

# COMPANY PROFILE 2025







# WIN-WIN RELATIONSHIPS CREATE THE WORLD'S No.1 PRODUCTS

Our corporate brand "ACCRETECH" was created from the words "Accrete," which means Grow Together, and "Technology." In a single word, the brand name represents our corporate philosophy: growing together with partners and customers by way of creating the world's best products by gathering the finest technology, intelligence, and information.



#### Message from the Management

Since its foundation in 1949, ACCRETECH Group has consistently focused on developing products that contribute to improving our customers' productivity and providing good customer support.

ACCRETECH Group has a corporate motto; "Win-Win Relationships with stakeholders", which outlines our view of cultivating and developing the business relationships with customers, suppliers, shareholders, and employees.

In recent years, we've been going through rapid and drastic changes in our business environment in terms of globalization, eco-friendly products, IT advancement, etc.

ACCRETECH Group, as a global corporation, has already been accommodating the required changes as well as assisting our customers with their product innovations, called "Monozukuri", using our precision measuring and process technologies.

ACCRETECH Group values the following principles: health, safety, product quality, environment, energy conservation, and the unified power of our employees.

In order to satisfy our customers and to fully contribute to our society, we continue to develop and supply our Semiconductor Manufacturing Equipments and Metrology Products with at most care and excellence.

Your continued support for our Group is greatly appreciated.



Chairman and CEO
Hitoshi Yoshida

President and COO
Ryuichi Kimura

\*What our symbol mark expresses:

The spinning golden orb represents a dynamic mixture of resources (people, goods, funds, and information) concentrated from all over the world. By condensing those powers, we will introduce powerful, state-of-art products into the market with clear targets. This is expressed by the jet streams shooting out at high speed from the center of the orb.

# and future

Tokyo Seimitsu continues to the global market respecting cultivated for decades:

introduce "World No.1 Products" to the core - technology we've

Tokyo Seimitsu, as a manufacturer of precision measuring devices and semiconductor manufacturing equipment, has been supplying Machine Control Gages, Surface Texture Measuring Instruments, Wafer Probing Machines, and more to the global market by applying our key technologies such as high precision micro positioning and measuring technologies. We will continue to introduce superb products to global market going forward.

Metrology Company

Semiconductor Company

#### High Precision Measuring Instruments

Metrology Company has supplied High Precision Measuring Instruments to various industries worldwide such as automobile, heavy duty equipment, aircraft, etc. and has been highly valued by customers all over the world.

We continue our product developments to achieve enhanced environmental durability, a smaller footprint, and fully automatic operation and so forth.

In addition, for the realization of a carbon-neutral society, in order to meet new needs such as NEVs or renewable energy market, etc., we also focus on the development of the performance evaluation system for secondary battery and contribute to the creation of the future society.

#### Semiconductor Production Equipments

Our Semiconductor Company holds the largest global market share, specifically in the conventional fields of wafer manufacturing, test, and back-end processing. In addition, we have also been active in the fields of CMP (Chemical Mechanical Planarizers) and Polish Grinders to fulfill our customers' needs to build the optimum production systems.

# **Coordinate Measuring Machines**

#### Comply with high precision parts. Active scanning technology to achieve high throughput. Al function for easy operation.

ACCRETECH developed the first 3D Coordinate Measuring Machine made in Japan. Today, we offer various 3D coordinate measuring machines suited for respective customers' needs. First, XENOS features innovative technology called Virtual Sensor Drive in addition to the Active Scanning Technology to achieve high throughput and Navigator Function to dramatically improve high-speed precision scanning. Second, X-ray CT systems named METROTOM series can visualize microscopic internal defects non-destructively. Third, XYZAX AXCEL series are equipped with high precision, high speed, and high resistance to surrounding temperature.



#### ZEISS XENOS®

- •3D Coordinate Measuring Machines with Super High Accuracy.
- •Maximum Permissible length Measuring Error (E₀) (μm): 0.3 + L/1000
- •Y-axis drive structure advanced from center drive.
- •Innovative silicon-carbide ceramic used in major structural components of the machine.

#### **ZEISS METROTOM** •X-ray CT equipment that visualizes tiny

- internal defects through non-destructive inspection using micro focus X-ray •Can be used for a wide range of applications including nondestructive inspection, structural comparison of internal profile, and high-accuracy measurement of internal and
- external dimensions
   Equipped with axis control technology derived from coordinate measuring machines, ultra-high-precision positioning stage, highresolution flat panel detector and software GOM Volume Inspect Pro





#### ZEISS PRISMO® Series NEW



- Product lineup consisting of ultra for ultra-high-accuracy measurement, verity for high accuracy measurement and fortis for on-site measurement in addition to standard models
- Equipped with the Navigator function, dramatically improving high-speed scanning precision
- •High-speed and high-precision VAST GOLD Active Scanning Probe realizes both scanning and point-



#### **ZEISS CONTURA®**

- •CONTURA series reborn with completely new structure and design
- •Multi-application sensor system enabling single machine to perform high-accuracy active scanning measurement, swing scanning measurement and non-contact measurement
- Product lineup consisting of aktive with active scanning probe as a standard feature and RDS with rotary probe head as a standard featurefeature and RDS with rotary probe headas a standard feature



#### ZEISS MICURA NEW



- •High-accuracy model that specializes in
- •ZEISS VAST technology combined with a rotary table for higher efficiency
- Reducing running costs with two ecological and economical functions



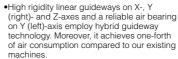
#### **XYZAX AXCEL RDS / PH Series**

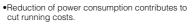
- •Maximum permissible length measurement error (E<sub>0</sub>, MPE) (µm): 1.8 + 3L/1000
- Amazing speed is achieved by review of the drive mechanism.
   A maximum drive speed of 700 mm/sec and maximum acceleration of 2300 mm/sec<sup>2</sup>
- •Enhanced resistance to environment.
- Temperature to guarantee accuracy: 15°C to 30°C
- Scanning Measurement Model (RDS) equipped with the two-axle rotating head RDS and the scanning probe VAST XXT.
- Enables contactless measurement by using optional line laser probe and image probe. (RDS)
- •Point-to-Point Measurement Model (PH) with wide-ranging specifications available depending on the installation environ ment or budget.



**XYZAX AXCEL PH** 

#### XYZAX mju NEX Series





- •A new line-up of 5/8/4 size with Y-axis measuring range of 760 mm
- •Equipped with TP200B with a real-time temperature scale correction function, which is resistant to vibration and can use a long stylus.
- •Max.permissible length measurement error (E₀, MPE) (μm): 2.2 + L/250 (18°C to 22°C)



#### **XYZAX SVF NEX Series**

- Redesigned RVF series
- •Renewal entry modeled Manual 3D coodinate measuring machine.
- ·Light weight design that does not cause fatigue even in long hours of measurement.
- •Measure, terminate, and intermediate point operations switches are freely selectable during operation This allows continuous operation without removing your hand from the 7-axis



#### **ZEISS O-DETECT**

- •Innovative and easy-to-use 3D image measuring instrument with wide visibility and high precision
- •Complies with ISO 10360-7 and guarantees threedimensional length measurement error
- •Overview image function makes programing and measurement easy



#### **ZEISS O-INSPECT**

- •Covered various workpieces and evaluating area.
- Contact-type sensor VAST XXT is a standard feature.
- •Image sensor telecentric zoom lense is a standard feature.
- •Non-contact profile measurement in the direction of height is possible.

# **Surface Texture and Contour Measuring Instruments**



#### Integrated Measuring Machine of Surface Texture and **Contour Profile**

#### SURFCOM CREST

- •The built-in linear motor tracing driver achieves high-accuracy and high-speed measurement
- •Roughness and contour integrated measuring instruments with the world's highest level accuracy and performance.
- •The introduction of highly stable optical path type laser interferometer provides the high resolution of 0.31 nm at measuring range of 13 mm.
- One-time measurement enables the high-efficient evaluation and analysis for both roughness and contour.



