AL2017 to a thickness of 0.1 mm in inside and outside diameters, and lengths of 30 mm, which is considered almost impossible by NC lathe processing. We have the technology of expert workmen that other companies cannot imitate. Moreover, as our development of support software for the education of cutting technology indicates, we have high technological capabilities and know-how as a company producing one-of-a-kind products.

Since the founding of the company, we have continued studying machining, and have established a

system in which skilled engineers are in charge of the processes from cutting to surface finishing, cleaning, and inspection, and deliver complete finished products. Making use of the advantage that we have our

own factory, we can deliver low cost, high quality products in rapid response. Based on our prominent high precision metal processing technology, we can meet customer needs for difficult processing.

Solutions for our clients

operability, the casters are most suited for traction.

As a specialty maker of casters, we have customers in numerous industries to note distribution, automobiles, machinery, copiers, food, scaffolding, construction, store fixtures and semiconductors. With production bases in Japan and China, we provide integrated services from planning to manufacturing and sales. Therefore, we can accurately and quickly make and deliver products sought by each business.

We have realized a service-life 3 times longer than with our conventional casters. Because resonance phenomena occurring at the time of traction is prevented and the load on the revolving superstructure

is lessened, wheel abrasion has been decreased. Owing to a longer service-life, stable motion, and easy

YUEI CASTER CO., LTD.

http://www.yueicaster.co.jp Japanese only 1-8-39, Honjyonishi, Higashiosaka City, Osaka

ISO 9001 ISO 14001

DAIKOUSEIKI CO., LTD.

http://daikou-sk.com Japanese only 6-11-21, Hommachi, Yao City, Osaka

Good planning capability One-of-a-kind technology Made in Japan Trial production possible Mass-production possible

CONTACT: Osaka Core Manufacturing Technology Network (Detailed information: P13) E-mail: monob2b@mydome.jp







Key features of the product

- 1. Can make products of various sizes.
- 2. Can deliver quality-controlled products starting from small lots.
- 3. Can make high precision products.

We can make fine-tuned proposals in response to requests for collar thickness. Our advantage is that we can lower the sampling errors that occur when header technology is used. Because we can make collar products by cutting, etc., we can deliver products starting from small lots. Using technological capabilities of skilled craftsman, we can make multifaceted proposals to meet customer needs.

Solutions for our clients

We have made and marketed special screws used for automobiles, motorcycles and farm equipment. The assumed customers are a wide range of industries including automobile and motorcycle-related companies and construction companies. We can provide a line of products that exceed 1,000 kinds. Because customers can consult with our sales staff and persons in charge of production at the same time, we not only can quickly answer questions concerning product manufacture but also field consult requests on commercial production systems and quick delivery, which are indispensable to improve costperformance.

SATOU-NEJI SEISAKUSYO Co., LTD.

http://www.satou-neji.com Japanese only 4-86, Ohtashinmachi, Yao City, Osaka

ISO 9001











Key features of the product

- 1. Flat springs can reduce costs.
- 2. Flat springs can securely attach products.
- 3. Can propose various flat spring shapes.

A refrigerator manufacture used to use aluminum extruded products for the cover that attaches external point-of-purchase advertising but had problems of bad installation and high costs. When we proposed using flat panels instead of aluminum extruded products, the refrigerator manufacture found the panels fit and installed well, succeeding in largely reducing costs.

Solutions for our clients

We are engaged in design, manufacture, commercial production of difficult-to-process flat springs and press molds made of special steel, etc.

If customers have troubles fitting and attaching products, we can make proposals starting from the shape of flat springs. Moreover, we can propose materials and conduct trial manufacture to mold-making and commercial production (assembly). In particular, if customers have troubles such that flat springs lack load and are easily broken, we can propose solutions based on our extensive experiences and know-how.

Showa Spring Co., Ltd.

http://www.showasp.jp/ Japanese only 1-8-30, Wakamatsu-cho-higashi, Tondabayashi City, Osaka ISO 9001 ISO 14001



Nanotect (Super-hard CNT-resin composite coating technology)







Key features of the product

- 1. Rust and corrosion prevention
- 2. Abrasion resistance
- 3. Thin and super-hard

We have established composite technology for uniformly dispersing carbon nanotubes (CNT) in resin coating by applying chemical treatment to the surface of insoluble CNT material. With this technology, we have developed a resin coating that produces a film of extremely high strength, hardness, abrasion resistance, toughness, and lubricity with rust prevention property.

Solutions for our clients

We consider the development of resources and energy in deep undergrounds and seabeds a promising market. Even under mechanically severe conditions of use in which fastening is repeated at limit loads, the strong Nanotect films do not exfoliate and protect parts while maintaining good corrosion resistance. We are not only entrusted with processing using Nanotect products, but also intend to market them as coating fluids.

