



The Heart of Japanese Aerospace, AICHI-NAGOYA

Aichi Prefecture is located in the central part of Japan, with a population of 7.5M centered around Nagoya City. The area boasts a GDP of 292B \$, which is an economic scale equivalent to several countries in the world. Aichi Prefecture is the No.1 aerospace industrial region in Japan where the development and production of the Mitsubishi SpaceJet family, fuselage and wings of Boeing passenger jets, aircraft engines and Japanese flagship rockets, etc. are actively carried out. In addition, some companies including startups are working on the development of next-generation air mobility technologies such as eVTOL and suborbital spaceplane.

Furthermore, Aichi Prefecture is one of the world's leading industrial manufacturing regions where various industries thrive. Many global manufacturers in automotive and machine tooling such as Toyota Motor Corporation, DENSO, AISIN, OKUMA, DMG MORI and Mazak are headquartered in Aichi Prefecture.

AICHI-NAGOYA AEROSPACE

CONSORTIUM (ANAC) strives for comprehensive development of the aerospace industry in Aichi Prefecture via collaboration by all sectors of the aerospace industry, such as The Aichi Prefectural Government, The City of Nagoya, local government organizations, industry-focused organizations, manufacturing companies and universities.

Our consortium promotes the aerospace industry through various activities, such as forums, networking events, exhibiting, matchmaking, human resource development, consulting programs by various experts and support for R&D.

We serve as a bridge to facilitate international business relations by collaborating with foreign government organizations and aerospace specific clusters.

At ANAC we strive to bring together the capabilities of Aichi with the global community to create a brighter future for Aerospace.

Members













Central Japan Aerospace Industrial Technology Center

AICHI INDUSTRY PROMOTION ORGANIZATION

Nagoya Industries Promotion Corporat





Komaki C







Japan External Trade Organization(JETRO)
JETRO NAGOYA













GDP Comparable to several countries in the world

\$292 billion

Population MMM M
Estimate 7.5 million



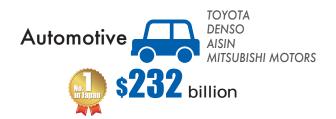








Turnover of main industries







Aerospace

- Aerospace Industry in the Chubu Area centered on Aichi Prefecture



Turnover

\$4.05 billion



Domestic share of Turnover

45.5%



B787

almost 35%

of B787 body parts production



Companies

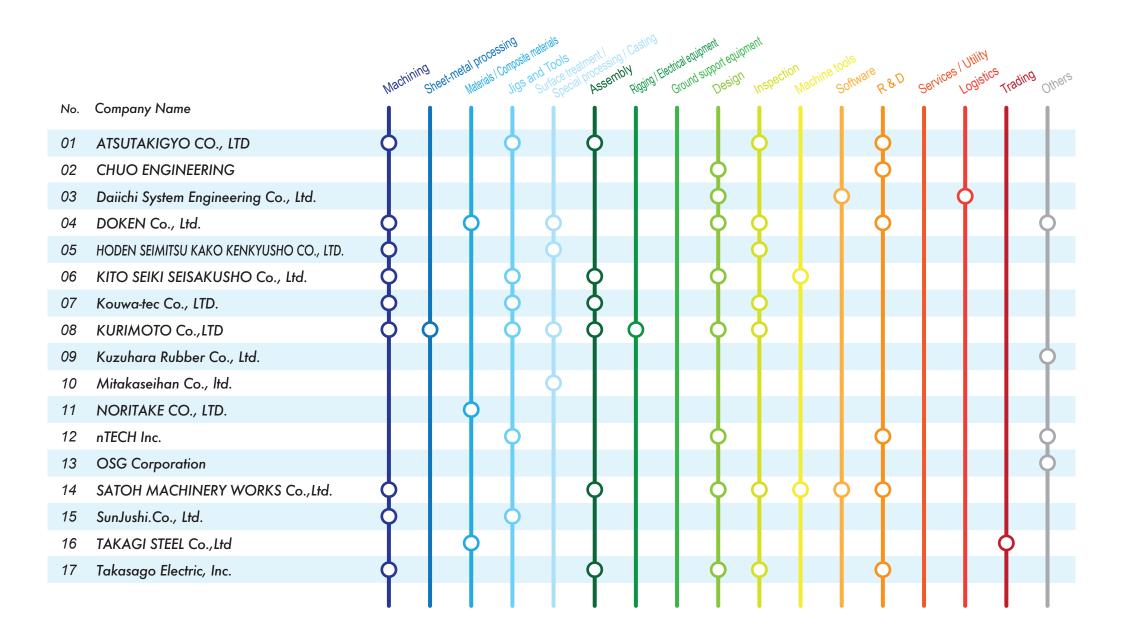
186



Employees 10 000

13,932

Major Aerospace Enterprises



ATSUTAKIGYO CO., LTD



Address	4-1-1 Fukufune-cho, Nakagawa-ku, Nagoya, Aichi 454-0836, Japan
Tel	+81-52-355-8038
Email	businessdepartment@atsuta-kigyo.co.jp
Website	http://atsuta-kigyo.co.jp
Contact Person	Masato Sakurai(Assistant Manager) Takuto Mizuno
Capability Category	Aerospace parts manufacturing • Production of prototypes and development products • Part Processing(Airframe) • Tooling, Jigs • 3D Printer Products Processing
Representative	Masayuki Nakashima
Sales Amount	550 million yen
Capital	15 million yen
Employees	38
Established	1956
Certification	JISQ9100:2016, MSJ4000
Major Customers	Mitsubishi Heavy Industories,Ltd Aoyama Seisakusho Co.,Ltd Noritake Co.,Ltd JAXA(Japan Aerospace Exploration Agency)

Business Overview

We are good at processing difficult-to-cut materials such as inconel,titanium etc. We promoted the factory's IoT system and linked the in-house LAN and the machine tool to construct a monitoring, maintenance and analysis system.

We will establish the best mix of the latest technology and traditional technology, respond quickly to high-mix low-volume production and meet customer needs

[Products]

Aerospace parts manufacturing

[Materials]

- · Difficult to cut materials such as inconel.titanium, Hastelloy, Waspaloy, stainless etc
- Alminium(A5052, A7075)
- Steel (S45C, SCM435)
- Other (teel, copper, magnesium, aluminum bronze, etc.)
- AMS Standard (AMS5643, AMS5659, AMS5662, AMS4050, etc.)
- · Materials for forging and casting

[Part Size]

~Φ1000

[Main Facilities&Equipment]

OKUMA MU-8000V-L (P) 5-Axis Mulutitasking Machining Centers(Φ1000×H550)

OKUMA MULTUS B300 II Multitasking Machines (Max Turning dia Φ630mm, Max work length 900mm)

OKUMA LB4000EX II L·M NC Lathes (Φ480×750L)

OKUMA LB3000EX II MY NC Lathes (Φ340×450L)

Makino Milling Machine a 51nx 4-Axis Machining Centers (560×640×640mm)

Mitutoyo CRYSTA-Apex S9106 CNC Coordinate Measuring Machines (905×1005×605)

Mitutoyo SV-C3200 Surface Roughness/Contour Measurement Formtracer Extream

Our Strength

- 1) In strategy cooperation with partner companies, we also try integrated production with added value such as assembly, welding, sheet metal, special cleaning.
- 2) 3D Printer Products Processing
- 3) We have 66 years of knowledge in aerospace equipment manufacturing
- 4) We can respond quickly even with high-mix low-volume production, meeting customer needs with IoT systems.