#### **Surface Texture Measuring Machine SURFCOM TOUCH 550**

- •Operator-Oriented Operation for the Workplace.New Surface Texture Measuring Instrument for Easy Operation.
- •No need of instructions with excellent GUI.
- •Supporting multi-language for worldwide use (20 languages).
- •High resolution and wide-range pickup for easy leveling and zero point adjustment.

#### Integration of Surface Texture and Contour **Profile measurements**

SURFCOM CREST is a surface texture and contour profile measuring device capable of fulfilling three conflicting requirements such as high speed, high accuracy, and low vibration due to the technology of our own invention. This is considered the world's finest measuring machine that has made high speed with low vibration possible using a linear motor drive as well as achieving remarkable accuracy due to the high resolution detector. As SURFCOM CREST can perform evaluation analysis on surface texture and contour at once, it eliminates the step of replacing the detectors.

Moreover, its high-speed measuring capability (200 mm/s) can further contribute to the high throughput. In the case of SURFCOM NEX series that are equipped with linear motors, high-magnification measurement with minimal vibration can be performed.





#### **Surface Texture and Contour Measuring Instruments SURFCOM NEX series**

- •Newly developed wide-range hybrid detector!
- •Extremely high-speed driving enables shorter tact time.
- •The linear motor tracing driver minimizing vibration and achieving highly accurate measurement



#### SURFCOM TOUCH 35/40/45/50

- •Easy-to-carry compact surface roughness measuring machines.
- •No need of instructions with excellent GUI.
- •Supporting multi-language for worldwide use (20 languages).
- •High resolution and wide-range pickup for easy leveling and zero point adjustment (TOUCH 50).
- •Palm-sized tracing drivers selectable for workpieces and measurement areas (TOUCH 35/40/45).

#### **Surface Texture Measuring Machine** HANDY SURF<sup>+</sup> 35/40/45

- Portable surface texture measuring instrument reborn with sophisticated design.
- Supporting multi-language for worldwide use (20 languages).
- •Superior operability and multiple analysis functions.
- •The instrument has the Z direction measuring range of 370 µm, which is the widest in class, and achieved a resolution as high as 0.0007 µm over the entire range.

#### Multipurpose Measuring Instruments

# **Optical Measuring Instruments**



Opt-scope R



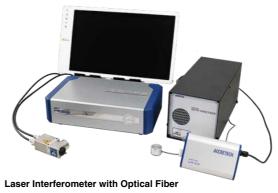
Opt-scope R200



**Opt-scope Rex** 

#### Non-contact / Three-dimensional Surface **Roughness and Contour Measuring Instrument**

- Opt-scope
- •High resolution 0.01 nm
- Electric XY stage moving range
   Opt-scope R: 25/50 mm, Opt-scope R 200: 200 mm,
   Opt-scope Rex st 400: 400 mm
- •Scanning speed increased by 6times with the Optional



#### DISTAX

Easy setting with optical fiber Fully-automatic measurement of a linear and rotary axis of machine tool.



Slim Type 3-axis Measuring Interferometer



Small Rotary Indexe



#### Non-contact displacement sensor Opt-measure

- Non-contact displacement sensor using the white interference method
- High accuracy and a wide temperature range. A compact sensor head with an optical fiber optical system provides a distance of 10 m or more between the sensor head and control section
- •A maximum of 16 sensors can be connected to one control section.
- •Measuring Accuracy: ±3.6 µm (15°C to 30°C)

# **Cylindrical Form Measuring Instruments**



#### **RONDCOM CREST**

- $\bullet \text{The rotation}$  accuracy is 0.01  $\mu \text{m}$  in both radial and axial directions. Ultra-high accuracy of the world's highest level.
- •The newly developed non-contact drive and guide section has realized extremely accurate positioning and long-term stable cy assurance.
- •Equipped with newly developed measuring force control detector realizing automatic switching between roundness measurement and roughness measurement
- •Ultra high accuracy diameter measurement of repeatability 0.3 µm.

## Continuous flow from the measuring room to the production line

**RONDCOM 60A** 

A broad selection satisfies diversified needs. RONDCOM CREST is the flagship model with the world's highest level of ultrahigh precision. ROND-COM NEX series come with multiple functions and straightforward maintenance. RONDCOM TOUCH has a unique design and smaller footprint.





Example of using XY-Axis Automatic Stage

#### **Roundness and Cylindrical profile** measuring instruments **RONDCOM NEX Series**

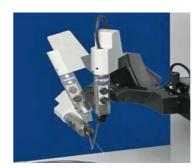
- •A 3-in-1 Machine Satisfying Various Measurement Needs with Functions to Measure Roundness, Diameter, and Roughness, as well as Selectable
- •Labor-saving option: AFD(Automatic Force adjustment Detector)
- Dramatically Improving Efficiency of Measurement of multiple workpieces and multiple locations Labor-saving option: XY-Axis Automatic Stage



- Perfect for mass production and repetitive measurements with the automated measure-
- •Economical type equipped with a straightness guaranteed column that is capable of cylindri-



- •Manual roundness measuring instrument best for the entry-level machine
- •Unique design of Colum moving type.
- Installation area was reduced by 50% (conventional ratio).
- •Employment of the Windows tablet enables the high and friendly operability through touch panel screen



Offset type CNC Detector holder

#### **Data Processing System** [ACCTee Roughness]

# **ACCTee**



- •All in One Document!
- •ACCTee is developed to represent the new concept in measurement
- •Document based measurement and analysis offer preeminent operability.
- Supports beginners to experts of the CNC programming through Easy and Expert modes.



Document Screen



#### **RONDCOM 76A**

- •Higher level of throughput with high speed drive.
- •Realization of unmanned operations from positioning of measuring points to the editing of measured data.
- •A top-rate machine equipped with field-proven air
- •The highest level of precision in the world.
- •Max loading weight of up to one ton (optional).





Measurement example of cylinder block and crankshaft.

# **Measuring Instruments for Shop Floor**

# Tokyo Seimitsu offers the most advanced technology for production line measurements at the shop floor (production site)

When customers explore the possibility of further improving the measuring efficiency and reducing the production costs while still promoting the product quality, they seek to have the measuring process done at their production floors. Tokyo Seimitsu produces various measuring devices built to accommodate auto-measurements and adjust to any production environment.

The Three-Dimensional Coordinate Measuring Machines: CenterMax and DuraMax series have been improved to withstand any harsh production environment.



#### ZEISS DuraMax® / ZEISS DuraMax® HTG

- •Simple plug-in completes measurement preparation. Plug & Play is offered
- •A slender space-saving desk-top type
- •Energy saving 3D coordinate measuring machines
- •Accuracy is guaranteed in a wide range temperature environment

#### Maximum Permissible length Measuring Error E₀, MPE:

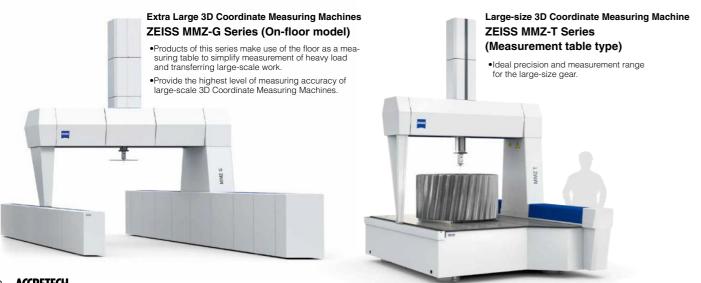
ZEISS DuraMax®	
2.4 + L/300 µm (18°C to 22	°C)
2.7 + L/250 µm (18°C to 26	°C)
2.9 + L/290 µm (18°C to 30	°C)

ZEISS DuraMax® HTG 2.2 + L/300 μm (18°C to 22°C) 2.5 + L/250 μm (18°C to 26°C) 2.7 + L/200 μm (18°C to 30°C) 3.9 + L/100 μm (15°C to 40°C)

#### Multipurpose Measuring Instruments

# **Measuring Instruments for Large Works**

Measuring machines perfect for large-sized and high-precision parts used in aircrafts, energy products, automobiles, machineries, and printers.



