



CHEMISTRY IN MOTION

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KINETICS is a multi-disciplinary company with a truly global footprint. Together with our customers we develop and manufacture chemical, slurry and gas process equipment solutions for ultra-high purity applications and other critical media. Our capabilities include complete planning, design, engineering and plant construction of some of the world's most complex and high-tech facilities.

We offer technical facility management services beginning with process planning and scheduling, equipment installation and tool hook-up. Upon request we can perform round the clock logistics and maintenance services performed by our qualified teams on-site. Therefore KINETICS meets the requirements of customers who demand the safest and most reliable plant and process solutions in the high-tech world.

KINETICS always provides you with innovative process solutions returning investment in your core business through our safe hands.

To consistently guarantee the optimal operation of your production processes, we constantly work to improve our solutions and to develop new ones. KINETICS is one of the innovation leaders in the industry, as evidenced by numerous international patents.

We strive to meet the requirements of our customers. Our global team focuses on delivering optimized engineering, equipment and systems where and when they are needed. Our versatility sets KINETICS apart – we create complex processing solutions distinguished by their value and return on investment. This is what we call chemistry in motion.

The KINETICS Group

Since 1973, we have around 2,000 qualified employees who are located in more than 20 offices around the world. Our internal network of factories, laboratories, assembly and engineering workshops is equipped to serve our international customers while ensuring our close proximity to where our solutions are needed.

OUR VISION

To be the most globally versatile provider and operator of the world's best ultra-high purity chemical mixing and delivery systems, safely moving chemicals from the supply source to the process equipment.

KINETICS
CHEMISTRY IN MOTION

Design
Engineering
Plant Construction
Equipment
Technical Facility Management

KSI

KESG
MEGA
WAFAB



ENGINEERING & CONSTRUCTION, EQUIPMENT SOLUTIONS AND TECHNICAL FACILITY MANAGEMENT.

All from a single source – globally.

KINETICS supports clients around the world in the microelectronic, solar, biopharmaceutical, and other technology-driven markets.

As a market leader for equipment for chemicals, slurries and specialty gases, we provide complete solutions. Our portfolio includes bulk gas supply systems such as piping for vessels, pipe bridges, pressure regulating stations as well as filter racks, loop and single lines and ancillary equipment hook-up.

KINETICS is your versatile global partner for integrated solutions spanning high-technology industries. We are committed to being the worldwide partner of choice for customers who are looking for design, engineering and construction of complex process solutions.

Your advantage: Whether supply or process systems, whether plant construction or technical facility management, we always have a holistic view of the entire value chain and develop optimal solutions for you. With 50 years of experience, we have unique expertise with all relevant systems and products on the market. No other company can match this versatility.

OUR MISSION

To design, build, install and maintain ultra-high purity mixing, dosing, delivery systems and wet bench equipment for slurries, gas, wet chemicals, and process media, whilst providing unrivalled technical facility management services, enabling our high-tech customers to optimize chemical usage, minimize operating costs and improve yield.

Engineering and Construction

Optimizing design and layout with an integrated green construction philosophy for maximum facility uptime.

Equipment Solutions

Specialists for innovative process media equipment and distribution systems for critical applications, distributed under the MEGA brand.

Technical Facility Management

Including complete chemical and gas management services tailored to meet operational requirements.





THERE'S ONLY ONE THING WE VALUE AS MUCH AS OUR CUSTOMERS.

Our core values.

Our core values shape us and define the KINETICS culture. We are proud to share these values with our business partners in everything that we do as part of our integrated solutions approach.

SAFETY

Empowering people to establish uncompromising safety standards at work and in our everyday lives

” CODE OF CONDUCT

“KINETICS’ core values are embodied in its Global Code of Conduct.

We place great value in ethical behaviour, as we believe that our employees’ and our business partners’ commitment to ethical behaviour is critical to KINETICS’ continued success. We hold ourselves and our business partners accountable for high standards of conduct in every project we perform. The Global Code of Conduct describes our expectation that KINETICS, through its management, employees and business partners, conducts business honestly, with integrity and in strict compliance with the law. In addition, the Global Code of Conduct provides guidelines to enable all of our employees and business partners to make ethical decisions and exercise good judgement. We encourage employees and business partners to ask questions and report violations to our management.”