Needs we can correspond / Business partners we want

- 1) In strategy cooperation with partner companies, we also try integrated production with added value such as assembly, welding, sheet metal, special cleaning.
- 2) Multiple process control is possible
- 3) 3D Printer Products Processing.
- We can respond quickly even with high-mix low-volume production, meeting customer needs.
- 5) We are good at processing difficult to cut materials such as inconel, titanium etc.

✓ Office & Plants

4-1-1, Fukufune-cho, Nakagawa-ku, Nagoya, Aichi, Japan

CHUO ENGINEERING CHUO ENGINEERING

Address	Nitta Building, 1-17-23 Meieki-minami, Nakamura-ku, Nagoya, Aichi, 450-0003, Japan	
Tel	+81-52-611-2919	
Email	contact@chuo-eng.co.jp	
Website	https://www.chuo-eng.co.jp/	
Contact Person	Naoji Ishino Executive Officer, General Manager of Aerospace Division	
Capability Category	Design, development testing and operation & maintenance of aerospace instruments and devices Design and development of automotive devices	



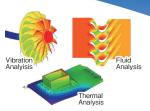
Representative	Yutaka Ishida, CEO & President
Sales Amount	4.5 billion yen (as of the end o march, 2021)
Capital	116 million yen (Capital reserve is included)
Employees	542
Established	September 1955
Certification	JIS Q9100, ISO9001
Major Customers	MHI group, KHI group, IHI group, JAXA BOSCH group, HONDA group, Fujitsu group, SONY group, Canon group, Daifuku group, Murata Machinery group, HITACHI group

Business Overview

Our business is focused primarily on the design and analysis of Aircraft, Aero Engines and Aerospace Equipment.

Especially Analysis and Additive Manufacturing field, our technicians meet your demand with rich experience and skills.

technicians meet your demand with rich experience and skills. We also provide the design and manufacture of Test Equipment at the R&D Center.



· Product & Services

Design Engineering: Structure, Equipment and Jigs

Analysis Engineering: Strength Analysis, Vibration Analysis, Motion Analysis,

Thermal Analysis, Fluid Analysis and Optimization

R&D: Test Equipment

 $\label{lem:lem:manufacturing:Design} Additive\ Manufacturing\ ,\ Manufacturing\ Prototype,$

Machining, and Evaluation

· Design Tools

CAD: CATIA V4 V5, CREO, Unigraphics NX-2, Solid Works, AUTO CAD, MICRO CAD Analysis: Abaqus, Nastran, HyperWorks, Patran, Femap, ADAMS, Marc, Fluent, NASGRO

· Additive Manufacturing Facilities (Partner Company)

3D Printer: EOS M290, M400-4 (250mm×250mm×325mm, 400mm×400mm×400mm)

Materials : Aluminium, Steel, Maraging Steel, Cobalt Chrome, Nickel Alloy, Titanium, Stainless, Invar, CuCr, Others

Our Strength

- · We are strong in the field of structural analysis. We are particularly good at creating new structures and shapes using topology optimization.
- · We are strong in Additive Manufacturing Engineering. We can support the whole process from selection of parts suitable for Additive Manufacturing to design proposal of new shape using topology optimization, and prototype manufacturing and evaluation.





Needs we can correspond / Business partners we want

- · Customers who want Design and Analysis for Product Integration.
- · Customers who want Product Weight Saving.
- · Customers who want Additive Manufacturing Engineering Solutions.
- · Customers who want Design and Manufacture prototype by Additive Manufacturing.

✓ Office & Plants

- · Head Office (Tokyo) · Design Center (Utsunomiya, Yokohama, Nagoya, Komaki, Fukuoka)
- · R&D Center (Komaki) · Training Center (Nagoya)

Daiichi System Engineering Co., Ltd. DSE DAIICHI SYSTEM ENGINEERING

Address	6F Nittochi Nagoya Bldg. 2-1-1 Sakae Naka-ku, Nagoya, Aichi 460-0008			
Tel	+81-52-204-1380			
Email	sales-CN@dse-corp.co.jp			
Website	https://www.dse-corp.co.jp/english/company/			
Contact Person	Business Development & Planning Department_Yukihiro Tomita Overseas Business Promotion Department_Nagasada Mitani			
Capability Category	Aviation/Aerospace Automotive Logistics Machinery Software Development Tubomachinery Design Software			
Representative	President & CEO: Yasushi Uchida			
Sales Amount	4.92 billion yen (as of March 2021)			
Capital	90 million yen			
Employees	593			
Established	29 October 1980			
Certification	ISO9001、ISO13485			
Group Name	DCR (Daiichi Computer Resource Co., Ltd.), DCT (Daiichi Communication Trust Co., Ltd.), Beijing DCR, Myanmar DCR, Thai DCR			
Major Customers	Daifuku Co., Ltd., Denso Techno Co., Ltd., Kawasaki Heavy Industries, Ltd., Mitsubishi Heavy Industries Ltd., Mitsubishi Motors Corporation, Subaru Corporation, Toyota Auto Body Co., Ltd., Toyota Motor Corporation, Toyota Production Engineering Corporation, Associated companies of MHI (Alphabetical Order)			

















Business Overview

Comprehensive support service for turbomachinery design (engineering service)

Turbomachinery design software sales (CAE, CAM)

Aerospace division: Conceptual design to project management, design and analysis department, quality assurance

Automotive division: vehicle design (body and interior), production engineering, research and development (engine, electronic control, HV)

Material Handling Machinery: development and design of automatic transfer equipment, control design, mechanical design, production engineering and quality assurance

Products · Materials · Part Sizes · Facilities & Equipment

Comprehensive support system for turbomachinery development covering everything from design and analysis to CAM for machining

Main software name:

- COMPAL®, AXIAL™, AxCent®, Pushbutton CFD®, TurboOPT II™, GasTurb, DyRoBeS
- MAX-PAC™, VAROC

Our Strength

We provide total support from design to machining, performance testing, and evaluation.

We are able to support our customers with a career spanning more than 60 years. DSE is proud to represent ConceptsNREC, Inc.

ConceptsNREC is a leading software and engineering company in Japan, and we are ready to assist you in any way we can.

We will support your company with ConceptsNREC for technical support of software and various engineering services.

[Software Sales and Software Support Services]

CAE Analysis Software:

Design analysis software from 1D design to 3D design, CFD analysis, and structural analysis.

Support services for software operation and usage.

CAM manufacturing software:

Conversion of in-house designed 3D models to MAX-PAC and provision of 5-axis programs by MAX-PAC.

Support service for software operation/usage.