TAKENAKA SEISAKUSHO CO., LTD.

http://www.takenaka-mfg.co.jp/ English 6-4-35, Hishie, Higashiosaka City, Osaka

ISO 9001



High-strength and heat-resistant magnesium alloy screws





Market Mey features of the product

- 1. High strength (More than 120% of conventional ratio)
- 2. Superior creep resistance
- 3. Bolt loosening-resistant properties

To expand the industrial use of lightweight, strong magnesium alloy parts, we have led the world in developing magnesium-based high-strength and heat-resistant magnesium alloy screws. The screws have solved the problems of electric corrosion in joining, as well as the problems of joining and looseness caused by thermal stress, and are applicable in environmental temperature up to 100° C.

Solutions for our clients

The developed screws are the lightest among metal screws in actual use. The use of magnesium alloy screws have two advantages.

- 1) Lighter weight screws The magnesium alloy screws have a weight of about a quarter of standard iron and stainless-steel, and thus contribute to further weight reductions of automobiles and mobile devices.
- 2) Solving the problems of joining of magnesium parts When joining magnesium parts by screw, it is necessary to take electric corrosion, thermal stress and bolt loosening into consideration when designing parts. The use of magnesium alloy screws can solve such joining problems.

Maruemu Works

http://www.maruemu.co.jp/ Japanese only 4-7-12, Nozaki, Daito City, Osaka

ISO 9001 ISO 14001



Superfine precision locknuts





Key features of the product

- 1. Can adjust balance.
- 2. Can adjust deflection.
- 3. Contribute to making shafts guiet.

We are the only company that standardizes and markets superfine precision locknuts. In particular, precision locknuts are one of the important parts used for the main shafts of high-speed rotary regions; their precision affects the processing accuracy of the machine. Our superfine precision locknuts guarantee a squareness of 0.002 mm, deflection of 0.002 mm, parallelism of 0.002 mm, and concentricity of 0.005 mm.

Solutions for our clients

The assumed customers are mainly from the machine tools industry and makers of peripherals for machine tools. Since we standardize superfine precision locknuts and provide them to customers, they can obtain high quality precision locknuts with just a single order sheet. Thus, the customers can reduce costs and simplify delivery management.

DAM CORPORATION

http://www.dam-j.co.jp English

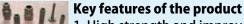
2-6-16, Morikawachihigashi, Higashiosaka City, Osaka

ISO 9001 ISO 14001

High functions steel wires for cold heading O I M







- 1. High strength and improved workability
- 2. High strength eliminates the need for heat treatment.
- 3. Improved magnetic properties and workability

Through a tie-up with steelmakers, we can develop and select steel grades according to request. And, we can propose more attractive products based on the long-cultivated technology of making steel wires for cold heading, production process design that makes use of parts processing technology and know-how developed in cold forging conducted within our own company.

Solutions for our clients

We can propose products according to customer requests, using characteristic materials such as ultrafinegrained steel that has contradicting features of high strength and high toughness with miniaturized grain sizes and can eliminate the need for heat treatment (thermal refining), materials that can contribute to weight reductions by strengthening including steel for high-strength bolts of good lagging destruction resistance, steel for tapping screws that can accommodate High-strongth auto motive steel sheet and soft magnetic steel of good magnetic properties, which has been actually used as electromagnetic parts for automobiles. Moreover, we can provide cold forged parts from slag to net shape.

Hot forming coil spring (Large-size coil spring) © O D

3. Precision spring properties and superior durability

We are a company that specializes in custom-made products starting from design, and can produce

springs with maximum dimensions of up to ω 90mm in material diameter, ω 600mm in outside diameter.

and 1200mm in free length. Because we produce five springs as an average production lot, we can

Our springs are highly reliable as they have been widely used for safety valves for electric power plants

and equipment for substations in Japan. Particularly, the springs used for safety valves not only have

normal load properties but also can control decentration load, and thus they can offer unprecedented

reliability. Moreover, because the springs are extensively used in seismic motion mitigation systems as

measures against big earthquakes, they can meet requirements for high load, long operation stroke and

OSAKA SEIKO LTD.

http://www.osaka-seiko.jp English 5-7-59, Nakaishikiri-cho, Higashiosaka City, Osaka

Key features of the product

2. Fully custom-made

1. World's largest coil springs

ISO 9001 ISO 14001



High-precision polished steel bars





Key features of the product

- 1. World's top-class dimensional accuracy and straightness
- 2. Reduced residual stress that prevents deformation after processing
- 3. Providing the highest quality products through the industry's top quick delivery system

Steel bars for office equipment require particularly high precision. We have realized a roundness that is close to zero and micron-order straightness. Customers can enjoy total cost merits from an improvement in yield. Moreover, our high-precision steel bars help to improve the availability of automated lines.

