



 AtkinsRéalis

INDUSTRIAL MEXICO

As a world-leading design, engineering and project management organization, we connect people, data and technology to transform the world's infrastructure and energy systems.

Together, with our industry partners and clients, and our global team of consultants, designers, engineers and project managers, we can change the world.

What We Do

Our commitment to a whole life view of major development programmes enables us to lead projects at every stage and ensure that, wherever we are involved, our people have a wider view of the challenge to better guide our clients and partners.



**Consulting,
Strategy & Advisory**



**Engineering
& Design**



**Project &
Program Management**



**Project
Delivery**



**Operations
& Maintenance**



Capital



Decommissioning

Who We Are

From designing entire cities to delivering nuclear power stations and transforming manufacturing systems, we focus our business in the areas that have the most impact on the way we all live and the resources we demand from the planet.



**Buildings
& Places**

Cities & communities
Social Commercial
Residential property



Defence

Aerospace
Defense Security



Industrial

Life sciences/Pharma
Advanced/ Hitech
manufacturing
General manufacturing



**Minerals
& Metals**

Minerals
Metals



Nuclear

Nuclear build Reactor
support and life extension
Environmental remediation



**Power
& Renewables**

Power Grids Hydropower and
dams Alternative energies
and technologies



Transportation

Rail & transit Roads
Aviation Port



Water

Water and wastewater
utilities - Treatment and
resources Environment
protection, regulation
and resilience



Our global team of over 36,000 employees speaks over 70 languages, and represents 130 nationalities across six continents.

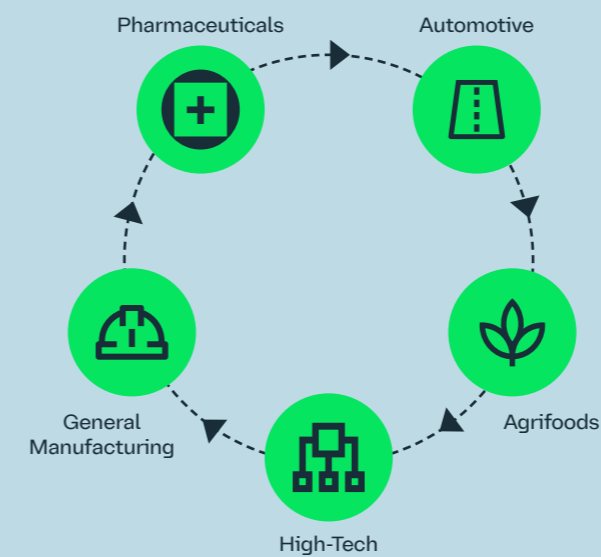


Industrial Focus

Supporting our industrial clients from billion-dollar investments in greenfield manufacturing and distribution facilities to small processing capacity modification projects.

Our longstanding relationships with legacy clients, many of whom we have served globally on a variety of projects for several years, are a testament to our constructive expertise and high level of client service.

We oversee construction and renovation projects on all types of manufacturing facilities in our key subsectors listed below.



Our presence in Mexico

With more than 12 years of experience working on projects in Mexico, our portfolio of work features projects for premier global clients in every major market sector, including automotive, pharmaceuticals, manufacturing, corporate real estate and energy.

We opened a location in Queretaro, the entry gate to El Bajío and a key automotive hub in central Mexico, in 2016 to expand our operations, capabilities and position as a world-leading project and program management consultancy in the region. Our presence in Mexico has enabled us to build strong ties to the architecture, engineering and construction community with a deeper understanding of the local market.



Utilizing our value management expertise, we realized project savings of \$5.8 million for Michelin. That's more than two times our fee on construction of a \$300 million greenfield manufacturing facility.

Representative companies we're proud to work with in Mexico

- | | | | | |
|------------------|-----------------|---------------------|----------------------|--------------|
| Bayer | Ford | Ikea | Michelin | Solidigm |
| Becton Dickinson | General Mills | Land O' Lakes | Nokia | Talos Energy |
| BorgWarner | GlaxoSmithKline | Magna International | Sensata Technologies | |
| Daimler Trucks | Honeywell/PEMEX | Marathon/Tesoro | | |

Project Process

We've developed a lean project process

We build strong relationships by understanding the challenges our clients face, sharing their ambition and helping them transform potential into reality.