Needs we can correspond / Business partners we want

Sales of turbomachinery design software

Performance evaluation, optimization, and review of design improvements for turbo machinery design

Office & Plants

Oye Office: 1F Ryoko Head office Bldg., 6-16 Oye-cho Minato-ku, Nagoya, Aichi Komaki Office: 17-1 Shinden-cho, Toyoba, Toyoyama-cho, Nishikasugai-gun, Aichi

Kariya Office : 3F Johkei Bldg. 4-31 Sakura-machi Kariya, Aichi Shiga Office : Daiko Bldg. 4-15 Yokaichi-hamano-cho higashi-Omi, Shiga

Utsunomiya Office: 1-7-8 Yavoi, Utsunomiya, Tochiqi

DOKEN Co., Ltd.



Address	1-2 Domeki Hitikuwada, Shinshiro, Aichi 441-1338, Japan
Tel	+81-536-24-5100
Email	sales@doken.biz
Website	www.doken.biz
Contact Person	(Production department) Daigo Ando (Sales department) Eiji Ohishi
Capability Category	 •Machining (5-axis, 3-axis large NC router machining) •Materials, composite materials (forming of polycarbonate, composite of different plastics) •Surface treatment (hard coat solution manufacturing and surface treatment) •Design (product design, production mold design) •Inspection (performance test, evaluation, safety standard certification acquisition) •R & D (silicone hard coat sol-gel solution) •Others (big size silk printing, autoclave bonding)



Representative	Hideyo Ando, President
Sales Amount	JPY 844 million
Capital	JPY 100 million
Employees	53
Established	May 1985
Certification	DOT-875, ECE-43R, VSTD 25-3
Major Customers	Toyota, Toyota Industries Corp., Toyota Boshoku Toyota Auto Body, Toyota C&D, Teijin, Mitsubishi HI Kawasaki, Honda, Yamaha, Suzuki, Nismo, Aichi Police National Police, Metropolitan Police, Government office

Business Overview

"In the fields of next-generation Automobiles, high-speed Trains, Aircrafts, Ships, are being promoted plastic windows, which are lighter than glass windows.

The plastic windows are used polycarbonate(PC) plastic material, which is strong and has excellent transparency, but PC is inferior in surface hardness to glass and is easily scratched, and it is deteriorated by the ultraviolet rays of sunlight. Therefore, we have applied a hard coat to the surface with functions such as scratch resistance and weather resistance for practical use. We manufacture designs, jigs and molds by ourselves, have our own brand SARCoat ® silicone hard coat sol-gel solution, and carry out all our own molding and surface treatment to produce plastic windows."

✓ Products · Materials · Part Sizes · Facilities & Equipment

[Products category]

- Car window, Shinkansen window, Cabin roof window, Motorcycle windscreen, Security shield [Plastics material]
- Polycarbonate (PC), Acrylic (PMMA), PC & PMMA Composite panel [Facilities processable size]
- Heat Press Forming [processable max. size 2,500x1500mm]
- Injection Molding [mold tightening force 650tons]
- NC Router 5 axes type [processable max. size 2,400x1600mm]
- Dip coating type Hardcoat Line [processable max. size L1500xD1300xW300mm]
- Flow coating type Hardcoat Line [processable max. size 2400x1400mm]



"e-Palette" in TOKYO 2020 Olympic Village



EV "APM" with wheelchair slope in TOKYO 2020 Paralympics



Shinkansen guest room window

Our Strength

"Large plastic windows can be formed transparently and without distortion, and we can consistently perform from development and formulation of silicone hard coat, which is hard and scratch resistant.

For plastic windows, we have obtained certifications such as the American automobile safety certification standard DOT, also the European product safety certification standard ECE."

Needs we can correspond / Business partners we want

"Develop, Design, Prototype, and Mass-produce for transparent and lightweight plastic windows. Various evaluation test equipment are able to obtain quality assurance and certification."

Office & Plants

(Head factory) 1-2 Domeki Hitokuwada, 441-1338 Shinshiro city, Aichi Japan

HODEN SEIMITSU KAKO KENKYUSHO CO., LTD.



Address	6255-1 Okusa-Nenjozaka, Komaki, Aichi 485-0802, Jaj	pan		
Tel	+81-568-47-1257			
Mobile	+81-80-7833-6032			
Email	info@hsk.co.jp	WK BERRY		
Website	https://www.hsk.co.jp	K Komaki Plan		
Contact Person	Shuichi Osako Aero Engine Division Project Manager			
Capability Category	Integrated processing of aerospace engine parts, electrical discharge machining, thermal spraying, heat treating, coating, non-destructive testing			
Representative	Norio Kudou,President & Chief Executive Officer			
Sales Amount	JPY 12.9 billion (as in February 2022)			
Capital	JPY 889 million			
Employees	562 (as in February 2022)			
Established	December 21, 1961			
Certification	ISO9001, JISQ9100, Nadcap(HT,CT,CP,NM,WLD,NNAS410/EN4179(PT Level3) Rolls Royce(SABRe,CT,HT,PT Level3), Pratt & Wh(CT,HT,PT Level3)	,,		
Major Customers	MHI, MHIAEL, KHI, IHI, Mitsubishi Power, DENSO, HO HITACHI	NDA,		

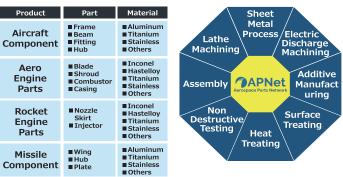
Business Overview

HSK has been accumulating and developing aerospace component manufacturing

technologies for about 60 years, focusing on special processes such as electric discharge machining, surface treatment, and non-destructive testing, and currently manufacturing turbine blades and compressor parts of Trent XWB engine for Airbus A350 and combustor parts of PW1100G engine for Airbus A320neo.



Turbine Blades











Blade process line

Plasma spraying

Heat treating

Non destructive test

Our Strength

HSK has Nadcap international certifications for aerospace parts manufacturing such as heat treating, thermal spraying, coating, EDM, welding, and NDT.

HSK provides the one-stop solution for the integrated production from material procurement to parts processing and quality assurance, including special processes.

Needs we can correspond / Business partners we want

HSK has established APNet, an aerospace parts network in 2020, cooperated with many suppliers. By integrating the technologies of these suppliers, we can realize the further one-stop solutions, reduce costs, shorten delivery time, and ensure the quality of our products. In addition, HSK provides the training services to acquire non-destructive testing qualifications, and contributes to the development of the aerospace industry.

Office & Plants

Aero Engine Division

- Komaki Plant : 6255-1 Okusa-Nenjozaka, Komaki-shi, Aichi, 485-0802, Japan
- Nagoya Plant : 6-783, Sakashita-cho, Kasugai-shi, Aichi, 480-0305, Japan
- Kasugai Plant: 3-5-9, Ueno-cho, Kasugai-shi, Aichi, 480-0306, Japan

KITO SEIKI SEISAKUSHO Co., Ltd.

