

# Strength

World-class human resources and manufacturing quality from Tsuruoka

## Our strengths

**Advanced processing and mass production technologies.  
Production system that ensures a stable supply of high-quality products.**

Suntec strives to maintain and improve product quality by establishing a thorough quality control system based on advanced processing and mass production technologies. We possess expansive manufacturing facilities furnished with state-of-the-art equipments. Furthermore, we are committed to fostering strong ties with local communities and making significant contributions to society and the environment.



**We pride ourselves on being a group of skilled technicians, and we promote the acquisition of technical certifications**

We support our employees in acquiring national certifications in order to improve their technical skills as technicians. Many of our employees who are active in the company have obtained multiple national certifications, with approximately 70% of our employees working as national technicians after their third year with the company.



**Responding to changes in the business environment with evolving processing technology capabilities**

Our staff in charge of manufacturing directly discusses the contents of drawings in accordance with the customer's requirements, and builds a production system that meets the customer's needs, from prototyping to mass production. In addition, we have continued to support our on-site technicians in acquiring national certifications since the establishment of the company, with the aim of improving their technical skills as technicians.



**Production facilities and factory environment for stable supply of high-quality products**

Suntec Co., Ltd. is a custom manufacturer of precision machine parts for electron microscopes, semiconductor manufacturing and inspection equipment, and various analytical instruments and turbomolecular pumps.



**Thorough quality control system to maintain and improve product quality**

Since our founding, we have accumulated expertise in vacuum parts processing, which prevents scratches and defects, in the process of delivering our products to our customers. We ensure stable quality by designing jigs and other tools through our product verification and manufacturing engineering department.



3-6-1 Takarada, Tsuruoka-shi, Yamagata Prefecture 997-0011  
(Tsuruoka East Industrial Complex)  
TEL:+81-235-23-0377 FAX:+81-235-23-0460

website



満足を「カタチ」に  
-Give Shape To Satisfaction-



Made-to-order manufacturing of precision machine parts



Corporate Brochure

Spreading our wings from Tsuruoka to the world  
**To the world**

## Corporate philosophy

- 01 We are always aiming to be a company that is loved as the best partner of users.
- 02 We will create a vibrant company where each and every employee can fully demonstrate his or her abilities.
- 03 We contribute to the development of an affluent society through manufacturing.

## Message from the President

Since our company's establishment, we have refined our technical capabilities and responsiveness in the field of precision machining in order to be chosen by our customers over the medium to long term. We have been striving to expand our facilities, improve the factory environment, build a production system, and develop human resources to meet the needs of our customers.

With respect to human resource development, our motto is "manufacturing is about developing people," and we are working to pass on skills from veteran engineers to young engineers and Vietnamese engineers at our in-house technical training center. In order to help all employees develop from human resources to human assets, we have introduced a system for challenging skill tests, a skill evaluation system, and a competency evaluation system, which encourages each individual to take on the challenge of achieving higher levels of technology, while encouraging manufacturing through teamwork between processes.

In today's rapidly changing and fast-paced world, we have established a system that can handle everything from prototyping to mass production and contribute to difficult-to-machine products in order to meet the needs of the times. Furthermore, in order to contribute widely to our customers' manufacturing processes from the upstream, we have established a one-stop system that handles everything from machining to welding and assembly.

With the goal of "spreading our wings from Tsuruoka to the world through business," we are constantly striving to realize "world-class human resources and manufacturing quality from Tsuruoka."

We look forward to the opportunity to grow with you as you tell us about your needs from prototyping to mass production, as well as your thoughts on your products.

