

miyamoto.

Mechanical, Electrical & Plumbing Experts

make the world a better, **safer** place. ●

A low-angle, upward-looking shot of a complex industrial interior. The scene is filled with a dense network of large, metallic pipes and conduits that crisscross the frame. The lighting is dramatic, with a strong, warm light source in the upper right corner creating a lens flare and illuminating the metallic surfaces. The overall color palette is dominated by cool blues and greys, with the warm light providing a contrast. The text 'We are MEP experts.' is overlaid in the center, with the word 'experts.' underlined in blue. The word 'MORE' is written vertically in the lower center, with a blue line extending downwards from it.

We are MEP experts.

MORE

**Trusted by some of
the biggest names
in the industry.**



miyamotointernational.com

MORE



LUCID





We're ready for anything.

Miyamoto's MEP team are experts in built-environment modernization and new construction for national laboratories, schools, hospitals, commercial, and residential buildings. They provide cradle-to-grave design services for all MEP systems, such as

custom HVAC systems, HVAC equipment for cleanrooms, infrastructure and central plant upgrades, covid mitigation, plumbing improvements, power system distribution, lighting and controls and power system studies.

Industrial • Commercial • Government
K-12 • Higher-Ed • Residential • Labs



Mechanical

Electrical

Plumbing

We improve efficiency and resiliency.

Our mechanical engineering team has tremendous experience in the implementation of HVAC equipment and systems. We perform investigations to determine where system inefficiencies or malfunctions occur to create solutions that optimize performance and increase the efficiency of operation. We closely coordinate with our clients to understand project

requirements, goals, design specifications, and operational environments to implement effective solutions. We have expertise in a wide range of HVAC systems and knowledge for their successful installation regarding acoustics, vibrational isolation, and controls systems integration. We work devotedly with other engineering and architectural disciplines to project completion with the aim for long-lasting solutions.



Mechanical.

Mechanical

01 Services

HVAC Load Calculations

We ensure proper sizing of heating and cooling equipment based on the project location/orientation and wall/roof constructions.

HVAC System and Equipment Analysis

- We investigate and determine where system inefficiencies or malfunctions may occur.
- Our solutions optimize performance and increase the efficiency of any operation.



Our HVAC Areas of Expertise

- Air handling units
- Boilers
- Chillers
- Cooling towers
- Heat Pumps
- Furnaces
- Humidifiers/Dehumidifiers
- Split System air conditioning units
- Computer-room air conditioners

Integrated HVAC Solutions

- Acoustical design considerations including duct liners, ductwork sizing design, duct silencers
- Vibration isolators and specialty curbs
- Awareness of maintenance and service access requirements





**Our team has the
experience and
capability to guide
our clients to
superior solutions.**

02 Project Types

New Construction

Coordination with structural, electrical, and architectural for a holistic approach to providing highly efficient and cutting-edge new technologies.

Facility Tenant Improvements

- Adaptive Reuse
- Improving thermal environment
- Space reconfigurations

Mechanical Replacements

Increase energy efficiency of equipment due to deteriorating conditions, in operation or deferred maintenance

Building Control Integration

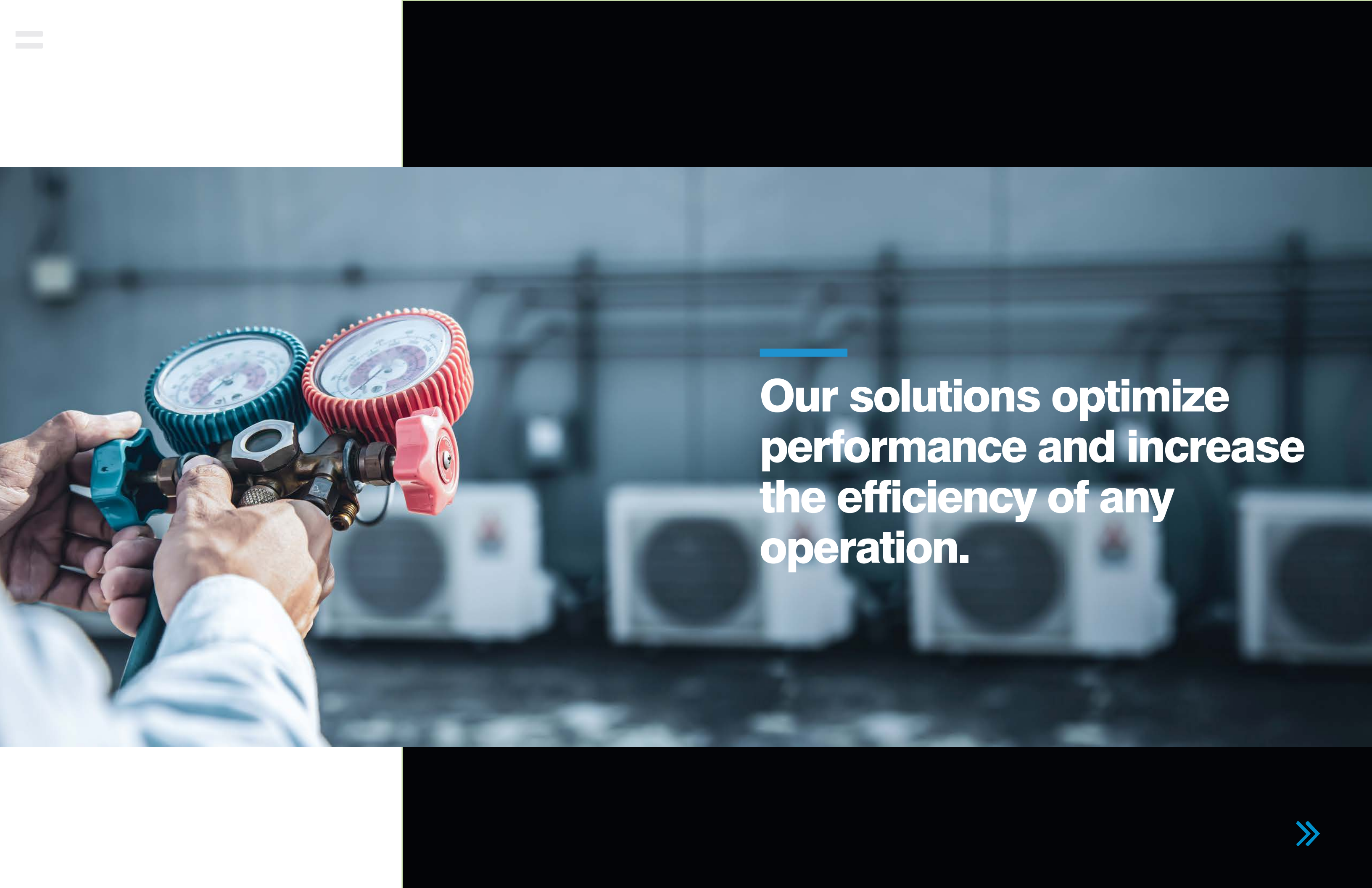
- Creating infrastructure to allow equipment monitoring
- Integration of new equipment into existing Building Management Systems (BMS)