Address	50 Nakane, Nakamachi, Toyota, Aichi 473-0904, Japan
Tel	+81-565-52-3757
Email	kaitenkougu@kitouseiki.co.jp
Website	http://www.kitouseiki.co.jp
Contact Person	Takuya Takeda 080-6919-4616
Capability Category	Manufacture of metalworking parts
Representative	Akitaka Kito
Sales Amount	600 million yen
Capital	20 million yen
Employees	50
Established	1963/3/1
Certification	JISQ / 9001
Major Customers	TOYOTA INDUSTRIES CORPORATION



Business Overview

Manufacturer of machine precision parts Live tooling unit repairs for CNC lathes Manufacturer of inspection gauges

Spindle plate / Iron, copper, aluminum, stainless steel Lathes, milling, machining centers, cylindrical polishing, inner diameter polishing, plane grinding machines, 3D measuring instruments

Our Strength

Experts in round machine precision parts
Experts in repairing live tooling units for CNC lathes

Needs we can correspond / Business partners we want

All processing for prototype parts and small-lot, multi-product processed products



⁰⁷ Company Profile

Kouwa-tec Co., Ltd. € Kouwa

Address	13-1 Nunouchi, Tomitsuka, Ama, Aichi 490-1202, Japan		
Tel	+81-52-442-0113		
Email	data@kouwa-tec.co.jp		
Website	http://www.kouwa-tec.co.jp		
Contact Person	Toshinobu Hayashi Minoru Kuroda		
Capability Category	Precision processing Prototype JIGs		
Representative	Toshinobu Hayashi		
Sales Amount	US\$8.9M (¥112/\$)		
Capital	US\$90K (¥112/\$)		
Employees	25		
Established	1965		
Certification	ISO9001 JISQ9100		
Major Customers	ShinMaywa NIPPI Nidec Shimadzu Corporation		

Business Overview

- 1 Semiconductor
- · Robot-related parts used in clean rooms.
- · Sensor body for gas accumulator.
- 2. Aerospace
- · Rib parts incorporated into the main wings of commercial aircraft.
- · Parts used for satellites and defense.
- 3. Medical
- · Auxiliary equipment parts used below the knee.
- · Parts to be incorporated into the spine.
- 4. Other precision parts related to hydrogen and drones.



[Products] Aerospace parts, medical parts, semiconductor manufacturing equipment and transport equipment parts.

[Materials] Aluminum(A5052 A7075 etc.)Difficult-cut materials(titanium inconel 15-5ph SUS316L etc.)Others (resin aluminum bronze etc.)Casting Forging

[Parts size] Plates \sim 2000mm Round Bar ϕ 800 [Facilities]

Machine	Model name	Maker	Number	Machine
	D500		1	550*1000*500 21APC
5-axis vertical spindle machining centers	D300		1	300*500*350 13APC
5-axis vertical spiritie machining centers	V 55-5XA		1	900*460*450
	V33-5XB	Makino Milling Machine Co.,Ltd	1	650*325*350
	A-77	Makino Milling Machine Co.,Ltd	1	900*800*1020 2APC
4-axis horizonta spindle machining centers	a51nx		2	540*640*640 2APC
	a82		1	1100*820*1020 2APC
	a81		2	900*900*1020 2APC
4-axis vertical spindle machining centers	VX-1500	Matsuura Machinery Corporation	3	1524*700*610 (Add 1-axis)
5-axis vertical spindle machining centers	MILLAC-1052V		1	2050*1060*800 (Add 2-axis)
4-axis horizonta spindle machining centers	MILLAC-525H	Okuma Corporation	1	520*450*520 2APC
4-axis florizonta spiridie fliacrillilling centers	MA-60HB	Onama Corporation	1	1000*900*1000 2APC
NC lathe	LB3000EXII		2	8 inch Max Φ410mm Max length500mm
automatic lathe	L20E-VIII 5-axis	CITIZEN MACHINERY CO., LTD	1	Workpiece diameter φ4mm to φ20mm Max work length 80mm
electropolishing	ECP-115-NO1	CHUO SEISAKUSHO.LTD	1	-
CNC 3-dimensional measuring device	SVA1220A	TOKYO SEIMITSU CO.,LTD	1	1200*2000*1000
CNC 3-dimensional measuring device	BRIGHT910	Mitutoyo Corporation	1	900*1000*600
CAD/CAM	HYPER MILL	OPEN MIND	3	-
CATIA V5	V5-6R2018	Dassault System	1	-
CNC machine simulation	Vericut	CG Tech	1	-

Our Strength

[Aerospace Parts] We mainly process complex shapes, thin materials, and shapes that are easily distorted, and we flexibly handles everything from prototyping to mass production by combining a 5-axis machining center and a multi-sided pallet.

[Medical Parts] It is possible to receive an integrated order from materials to surface treatment, mainly for spinal implants and artificial limbs.

[Semiconductor] We have built a management system that guarantees quality of 5 μ m or less and does not allow scratches, and consistently handles everything from materials to surface treatment and polishing. We accept orders and provide stable QCD.

Needs we can correspond / Business partners we want

- We can handle a wide range of materials from aluminum to difficult-to-cut materials, and we can meet deadlines and costs by eliminating jigs and processes.
- We can handle everything from materials to processing and surface treatment.
- We can handle special processing such as helical processing, burnishing processing, and electropolishing, which are necessary for processing semiconductor and vacuum parts.
- We have a track record of processing inconel718 in the trial processing of aircraft engine
 cases for the needs of companies involved in engines and defense. From the design and
 production of jigs and cutting tools to the processing of difficult-to-cut materials and process
 management capabilities, we will utilize the know-how we have cultivated so far to expand
 into new fields.

✓ Office & Plants

HEAD OFFICE: 13-1 Tmitsuka, Nunouchi, Ama-shi, Aichi 490-1202, Japan IIDA OFFICE

KURIMOTO Co.,LTD

Address	6 Terada, Kitajima, Iwakura, Aichi 482-0017, Japan
Tel	+81-587-66-8801
Email	y.kato@kmkogyo.co.jp
Website	http://www.kmkogyo.co.jp/en/corporate/index.html
Contact Person	Corporate Officer Sales Department General Manager Yoshiharu Kato
Capability Category	Automotive parts, aircraft parts, medical care, housing equipment, etc. Metal parts (AM, precision cutting, sheet metal press, etc.) Resin parts (AM, cutting, casting, molds, etc.)



Sales Amount 3.2 billion yen Capital 84.57 million yen Employees 145 people (As of July 2022)	KURIMOTO
•	
Employees 145 people (As of July 2022)	
Established September 1990	
Certification ISO9001 / ISO14001	
Group Name Ontec Co., Ltd. / Sanritsu Co.,Ltd.	
Major Customers Automobile manufacturers, parts manufacturer parts manufacturers	ers, aircraft

Business Overview

"Kurimoto Co., Ltd.", which is headquartered in Iwakura City, Aichi Prefecture, has been using the latest capital investment and technological capabilities since its founding.

We have been striving to improve, and have produced prototypes and mass-produced products with high quality, short delivery times, and low costs.

Recently, we have added several new 3D printers and are not only manufacturing but also selling the equipment.

- 3D Printer: 23 machines (SLA SLS Carbon M2 The largest FDM Stratasys F770, H350, J55, Origin One)
- Metal 3D printer: 2 units (GF Machining Solutions Flex 350)
- Machining Center: 40machines (for Molding / Resins & ALCutting)
- Spot welding line (D37m×W4m×H4m)
- Fiber laser welding (TRUMPF Tru Disk 3001)
- · Laser cut (Mitsubishi Electric ML3015GX-F60)
- 3D Scanner: 2 machines (GOM ATOSII Triple Scan, Vectron VMC7000MApi)
- CT Scanner: 2 machines (Nikon MCT 225, XTH 450)
- · Combined environmental tester (EMIC FH-40K/60 type): 2 units







Our Strength

- · Multiple units of 3-axis and 5-axis metal processing machines
- · 2 metal 3D printers
- Multiple measuring instruments (contact type, non-destructive)
- A wide range of materials from resin to metal, cutting from AM, mold processing and a wide range of construction methods, An environment where manufacturing can be done with new ideas based on "actual places, actual things, and phenomena" in fulfilling measurements.