Solutions for our clients

We are a secondary processing maker specialized in steel bars. The assumed customers are all kinds of metal processing industries that handle shaft and spindle processing, and tools and parts manufacturing. We can provide high-precision free-cut steel bars that help reduce customer costs and deformed bars of various cross-sectional shapes via a quick delivery system. Moreover, we develop and manufacture a variety of polished steel bars according to customer needs. We offer consulting on materials that are hard to process.

Kinomoto Shinsen Co., LTD.

http://www.kinomoto.co.jp Japanese only 2-56, Yayoi-cho, Higashiosaka City, Osaka

ISO 9001

http://www.tokaibane.com Japanese only

ISO 9001 ISO 14001

Tokaibane Mfg. CO., Ltd.

natural spring properties.

respond to requests for just one unit.

Solutions for our clients

3-7-27, Sagisu, Fukushima-ku, Osaka City, Osaka



Miniature springs for precision instruments





Key features of the product

- 1. All custom-made springs
- 2. Mass-produced springs thinner than hair
- 3. Subassembly support

We produce all custom-made miniature springs used widely in lighter and thinner precision instruments such as mobile phones, digital cameras, and LCD televisions. Recently, we have succeeded in the massproduction of extra-fine springs that are thinner than hair, 40 μ in wire diameter and 200 μ in coil diameter. They are used for ultra-precision cameras and gas detection equipment.

Solutions for our clients

The miniature springs are essential for precision instruments that are becoming forever lighter and thinner. We have developed a proprietary multi-process automated production system and installed a clean room of the same level as mobile phone makers within our plant. Thus, we can provide a stable supply of springs while ensuring cleanliness of processes ranging from manufacturing to inspection and packaging. Moreover, we not only can produce springs but also subassemblies that unify parts with springs, which makes the production processes highly efficient and enables easy replacement. Therefore, our technologies help customers make their products lighter and thinner.

RIKEN SPRING INDUSTRY CO., LTD.

http://www.riken-spring.com Japanese only 16, Kamitahara, Shijyonawate City, Osaka

ISO 9001 ISO 14001



Thin metal bellows





Key features of the product

- 1. Superior elastic properties and low spring constant
- 2. Can be molded to be requested inside and outside diameters.
- 3. Multilayer structure that makes bellows for high pressure

Using our proprietary processing technology, we process thin metal of 0.1 to 0.4 mm in thickness to produce oneto four-layered bellows of good flexibility and long service-life. The bellows have a low spring constant and good pressure resistance, and can be used under various conditions from ultra-high vacuums to high pressures and from extremely low temperatures to high temperatures, hence they are used for purposes related to space development.

Solutions for our clients

Since the size of the bellows can be freely selected, they can be used for valves and double pipes for liquid hydrogen and oxygen, which have only a limited space for placing bellows.

Although our standard bellows are made of SUS316L, we can produce bellows of special materials such as hastelloy, titanium, inconel, monel, nickel, etc., starting from only one unit orders of a requested size and deliver them guickly without charging for molding costs. Therefore, we have received orders from research institutes of universities and private companies.

Mitsumoto rasenkan Kogyo Co., Ltd.

http://www.mitsumoto-bellows.co.jp/ Japanese only 1-2-37, Nagata, Jyoto-ku, Osaka City, Osaka

ISO 9001



Master gears for measurement of tooth surface engagement error





Key features of the product

- 1. Can produce gears from module 0.15.
- 2. Spur and helical specifications available
- 3. Same precision of JIS standard M00 grade

Master gears help guarantee the quality of products if used for total inspections of their resin molded, sintered, and miniature metal gears. Namely, our high-precision master gears can be used for judging overall errors of the product's gear if the two gears are rotated together without backlash.

Solutions for our clients

We can produce master gears of different pressure angle or high-tooth specifications that cannot be measured by standard products. Moreover, we can design and produce master gears individually to customer requested specifications, including DPs and special modules. Therefore, the individually produced master gears will have no problems such as interference at the top and bottom between the product's gear and the standard master gear, or measurement difficulty because of high-tooth specifications.

Takizawa Precision Gear Co., Ltd.

http://www.takizawa-gear.com Japanese onl 6-8-14, Hishie, Higashiosaka City, Osaka

ISO 9001







Key features of the product

- 1. Handle general-purpose to custom-made hinges.
 - 2. Ensure safety via high strength.
- 3. Superior weather resistance and durability

We produce hinges that, as the pivot of smooth opening and closing, support the hinged doors of housing and furniture. We have a 60% share of hinge market for housing in Japan, and widely handle not only general-purpose hinges but also custom-made hinges for various applications.