Feasibility Studies

Coordination with structural, electrical, and architectural disciplines to assist clients in achieving their goals for increased indoor air quality, or serve process equipment requirements that may generate a lot of heat or volatiles.

Detailed evaluation of existing and new mechanical systems to assist clients in identifying challenges and opportunities of their short-term and long-term goals. Coordination of mechanical requirements with Architectural, Electrical, and Structural engineering teams to develop detailed reports used to establish basis of the new building design or system requirements.





**Our solutions optimize
performance and increase
the efficiency of any
operation.**



Mechanical

Electrical

Plumbing

Powering your ideas. Powering the world.

Our electrical team are experts in power system distribution of low and medium voltage systems, emergency and standby systems and UPS design. We can bring in new and state-of-the-art lighting and controls design to meet Title 24 compliance requirements. We are highly competent in New Construction and Tenant Improvements such as

space modifications, energy-efficient lighting solutions, service panel upgrades, converting gas-powered to electric-powered equipment and elevator modernization. We have high proficiency in power system studies such as short circuit calculations, device coordination and arc flash analysis and labelling using power system software.



Electrical

Electrical

01 Services

Electrical

- New construction
- Power distribution
- Substation replacement
- Power system studies, Arc flash labels (BART) – ETAP & SKM
- Lighting upgrades
- Electrification of boilers
- Elevator modernization

Electrical Sub-Market

- Data / Communications / IT
- Fire Alarm System
- Security Infrastructure
- Photovoltaic Design





**We step up.
We transform.**

Mechanical

Electrical

Plumbing

We do it all, so you don't have to.

Our plumbing team handles all aspects of the design process. We analyze both new and existing buildings by calculations fixture unit calculations and specifying appropriate plumbing systems and equipment. We perform investigations to determine where system inefficiencies or malfunctions occur to create solutions that optimize performance and improve

safety of operation. Our expertise primarily lies in commercial retrofit projects, which include domestic potable water, domestic hot water, sanitary sewer, and storm water systems. We also have strong experience in systems such as compressed air, laboratory gas, vacuum, natural gas, water treatment, process cooling water, and heat exchangers.



Plumbing



Plumbing

01 Services

New Construction

Utility company coordination for water, sanitary sewer, stormwater, natural gas.

Facility Tenant Improvement

Plumbing Fixture Upgrades

- Revise fixtures: to meet accessibility (ADA) requirements and water-conservation efforts.
- Provide fixtures to bring building up to code: including eyewash and shower stations for ADA, OSHA and EH&S requirements

Plumbing Safety Equipment

- Prevent cross-contamination of water systems
- Provide water treatment systems for the longevity of open-loop mechanical systems or process equipment

Title 24 Compliance Forms

- Water heating equipment

Feasibility Studies

- Evaluate existing plumbing infrastructure and capacities to support new work
- Perform plumbing load calculations to determine cold water & sanitary sewer capacity



Our “A-team” of MEP experts.



Elliot Lee

*Principal
Mechanical/Plumbing*



Ramya Tipparaju

*Associate Principal
Electrical Engineer*




Hector Pedraza

*Senior Associate
Mechanical Plumbing Engineer*



Mark Gadbois

*Associate
Electrical Engineer*



**We uncover
and solve
inefficiencies.**

Save lives, **impact** economies.

We Know MEP.