Needs we can correspond / Business partners we want

- · Various proposals using 3D printers.
- We are able to respond flexibly even with high-mix low-volume production, meeting customer needs.
- Application to final products, inspection jigs, processing jigs, masking jigs, anti-vibration jigs etc.
- · Resinification of metal parts (In-house support from molds to molding is possible)
- · Proposals centered on metal AM and precision cutting

■ Office & Plants

Sales Office (Utsunomiya / Yokohama / Hamamatsu / Hiroshima)

Kuzuhara Rubber Co., Ltd.



Address	93-8 Ooyamadanaka-Yokoyamachou Anjou-shi,Aichi,Japan
7.00.000	• • • • • • • • • • • • • • • • • • • •
Tel	+81-566-74-1862
Email	mkuzuhara@kuzuharagomu.co.jp
Website	https://www.kuzuharagomu.co.jp
Contact Person	Representative director: Makoto Kuzuhara Sales: Yamamoto Masamichi
Capability Category	Masking jig for aircraft parts, rubber molded products
Representative	Makoto Kuzuhara
Sales Amount	399.83 million yen / 2019 period
Capital	3 million yen
Employees	28 people (the end of June 2019)
Established	16-Oct-92
Certification	ISO 9001
Major Customers	MIshiguro Rubber · Sanwa Industry · Mino Chemical Industry · Fukoku · Iijima Electronics Industry · Chubu Beautification Company · M-Tech · Tomohiro Wise · Takasago Electric Industry · King Whetstone · Canto Tool · Masuda Vinyl

Business Overview

We design and manufacture masking jigs for the coating of turbine blades for PW1100G-JM mounted on Airbus A320.

We manufacture piston boots for automobile brake calipers, packing and cushion rubber.

September 2020 JISQ9100 scheduled to be acquired





General production of masking rubber and industrial rubber for turbine blade coating 500mm×500mm×H150mm

Rubber molding machine, vacuum rubber molding machine, frozen shot, optical microscope, thermostatic chamber









Our Strength

By creating a dedicated masking rubber using 3D CAD, instantaneous desorption is possible, enabling labor saving and high quality in the masking process. Depending on the usage environment, it can be used many times. We will listen to your needs and propose the best masking rubber.

Needs we can correspond / Business partners we want

Customers seeking labor saving and high quality in the painting process Customers who want small lot and high variety support

Office & Plants

Head office · Delivery center

Mitakaseihan Co., Itd.





Address	83 Futami-cho, Toyokawa, Aichi, Japan
Tel	+81-533-85-4351
Email	sales_gr@mitaka-seihan.co.jp
Website	https://www.mitaka-seihan.co.jp/
Contact Person	Taichi Takasu (Aerospace Division General Officer) Ayaka Hashimoto, Kaori Kamiya(Aerospace Division Sales assistant) Junichi Takeno, Yosuke Sakakibara(Aerospace Division Quality Assurance Manager)
Capability Category	Special print processing for the aerospace and defense industry ①Anodizing process *Scheduled to acquire Nadcap certification in 2024 ②Monster-class UV inkjet printing at a speed of 200m/h Maximum size 4' x 8' * 2023.5 introduction decision ③High precision fiber laser processing Maximum size 4' x 8' * 2023.5 introduction decision ④High-quality and high-precision laser marking by 3Axis-YVO4SHGLASER ⑤Niche Prototyping Equipment/Technology & High Speed/High Performance Mass Production Equipment/Technology ⑥Online shop for materials and products for professionals *Credit card payment accepted
Representative	Ryuta Takasu
Sales Amount	¥ 372 million
Capital	¥30 million
Employees	65
Established	April 7, 1955
Certification	JISQ9100(AS9100):2016, ISO9001:2015, ISO14001:2015
Group Name	Mitaka Trading Co., Ltd.
Major Customers	Nabtesco Corporation, Yokogawa Electric Corporation, KONICA MINOLTA, INC., Kowa Company, Limited, SINTOKOGIO, LTD., NIPPON SHARYO, LTD., Shirakawa Olympus Corporation., TOYOTA TSUSHO MATERIAL INCORPORATED, OSG CORPORATION, Takatori Co., Ltd. Trading companies, government offices, etc.

Business Overview

Manufacturing bases in Aichi prefecture. (Since 1955)

Manufacturing metal name plates for aerospace, and perform thin processing of metals, resins, etc. and special printing. In-house salt spray test, etc.



Products · Materials · Part Sizes · Facilities & Equipment

[Products]

General special printed products specializing in aerospace quality. (Materials)

Aluminum alloy, metal, stainless steel, high-performance resin film and plastic, Stickers, cutting sheets, special double-sided tape, etc.

[Corresponding size]

Please contact us.

[Main equipment]

Anodizing (environmental type) drainage equipment set.

Salt spray tester (Suga tester STP-90V-4Z)

DTP equipment, silk screen (curved surface, flat surface) printing equipment, On-demand printing machine, High-speed drilling machine, Progressive thomson press machine, Various press equipment set, 2D / 3D measuring machine, Exhaust system equipment, etc.

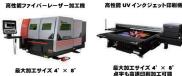




Our Strength

We are printing specialists.

Eneral industrial nameplates with high quality requirements, Specialize in processing thin materials as aluminum and stainless steel, high-performance resin films, double-sided tape, sponges, and rubber, etc.





Needs we can correspond / Business partners we want

Provide you with the information and processes you need to make decisions quickly and accurately. Actively communicate and make suggestions.

It's not just QCD.

We will contribute to the development of our customers' products with our comprehensive strength including fine-tuned responsiveness.

Office & Plants

- Head office factory 83 Futami-cho, Toyokawa-shi, Aichi Japan 442-0051
- Noguchi Factory 51-6 Tsuiji, Noguchi-cho, Toyokawa-shi, Aichi Japan 442-0044

NORITAKE CO., LIMITED Noritake



Address	3-1-36, Noritake-Shinmachi, Nishi-ku, Nagoya 451-8501, Japan
Tel	+81-52-561-9868
Email	newcera@n.noritake.co.jp
Website	https://www.noritake.co.jp/
Contact Person	Sumio Nishiwaki Shuji Kawabata
Capability Category	Manufacturing (From Prototype to Mass Production) Development, design, and commercialization of Ceramics Cores for precision investment casting and industrial abrasive grind wheel. Development and commercialization by additive manufacturing.
Representative	Hiroshi Kato
Sales Amount	1,198 Million USD /2018 (@ 105 yen/USD)
Capital	149 Million USD (@ 105 yen/USD)
Employees	5091
Established	January 1st, 1904
Certification	ISO9001, JQA-2835 and ISO14001
Major Customers	MHI、KHI、IHI、HOWMET AEROSPACE

Business Overview

NORITAKE's Ceramic Cores are being used for manufacturing high-precision rotor and stator blades for gas turbines and jet engines, these ceramic cores contribute greatly to high quality of precision investment casting materials. In addtion, we can make the Ceramic Cores by additive manufacturing (3D printing) which contributes greatly to the shortening

the development and commercialization speeds to meet customer or market demands. In addition, we can develop, design and commercialize the various abrasive tools for difficult-to-machine materials including heat-resistant steel.