#### **Charge/Discharge Testing Systems**

# **Battery Test System**

Charge/discharge testing systems are measuring systems indispensable for charge and discharge cycle tests conducted in research and development of rechargeable batteries and capacitors as well as in quality assurance (sampling and reliability tests). These systems allow a variety of tests, including performance and durability tests, to be performed automatically on rechargeable batteries and capacitors for a broad range of products that have recently come into increasing use, from consumer mobile devices to electric vehicles.

Tokyo Seimitsu provides "charge/discharge testing systems," "battery jigs," "battery evaluation contract service," and "maintenance service."

#### Charge/Discharge Testing Systems

These systems are used to perform performance tests optimal for research, development, and quality control of cell, module, and pack rechargeable batteries and capacitors.



#### battery jigs

The Company provides battery evaluation jigs that realize "stable measurement," "equipment safety," "human safety," and "labor saving" in cycle tests and characteristic tests conducted when developing rechargeable batteries and capacitors.

The jig is designed and created as appropriate for the battery shape, including rectangular, cylindrical, and laminated batteries.



#### battery evaluation contract service

Building on the power supply technology that we have amassed over the years, we, as the pioneer in charge/discharge testing systems, provide a battery evaluation contract service that meets diverse customer needs.

#### Four Strengths

①Technical capabilities and ability to respond to customer needs as a manufacturer that develops and sells charge/discharge testing systems

②Track record of delivering more than 2,000 units to 100 companies and customers (testing know-how)

③Abundant professional staff and a team dedicated to testing + a team dedicated to battery evaluation and quality

4Strong relationships with battery measuring equipment manufacturers, analysis companies, and certification organizations

#### 「New developments」

Provision of <u>our own dedicated battery deliver</u>

<u>service</u> that realizes safety inspections during transportation

Provision of <u>battery disposal service</u> based on SDS (Safety Data Sheet) information

Providing a remote function that enables even distant customers to check data under evaluation in real time



Battery evaluation center

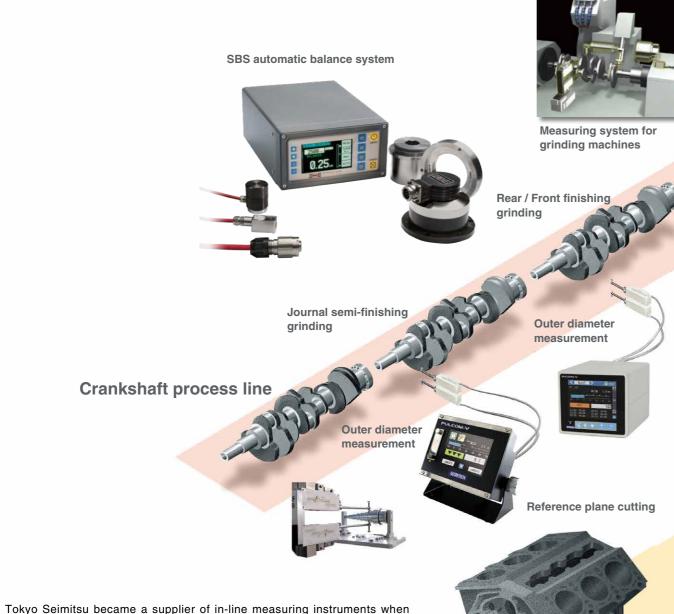
#### maintenance service

Tokyo Seimitsu provides a rich line of services including the field adjustment, relocation, version upgrade, and repair of charge/discharge testing systems.

#### **Automatic Measuring Instruments**

# **In-Line Measuring Systems**

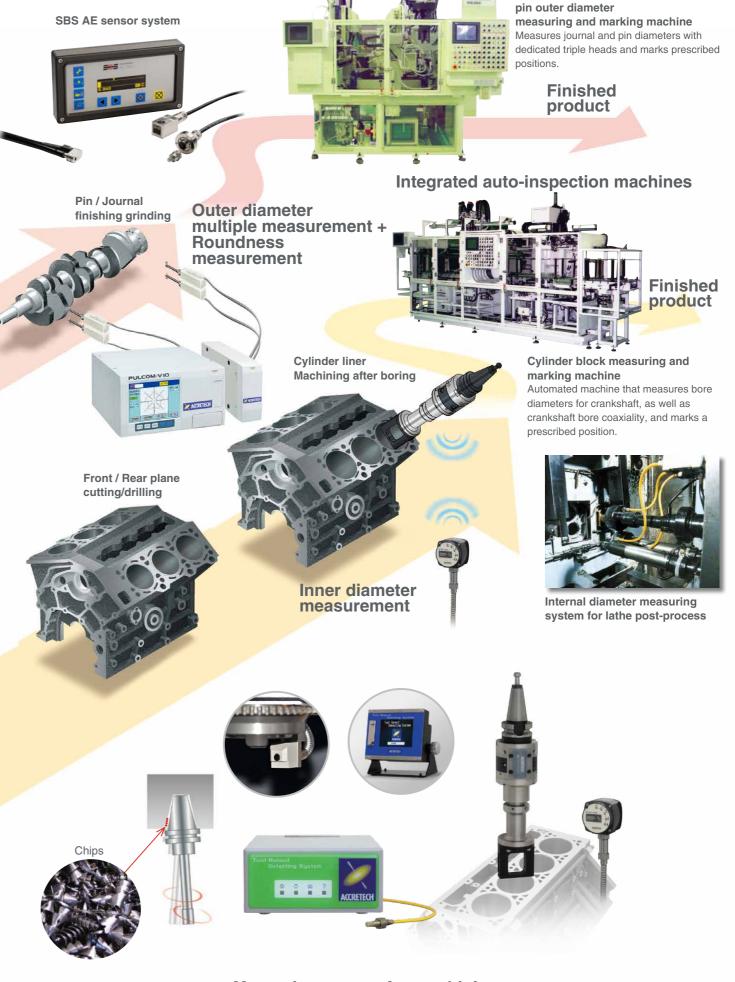
#### **Unequaled Reliability, Uptime and Quality**



Japanese automobile industries began to thrive in 1960s. From that point on, the automobile production lines have been required to operate 24 hours a day, 7 days a week, 365 days a year to produce high quality products on time. As a supplier, we have always been responding to customers' needs, for instance, by developing real time control using in-process gauge, feedback control using post-process gauge, and the integration of the two.

Furthermore, we have earned superb customer reputations as a result of our total support package including shorter turnaround, high liability, and best application capabilities; not to mention the excellent local support network that we have built to assist customers on a daily basis.

Our built-up experiences and accomplishments as a supplier of in-line measuring instruments became the strong backbone of the entire Tokyo Seimitsu group, including the semiconductor equipment sector.



Crankshaft journal and

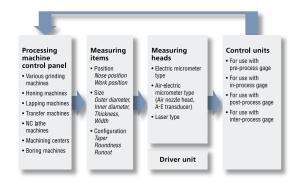
Measuring system for machining center

14 ACCRETECH 15

Cylinder block process line

#### **Automatic Measuring Instruments**

# **Machine Control Gages**



#### Powerful lineup: high-precision measurement and machine control in real time

Machine Control Gauge PULCOM utilizes the measured data collected either, before, during, or after the process to control the production machine in real time. PULCOM is mainly recognized for its high precision, which is considered second to none. PULCOM enables 0.1 µm precision measuring, which surpasses any previously introduced systems, and thus is capable of assisting our customers with their on-going pursuit for accurate machining capabilities.PULCOM is also waterproof and is suitable for any production environments so that it can be widely utilized for in-line high speed measurements and device controls. Along with PULCOM, we also customize various other auto-measuring, marking, and sorting devices that have been well accepted by global markets.