Solutions for our clients

The "3D adjustment hinges," which account for 60% of our product sales, enable easy adjustment in three directions -- up and down, left and right and back and forth -- by simply turning a screw. Since no space is created between the door and the door frame, the hinges can prevent users from pinching fingers, and thus can be used as "hidden hinges." Moreover, our press manufacturing method can make the hinges as thin as 21 mm and achieve cost reductions. Our hinges have high strength, high weather resistance, and high durability, because they are subject to at least 200,000 cycles of opening and closing tests, strength tests by tensile strength testers, weather resistance tests by salt spraying, and endurance tests under chemical exposure.

NISHIMURA CO., LTD.

http://www.nishimura-arch.co.jp/ Japanese only 2-162, Chizuka, Yao City, Osaka

ISO 9001 ISO 14001



SOUL Design-Chucks for Car parts





Key features of the product

- 1. Rich experience in clamping difficult-to-clamp workpieces
 - 2. Ensure reliable quick delivery.
 - 3. Worldwide after-sales care

Since their commercialization in 1969, our design chucks have been highly evaluated for optimal design, high-quality manufacturing, quick delivery, and long-term after-sales care for all chucking needs of car parts, and have the top delivery results and repertory in Japan.

Solutions for our clients

Our design-chucks are custom-made and designed for mass-produced workpieces for which generalpurpose chucks are not suitable. In particular, the first production of new model cars cannot tolerate any delays and mistakes. Our products have been evaluated for design owing to the best clamping mechanism for the conditions of use of workpieces, quick delivery and reliable response to troubles. We have numerous examples of success in research and development with customers as to irregular-shaped and thin-walled workpieces that are difficult to handle. Moreover, we have developed worldwide aftersales care for overseas-delivered products, jointly with overseas partners.

TEIKOKU CHUCK CO., LTD.

http://www.teikoku-chuck.com English /中文 2-1-50, Kitakyuhoji, Yao City, Osaka

ISO 9001

Gas cylinders



Key features of the product

- 1. Spring function maintained by filling with nitrogen gas
- 2. No pipework required
- 3. Energy-saving

Our gas cylinders have spring functions based on gas compression, to promote energy-saving and spacesaving. Because the gas cylinders can be used on their own, no pipework is required. Unlike hydraulic and pneumatic cylinders, the gas cylinders require no energy sources and thus can save on energy.

Solutions for our clients

Because they are filled with nitrogen gas, our gas cylinders require no power sources, and, therefore, demonstrate a huge energy-saving effect and eco-friendliness. Our gas cylinders are balance cylinders designed for machine tools in the general industrial machinery industry and come in variations of rod diameters from 16 φ to φ 80 (8 kinds) and loads from 1.4 to 59.9KN. Since they are gas cylinders, measures have been taken to prevent the infiltration of cutting oil and cutting powder, the bearings have been strengthened for eccentric load, and corrosion resistance has been upgraded by a special surface treatment of rods. Because accessories are available for installation in machinery and equipment, as well as filling kits, our gas cylinders can be used in various fields.

HORIUCHI MASHINERY CO., LTD.

http://www.horiuchi.co.jp English /中文/Indom 1-37, Oimatsu-cho, Sakai-ku, Sakai City, Osaka

ISO 9001



High-purity integrated gas system (IGS) © 0 1 for semiconductor manufacturing





Key features of the product

- 1. Excellent reliability based on the W-Seal method
- 2. Dead space free
- 3. Smaller footprint about one-third the size of comparable systems

With Fujikin's revolutionary W-Seal, gas system components can be top-mounted, allowing easy installation and removal, reducing maintenance time to about one-fifth that of other systems and increasing miniaturization, standardization and reliability. As a result, Fujikin's revolutionary gas system, the IGS, won the Excellence Award of the 1st Monozukuri Nippon Grand Áwards and was commended by the Prime Minister. The IGS succeeds in providing the lowest costs and highest reliability.

Solutions for our clients

Fujikin produced Japan's first valves for space rockets in 1976. We manufacture not only specialized valve machinery but also ultra-precise fluid control systems. With improved basic technology as well as a gasflow design based on the W-Seal, the IGS can help reduce the size of the overall system, so that the layout area can be shrunk to about one-third the size of conventional gas panels. With its high reliability and low maintenance, the IGS will play a key role in semiconductor manufacturing.

Fujikin Incorporated

http://www.fujikin.co.jp/ English

Kitahankyu Bldg., 1-4-8, Shibata, Kita-ku, Osaka City, Osaka

ISO 9001 ISO 14001



Aluminum-alloy connecting rods





Key features of the product

- 1. Contribute to lighter weight products.
- 2. Stable supply of high quality, high precision parts
- 3. Contribute to low vibration and low noise.

Connecting rods, which are used for internal combustion engines and compressors, convert rotational motion into reciprocating motion (or reversely). Although iron materials account for more than 90% of the connecting rods currently seen on the market, we have specialized in aluminum connecting rods in order to reduce product weight.