Executive Management Team of the KINETICS Group

Dependability

Embrace ownership to meet our commitments to our customers and employees

Teamwork

Passionately learn and share ideas and knowledge, and promote collaborative efforts across all internal and external aspects of our business

Quality

Inspire delivery of innovative quality products and services, employing best-known methods, while striving for continuous improvement

Diversity

Treat everyone with trust and respect, irrespective of age, gender, ethnicity, education, physical abilities, race, and religion. Be broad-minded and open to new ideas

Social Responsibility

Maintain a balance between our professional endeavours, family lives, communities, and the environment



EQUIPMENT DESIGN AND MANUFACTURING.

If we don't have it, we invent it.

KINETICS is a global leader in the design, fabrication and installation of high purity systems for chemicals, slurries, gases and ultra-pure water required for microelectronic, photovoltaic and other high-technology applications. KINETICS equipment is sold under the brand names MEGA and WAFAB and this equipment is renowned worldwide for its quality and reliability.

Our equipment design and manufacturing teams work with our clients to understand their technical and productivity needs and develop the best equipment and factory designs to meet the most stringent process requirements.

We do not accept "Impossible!", as numerous patents prove. Our ISO-certified manufacturing sites, located throughout the world, produce safe and highly reliable equipment, shipped to customer sites within targeted schedules. Our proven project management and quality assurance processes enable us to meet the strictest customer requirements.

Equipment for chemical delivery, chemical and slurry blending and dispensing combines modularity, performance, accuracy and capacity for the most demanding processes and applications. KINETICS' expertise has been earned through a solid history of successfully supplying many of the world's most demanding customers and applications around the world.

KINETICS **gas distribution systems** are engineered to suit specific gas and fabrication process requirements for manual, semi-automatic, or fully automatic operation. All of our tools are well-documented and achieve uptimes exceeding 99.999%.

KINETICS' family of **inline chemical metrology** tools are designed to support CMP processes in different ways, from monitoring and replenishing mixture components to particle size and distribution analysis, to real-time concentration measurement.

UNIQUE FAB SIMULATION

With our unique Fab Simulation, we assemble mixing and delivery systems, adapted to our customers' current configuration, to simulate real-world conditions for chemical and slurry processes. For this purpose, MEGA Fluid Systems' R&D lab offers a wide range of analytical capabilities to simulate and test current chemical processes in order to develop more robust chemical and slurry feeding solutions.



SUPPLY AND PROCESS SOLUTIONS.

For today and tomorrow.

Supply and Process Systems for Chemicals and Gases.

We support trouble free operations through our innovative solutions for your production plant. KINETICS solutions are synonymous globally with quality and reliability.

OUR VERSATILITY, YOUR BENEFITS

KINETICS' history has been driven by a partnership approach with our customers and business partners.

It has led to us becoming one of the world's most versatile and experienced solution providers in high-tech industries around the world.

In multiple key locations across the continents, our teams continue to strengthen longstanding partnerships and build new ones by successfully delivering more and more projects with increased vertical integration levels and enhanced scope.

We continue to invest in improving our versatility on behalf of all of our customers because we wholeheartedly believe the derived benefits are tremendous and very significant in contributing to how we help to deliver your return on investment. Our experience continues to grow and our focus is a critical discipline that adds value to all that we do.

EXPERIENCE HIGHLIGHTS

- ✔ Design and installation of complex process high-purity piping systems and solutions as well as mechanical and process piping
- ✔ Wide range of facility, chemical, gas, slurry and wet processing equipment
- ✔ Offsite manufacturing and offsite assembly initiatives as well as other use of smart tools and processes
- ✔ Technical facility management from tool installation and hook-up to around-the-clock support on site
- ✔ Major project management experience and integrated project delivery (IPD)

INTEGRATED SOLUTIONS FOR FABS AND LABS.

Plus solutions for other high-tech industries.

Combined experience, sustainable construction practices, strong teams in critical regional locations lay the foundations for KINETICS to engineer process and technology solutions which return investment in your core business.

As an industry leader in facility engineering services as well as equipment design and Manufacturing the ideal engineering team is based nearby to support every aspect of your project's needs.

Regardless of the industry, today's construction projects require professional support to manage the myriad of project details and coordinate complete program elements. When those projects involve meeting the demands of ultra-pure clean elements required for semiconductor, pharmaceutical, and biotech manufacturing, they come with layers of additional complexity. KINETICS has you covered.