Definition Phase

- Confirm strategic mission, vision, policies for the project.
- Assess each potential location's suitability for the project; new and existing

Benefits

We prepare all HS&E, risk and performance management plans to a final state for inclusion in the tender documents.

We assess all location options against parameters of the sites.

We optimize the site layout, build of facilities, infrastructure, and long-term sustainability of the site.

We ensure future growth can be naturally accommodated.

We can provide conceptual studies, FEL bridging, FEED documents, and/or technical design assurance.

Evaluation Phase

- Establish engineering consultant roles, skills, manpower and costs.
- Optimize schematic scenarios and budgets to meet building, regulatory and service needs.
- Complete HS&E risk assessment, legal compliance review and agree changes.

Benefits

We collaborate with the project team to nurture detailed understanding of client requirements.

We oversee compliance with all local jurisdictions and codes.

We evaluate fit-for-purpose adjustments to existing facilities.

We provide a clear understanding of all major component pieces of the factory build.

We create optimized solutions and cost savings options that exceed expectations and maximize return on investment (ROI).

Concept Phase

- Optimize engineering concepts, service requirements, costs and primary work packages.
- Refine HS&E risk assessment, legal compliance review and agree changes.
- Define the process manufacturing, support organization, location and space requirements.

Benefits

We develop project plans conceptually to illustrate all project elements for analysis of systems coordination, probable costs, HS&E and regulatory requirements.

We deliver risk assessments based upon technical reviews and stakeholder engagements with a focus on integration of the developing process manufacturing requirements.

Detail Phase

- Finalize detailed construction documentation and HS&E management system.
- Finalize HS&E risk assessment and agree corrective actions.
- Design the performance management system and infrastructure.
- Refine process manufacturing layouts and system requirements.
- Tender and appoint contractor.
- Design qualification.

Benefits

We prepare all HS&E, risk and performance management plans to a final state for inclusion in the tender documents.

We assist the client organization in all matters relating to the appointment of the contractor.

Verify design meets user requirements.

Implementation Phase

- Construct facility and install services.
- Implement the HS&E and performance management systems.
- Finalize process manufacturing system requirements and install changes.
- Complete final HS&E assessment agree any corrective actions.
- Execute closeout including commission building and services.

Benefits

We manage the contractor throughout the construction and installation works through to formal project hand-over.

We provide ongoing quality assurance, change management and verification of the work's compliance with all HS&E and performance management systems.

Consolidation Phase

- Complete corporate HS&E audit/review.
- Complete lessons learned.
- Audited closure of all accounts and contracts.
- Post-project support (warranty issues, training, production start-up, etc.).

Benefits

We complete a systematic closure of all client organization records upon completion of the work.

We manage all final quality controls and commissioning of the facility.

We evaluate the program's success to confirm we met our client's strategic mission, vision and policies for the project.

BMW Facility Expansion Project

We delivered value engineering and project controls, with a total project savings of \$16.7 million, more than three times our fee.



Our Services

Owner's Representative

We align our role and deliverables to the project responsibility assignment matrix, or RACI, and can support owners either as a seconded project manager or owner's representative. We prepare the RACI with a comprehensive project management or execution plan to coordinate stakeholder goals with team functionality and execution strategy.

Our resources and service capabilities allow us to align with owner programs and project approaches, whether by project type, delivery method (design-build, prime contracting, construction management as agent), or by providing oversight of general contractors or construction management at risk entities.

[Our teams can scale up or down as required during the project phasing making our services a cost-effective solution in support of the owner project team resources.](#)

Project Controls

We embed a focus on the owner's goals and objectives associated with cost, schedule and associated risk management. A strong and experienced project controls team is key to delivering a project on time and within budget. Our project controls team works with our project managers and construction field teams, who can be either field-based or remote. We are experienced with various tools including: P6, Oracle Primavera Unifier, as well as in-house and other cost management software.

[We have a proven track record that often returns savings of more than 300% on the cost of our services.](#)

Cost Estimating

Cost estimating is a core service for our business and underpins everything we do. Many of our cost estimating staff are certified by ASPE/AACEi, and we understand that an incomplete design does not lead to an incomplete estimate. Our established cost estimating process focuses on communication and stakeholder management to deliver high-quality cost estimating services. From verifying documents to understanding the specific needs and expectations of our clients, clear communication drives our success.