Solutions for our clients

For makers of general-purpose engines, marine engines, reciprocating compressors and industrial pumps, we can make proposals by taking advantage of the extensive know-how we have cultivated as a aluminum connecting rod specialist. We can solve customer problems ranging from OCD (quality, cost and delivery) to reductions in procurement, use of special aluminum alloys, and manufacturing by lot from trial manufacture to commercial production. We can also help customers by supporting design and procurement of formed and fabricated materials and peripheral parts.

NIPPON WICO CO., LTD.

http://www.wico.jp English 3-6-2, Shoji, Ikuno-ku, Osaka City, Osaka ISO 9001

Good planning capability One-of-a-kind technology Made in Japan Trial production possible Mass-production possible

CONTACT: Osaka Core Manufacturing Technology Network (Detailed information: P13) E-mail: monob2b@mydome.jp



"Clean Dash Roller and Sheet" dust removing sticky rollers





Key features of the product

- 1. Self-adhesive rubber without adhesive
- 2. Eliminating static electricity
- 3. Semi-permanent adhesiveness

The Clean Dash Roller is a dust removing rubber roller with semi-permanent adhesiveness. Unlike silicon sticky rollers, because the Clean Dash compound has adhesive power as its nature, the roller removes the dust on the product without worries about the adverse effects from possible extraction of adhesive or silicon oil to products.

Solutions for our clients

This product offers the best solution for every customer who has a problem with dust. The product is used in a number of different industries including printing, film manufacturer, paper mill, electric industry and so forth. Its flexibility enables the roller to be used on the concavo-convex surface and cut groove after slitting process. And due to its high chemical resistance you can use the roller repeatedly only by cleaning the roller with special solvent. We can design roller or sheet to meet you needs, and we can offer you the suitable product.

TECHNO ROLL CO., LTD.

http://www.technoroll.co.jp/ English 3-4-5, Techno-Stage, Izumi City, Osaka

ISO 9001 ISO 14001



Float type level switches





Key features of the product



- 1. Compact, durable, relatively inexpensive
- 2. Diverse lineups for various kinds of liquids
- 3. Not only standard products but also OEM products are available

We manufacture products from various kinds of materials that can be used with all kinds of liquids including polypropylene, nylon, NBR, and stainless steel. All our level switches are compact and can detect liquid in small tanks and narrow places. We provide a variety of level switches made from stainless steel, including models with good heat resistance or pressure resistance.

Solutions for our clients

Since the start of production in the early 1980s, we have achieved results over about 30 years. On top of marketing in Japan, we directly export the level switches to about 30 countries in Europe, North America and Asia. We can accept small lot orders starting from 10 units. In addition to customers that actually use the level switches, we also market the products to trading companies and others in the same trade. We can manufacture not only standard products but also special order products such as oil level sensors and oil-water interfacial sensors.

RIKO CO., LTD.

http://www.riko.co.jp/ English 2-2-52, Nakano-cho-Higashi, Tondabayashi City, Osaka ISO 9001



Custom-made industrial brushes (Can be produced from one unit.)





Key features of the product

- 1. Cleaning brushes for products and conveyers
- 2. Grinding and polishing brushes for metal component finishing
- 3. Sealing brushes made of dense bristles

We produce custom-made industrial brushes starting from just one lot. We have an advantage in crosstrained workers who enable quick delivery of high quality products. Since we have a wide range of bristle materials including plastic, abrasive grain-containing nylon, high-temperature resin, metal, and animals and plants, we can provide brushes that can be applied to various kinds of manufacturing facilities.

Solutions for our clients

- (1) Cleaning brush for conveyors. The constantly rotating brush prevents dirt from adhering to the conveyor.
- (2) Brush for deburring and polishing surfaces of automotive metal components. Appropriate brushes can be selected from a wide range of bristle materials such as metal and abrasive grain-containing nylon.
- (3) Brush for blocking the sliding area inside of machining centers. Owing to our proprietary brush forming technology, the brush can be installed in complicated locations of machine tools.

Kyoushin Giken Co., Ltd.

http://www.kyoushingiken.co.jp/ Japanese onl 5-6-3, Shinomiya, Kadoma City, Osaka

Plastic nippers





Key features of the product

- 1. Sharpness and durability based on craftsman technology
- 2. Precision cutting parts based on state-of-the-art polishing technology
- 3. Ensuring good condition of the cutting plane

Since the nippers enable sharp cutting and leave the cutting plane in good condition, burrs from resin molding can be easily cut with good workability. The nippers also maintain good durability over time. Owing to craftsman technology we have accumulated over more than 85 years and cutting-edge technology, the nippers have won the overwhelming support of factory workers and professional craftsmen.

Solutions for our clients

The nippers can be used in resin molding, light electrical product, and harness plants. Because the nippers have excellent sharpness, good workability, and sound durability, they can be used over a long period of time. Since the blade is polished using our proprietary cutting-edge polishing technology, the nippers have little variation in quality and cause little friction when cutting materials. With our nippers, users can cut material with 20 to 30% less force than other nippers.