The product line of NORITAKE's Ceramic Cores are shown at below or above table.

We have various molding methods and materials, and we can support any sizes and shapes of the products.

Selection is made from among the material model on the basis of molten metal temperature, casting materials, and shape (size) of cast product at customer's request.

Minimum thickness is 0.30mm, Maximum thickness is 150mm,

Maximum length is 1,000mm

Shortening the development or commercialization time, we can also provide the prototype ceramic cores made by Additive Manufactureing.

In addition, we can offer most suitable abrasive tool and the specifications to any machining materials or abrasive method according to customer or market demands.

Material model 品面 Major composition 主成分			°C MONARC				
		N200	N400	N450	N500	N600	N700
		SiO2-ZrSiO4	SiO2-ZrSiO4	SiO2-ZrSiO4-Al2O3	SiO2-Al2O3	SiO2-Al2O3	SiO2-ZrSiO4
Molding method 成形方法		Pouring method 網込成形	Medium-pressure injection molding 中圧射出成形			High-pressure injection molding 高圧射出成形	
	Fe	<300 ppm	< 80 ppm	< 80 ppm	< 30 ppm	< 200 ppm	< 300 ppm
Trace impurities 微量不純物	Pb	< 25 ppm	< 25 ppm	< 25 ppm	< 25 ppm	< 25 ppm	< 25 ppm
	Bi	< 1 ppm	< 1 ppm	< 1 ppm	< 1 ppm	< 1 ppm	< 1 ppm
	Ag	< 1 ppm	1 ppm	< 1 ppm	< 1 ppm	< 1 ppm	< 1 ppm
Characteristic values 物性值	Porosity 気孔率	30%	34%	33%	34%	35%	34%
	Thermal expansion rate at 1000°C 熱療療事	0.25%	0.25%	0.25%	0.25%	0.10%	0.25%
Bending	at Room Temperature	7Mpa	6Mpa	9Mpa	10Mpa	7Mpa	8Mpa
stregth 抗折強度	at 1,000°C	24Mpa	20Mpa	25Mpa	24Mpa	20Mpa	22Mpa
Size サイズ	Maximum length 最大長	~L1000mm	~L500mm			~L300mm	~L250mm
	Minimum thickness 最小肉厚	0.80mm		0.50mm		0.50mm	0.30mm
Cast type 绑造用途		CC/DS/SC	cc	CC/DS/	sc	cc	CC/DS/SC

Our Strength

NORITAKE is one of the leading company for "Ceramics" and has 4 different business fields with the application and development of a variety of ceramics manufacturing technologies which come from tableware production we originally started.

Utilizing "NORITAKE core technology" which means that controlling the size and volume of pores in ceramic and our special materials design and firing technology, our special industrial grinding wheels with optimized abrasive grain arrangement and our special ceramics cores support various industries.

Needs we can correspond / Business partners we want

We would like to be one of the business partners with any oversea companies for the precision investment casting on Aero-engines, IGT and something.

Office & Plants

Miyoshi Factory, Aichi Japan (For Ceramic Cores)

Matsusaka Factory, Mie Japan (For Ceramic Cores)

Miyoshi Factory, Aichi Japan (For Industrial abrasive grind wheel)

Kurumei Factory, Fukuoka, Japan (For Industrial abrasive grind wheel)



Address	2-16-9, Takayama-cho, Kasugai-city, Aichi 486-0912, Japan
Tel	+81-568-29-6006
Email	akira.n@ntech-tool.co.jp
Website	http://ntech-tool.co.jp
Contact Person	Akira Nagae
Capability Category	Cutting tool sales for Heat Resistance Material Development and Study for cutting tool geometory
Representative	Akira Nagae
Sales Amount	US\$500,000
Capital	US\$266,000
Employees	16
Established	in 2016
Group Name	Nagae-siki.co., LTD
Major Customers	Mitsubishi Heavy Industries Mitsubishi Heavy Industries AERO ENGINE IHI Jet service





Business Overview

- We have established the cutting tool division for AEROSPACE industries.
- It is dedicated cutting tool from design, development to produce for heat resistant material such as Inconel, Waspaloy and Titanium.







- · Walter HELITONIC POWER×2unit
- · Walter HELICHECK PRO×1unit

Our Strength

- · On demand design and product
- Small order
- · Short lead time from design to ship

Needs we can correspond / Business partners we want

Study and development of cutting tool for resistant material

✓ Office & Plants

2-16-9, Takayama-cho, Kasugai-city, Aichi 486-0912, Japan

¹³ Company Profile

OSG Corporation



Address	3-22 Honnogahara Toyokawa, Aichi 442-8543, Japan
Tel	+81-533-82-1111 (Main)
Email	cs-info@osg.co.jp
Website	https://www.osg.co.jp
Contact Person	Shigetoshi Ukei
Capability Category	Development, manufacturing, and sales of cutting tools
Representative	Norio Ishikawa, Chariman & CEO Nobuaki Osawa, President & COO
Sales Amount	126,156 million yen (Consolidated), 52,097 million yen (Non-consolidated)
Capital	12,239 million yen
Employees	7,489 (Consolidated), 1,914 (Non-consolidated)
Established	March 26, 1938
Certification	ISO9001/ISO14001/JIS Q9100
Group Name	Aircraft related: Amamco, NEXAM, SMOC Material: Nippon Hardmetal Co., Ltd. Manufacturer: SD Manufacturing Co., Ltd., Otaka Seiko Co., Ltd., Aoyama Seisakusho Co., Ltd., Noda Precision Co., Ltd., Nissin Diamond Co., Ltd., F.P.Tools Co., Ltd. Coating: OSG Coating Service Co., Ltd. Regrinding: ORS Co., Ltd.



Business Overview

OSG is the world's largest manufacturer of round cutting tools, with top global market share in taps, drills and end mills. OSG has always strived to provide quality products in sync with the latest technology and customer needs. This philosophy is the corporate DNA of OSG and the driving force of its global operation. Our production, sales, and technical support network are now in 33 countries.

Cutting tools in general including taps, drills, end mills, indexable tools, rolling dies, and gages.

Our Strength

OSG has been committed to developing quality products that truly exceed the expectations of each customer. This spirit remains alive in all facets of our operation today, and has given OSG the strength to challenge the status quo and deliver products and services in sync with manufacturing needs of the times. Our corporate tagline "shaping your dreams" summarizes this passion for new challenges and commitment to transform each and every one of our customers' dreams into reality.





✓ Office & Plants

Headquarter in Toyokawa, Aichi, manufacturing plants being located nearby, domestic sales offices in 30 locations, and our production, sales, and technical support network is now in 33 countries.

SATOH MACHINERY WORKS Co.,Ltd.