#### **Measuring Heads**

- •Improved stability (Outstanding measuring head in temperature fluctuation)
- Compact size and small space.





#### **Machine Control Gages Control Units**

#### **PULCOM V9**

- High Extensibility
- •Easy operation via touch-icon interface on the display







#### PULCOM V10A + V11

•Various functions, such as circularity measurement or SPC control.



# ACCRETECH Accretech SBS Products





#### SBS automatic balance system

- Extremely robust and speedy
- •Maintaining or improving machining quality



#### SBS AE sensor system

- ·High analytical performance and operability
- •Suitable for machining monitoring and reducing cycle time

#### **Automatic Measuring Instruments**

# **Sensors, Analyzers and Display Units**

#### High accuracy and proven reliability in a compact format

Tokyo Seimitsu developed a large selection of sensors according to the measurement principles in order to fit any purposes fund in the various production measuring scenes. These well-established sensors have earned high reviews over the years, as they are easy to use and observe during the line measurements, are capable of high-speed response suitable for machine built-in, and guarantee high accuracy crucial for liable inspection results. We are actively engaged in the development of various types of non-contact sensors and more to fulfill future demands.

#### **Air Micrometers**





**PHA Series** 



#### PC connection type Inspection system

#### **USB** connection

- The data is captured by PC
- USB-Bus powered system
- Multi-gage system

#### Various lineup

- LVDT-USB : Compact measuring head, electric micrometers • PHA-USB : High precision, wide range of measurement,
- optics scale gage
- · Air micro USB: Converting the minute dimensional change detected by air nozzles to electric signal



**Aluminum High-Speed Cutting Process Monitoring Device** 

#### **ATC Run-out Detection System**

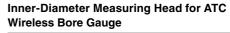
•Detect tool for run-out to prevent manufacturing error.



#### **Contact Type Wafer Thickness Measuring Systems**

WT-425 Series





• Bore gauge for ATC using wireless communication







# **Wafer Probing Machines**

Responding to the progress of device technologies and measurement needs of the next generation, Tokyo Seimitsu continues to lead the Semiconductor industry by offering solutions equipped with state-ofthe-art intelligent features.

As the top manufacturer of wafer manufacturing and device test systems, Tokyo Seimitsu has always driven proactive technological development. By integrating advanced expertise accumulated over many years of operation with the latest technologies, the Company offers another range of advanced products to customers.



#### **AltaProv**

Accretech Probing Machine for full wafer testing on a single touch down.

Developed with capability to simultaneously measure on 12 stages with dedicate XY stage and POGO tower.



#### **UF3000€X**-i5

Probing machine for mass production with the same features as single probing machines, achieving minimum footprint.

#### Next-generation ultra-high-performance probing machine

AP3000/AP3000e is a next-generation ultra-high-performance probing machine designed to achieve high precision, high throughput (index move, wafer handling, and wafer alignment), low vibration and low noise. Anti-Virus/Anti-Malware software is installed as standard software on the machine.

The functions and operability of AP3000/AP3000e are inherited from previous models, and it maintains compatibility of recipe and map data. It is very user friendly with the safety and security in mind.



#### **AP3000**

The AP3000 is a high-end model that leverages advanced technologies to support the probing techniques that require diversified response for miniaturization and highly-dense integration of next-generation devices.



#### AP3000e

The AP3000e is a general-purpose model featuring further evolved core technology that we have preserved over the years. It meets various customer needs and test environments in a very cost-effective way.



#### **FP3000W**

The thin wafer mounted on the dicing frame, diced wafer, and CSP substrate are automatically transferred by frame and gone through the probing test.

# **Wafer Probing Machines**

Prober variation satisfying various device demands – UF Series

The UF series probing machines were developed by combining the latest technologies of Tokyo Seimitsu.

Exhibiting high accuracy, high efficiency, and high functionality, it further offers the full automation, self-diagnostic function, use of GUI, high operation performance and stability.



#### **UF2000**

•High precision 200 mm Wafer Probing Machine.

Probing machine with ±1.5 µm precision, high rigidity and high throughput.

This machine demonstrates its performance through utilization of a new processor and the quality of its new loader.



#### **FP2000**

•Machine ready for tape frame transportation.



#### **UF200R**

•Super high-rigid machine for memory.



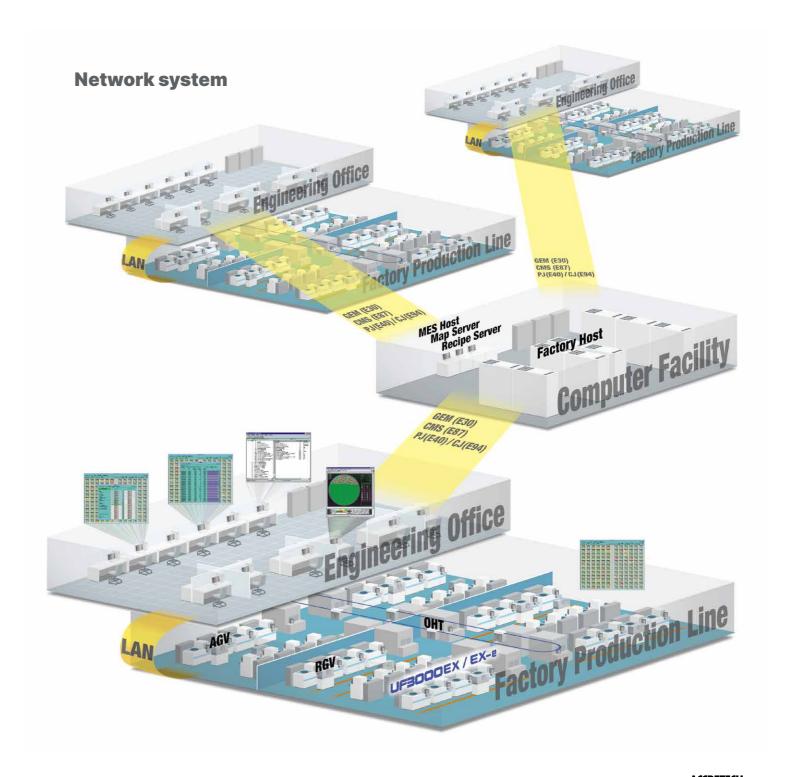
#### **UF190R**

•High-speed machine for bipolar.

ACCRETECH network useful for test process quality and data management, test result analysis and automation at customer sites.

#### **System Integration**

The ACRRETECH Probers take initiative in the factory automation process by employing the SEMI standards of GEM (E30), CMS (E87), PJ (E40), or CJ (E94), combined with our original networks Vega-Net, Light-Veganet, and Vega-Planet. The UF series are equipped with the next-generation remote terminal function which provide the e-Maintenance/e-Diagnostic.

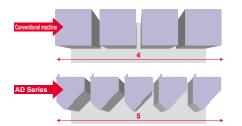


# Fully Automatic Dicing Machines

Designed to reduce the footprint and built on the concept of high maintainability, these machines offer an optimal dicing environment.

Tokyo Seimitsu's fully automatic dicing machines feature high throughput and high processing quality, ensuring excellent CoO (Cost of Ownership). The unique diagonal layout mechanism is adopted to make effective use of floor space and maximize production efficiency. The combination of a highly rigid gate-type structure and a opposing twin spindle design allows these machines to deliver high productivity with two spindles while realizing small footprint.

# Downsizing was achieved in both AD Series in comparison with the conventional equipment.





TWIN Dicing concept with the face-to-face twin-spindles



#### AD3000T-PLUS

- •Fully automatic dicer compliant with 300 mm work that is equipped with the face-to-face twin-spindles.
- •High power spindle as a standard feature.
- •A rich variety of option settings The intermediate dressing function, built-in UV irradiation system, and ionizer and other optional units are made smaller and adopt internal optimal designs, making it possible to build the main optional units into the machine.