Our global presence allows us to offer a full range of design, engineering and construction services that include:

- Process & chemical engineering
- Mechanical, electrical & control engineering
- Cleanroom design and architecture
- Construction administration & management
- Start-up and commissioning
- Chemical and Gas management

KINETICS' multi-disciplinary design teams help you to improve the overall quality, schedule and effectiveness of the design process:

- Site master planning
- Project planning, budgeting, & scheduling
- Site utility planning & surveying
- Conceptual and detailed design
- Design of
 - chemical blending and distribution systems
 - specialty gas and bulk gas distribution systems
 - water and waste distribution systems

We address all critical parameters related to the successful execution of a project, including:

- Safety performance
- Staffing & manpower loading
- Material procurement & shop fabrication
- Management of sub-contractors



WE TAKE PREFABRICATION TO A NEW LEVEL.

With our **SUPER BIM**, you will never waste an inch of your building.

See through walls, plan like you are time traveling, manage dimensions simultaneously and monitor and optimize with KINETICS.

Buildings are not flat so why would you want your construction designs to be?

Building information modeling (BIM) software provides a multi-dimensional digital vision of our construction project. It incorporates spatial relations, light analysis, geographic information, and allows engineers to see the project from every angle, before anything is built.

It helps to:

- reduce/avoid costs due to rework
- improve labor productivity
- maximise prefabrication | off-site manufacturing activities

Virtual designs are shared across all disciplines, from building architects and engineers to the construction teams and subcontractors, to the customer; each contributing data to a single model.

Our commitment is to support you with transforming your project goals into facilities and standards into systems. We explore potential design and installation conflicts early and are constantly vigilant throughout the project to reduce risk and improve outcomes each step of the way.

SUPER BIM – A REVOLUTIONARY NEW TOOL

Our locations around the world are equipped with state-of-the-art 360-degree laser scanners. We use these to measure your premises and then prepare the data with BIM tools to create a digital twin, which we then load into a Microsoft HoloLens.

The entire installation is superimposed on the existing situation on site with the help of augmented reality. You can check accuracy of fit, distances, collisions, etc. and changes can be made even before parts are ordered or built. Prefabrication is taken to a new level while successfully avoiding rework.



SOMETIMES IT PAYS TO BE
A LITTLE BIT OFF.

With off-site manufacturing and off-site assembly.

With 17 Offices worldwide and more than 200,000 sqft. (20,000 sqm.) of dedicated manufacturing, assembly and test areas as well as a qualified and skilled workforce, we manufacture equipment and products in-house at our global locations in accordance with your requirements.

KINETICS also provides extensive off-site manufacturing, fabrication and assembly work to support individual project needs. These services vary from project to project or site to site, depending on the goals we want to achieve. In close cooperation with our customers, we ensure that we are aware of and meet every requirement.

When building a new production facility, time is one of the most precious resources. That is why we have developed a **prefabrication system** that not only saves time, but also reduces the number of workers on the construction site.

This is made possible by prior **laser scanning** of the hall. The 360-degree image of the building provides exact information about the dimensions of tools and piping. At our production facilities all over the world, we weld the pipelines and assemble the finished pipe systems in racks (skids). After prefabrication, we laser measure the finished module again to make sure everything fits.

We deliver the finished skids to the construction site and install them in the shortest possible time using a sophisticated system of hydraulic lifting columns.

If desired, we can also manufacture the piping and racks directly in our own mobile clean room at the construction site.

Our level of vertical integration is exceptionally high across our portfolio.

KINETICS strives to achieve the highest level of vertical integration to ensure we add value to the project throughout all the execution phases.

The flexibility and capabilities KINETICS provides are fully in line with our vision to be the most versatile provider of such solutions and bring benefit to our clients around the world.



TECHNICAL FACILITY MANAGEMENT.

ROI included.

Excellent facility management goes far beyond general maintenance and security protocols. It ranges from site design and planning through to procurement, installation and operation of state-of-the-art process plants to the management of the delivery, storage and distribution of specialty chemicals and volatile gases.

Technical facility management teams from KINETICS understand your processes and can tailor a variety of total chemical management (TCM) and total chemical and gas management (TCGM) services to meet specific cost and operational requirements.

We take an integrated approach to facility operations, drawing from our expertise in managing a wide variety of chemical, specialty, and bulk gas supply systems in microelectronics and photovoltaic facilities worldwide. Our services are centered on the supply and disposal of chemicals, gases and other media.

From the incoming loading dock to the final point-of-use, the quality of gases and chemicals is maintained through strict and consistent procedures and validated through routine measurement and analysis.