Address	2.40 Kuuhan aha Minata ku Nagaya Aishi 455 0000 Janan		
Address	3-42,Kyuban-cho,Minato-ku Nagoya,Aichi 455-0008,Japan		
Tel	+81-52-661-176		
Email	yoshi.satoh@satoh-gr.co.jp		
Website	http://www.satoh-gr.co.jp/		
Contact Person	HEAD OFFICE: Yoshihiro Sato h OTOWA OFFICE: Masaru Mizutani HAGI OFFICE: Futoshi Takahashi		
Capability Category	 Parts processing and inspection Development, manufacturing and sales of molding machines 		
Representative	Yasuhiro Satoh		
Sales Amount	€12241600		
Capital	€344282		
Employees	91		
Established	November, 1961		
Certification	ISO9001 · ISO14001 · JIS Q 9100		
Group Name	Nittore Co.,Ltd., Fujii Industry Co.,Ltd., LPM Co.,Ltd.		
Major Customers	UACJ Corporation, Kobe Steel, Ltd., Mitsui & Co. Machine Tech Ltd. Mitsubishi Corporation Technos., Okaya & Co., LTD., Automobile manufacturers, Automobile parts suppliers		
	, , , , , , , , , , , , , , , , , , , ,		

Business Overview

- ①Machining of various materials, including ultra-large products.
- ②Design and manufacturing of vertical injection molding machines for plastic molded product suppliers and research institutes in japan and overseas, and construction of composite molding systems including ancillary types of equipment.

Main equipment and supported sizes: (Machining department)
Large 5-axis machining center (5.1 m x 19 ft), 5-face machining
center (4.1 m x 10 m), horizontal boring machine (12 m x 4.5 m)
Large vertical lathe (7 square meters x 3.5 square meters) with a
lineup of various processing machines.

Onwership of Laser-type and Arm-type 3D measuring instruments, which are required for the actual measurement of large products.

Product information: (Equipment department)

The main product lineup includes Hot press, Vertical injection molding machine, Sheet stamping molding equipment, Various base materials /Composite material heating and conveying equipment, etc.







Our Strength

- In the Machining department, central management from formation of various materials including ultra-large products to machining is possible.
- In the Equipment department, we closely correspond with the user to design and manufacture unique molding machine and molding system that meets the customer's required spefications, reduce weight using in-house trial machines, try trial production such as composition molding and provide after-sales maintenance.

Needs we can correspond / Business partners we want

(Machining department)

- With our extensive lineup of machine tools, we can handle multi-process processed products in-house regardless of the materials.
- · We also have a Constant temperature factory and are good at processing aluminium.
- We perform comprehensive engineering from material procurement to delivery date management and quality assurance.
- Quality assurance is possible through the use of three-dimensional measuring machine. (Equipment department)
- We have brushed up the know-how accumulated as Vertical injection molding machine manufacturer and posses s various development technology.
- We are good at custom-made products, and can develop, design and manufacture various molding equipment.
- In addition to molding equipment, we handle everything from material input to product removal and mold replacement in a single system.
- Our own technology examination machine (vertical molding machine) can be widely used from prototype trials to Research and Development assistance.
- We have many achievements in composite material molding equipment, and it is used in a
 wide range of industries such as aviation, automobiles, and building materials as an
 underlying technology for weight reduction and carbon-free society.

✓ Office & Plants

HEAD OFFICE (Development/Manufacturing of Molding Machines)
OTOWA OFFICE (Development of molding machine/ Large-scale machining)
HAGI OFFICE (Manufacture and trial of molding machines/ Large-scale Machining)

Sunjushi.Co., Ltd. フリン樹脂



Address	14-1 Oshima Mutsushi, Kitanagoya, Aichi 481-0001, Japan
Tel	+81-568-27-3014
Email	akira-takanezawa@sunjushi.co.jp
Website	http://www.sunjushi.co.jp
Contact Person	Akira Takanezawa
Capability Category	The manufacture of plastic parts and composite material parts for aviation space and defense The manufacture of plastic,rubber and metallic products for machine and device Tool design and manufacture of products for machine and device





Representative	Taro Isomura
Sales Amount	731 million yen
Capital	9million yen
Employees	50 (as at September 2022)
Established	1985
Certification	JIS Q 9100:2016(AS9100D&EN9100:2018)/ISO9001:2015
Major Customers	Mitsubishi Heavy Industries, Ltd. Fujiwara Co. Ltd. Churyo Engineering Co., Ltd. NOF CORPORATION. SANKO MFG Co., Ltd. ShinMaywa Industries, Ltd. Tamagawa Seiki Co., Ltd.

Business Overview

Sunjushi is a processing manufacturer specializing in plastics

Plastic processing:cutting/maching/bonding/welding/bending

No mold required, one-piece manufacturing available No initial cost of mold making

Convenient at small lot prototyping and development stage

[Wide range of materials]

We use materials from commodity plastics to thermoplastic resin such as super engineering plastics and thermosetting resin; Bakelite, CFRP etc.

[Facility & Equipment]

5-axis NC machine tool (INTEGREX i-200)

three coordinate measuring machine

image dimension measuring machine(IM-7020)

Surface roughness measuring instrument(SURFTEST SJ-410)

3D printer(Fortus 450mc),3D CAD(CATIA V5)

Our Strength

[Factory of temperature control]

Our factory is kept the temperature stable (25°± 2°(measured value))

[Processing every material]

We process not only CFRP, but also materials under development.

(Stable supply)

Promise to provide goods over a long period by balanced age structure from well-experienced employees to young employees. (The workers' average age: 33 years old.)

[Product machining results]

Dealing directly with aircraft manufacturers(G7500, US-2)

Needs we can correspond / Business partners we want

Precision machining general equipment mainly for aerospace industries and automobile parts from small to large size.

Designing and manufacturing of jigs and tools for the above purpose.

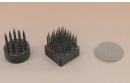
High quality, perfect delivery, stable supply, cost competitive. We are next generation Japanese manufacturing.

Looking for suppliers of plastic processed parts

Want to reduce costs with 3D printer parts

Office & Plants

Head office: 14-1 Oshima Mutsushi, Kitanagoya, Aichi, 481-0001, Japan Branch office: 82-2 Tokuganji Fujishima, Komaki, Aichi, 485-0064, Japan



TAKAGI STEEL Co., Ltd.



Address	3-308 Fujimae Minato-ku Nagoya Aichi 455-0855, Japan
Tel	+81-52-301-1801
Email	t-takagi@takagi-steel.co.jp
Website	www.takagi-steel.co.jp
Contact Person	President and CEO Tomohide Takagi Nagoya Sales Manager Kazutaka Yamashita
Capability Category	Sales and distribution of materials for aircraft.
Representative	President and CEO Tomohide Takagi
Sales Amount	1,200 million yen
Capital	50 million yen
Employees	33 people
Established	1955/4/8
Certification	JIS Q9100 (obtained in February 2022) ISO9001/14001 (obtained in January 2021)
Major Customers	AISIN SIN'EI Co., Ltd DENSO Co., Ltd AMANO Corporation ALPHA Corporation FDK Corporation Konica Minolta, Inc. JTEKT Corporation THK Co., Ltd Tsukiboshi Manufacturing Co., Ltd. FUKUI BYORA Co., Ltd NITTO KOGYO Corporation Nitta Corporation HAMANAKODENSO Co., Ltd HAMANA PARTS INDUSTRY Co., Ltd Hirose seikou Co.,Ltd. NIPPON POP RIVETS AND FASTENERS Ltd MIWA LOCK Co., Ltd. Musashi Seimitsu Industry Co., Ltd. MEIRA Corporation UNICRAFT NAGURA Corporation YKK Corporation

Business Overview

In the business area,we have partnership with over 200 companies in over 60 years for sales of materials mainly for special steels and tool steels.