FUJIYA CO., LTD.

http://www.fujiya-kk.com/ English 2-6-32, Matsubara, Higashiosaka City, Osaka

ISO 9001



Ozone generators for comfortable and improved working environments





Key features of the product

- 1. Effective for decolorization and fat splitting
- 2. Effective for deodorization
- 3. Effective for sterilization and keeping food fresh

With its an oxidizing power second only to fluorine, ozone can produce the effect of sterilization, deodorization, decolorization, and water purification.

These ozone generators can generate ozone in gas, mist and bubble water respectively and help improve the environment depending on where and how they are used.

Solutions for our clients

The ozone generators can be used for deodorization in supermarkets, restaurants, and hotels and deodorization of cigarette smoke and toilets, disinfection of kitchens and stockyards, disinfection of food by washing with ozone water, and keeping food fresh. In pet shops, they can be used for preventing disease by disinfecting and deodorizing excretory substances. In general plants, they can be used for fat splitting of wastewater and deodorization of the putrid odor of cutting fluid used for machine tools. As for water tanks that contain live fish, they can be used to prevent the generation of slime. In ponds, they can be used for cleanup and removal and blue-green algae. In general households, they can be used to remove odors, keep yegetables fresh, and remove black mold from bathtubs and bathrooms. Moreover, the ozone generators can produce deodorizing effects in garbage pickup areas and waste treatment plants.

Rex Industries Co., Ltd.

http://www.rexind.co.jp English/中文/Italian 1-9-3, Hishiyahigashi, Higashiosaka City, Osaka

ISO 14001

ISO 9001







Key features of the product

- 1. Can handle small lots starting from 30 units.
- 2. Mold costs are halved compared with conventional methods.
- 3. Mold precision is equal to conventional methods.

Our eco-die-casting system divides molds into a base (common) part and cavity (product) part. Customers bear only the cost for the cavity part, while we bear the cost for the base part. Therefore, mold costs can be halved compared with conventional methods, and customers can make molds at low costs.

Solutions for our clients

Because our eco-die-casting system enables easy mold replacement, it makes small-lot production starting from 30 units possible. Although the costs borne by customers can be halved compared with conventional methods, mold life and precision are equal to conventional die-cast molds, as we can deliver high quality products. Since we have a production plant in China, we can respond to customer demands for cost reductions and provide high quality products through a complete inspection system. In addition, we have more than 100 overseas subcontractors and can meet diversified customer needs.

TAIYOPARTS CO., Ltd.

http://www.taiyoparts.co.jp/ Japanese only 1-23, Yashimokita, Kita-ku, Sakai City, Osaka

1. Limited production of diversified products

We are the only Japanese company that can produce design-conscious knob bolts in 21 different

designs and 6 different colors. Based on cassette molding technology that enables limited production of

Because users can open and close the knob bolts without using tools, the bolts are used in all kinds of

industries. On the other hand, many conventional products are made in black and dark colors as industrial

products, and only round, triangular and chrysanthemum-shape types are available. The assumed

customers are companies who make products with elaborate designs and companies who seek products

with a bright and cheerful image for health appliances, and welfare, medical and children's products. Our products have been welcomed by users, who commented that they "have succeeded in increasing the

2. Diversified kinds of collars and designs

3. Made of high-performance ASA resin

diversified products, we can produce on-demand products starting from small lots.

Eaglestar knob bolts

Key features of the product

ISO 9001 ISO 14001

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Hard lock nuts





Key features of the product

- 1. Do not loosen under vibrations and impacts.
- 2. Can be repeatedly used.
- 3. Simple workability

The world's only locking nuts made with the "wedge principle." With their locking effect, the hard lock nuts have demonstrated high safety and stable economical efficiency in all kinds of fields including railroad vehicles and tracks, high-rise buildings and bridges, expressways, and industrial machinery.

Solutions for our clients

The assumed customers are companies that should prevent accidents involving human lives caused by loosened bolts and nuts, and that want to reduce maintenance costs for joining parts. Moreover, we also have wheelchair and baby carriage makers as customers, which use our hard lock nuts in order to give added value to their products. By using our products, these customers can prevent possible damage caused by loosened nuts and resulting accidents. Moreover, because the hard lock nuts do not need to be retightened many times, they help reduce management expenses.

HARDLOCK Industry Co., Ltd.

http://www.hardlock.co.jp/index.php English

ISO 9001

1-6-24, Kawamata, Higashiosaka City, Osaka

Mitsuboshi C. I. Co., LTD.