#### AD3000T-HC PLUS

- Fully automatic dicer with opposing twin spindles capable of handling 300-mm-wide workpieces.
- Automatic WH/FH switchover Wafer handling (WH) and frame handling (FH) can be automatically switched simply by setting a recipe.

This helps reduce the person-hours for step switchover and prevent an operational error.



#### AD2000T/S

- •Fully automatic dicer compliant with 200 mm work that is equipped with the face-to-face twin-spindles / single spindle.
- •High power spindle as a standard feature



#### AD3000TW

- •A model with face-to-face twin spindles for large packages
  •Supports dicing of larger packaging substrates, including Fan-out WLPs.
- •Supports dicing of multiple packaging substrates by selecting a special dicing frame or square table, contributing to improved productivity and cost reductions.

#### Semiconductor Production Equipment

# **Semi-Automatic Dicing Machines**

# User-friendly operations ensure high processing quality.

Based on its quantitative dicing know-how amassed over the years, Tokyo Seimitsu maintains the high level of processing quality by determining overall cutting conditions and realizing the best processing conditions for each individual wafer the customer manufactures. All the dicers have a GUI (Graphical User Interface) as a standard feature, which is used in combination with the auto-alignment function to enable user-friendly operations that reduce manual operations.

#### AD30TW

- •Dicing machine dedicated to large package substrates Capable of dicing substrates up to 360 mm x 360 mm in size
- Opposing twin spindle design Productivity is improved by minimizing the X axis movement and using two axes simultaneously for processing.
   High-performance,
- high-power spindle as standard



innovativeCapable of dicing large panels of up to 360 mm by 360 mm



Multiple substrates can be mounted at the same time (250 mm x 75 mm, an example of five substrates on a frame)





- Space-saving design
   The diagonal layout mechanism reduces footprint by 40% compared to our previous models.
- Semi-automatic dicer with opposing twin spindles or a single spindle capable of handling a 200 mm wide workpiece.
- High-performance, high-power spindle as a standard feature.



#### SS Series

- •High power spindle as standard feature.
- •Improved operability with the 17-inch LCD touch panel screen.
- •Auto alignment as standard feature.
- World smallest footprint for each machine



A-CS-300

# Automated wafer cleaning machine

- Wafer cleaning machine capable of cleaning and drying a 300 mm wide workpiece.
- Optimal for spin cleaning and drying workpieces cut and grooved by a semiautomatic dicing machine or other device

# **Precision ACCRETECH Blades**

Our blades for precision cutting are derived from our unique development technology as well as our diverse application technology. We offer products that can cut a variety of materials, cover diverse cutting applications and satisfy today's requirement of "high quality & low cost".



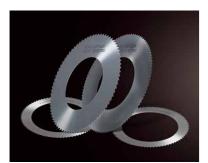
< NICKEL BOND BLADES >

Nickel blades manufactured by electroforming with globally acknowledged performance that supports outstanding stability. The Company continues to pursue the possibilities in cutting electronic materials by making use of the rigidity and wear-resistance of nickel blades.



< HUB TYPE BLADES >

Nickel plated hub blades designed and manufactured with high tolerances under strict quality controls. This ensures repeatable high cutting quality and durability.



< ULTRA HARD METAL SAWS >

Ultra-hard metal saw that does not allow burring on the edge through the cutting of the variety of resin and metal substrate.It can be the total solution for cutting that can respond to the new demands.



< METAL BOND BLADES >

Metal bond blades uniquely manufactured to your specific dicing demands. GM series for glass and YM series for ceramics. Customized to your application.



< RESIN BOND BLADES >

Resin bond blade developed to achieve high speed cutting and durability, while maintaining high sharpness. Choose different series of blades according to the usage; PG series for semiconductor packages and GC series for glass and ceramics.



< DRESSING PLATE >

Dressing plates that work to maintain the quality and cutting ability of all types of blades. Dressing under optimized conditions maximizes the blade performance.

#### Semiconductor Production Equipment

# **Fully Automatic Laser Dicing Machines**



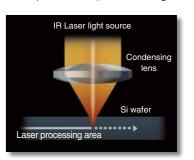
Laser Dicing Machine ML3200FH

Able to perform non-contact dicing without damaging the silicon wafer surface

A Ø300 mm laser dicing machine equipped with IR (Infrared) laser. Various loader specifications are available to meet various needs of customers.

#### [Features]

- Supports completely dry process. Optimum choice for processing devices whose processing load should be minimized and that should be kept away from water.
- Adoption of a high output laser significantly reduced the number of scans required for processing, dramatically increasing the throughput.
- Narrow kerf width increases the yield (number of chips obtained), contributing to cost reduction.



This laser dicing machine removes Low-k film, Cu wiring, TEG, etc. on the street with low damage using UV laser beam.

#### [Features]

- Ø300mm Compatible fully automatic laser dicing machine Automatically supports a series of processes from water-soluble protective film distribution to laser dicing and cleaning.
- Laser Grooving Process compatible AL3000 supports applications for removing TEG on Low-k grooves or streets.
- Achieves both high quality processing and high throughput with a unique laser engine mechanism



Laser Dicing Machine AL3000

# **High Rigid Grinders**

#### Realized the damage-free processing in a short amount of time.

Our high rigid grinder is the device to grind hard-to-cut materials such as sapphire and SiC substrates.

HRG300 allows the processing of individual wafers with larger diameters (300 mm) and of the batch grinding of wafers with smaller diameters that are attached to the support substrates.



#### **HRG300**

#### **Features**

- High-rigidity
- Processing efficiency
- Low processing cost
- Equipped with the batch processing-compliant IPG
- Continuous dressing mechanism (optional)

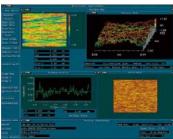


#### HRG200X

#### Features

- Fully Automatic High Rigid Twin Axis Grinder
- Less-damage Grinding with Shorter Process Time
- Low processing cost
- High Accuracy
- Mirror Finish Surface Grinding

#### Processing example of SiC. Mirror finish becomes available only with grinding.



Ra: 0.247 nm PV: 1.829 nm



Grinding wheel: HW8000V fin

#### Target material

Hard-to-cut materials such as sapphire, SiC, GaN, ALN, and LT.

#### Target work

Size:  $\phi$  2  $\sim$   $\phi$  12 inch Max. thickness: 20 mm

(including the thickness of the support substrate)

#### **Semiconductor Production Equipment**

#### Pursuing the limit of grinding machines.

ACCRETECH High Rigid Grinders enable mirror finishing with no use of chemicals and contribute to achieving high precision, high throughput and low cost in the wafer thinning process.



#### HRG3000RMII

#### Features

- Fully Automatic High Rigid Twin Axis Grinder
- Less-damage Grinding with Shorter Process Time
- Low processing cost
- High Accuracy
- Mirror Finish Surface Grinding

#### Semiconductor Production Equipment

## **Polish Grinders**

Inspired by Tokyo Seimitsu's own innovative engineering, this polish grinder offers an integrated solution for thinner wafers and damage removal required for system-in-package products, and 3D mounting technology while eliminating wafer damage during transport.



#### Features

- Integrated operation: Handles rough and fine grinding, polishing, and wafer cleaning on both sides in a single unit
- Safety measures : All manufacturing processes are completed in a wet state, preventing the release of fine particles
- Stable wafer transfer : Ground wafers are transported throughout all processes with minimum handling
- The equipment offers integrated data control and communication systems: the RM module combines a transport mechanism for minimal transfer of thin wafers with an inline connection system; measurement is performed by a post-process gage.
- Quality management: Data management and Communication using Post process gauge





3

#### Target material

Si, SiC, Glass, Mold package etc..