President of Suntec Co., Ltd.  
**Jujiro Sashida**

## Domestic locations



**Main Plant**  
3-6-1 Takarada, Tsuruoka-shi,  
Yamagata Prefecture  
997-0011 (Tsuruoka East  
Industrial Complex)



**No. 2 Plant**  
3-5-21 Takarada,  
Tsuruoka-shi, Yamagata  
Prefecture 997-0011 (Tsuruoka  
East Industrial Complex)



**Kushibiki Plant**  
3-5-21 Maruoka Aza Machinouchi,  
Tsuruoka-shi, Yamagata Prefecture  
997-0334 (Kushibiki West  
Industrial Complex)



**Shonan Plant**  
50-1 Shimo Yamazoe Aza  
Shonan, Tsuruoka-shi, Yamagata  
Prefecture 997-0341 (Shonai  
South Industrial Complex)

## Overseas locations



**SUNTEC VN CO., LTD.**

6-1, N3-2 Road, Long Duc Industrial Park,  
Long Duc Commune, Long Thanh District,  
Dong Nai Province, Vietnam.  
TEL:(+251) 3200005  
FAX:(+251) 3200006





# Manufacturing

## Production system

### 01 Process design

At Suntec, we hold preventive action meetings for products for which orders are confirmed after an order review meeting to thoroughly avoid the risk of possible defects. During our meetings, we discuss in detail the processing process, who is in charge, and how to respond to risks, so that we are fully prepared before we start processing the product. Furthermore, depending on what is to be processed, we hold in-depth discussions with our customers to pursue manufacturing that satisfies customers from the drawing stage to the completion of the product. We also have a system in place to back up product processing by creating process drawings, jig drawings, and machining programs using CAD/CAM as needed.



### 02 Machine processing

Suntec has many advanced production facilities that can handle a wide variety of shaped workpieces, including vertical 5-axis milling machines, multitasking machines, and wire-cut electric discharge machines. We continue to improve our facilities and technologies to meet every need of our customers, including short lead-time processing requests and difficult processing.

**Features of Suntec**

**We have more than 40 NC lathes and more than 40 vertical and horizontal machining centers.**



### 05 Assembly

We perform assembly work flexibly adapting to the ever-evolving products of our customers. We provide high quality products by procuring parts, manufacturing harnesses, adjusting each part, and inspecting performance.

**Features of Suntec**

- Highly clean assembly area
- We are capable of high-mix low-volume assembly.
- We can also assemble high vacuum equipment.
- We also possess He leak detectors and can support vacuum leak testing.



### 06 Quality inspection

Our dedicated team inspects the products. Inspections are an important process to assure product quality. We rigorously check the quality of our products, including dimensions and appearance, by using the latest inspection equipment to perform precise measurements and evaluations. We also record inspection results and manage information on product quality in an effort to improve quality.

**Features of Suntec**

- We are equipped with a wide variety of more than 1,000 measuring tools and 8 CMMs.
- Our dedicated temperature- and humidity-controlled inspection room.



Production system that ensures a stable supply of high-quality products

### 03 Finishing processing

We manually finish "deburring," "drilling," "tapping," "mirror finishing," and "polishing of seal surfaces" in areas inaccessible by machine processing. We possess a variety of grinders and are capable of machining high-precision flatness and parallelism.

**Features of Suntec**

- Our manual finishing unit, which is essential for machining vacuum components such as seal surface polishing, is deployed to handle various shapes and materials.
- We employ a large number of female employees, who play an active role as key members of the company.



### 04 Welding

We manufacture products responsibly with our in-house integrated system, starting from parts machining, through welding, leak testing, secondary machining, and manual finishing, to final assembly. We also produce a wide variety of products in small lots on a daily basis, and respond to customers' product requirements, consultations on processing details, and short delivery times.

**Features of Suntec**

- We are capable of welding in extremely high vacuum (tig welding, semi-automatic welding, brazing, soldering).
- After processing, leak tests are conducted according to customer requirements (helium leak test, water pressure test, airtightness test).
- We have an electric furnace that enables internal stress removal and heat treatment of materials.
- We also have a variety of tube benders and can handle pipe bending used for cooling components.



### 07 Shipping and packaging

Shipping and packaging is an important process to ensure that products are delivered to customers. We select appropriate packaging methods according to the characteristics and size of the product, propose returnable containers, and conduct thorough quality control in packaging operations to protect product quality and provide products that satisfy our customers.