Solutions for our clients

visual completeness of products."

http://www.mitsu-boshi.co.jp English

ISO 9001

2-15-12, Takaidamotomachi, Higashiosaka City, Osaka



Cold-headed parts: Threaded fasteners, ○ □ □ nuts, collars, spacers, washers



Key features of the product

- 1. Specialized in producing lightweight and compact irregular-shaped parts
- 2. High processing accuracy and high quality based on cold heading molding
- 3. Trial manufacture possible using molds made on our own

Because of our pursuit of technology as a parts-former, we can flexibly meet customer requests for quality, cost and delivery date using an integrated cold heading system comprised of trial manufacture, moldmaking and commercial production. Since we can make high-precision molds ourselves, we can produce high quality products starting from small lots.

Solutions for our clients

We have delivered diverse products such as joining parts, including collars and spacers used for seat belts and intake manifolds of automobiles, hub nuts for anchoring tire wheels of agricultural and construction machines, special nuts for anchoring bicycle brakes, and special nuts used for medical, health and nursing care beds. We can make products for all industrial fields that need safe, secure and high-precision coldheaded parts for joining.

MATSUDA CO., LTD.

http://www.matsuda@matsuda-fastener.co.jp Japanese 2-4-19, Shiqitahiqashi, Jyoto-ku, Osaka City, Osaka





World's smallest-diameter stainless steel wire rope





Key features of the product

- 1. Single wire drawing of 9 μ (smallest diameter) possible
- 2. 81μ -diameter steel wire ropes by twisting 49 strands of 9μ -diameter wire
- 3. Integrated production processes in-house

Our stainless steel single wires of 9 μ in diameter and wire ropes of 81 μ in diameter have made it possible to produce products that have unprecedented features. As a new material that has both features of stainless steel and flexibility like silk, steel wire ropes, as thick as hair, inspiring high expectations in the fields of medical treatment and cutting-edge processing.

Solutions for our clients

We manufacture products through integrated production processes comprised of wire drawing, twisting, resin coating and end processing. Moreover, regarding thinning technology, we have succeeded in mass-producing stainless steel wires of 9μ in diameter, which is unprecedented in the world. Because we have enabled the drawing of wires of unprecedented small diameter, it has expanded possibilities in the field of cutting-edge medical treatment. Such wires have made it possible to conduct treatment of sites that conventional products cannot reach (with secured strength and the use of metallic characteristics). Moreover, we also specialize in the processing of various types of metals other than stainless steel, as well as nonferrous metals. Therefore, we can meet the needs of companies that use thin line materials, by helping with various types of trial manufacture and design.

Osaka Coat Rope Co., Ltd.

http://www.ocr.co.jp/ English 3-5-22, Techno-Stage, Izumi City, Osaka

ISO 9001



New material high density, highly-functional stainless steel filters







Key features of the product

- 1. Strong against chlorine
- 2. Magnetic
- 3. High density
- ① These high density, highly functional wire gauzes and filters are made of chlorine corrosion-resistant austenitic stainless steel. They have stronger resistance to stress corrosion cracking caused by chloride than SUS316L and duplex stainless steel.
- 2) High density wire gauze and filters made of magnetic ferritic stainless steel

Solutions for our clients

The chlorine corrosion-resistant austenitic stainless steel wire gauze has superior corrosion resistance against seawater, sulfuric acid, and organic acid, and can be used not only by water treatment equipment makers and in chemical and food plants, but also in fields that will become social keywords of the future. such as seawater desalination plants and seawater heat exchangers. Moreover, with the wire gauze made of magnetic ferritic stainless steel, users can easily select and remove corrosion-caused wire gauze debris trapped in the product, and, therefore, the wire gauze is expected to be used by milling, medicinal drug and food makers.

MATSUBARA WIRE CLOTH CO., LTD.

http://www.wire-mesh.co.jp Japanese only 6-1-25, Oka, Matsubara City, Osaka

ISO 9001



GF wheel (polishing wheel shows high cutting power)





Key features of the product

- 1. Highly evaluated for rubbing-based polishing as opposed to conventional beating-based polishing
- 2. Flexibility that grinding wheels that whetstones do not have
- 3. Long service-life and high cutting power

The GF wheels are high density abrasive cloth wheels (patented) that have been developed based on our proprietary technology. Unlike general flap wheels that beat flaps onto workpieces, the GF wheels can efficiently polish workpieces using their ideal polishing method of rubbing. The high density flaps produce excellent cutting power.

Solutions for our clients

The GF wheels demonstrate their power when polishing seamless pipes made by metalworking, particularly those made of special alloys. Users that use grinding wheels for centerless polishing always have flexibility problems, but those problems can be eliminated if the GF wheels are used. Moreover, the GF wheels have more advantages than grinding wheels, such as a lighter weight, easiness to handle, high safety and resistance to cracking. In addition, the GF wheels can be customized by trimming and changing the hardness to customer requests. By using these products, customers can shorten polishing processes and reduce machining time.