#### Target work

Size:  $\phi$  8  $\sim$   $\phi$  12 inch Minimum finish thickness: 10  $\mu$ m

# **Chemical Mechanical Planarizers**

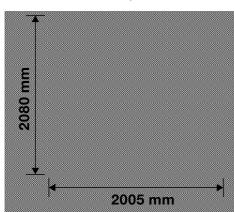
Integrating the technologies of precision measuring machines and semiconductor manufacturing systems developed thus far, Tokyo Seimitsu offers the ChaMP series Chemical Mechanical Planarizers that meet diverse process requirements. (Applicable wafer sizes: 300mm, 200mm, 150mm, 100mm)

**Compact High-Performance CMP** 

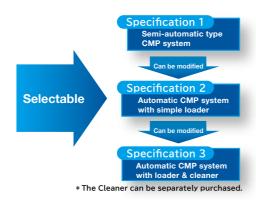
#### ChaMP-211

#### Feature

- Low price, small foot print
- High-performance CMP:
  Developed technology through the mass production line of the semiconductor device.
- Flexible customization meeting user's needs
  - --->Expendable from R&D, trial, to mass production.







#### **Standard Model**

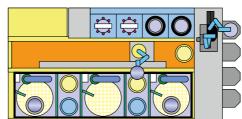
# ChaMP-232 For 200 mm or 150 mm or 100 mm wafers

# ChaMP-332 For 300 mm wafers

#### Feature

- Supports all types of application with a 3 platen, 2 head configuration
- All machines supporting 300mm/200 mm/150 mm/100 mm wafers are equipped with similarly conceived polishing heads and EPD system.





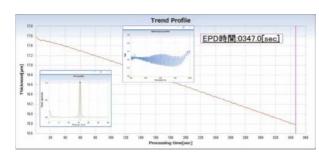
# Air-float head enables low-pressure and high planarity process "Sylphide"

- Extremely uniform pressure distribution by air film above wafer.
- Stable pressure control at low pressures made possible with airbags independent from air films.
- Independent retainer pressure airbags enable better edge profile control.
- Unique design of retainer/membrane assembly reduces machine downtime. (Refer to below.)
- Zone control function is optionally possible.

CMP's outstanding head work not only improves the process performance but also increases the productivity as well as reduces costs. More precisely, adapting the well refined hard pats can shorten the polishing time and thus reduce the cost of consumables.

#### Optical End-Point Detection System

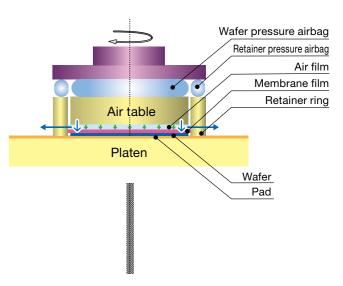
- Uses white light source and accurately detects residual film changes with reflection data of wide wavelength range and original algorithm.
- Provides a wide range of applications.
- Equipped with intuitive GUI that allows the user to see film thickness changes.



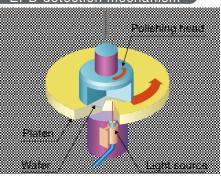
#### Cleaning machine

- Enables cleaning of 300 mm / 200 mm / 150 mm / 100 mm wafers and flexibly handles square or other special substrates.
- Achieves cleaning suitable for state-of-the-art processes.
- Enables simultaneous cleaning of front and back surfaces.

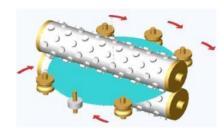
#### Sylphide



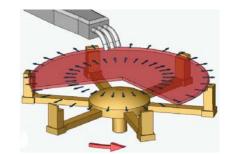
#### EPD detection mechanism



#### Scrub cleaning



#### Spin-drying



# **Wafer Manufacturing Systems**

#### As the leading supplier of silicon wafer manufacturing equipment, our acclaimed engineering has succeeded in systemizing the wafer manufacturing process.

As the semiconductor devices get smaller in size, demand for precision machining technology for silicon wafers increases. Tokyo Seimitsu provides a line of wafer manufacturing systems respectively designed for individual processes such as sliced wafer demounting and cleaning, wafer edge grinding, and more to ultimately improve product quality and productivity. We offer consultations to select the optimal systems for automation and process management as well as providing technical and maintenance support going forward. Our core products, Wafer Edge Grinding Machine for 300 mm wafers and Demounting and Cleaning Systems for sliced carbon wafers are highly evaluated by customers and have secured the world-class market share.

#### Wafer Edge Grinding Machine W-GM Series

- Newly-developed grinding unit enhances the rotative precision of the spindle, and improves the edge roughness.
- Non-contact measuring system achieves stable alignment.
- Multiple-point of thickness of pre-processed wafers , diameter and notch depth of post-processed wafer are measured by non-contact system.
- Options such as low damage grinding to reduce machining damage are available.



#### W-GM-6200

- •Improve the Space Efficiency by the Compact Design.
- •Highly Accurate Grinding by the Synchronized X, Y,  $\theta$  Support Control.
- •Easy Operation by Touch Panel.

#### W-GM-5200E

- •Machine specification ready for 300 mm (φ 12") wafers.
- •Makes possible high precision and high quality 300 mm wafer
- •Newly-developed built-in inspection system (option) enables realtime monitoring inside the machine of wafers quality control after





#### **Demounting and Cleaning System** (C-RW-200 / 300)

 Automatic demounting of wafers from the slicing base, cleaning and storing on the cassette

#### W-GM-4200E

- •Machine specification ready for 50 mm (\$\phi\$ 2") 200 mm (\$\phi\$ 8") wafers.
- •Newly-developed grinding unit enhances the rotative precision of the spindle, and improves the surface roughness.
- •Performs non-contact measuring of pre-processed wafer thickness, diameter and notch depth of post-processed wafer

#### W-GM-4200S

•Workpieces in various shapes (rectangular and polygoral

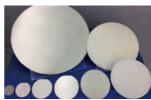


#### **Grinding Service**

Our edge grinding machines can be used for various applications and with various materials such as Si, SiC, GaN, sapphire, compounds and oxidized materials.

We will provide you with the machining technology we have accumulated.

#### Process Example \*Edge Roughness (Ra = 20 nm) \*Measured by Our Standard



Si Wafer 2" (50 mm)  $\sim$  18" (450 mm)



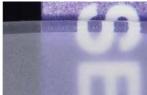
Counter Measure against Knife Edge/Asymmetric Profile Grinding



Terrace Grinding



Edge Trimming Bonded Wafer with Special Profile



Edge grinding of the mirror finished surface of sapphire wafer

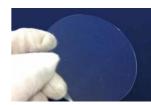




Ingot Rounding Maximum Thickness: 30 mm



Notch grinding of SiC, sapphire, and brittle materials



Glass Wafer Edge Grinding



Compound Materials such as SiC & GaN



Square / Rectangle Glass Substrate

## **How We See CSR**

Tokyo Seimitsu Group does business activities based on its corporate philosophy, "Growing together with partners and customers by collaborating technology, knowledge, and information to create the world's No.1 products."

Throughout these activities, we create WIN-WIN relationships between all the stakeholders such as shareholders, suppliers, employees, local community, international society, actively play an important role on the realization of a sustainable society, and make efforts to enhance our corporate value.