[Our historical data contains details from hundreds of projects across all sectors and locations. Our data contains actual contractor costs, detailed quantities from contractor reconciliations and historical unit prices.](#)

Project/Construction Management

We support clients throughout the world with the construction and management of their key assets. Our excellence in service delivery is driven by our people and backed by industry-leading project management processes based on the ISO21500 and Project Management Institute (PMI) standards.

We focus on adding real value and enhancing ROIs. From initial concept through completion and occupancy, clients rely on us to provide value added solutions, drawing on our advanced thinking, systems and standards. Through our effective project management, we control and deliver projects to meet budget and program goals, while maintaining safety, achieving quality and maximizing ROI.

Our project management delivery is centered on the PMI Project Management Body of Knowledge (PMBOK) defined project elements that are integral to a successful outcome for our clients.

Our management efforts span all phases of the project life cycle and encompass cost, scope, communication, stakeholders, schedule, quality, resources, risk, procurement, health, safety and environment and integration.

Program Management

Our holistic service offering can be packaged into a program management role. We work hand-in-hand with clients to plan for upcoming capital programs including:

- Project delivery methods
- Best practices
- Stage gate and FEL process setup
- Training
- Project management and project controls software deployments
- Bidding and engagement of design engineering and other contracts/design management
- Resource management and commercialization/master scheduling services

[Our goal is to help clients manage their capital investment program so that projects are planned, sponsored, selected and overseen for successful delivery.](#)

- Program Management
- Project Planning
 - Cost estimating
 - Risk management
 - Value management
 - Project delivery advisement
 - Procurement and contract advisory
- Strategic Facility Consulting
 - Facility condition assessment
 - Energy and sustainability
 - Waste water treatment
 - Workplace solutions
- Business Assurance
 - Business processes
- Project Management Support
 - Owner's representative
 - Stage gate/FEL planning
 - Pre-construction services
 - Bid management
 - Design management
 - Project oversight/reporting
 - Commissioning/close-out
- Construction Management
 - Construction coordination
 - Safety planning and oversight
 - Permitting support
 - Quality management
- Project Controls
 - Contract administration
 - Change order management
 - Cost management
 - Schedule management
 - Commercialization scheduling
 - Project management information systems

Project Planning/Program Management Office (PMO)

We develop an understanding of the stakeholder goals during the initial project phase. This can include working with owner PMOs supporting development of project charters, RACIs, communication plan and initial risk registers. We can identify potential resource needs, overall commercialization schedules, as well as constraints and milestones.

We build upon the initial project charter, working within the PMO to support scheduling, risk workshops and mitigation planning, advisement on BIM and software systems, advisement on delivery methods, and pre-qualification and bid management. The output results in a project execution plan enabling the owner to organize and engage with a project delivery method and team to successfully execute the project or program, including budgets, schedules, risk registers and other planning documents.

Effective PMOs achieve a consistent program and project management approach, utilizing the most effective tools and technology to deliver projects on-time and under budget. PMOs drive and support business strategy through enhanced reporting metrics and established governance.

BMW Facility Expansion Project

We delivered value engineering and project controls, with a total project savings of \$16.7 million, more than three times our fee.

Consulting Services

We are an industry-leading, integrated project and program management consultancy, providing expertise for projects across a wide range of industries.

We offer a unified approach to provide expert consulting services to the engineering and construction market, leveraging our cross-discipline and multi-sector experience.

We provide a fully integrated solution to maximize the delivery of your programs and projects.

Our consulting service is made up of four pillars to support your needs.



The vision of our consulting service group is to bring world-class project management consulting services to assist clients in the successful delivery of their portfolios, programs and projects across North America.

Construction Data Intelligence

We have proprietary, in-house construction data intelligence and cost estimating resources that enable projects to reach their maximum potential.

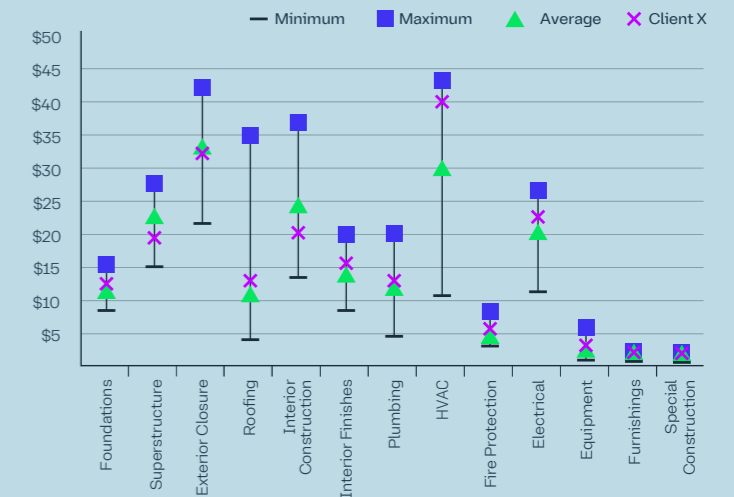
Detailed historical elemental costs are a great predictor of future overruns and opportunities. Specific comparison of similar project types allows for more intuitive planning and greater accuracy at the appropriation stage. Cost driver line items can be charted individually, allowing your team to focus on the scope where the greatest risks lie.