OUR FACILITY MANAGEMENT SERVICES INCLUDE:

- ✔ **Planning and design**
- ✔ **Plant operations:**
cylinder and drum transport and change-out; blending of chemical batches; routine system inspections; system troubleshooting (minor and major)
- ✔ **Warehouse logistics**
- ✔ **Occupational health and safety**
- ✔ **Equipment and systems maintenance:**
Routine system inspections; equipment inspection and cleaning, measurement & analysis; quality monitoring & documentation

BETTER RETURN ON INVESTMENT

What our customers particularly appreciate about us:

Thanks to our expertise, we regularly make recommendations on how to increase the efficiency of a facility. This is directly reflected in the operating costs.



OUR BIGGEST COMMITMENT IS TO SAFETY.

Because we are committed to you.

KINETICS' Beyond Zero Safety Program emphasizes our integrated approach that makes safety a priority in everything that we do

We constantly focus on enhancing safety through each individual's sense of responsibility. We strive to achieve a positive attitude towards prevention of any event that creates unsafe working conditions and with a strong team spirit, while caring for everyone.

We achieve quantifiable performance that drives industry safety levels beyond zero, creating a culture that inherently focuses on reducing risk and eliminating unsafe situations.

Personal commitment means each and every employee at KINETICS commits to working safely, looking out for each other, and staying vigilant on and off the job.

Site-specific safety plans are adapted as a project both gains momentum and subsequently winds down to completion. Reviewing the general physical and environmental risk factors alongside each individual site ensures that the KINETICS culture is always present.

BEYOND
Zero

Pre-task planning allows the crew to plan their daily work, set individual expectations and first get the thumbs-up from the supervisor and site safety person. Supervisor safety training reinforces skills that make the difference throughout our work to make sure each person is equipped to keep everyone safe.

Hire orientation helps form healthy patterns from the start, with mentors assigned to orient personnel to their job environment and potential hazards.

Communication improvements get crews, clients and contractors on the same page to help each other make wise choices every step of the way. We actively promote audits and inputs from all project and site stakeholders.

LONG-TERM SUSTAINABILITY IS PART OF THE KINETICS CULTURE.

Whether products, services or the environment.

Sustainability is in the DNA of KINETICS. After all, our products serve to safely protect the environment from harmful substances and ensure the return of these substances for proper recycling or disposal. But even beyond that, we strive to reduce our environmental footprint as much as possible, whether by using electric vehicles or manufacturing in the most environmentally friendly way possible. This is also evidenced by our certification.

KINETICS is a company that exercises the highest degree of ethical standards. We take personal responsibility for our actions and treat our environment with respect. Maintaining a balance between our professional endeavours and the environment is something close to our hearts.

KINETICS and our employees contribute to charities in different regions around the world. Contribution and support is actively encouraged and promoted in support of different causes throughout our communities as much as possible through various initiatives which are representative of the willingness to engage as well as the spirit and creativeness of the KINETICS family wherever they are working.

We know that sustainability is a journey that never ends. That is why we encourage all our employees to never lose sight of this aspect in their daily work, because many small steps also lead to the goal.

OUR CERTIFICATIONS

- Along with our **ISO 9001** certificates, KINETICS holds ISO 14001 certificates. ISO 14000 is a family of standards related to environmental management that helps organizations minimize how their operations negatively affect the environment.
- LEED®** (Leadership in Energy and Environmental Design), was developed by the United States Green Building Council (USGBC). It is considered to be the most widely used green building rating system in the world. KINETICS LEEDS® accredited engineers work with our clients' project teams to achieve the highest economically viable LEED® certification rating from the United States Green Building Council (USGBC).



RECONDITIONING INSTEAD OF THROWING AWAY

KINETICS is not only a leader in the design, manufacture and installation of new process equipment, but also has extensive experience with refurbished 200 mm and 300 mm process equipment. To extend the reliability and life of a system, our experts refurbish equipment purchased on the secondary market and, thus, help to avoid unnecessary waste and preserve resources.

Consciously bringing the world closer together

OUR LOCATIONS WORLDWIDE

North America

- Livermore, California
- Tualatin, Oregon
- Tempe, Arizona
- Durham, North Carolina
- Boston, Massachusetts
- Frederick, Maryland
- Anaheim, California

Europe

- Eschau-Hobbach, Germany
- Dresden, Germany
- Neubiberg, Germany
- Villach, Austria

Near East

- Saudi Arabia

Asia

- Shanghai, China
- Chengdu, China
- Hsinchu, Taiwan
- Kuala Lumpur, Malaysia
- Kulim, Malaysia
- Singapore, Singapore



OUR HEADQUARTERS

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