#### Motto

**WIN-WIN RELATIONSHIPS CREATE** THE WORLD'S NO.1 PRODUCTS!



Power generation that combines ecology and efficiency

# **ACCRETECH**



**Precision Measuring Instruments** 

#### **Suppliers**

Partners we work with to create new value





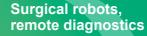
Small components

#### **Finished Products**

**Manufacturers** Supported by **Tokyo Seimitsu** 



**Support Manufacturing and Society with Measuring Technology**  Achieve a Sustainable Society













Semiconductor Manufacturing Equipment



stakeholders

convenience in society and the reduction of environment impact through providing precision measuring instruments and semiconductor manufacturing equipment that are vital for our customers' manufacturing process and energy- and resource-saving products. This means that the measuring technologies and products that Tokyo Seimitsu Group provides support manufacturing activities of customers and that end products produced through those activities support the entire society. In recent years, while the environment that surrounds companies changes significantly, Tokyo Seimitsu Group rec+ognizes that sustainability is one of our most important business issues and continues to promote sustainability activities more than ever. To achieve the sustainable growth for our group and society, we have set Purpose (raison d'être) as "Gaging the future with Metrology, Creating the future with Semiconductors." Using this as a starting point, we will further enhance the effectiveness of our sustainability activities by defining material issues and reflecting specific initiatives and targets in the Mid-term Management Plan. In addition, we will strengthen our sustainability promotion structure to realize our Purpose and aim to realize a sustainable society and the sustainable growth of Tokyo Seimitsu Group through dialogue and collaboration with our

Based on our corporate philosophy, Tokyo Seimitsu Group has contributed to the enhancement of

a higher level by integrating excellent technology, wisdom and information available in the world.

products and grow together to

We create the world's No. 1

Corporate Philosophy

#### Outline of Company

#### Name

TOKYO SEIMITSU CO., LTD.

#### Establishment

March 28, 1949

#### Capital

Paid-in capital: 11,450 million yen (as of March 31, 2024)

#### Stocks

Listed on the Prime Market of the Tokyo Stock Exchange

#### Employees

Non-consolidated: 1,200 Consolidated: 2,658 (as of March 31,2024)

#### **Directors and Auditors**

Hitoshi YOSHIDA Chairman and CEO Ryuichi KIMURA President and COO

Koichi KAWAMURA Executive Vice President and CFO

Takahiro HOKIDA Director
Shuichi TSUKADA Director
Romi PRADHAN Director
Kiyoshi TAKAMASU External Director

Shigenari MORI External Director

Shinji AKIMOTO Director(Serving as Audit and Supervisory Committee Members)
Yuriko SAGARA External Director(Serving as Audit and Supervisory Committee Members)
Masaki SUNAGA External Director(Serving as Audit and Supervisory Committee Members)
Motoko KAWASAKI External Director(Serving as Audit and Supervisory Committee Members)

(as of Jun 21, 2024)

#### Affiliates

Tosei Engineering Corp. Tosei Systems Co., Ltd. Accretech Create Corp.

Tosei Box Corp.

Accretech Finance Co., Ltd.
Accretech Powertro System Co., Ltd.

Accretech America Inc.
Accretech (Europe) GmbH
Accretech Korea Co., Ltd.
Accretech (China) Co., Ltd.
Accretech Taiwan Co., Ltd.
Accretech (Malaysia) Sdn. Bhd.
Accretech (Thailand) Co., Ltd.
Accretech Adamas (Thailand) Co., Ltd.
Tosei Engineering (Pinghu) Co., Ltd.

TOSEI (Thailand) Co., Ltd. Accretech SBS Inc.

Accretech (Singapore) Pte. Ltd. Accretech Vietnam Co., Ltd. PT Accretech Indonesia Accretech-Tosei do Brasil Ltda.

PT TOSEI Indonesia.
TOSEI Philippines Corp.
TOSEI Engineering Pvt. Ltd.
TOSEI Mexico, S.A. de C.V.
Accretech SBS UK Ltd.
Accretech-Tosei Hungary Kft.
Accretech (Pinghu) Co., Ltd.

Tosei Technology Development (Shanghai) Co., Ltd.

#### In-house Company System and Executive Officer System

#### Semiconductor Company

Kazumasa ISHIKAWA

Rvuichi KIMURA Head of Semiconductor Company Takahiro HOKIDA Managing Executive Officer Managing Executive Officer Nobukazu AOSHIMA Yuichi KUBO Managing Executive Officer Masaki KANAZAWA Managing Executive Officer **Executive Officer** Romi PRADHAN Keng Hooi TEE **Executive Officer** Hiroyuki SAKAI **Executive Officer** Masayuki AZUMA **Executive Officer** Toshihiko ETO **Executive Officer** Ryoichi IDE **Executive Officer** 

**Executive Officer** 

#### Metrology Company

Shuichi TSUKADA Executive Officer / Head of Metrology Company
Taichi FUJITA Managing Executive Officer
Takashi MASUDA Executive Officer
Mutsumi ONO Executive Officer

#### Administration Company

Koichi KAWAMURA Head of Administration Company
Asashi KATO Managing Executive Officer
Kimito KOIZUMI Managing Executive Officer

#### **Brief History**

	·	
194	•Establishment of Tokyo Seimitsu Kogu Co., Ltd.	2002
195	Manufacture and sale of measuring machines using mechanical gages	
195	•Development of Japan's first flow type air micrometer	
195	Development of Japan's first LVDT type electric micrometer	
	Establishment of Daiichi Seiki Co., Ltd.	
195	•Development of germanium pellet auto-sorter	2005
196	Company name changed to Tokyo Seimitsu Co.,Ltd.     Listed on the second section of the Tokyo Stock     Exchange     Development of surface texture measuring instrument	2007
196	Development of Japan's first wafer slicing machine	
196	Development of wafer probing machine	
196	Development of roundness measuring instrument	
198	•Establishment of Tosei Engineering Service Co.,Ltd.     •Development of Japan's first coordinate measuring machine	2008
197	•Development of the wafer dicing machine	
198	•Establishment of Tosei Systems Co., Ltd. as a software development group	
198	Listed on the first section of the Tokyo Stock     Exchange	2009 2010
198	•Establishment of Research Laboratory	2011
198	•Establishment of Tokyo Seimitsu Europe GmbH (Germany) and Tokyo Seimitsu America, Inc.(USA)	• 2012
199	•Establishment of ACCRETECH Service Center in Korea	
199	<ul> <li>•ISO 9001 awarded to the Hachioji and Tsuchiura Plants</li> <li>•Obtained a business license under the traceability system of the Measurement Law for the calibration of the "length measurement laser"</li> <li>•Establishment of the Beijing Representative Office</li> <li>•Establishment of Tokyo Seimitsu (Malaysia) Sdn.Bhd. in Malaysia</li> </ul>	<ul><li>2015</li><li>2016</li><li>2017</li></ul>
199	Obtained a business license under the traceability system of the Measurement Law for the calibration of the "Block gage"  Establishment of ACCRETECH America, Inc. and ACCRETECH Manufacturing Company in USA  Entered into a partnership with Carl Zeiss in the field of high precision measuring instruments worldwide	• 2019 • 2020
199	<ul> <li>•Received the "10 BEST Award" for "Customer satisfaction with a semiconductor equipment supplier" survey by VLSI Research Inc.</li> <li>•Establishment of the TSK Technical Center in Hsinchu, Taiwan</li> </ul>	<ul><li>2021</li></ul>
199	•Establishment of Tokyo Seimitsu (Singapore) Pte.Ltd.	
199	•ISO 14001 awarded to the Hachioji and Tsuchiura Plants	2022
199	•Establishment of ACCRETECH Finance Co., Ltd.	
200	Corporate brand "ACCRETECH" introduced     Establishment of Tosei Box Corp.	• 2023