We can calculate contingencies based on historic information and known risks rather than assigning them an arbitrary percentage, as shown below.

Accurate application of location indices, escalation and currency exchange rates will allow your projects to reach their maximum potential.

Our historical data contains details from hundreds of projects across all sectors and locations and is rich with actual contractor costs, detailed quantity data from contractor reconciliations and actual unit price histories.

Office Direct Cost Range (\$/SF)



We can create specific reports and graphs per your needs that answer the following questions:

- Do I pay more than my competition to construct a similar facility?
- Do we over-specify project elements?
- How close are my costs to the industry averages?
- Have I adjusted costs correctly for scope, location, timing, market?
- Where are the specific risks on my project?



PROJECT EXPERIENCE

Michelin Mezquite Phase 1

León, Guanajuato

As project manager for Michelin's new 242-acre passenger-tire plant, we provided overall project management services including design, engineering review, construction and procurement management, document control, project controls and HSE management. The new industrial complex consists of 18 buildings, including mixing and tire construction.

By managing multidisciplined teams, including civil, electrical and mechanical, we were able to alleviate schedule risks for Michelin to produce its "First Tire" on schedule.



Michelin Mezquite Phase 2

Michelin is currently expanding its passenger-tire plant in Leon with 16 new buildings over an additional 60 acres of productive area. After successful delivery of Phase 1, Michelin asked us to continue providing overall project management services including design, engineering review, construction and procurement management, document control, project controls and HSE management.

This multidisciplined project includes the complex coordination of five main contractors to ensure successful on-time and on-budget delivery of phase 2 of the project.

Michelin Huizache

León, Guanajuato

We provided project management services for three buildings at the industrial complex at Michelin MX2 plant, including the mixing butyl, warehouse and locker room buildings. Our services included engineering, procurement, document control, project control, HSE and construction management of all disciplines, including civil, electrical, mechanical and special installations.

Even with scheduling challenges due to the Covid-19 pandemic and lack of other materials, we used our local resources and knowledge to mitigate any issues for successful project delivery.



Borg Warner Reman

Ramos Arizpe

Borg Warner needed to expand their production and warehouse buildings at the Ramos Arizpe facility in Mexico. We provided construction management and project control services to oversee the design coordination and project execution.

By collaborating and coordinating with Borg Warner stakeholders and contractors, we reduced schedule and cost risks for successful project completion.



Sensata Technologies

Aguascalientes

We provided procurement management consultancy services for Sensata Technologies laboratory and office space expansion project for their tire pressure monitoring systems (TPMS).

One of our first tasks was to propose a stakeholder register along with RACI chart to delineate responsibilities through planning and execution of the project. This task helped the team manage stakeholder expectations while effectively engaging them for inputs and decisions necessary for the procurement process.

We provided recommendations of supplier proposals based on economic, technical and financial capacity metrics. Our market expertise blended well with the existing client's procurement process.



GlaxoSmithKline (GSK)

Xochimilco

We led the program management office (PMO) as well as provided program and contract management services for GSK's implementation of an outsourced facilities management program.

The program implementation included a simplification to one provider for each facility management group, the development of a consistent scope of work for each selected provider, the implementation of a measurable level of service provision including global and local key performance indicators (KPIs) implementation, as well as contract negotiation support to generate significant project savings.



Bayer

Lerma, Orizaba and Tlaxcala



Good Manufacturing Process (GMP) Upgrades, Lerma

We provided contract and claim management services for the GMP upgrade project at Bayer's existing health facility in Lerma. In addition, we also led the design coordination to meet compliance of regulatory standards.

Bayer Parenteral Projects, Orizaba

We provided contract and claim management services on a parenteral expansion project at the Orizaba facility in Mexico. The expansion included the addition of two floors and a mezzanine.