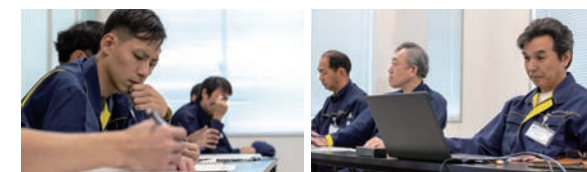
**We have acquired the ISO 9001 certification, the international standard for quality management.**

In order to provide our customers with satisfactory products in the field of precision mechanical parts processing, Suntec Co., Ltd. acquired the ISO 9001 certification, the international standard for quality management systems, on April 25, 2008. We will continue to strive for further quality control and to provide products that satisfy our customers.



#### ●Quality meetings

We hold a monthly meeting for the purpose of quality improvement, attended by the plant manager and the managers of the manufacturing, quality assurance, production engineering, and sales groups. At the meeting, process quality results for the previous month are reviewed, factors causing problems are analyzed, and improvements and countermeasures are discussed.



# Products

We maintain and improve product quality through a rigorous quality management system

## Product information



**○Analytical instrument parts**

Material: A5056, A1050 / Dimensions:  $\phi 100 \times 130L$

TIG welding of aluminum



**○Analytical instrument parts**

Material: C1020 / Dimensions:  $\phi 300 \times 50$

Airtightness Brazing Soldering

Pipe bending

Each part processing - welding - secondary processing - leak test - surface treatment



**○Bicycle-shaped showcase piece**

Material: A5052

Machine / S500Xd1 (Vertical machining center)

POINT / Both this piece and its custom-made jig were created through CAD-based design.



**○Analytical instrument parts**

Material: SUS304 / Dimensions:  $250 \times 200 \times 200$

Vacuum resistance (10-10Pa or less)

TIG welding Wire cutting

Each part with sealing surface

Each part processing - welding - secondary processing - leak test



**○Analytical instrument parts**

Material: SUS304 / Dimensions:  $\phi 60 \times 200$

Vacuum resistance (10-10Pa or less)

TIG welding Bellows welding

Each part with sealing surface

Each part processing - welding - leak test



**○Cube-shaped showcase piece**

Material: A5052

Machine / S500Xd1 (5-axis/multitasking machine)

POINT / A cube can be attached, detached, and rotated on a base with a spring.

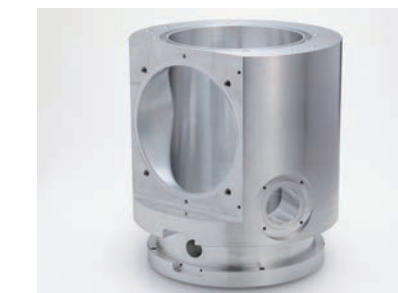


**○Analytical instrument parts**

Material: SUS310 / Dimensions:  $\phi 62 \times 17$

Ra 0.2 hairline hand finishing

Center with  $\phi 1$  pole



**○Analytical instrument parts**

Material: S45C / Dimensions:  $\phi 200 \times 250$

R-face machining by simultaneous 5-axis machining

Internal diameter all around Ra 0.8 (lathe machining)



**○Tensegrity showcase piece**

Material: SUS303 (Our company logo)

Machine /  $\alpha$ -C600iC (Wire-cut electric discharge machine) · Vertical milling machine

POINT / Piece is held up by extremely slender columns, each with a cross-section of 0.35mm by 0.35mm.

# Activity

Our manufacturing activity sustainably contributes to development of wealthy society

## Initiatives and activities

### New plant in Vietnam Aiming to strengthen the supply chain.

In September 2023, Suntec commenced operations at SUNTEC VN, a newly established base in Vietnam. We aim to strengthen the supply chain and stabilize QCD through cooperation between Japan and Vietnam by utilizing trainees with experience as technical interns in Japan.



### Active acceptance and full support for technical intern trainees.

Since 2017, Suntec has accepted more than 15 Vietnamese technical interns and provided them with private rooms in a detached dormitory outside the company. Following practical training, we also provide support for employment in our overseas subsidiaries, expanding the scope of their activities.

### Endowment lectures are held at Tsuruoka Technical High School, led by alumni of the school.

Suntec offers endowment lectures to Tsuruoka Technical High School, led by alumni of the school. Through practical training hours, we provide students with the opportunity to acquire basic knowledge of machining and practical skills to operate the machines.