- Received the "10 Best Award" in two categories: awarded for the 7 consecutive years in the Test & Material Handling Equipmentcategory, and the awarded in the Assemby Equipment category for the first time
- Establishment of Accretech (China) Co.,Ltd.
   Entered into a partnership with Hamamatsu Photonics K.K. for developing semiconductor manufacturing equipment and jointly developed a new laser dicing system, "MAHOHDICING MACHINE"
- Renewed partnership agreement with Carl Zeiss for another 5 years
  - Establishment of Accretech Korea Co.,Ltd.
     MAHOHDICING MACHINE was granted the Chairman' Award of The Japan Machinery Federation at its 27th JMF Award for Energy-Conserving Machinery.
  - Obtained a business license at Tsuchiura Plant under the traceability system of the Measurement Law for the calibration of the "length measurement laser" and "3D Coordinate Measuring Machine"
- Received the "10 BEST Awards" in two categories :awarded for 13 consecutive years in the Test & Material Handing Equipment category, and for 7 consecutive years in the Assembly Equipment category
- •Technical cooperation with Mitaka Kohki Co., Ltd in non-contact metrology
- 2009 •Establishment of Accretech America Inc.
  - •Relocation the head office to Hachioji City
  - Completed the No. 5 Plant at Hachioji Semiconductor company
    - Acceptance of Dicing Blade Business from Mitsubishi Material Corporation and started Blade Business
       Established "ACCRETECH Application Center" accommodating to device process diversification
- •Changed company name of Tokyo seimitsu (Thailand) Co., Ltd. to Accretech (Thailand) Co., Ltd.
  - Completed the No. 6 Plant at Hachioji Semiconductor company.
  - Joint Development with Panasonic Factory Solutions Co., Ltd. to promote Laser Grooving Device used in
  - Plasma Dicing method.
- Establishment of Accretech Powertro System Co., Ltd.
   Establishment of Accretech SBS Inc.
  - •Establishment of Accretech SBS UK Ltd.
  - Construction of Tsuchiura Plant MI Building completed
     Semiconductor Business Department office opened at the subsidiary in Vietnam
  - Acquisition of 100% ownership of Accretech Powertro System Co., Ltd. (former Fujitsu Telecom Networks Fukushima Ltd.) completed
  - Construction of new building for Tokyo Seimitsu subsidiary Accretech Taiwan Co., Ltd was completed
     New Taiwan Application Center was opened
  - •Due to the revision of the market classification of the Tokyo Stock Exchange, the Company moved to the Prime Segment
- Construction of Hanno plant of Semiconductor Company was completed
  - Transfer of development, manufacturing, and sales business of charge/discharge testing system from a consolidated subsidiary, Accretech Powertro System Co., Ltd.

#### Tokyo Seimitsu Corp Head Office/Plant -



**Head Office** 

2968-2, Ishikawa-machi, Hachioji-shi,

Tokyo 192-8515, Japan Tel: +81(0)42-642-1701 Fax: +81(0)42-642-1798



Hachioii Plant

2968-2, Ishikawa-machi, Hachioji-shi, Tokyo 192-0032, Japan Tel: +81(0)42-642-0381 Fax: +81(0)42-642-0386



**Hanno Plant** 

2-7-1, Akanedai, Hanno-shi, Saitama, 357-0069 Japan Tel: +81(0)42-649-1371 Fax: +81(0)42-649-1197



#### **Tsuchiura Plant**

4, Higashi-Nakanuki-machi, Tsuchiura-shi, Ibaraki 300-0006,Japan Tel: +81(0)29-831-1234 Fax: +81(0)29-831-4453



#### **Furudono Plant**

50, Matsukawadaisaku, Furudono-machi, Ishikawa-gun, Fukushima, 963-8304 Japan Tel: +81(0)24-753-4111 Fax: +81(0)24-753-4918

#### Tosei Engineering Corp Head Office/Plant

\*Tosei Engineering is a group company of Tokyo Seimitsu and manufactures semiconductor manufacturing equipment and automatic measuring instruments.



Tosei Engineering Corp. **Head Office / Plant** 

4-6. Higashi-Nakanuki-machi. Tsuchiura-shi. Ibaraki 300-0006.Japan Tel: +81(0)29-830-1888 Fax: +81(0)29-832-4053



#### Niigata Plant

Kandatsu Plant

Ibaraki, 300-0015, Japan

Tel: +81-29-830-1882

959-0132, JapanIbaraki, Tel: +81-256-97-1771

Fax: +81-29-832-4053



#### Nagoya Plant

96, Shin-Ikeura, Uchikoshi-cho, Miyoshi-shi, Aichi 470-0213 Japan Tel: +81(0)561-32-3601 Fax: +81(0)561-34-2744



2-14, Kitakandatsu-machi, Tsuchiura-city,

1-1-74, Bunsuiakebono, tsubame-City, Niigata,

#### **Overseas Offices**

#### International Marketing Dept.

(Semiconductor Company)

2968-2, Ishikawa-machi, Hachioji-shi, Tokyo 192-0032, Japan Tel: +81(0)42-642-0381 Fax: +81(0)42-631-5234

#### (Metrology Company)

4, Higashi-Nakanuki-machi, Tsuchiura-shi, Ibaraki 300-0006. Japan Tel: +81(0)29-831-1240 Fax: +81(0)29-831-1461

#### Asia



Accretech (China) Co., Ltd.

#### China

#### Accretech (China) Co., Ltd.

(Head Office / Shanghai) Room 2101C, No.1077, ZuChongZhi

Zhang Jiang Hi-Tech Park, Pudong New Area. Shanghai, China, 201203

Tel: +86(0)21-3887-0801 Fax: +86(0)21-3887-0805

#### (Shanghai Office)

Room212, No.118 Fu Te Bei Road, WaiGaoQiao F.T.Z Shanghai, China,

Tel: +86(0)21-5064-0201

#### Accretech (Pinghu) Co., Ltd.

Building 2#, No 1389, Xinqun Road, Pinghu Economic Development Zone, Pinghu City, Zhejiang, PRC. China, 314200

Tel: +86(0)573-8520-8060 Fax: +86(0)573-8520-8065

#### (Changchun Office)

Room 1169, B10A Building, Greenland Central Plaza, No. 1088 Nanhuancheng Road, Nanguan District, Changchun, Jilin, China, 130028 Tel: +86(0)431-8896-1051 Fax: +86(0)431-8896-0661

#### (Dalian Office)

Room 715, Building 3#, Yifeng Modern City, Jin Ma Road, Development Zone, DaLian City, Liaoning Province, China,

Tel: +86(0)411-8756-5414 Fax: +86(0)411-8756-5414

#### (Beijing Office)

Room 508, Tower B, Jinhai ShangFu Center, No.403, Baiziwanxili, Chaoyang District, Beijing, China, 100124 Tel: +86(0)10-5820-0588 Fax: +86(0)10-5820-0588

#### (Tianjin Office)

Room 606, Brilliant Crystal Tower, 53-1 Weidi Road, Hexi District, Tianjin, China, 300201

Tel: +86(0)22-8822-7220 Fax: +86(0)22-2833-2125

#### (Jinan Office)

Room 1404, NO.1, Hengda City, No.58, Gongyebei Road, Licheng District, Jinan, Shandong, China, 250100 Tel: +86(0)531-6668-8196 Fax: +86(0)531-6668-8190

#### (Xi'an Office)

Room 22601, Unit 2, Block B, NO.2, Heng Tian Guo Ji City, NO.2, Daqing Road, Lianhu District, Xi' an, Shaanxi Province, China, 710082 Tel: +86(0)29-8886-3499 Fax: +86(0)29-8886-3499

#### (Nanjing Office)

Room 2103, Building 1, Tongxi International Plaza, No.1222, Shuanglong Avenue Jiangning Area, Nanjing, Jiangsu Province, China, 211100 Tel: +86(0)25-8498-6492 Fax: +86(0)25-8498-6493

#### (Hefei Office)

Room 118, NO.3 Buiding, Liu En Na Ji Industrial Park, No.324 Tang He Road, Xinzhan District, Hefei, Anhui Province, China, 230012

Tel: +86(0)400-812-0294

#### (Wuxi Office)

Room 7-407, No.12, Changiang Road, Wuxi, Jiangsu Province, China, 214028 Te1: +86-400-812-0294

#### (Suzhou Office)

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