Reliability Projects, Tlaxcala

We are currently providing contract and claim management services on a crop protection products expansion project at the Tlaxcala facility.

We also provided support to the Bayer Guatemala office, through quantity surveyor services to the Guatemalan pharmaceutical facility expansion project.



General Mills Bazinga and Earhart

Irapuato

Our role is to support the General Mills project management team (PMT) with onsite resources at the Irapuato facility in Mexico for construction management services including supervision of the different trades as well as HSE coordination.

Our approach to an owner's representative/management role is to serve as a collaborative project partner, while remaining focused on driving value and representing General Mills' best interests.

Our integrated project approach delivers business improvements and efficiencies that maximize value and help transform visions into reality.



Michelin, Project Agave

Queretaro

Michelin engaged us to represent their interests in the expansion of their corporate offices located in Queretaro, Mexico. During the preconstruction phase, we supported Michelin in defining the scope of work and validating that the preliminary design presented by the developer met Michelin's requirements as final user of the building, as well as following-up for required permits and licenses.

From the start of construction, we supervised the work to validate that design specifications were met. Throughout the project, we controlled the budget by following completion progress and keeping track of change orders allowance and contingency. We also monitored construction progress starting on the license release date, identifying milestones and raising flags for potential delays for the client.

The project's aggressive timeline was completed in just 46 weeks, just in time for the official opening.



Ford El Cristo Mexico World Headquarters

El Cristo

Ford Mexico wanted to move its headquarters out of Mexico City to the El Cristo area due to its access to the Metropolitan Zone of the Valley of Mexico. We provided owner's representative services for this greenfield project, including construction cost management.

By implementing cost control measures and reporting the findings to management, we saved approximately \$5 million USD on project costs.



Ford Vehicle Personalization Center

Hermosillo, Sonora

Ford needed to update and expand its Hermosillo Assembly Plant facility in Mexico to keep up with consumer demand. We provided cost estimating and business case and bidding process support to simultaneous projects, including plant additions, paving and repairs.

By leveraging our subject matter experts coupled with our holistic approach, we analyzed supplier bids, deviations and gaps to ensure compliance.



Magna

Multiple locations

We worked with the Magna facilities development team to assist with the development of site requirements for seating and lighting plants. As part of this engagement, we performed a facility condition assessment of eight manufacturing facilities in Puebla, Nuevo León and Coahuila de Zaragoza, Mexico. Through our assessment we established the condition of the building fabric, mechanical, electrical and plumbing systems.

Our primary purpose was to provide detailed reports for each facility on a system-by-system basis and also develop capital expenditure projects over the ten-year study period. The assessment consisted of approximately 2.26 million square feet of industrial properties which also included other assets such as sewage treatment works, soccer pitches and tennis courts.

The main production areas comprised of large, open plan, steel-frame structures with metal clad roofs and walls. The offices were integrated along with canteens for the employees. Each facility operates independently and produces components for various automotive original equipment manufacturers.

We were engaged to perform facility condition assessments on multiple manufacturing facilities to develop scope requirements for a capital expansion program.



Land O'Lakes

Multiple Locations



We have worked with Land O'Lakes on several projects in Mexico, including a post-project assessment of a seeds facility, and project management services for an office fit-out project. We also provided project management support to Land O'Lakes factories including new production and distribution facilities as well as upgrades and extensions to existing facilities.

In addition, we provided an assessment of project team performance on a \$6 million seed plant project. Our review focused primarily on the execution strategy, cost status, schedule status and current process alignment as well as an indication of completion costs and startup date.

We conducted an assessment of the project and provided a detailed report and recommendations for improvements.



Becton Dickinson

Cuautitlan

We provided commercial, financial and administrative support for the remodel of an existing syringe production facility. The 22,000 square-foot site was surrounded by clean production areas, requiring the construction area to be isolated at negative pressure for dust control.

On site, we provided local support to oversee construction, including engagement of subcontractors, progress payment approvals and schedule management. Since the facility was considered "gray pharma," construction for the remodel was kept isolated from production areas. Tie-ins to existing services were coordinated with the maintenance team to avoid production disruption.

Communication between the client and general contractor was key to advancing the project in time for the new equipment to be installed.