We have advantage that be able to do parts completion to one-stop by collaboration with partners and utilizing our own factory.

In line with the acquisition of JIS Q9100 certification, we have established a specialized department "Aviation Group" across sales, management and warehouse. As a result, the quality inspection and control system for handling aircraft materials has been strengthened.

[Handling material]

Aircraft Materials: A286, 17-4PH, 17-7PH, 15-5PH, PH13-8Mo, Nimonic80A, Inconel 718, Waspaloy, PWA 92, Hastelly, Ti6A4V, 17-22A, H-11, Greek-Ascoloy, 4130, 4140, 4330, 8740, A2017, A2024, A6061, A7075

Special steel materials: SKH51, SKH55, SKH57, HAP, YXR, DURO, SLD-i, SLD-MAGIC, SKD11, SKS, SK, DAC-MAGIC, SKD61, HPM, NAK, SUS, SC, SCM, SNCM

[Major equipment]

Cutting machine, Machining center, NC grinding machine, three-dimensional measuring machine, three-dimensional CAD / CAM.

Our Strength

We can sales the only drawbench materials (about aeronautical field) produced by Japan domestic. We provide production scheme with "Hitachi Metals, Ltd." a major manufacturer of aviation materials in Japan and a drawbench processing.

This method is in demand for heat resistant steels such as A286 and Inconel 718.





Needs we can correspond / Business partners we want

• We offer various service such as arranging purchase parts, designing, manufacuturing and inspection, which can save your labour.

(We have achieved 40% cost reduction from target price.)

· We offer service with low-cost, high quality and short delivery time.

(3 days is the fastest delivery after your order)

We offer KAIZEN (e.g. cost reduction by design changes)

■ Office & Plants

Headquarters:

3-7-19 Nishiki, Naka-ku, Nagoya, Aichi 460-0003, Japan Nagoya Office:

3-308 Fujimae, Minato-ku, Nagoya, Aichi 455-0855, Japan Toyohashi Office:

51-1 Motoyashiki, Mitsuya-cho, Toyohashi, Aichi 441-3114, Japan Seto Factory:

16 Higashiyasudo-cho, Seto, Aichi 489-0053, Japan



Takasago Electric, Inc. TESTALASAGO Fluidic Systems



Address	66 Kakitsubata, Narumi-cho, Midori-ku, Nagoya, Aichi 458-8522, Japan
Tel	+81-70-6580-2404(Aerospace Group)
Email	info@takasago-elec.co.jp
Website	https://www.takasago-fluidics.com/
Contact Person	Masahiko Inoue (Aerospace Group Leader) Maito Makino (Aerospace Group)
Capability Category	Valves and pumps. Development, design and manufacture of the following products: • Solenoid valves including hydraulic valves, thruster valves, pinch valves, proportional valves, etc. • Check valves • Small liquid pumps and micro pumps • Integrated fluidic systems for space experiments • Precisely machined metallic and plastic parts







Repres	entative	Fluid Control System Company: Koichi Kojima, Future Creation Company: Haruyuki Hiratani
Sales A	mount	US\$30M (¥143/\$, as of September 2021, consolidated)
Capital		US\$629K (¥143/\$)
Employ	/ees	376 (as of May 2021, consolidated)
Establi	shed	July 1st 1959
Certific	ation	AS9100/JISQ9100/EN9100, ISO9001
Group	Name	Takasago Electric (DBA in US: Takasago Fluidic Systems / TFS)
Major C	Customers	NASA, JAXA, Tamagawa Seiki Co., Ltd., Mitsubishi Heavy Industry, Tokyo Aircraft Instrument Co., Ltd., ALE Co., Ltd., etc.

Business Overview

Takasago has provided more than 10,000 different valves, pumps and other related products for medical, diagnostic and analytical applications over the last 60 years. In the last decade we started our aerospace business that includes hydraulic valves, thruster valves and experimental devices.

Products · Materials · Part Sizes · Facilities & Equipment

- > Thruster valves for 2 20N class satellite propulsion systems. The smallest weighs only 8g.
- > Ultra-small and ultra-lightweight (1.5g~) valves
- > Hydraulic solenoid valves and check valves
- > Fuel valves
- > Pressure adjustment valves for pilot suits
- > Valves for galley inserts and lavatory systems

Facility & Equipment

- > Processing Machines
- 5-axis grinding machine (ROKU-ROKU Co., Ltd.), Machining centres (FANUC Corporation), etc.
- > Inspection Machines
- 3D coordinate measuring machine (Carl Zeiss AG), Gas Leakage tester, Load testing machine
- > Evaluation Equipment
- 500 4500psi hydraulic testing machine (NETUREN HYMEC CO., LTD.)

Our Strength

- > High-level quality control with 60 years' experience in the medical industry
- > Custom design solution and high-mix low-volume production to meet various customer needs
- > Customization and miniaturization to make a system light-weight
- > Integrated manufacturing management from precision machining, assembly in a clean room to final functional testing.

Needs we can correspond / Business partners we want

- · We can supply custom-designed valves for hydraulic, ventilation, galley, lavatory and satellite propulsion systems. We can directly correspond to tier 1 – 2 suppliers for such systems.
- · We seek European business partners who can assist us with marketing and business development.

Office & Plants

<Japan> Headquarters: Nagoya, Branch Offices: Tokyo, Kyoto < U.S.A>TFS U.S. Branch Office: Massachusetts

<China>Takasago Electric (Suzhou) Co., Ltd: Suzhou

Shenzhen Branch Office: Shenzhen











Central Japan Aerospace Industrial Technology Center

AICHI INDUSTRY PROMOTION ORGANIZATION

Nagoya Industries Promotion Corporation









Nagoya Chamber of Commerce & Industry



Japan External Trade Organization(JETRO)
JETRO NAGOYA



Greater Nagoya Initiative Center







CONTACT

Next Generation Industry Section, Bureau of Economy and Industry, Aichi Prefectural Government
3-1-2 Sannomaru, Naka-ku, Nagoya, Aichi 460-8501, Japan
TEL +81-52-954-6349 E-mail anac_contact@aichi-nagoya-aerospace.jp URL https://aichi-nagoya-aerospace.jp/

AICHI PREFECTURAL GOVERNMENT / CITY OF NAGOYA / Central Japan Aerospace Industrial Technology Center / AICHI INDUSTRY PROMOTION ORGANIZATION / Nagoya Industries Promotion Corporation / Chubu Bureau of Economy, Trade and Industry Komaki City / Nagoya Chamber of Commerce & Industry / Japan External Trade Organization(JETRO) JETRO NAGOYA / Greater Nagoya Initiative Center / NAGOYA UNIVERSITY / CHUBU UNIVERSITY / Aichi Prefectural University