Three-F Giken Co., Ltd.

http://www.tfq.co.jp/ English 1-3-11, Kishiwada, Kadoma City, Osaka ISO 9001



Endless belt (Abrasive belt)





Key features of the product

- 1. High grinding force
- 2. Long service-life
- 3. Stably polished surfaces

The belts demonstrate superior grinding performance and can be used from rough grinding to precision final polishing. In particular, the belts are used for polishing surfaces of special steels including stainless steel and titanium, and circuit boards. To meet all kinds of customer demands, we produce products from small lots with belt widths ranging from 6 to 1,650 mm.

Solutions for our clients

Our products have been mainly delivered to and favored by steelmakers, stainless-steel makers, and semiconductor manufacturers. The stainless steel made in Japan is of the world's top level. The precision of Japanese stainless steel is guaranteed by thorough polishing work, and, therefore, grinding belts are indispensable for making stainless steel. To enhance stability and improve quality, we make full use the latest computer-controlled automatic abrasive coating line and meet customer demand including that for cost reductions.

Nagatsuka Abrasive Mfg. Co., Ltd.

http://www.crownab.com English 1-5-37, Rokumanji-cho, Higashiosaka City, Osaka ISO 9001 ISO 14001



Lithium ion battery gasket (Packing)





Key features of the product

- 1. Can perform trial manufacture to commercial production.
- 2. Have about 30 years of development results and know-how.
- 3. Can make customization proposals and provide planning.

We developed gaskets for miniature square batteries for the first time in the world in 1985, and have the world's leading share in the production of gaskets for lithium ion batteries. Moreover, we manufactured thin-walled injection molded products by making use of PFA (teflon) materials of good heat and chemical resistance for the first time in the world.

Solutions for our clients

We have promoted unmanned automation by injection molding machines and laser beam machines that can handle miniature precision thin-walled products. For the monthly production and shipment of 20 million products, we control dimensional accuracy to 1/10,000,000 mm. We can develop and produce all kinds of gaskets for lithium ion batteries from small sized ones for mobile phones and digital cameras to large sized ones for electric vehicles. We can mass-produce high-quality large-size lithium ion gaskets at low costs, and have already the results of commercial production.

Daiwa Kasei Co., Ltd.

http://www.daiwa-kasei.jp/ Japanese only 17-11, Takumi-cho, Sakai-ku, Sakai City, Osaka

ISO 9001 ISO 14001



Difficult-to-process wire products (Wire clamps, etc.)





Key features of the product

- 1. Can process difficult-to-process stainless steel wire and hard steel wire.
- 2. Can process materials in more than 25 processes without using molds.
- 3. Precision parts that have been delivered to automakers

We have delivered 20 kinds of wire clamps (difficult-to-process wire products) to Japanese automakers, who have highly evaluated our products. We have actually produced these products for seven years, and have facilities for commercial production and the technology for making precision parts.

Solutions for our clients

Our products have met the needs of automakers by satisfying rigorous conditions placed on precision, which other companies have had difficulty in achieving. By promoting the replacement of plate-like parts made by press-working with wire processed products that do not require molds, we have helped automakers achieve their aim of weight reductions and cost reductions. (These products are called "wire clamps.")

EIKO GIKEN CO., LTD.

http://www.eiko-sp.co.jp Japanese only 188-8, Mitsushima, Kadoma City, Osaka

ISO 9001



"PIASTA" highly corrosion-resistant Bi-metal drill screw





Key features of the product

- 1. Corrosion resistance of austenite stainless steel
- 2. Drilling and Tapping performance of hardened steel
- 3. Realization of working efficiency and reliable joining

Since dissimilar metals are combined in one screw, each metal demonstrates its properties well. During installation, the super-hardened steel makes work speedy. Once installed, the corrosion-resistant stainless steel quarantees reliable joining. These highly corrosion-resistant Bi-metal drill screws have been highly rated by users.

Solutions for our clients

The screws are most suitable for joining roofs and exterior wall materials of buildings that require corrosion resistance, particularly structures in coastal regions exposed to sea breezes, chemical plants that emit corrosive gases and areas where acid rain is intense. Normally, despite its good corrosion resistance, stainless steel has low cutting performance and requires drilling work in other process, resulting in poor working efficiency. Conversely, hardened steel drill screws that can be installed in one step have poor corrosion resistance. With the use of drill screws made of composite metal, which bring together the advantages of two kinds of steel, we offer reliable joining that guarantees both workability and high corrosion resistance.

PIAS SALES CO., LTD.

http://www.pias-vis.co.jp/ Japanese only 4-3-44, Shinkitajima, Suminoe-ku, Osaka City, Osaka ISO 9001

Good planning capability One-of-a-kind technology Made in Japan Trial production possible Mass-production possible

CONTACT: Osaka Core Manufacturing Technology Network (Detailed information: P13) E-mail: monob2b@mydome.jp