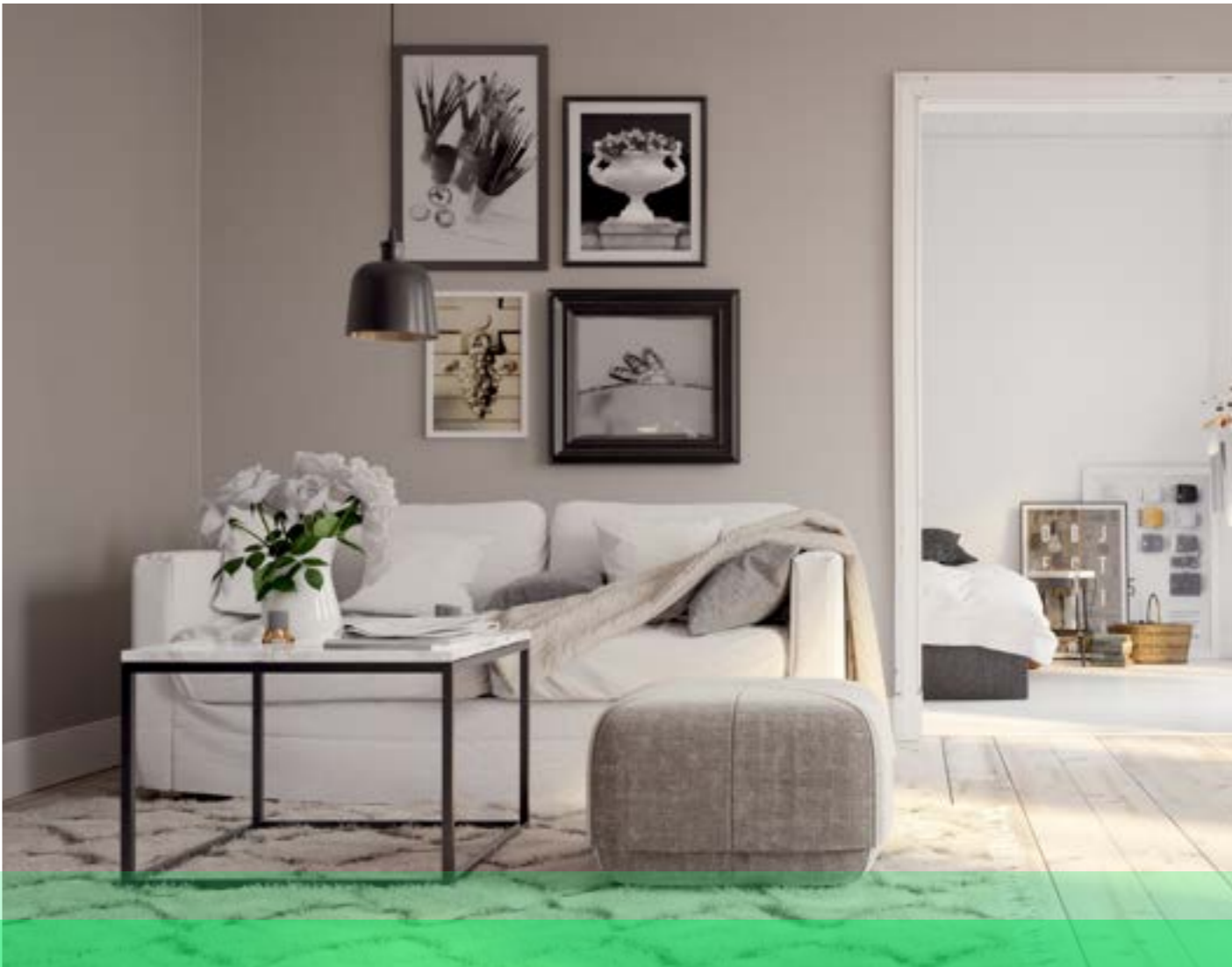
Ikea Puebla Store

Puebla, Mexico

We provided construction and HSE management services to Ikano Retail Mexico for the Ikea fit out retail store of 120,000 square feet. The store showcases over 4,000 home furnishings and accessories, along with a Swedish restaurant with capacity for 250 customers.

We tracked progress continuously by Kanban boards in all areas, reporting delays against baselines and implementing contingency plans where required.

We also monitored manpower for all contractors and coordinated our efforts to align with the owner's strategic goals.



Engineering a better future for our planet and its people.

OUR CULTURE & VALUES

What we stand for matters. Our purpose is to create a better future for our planet and its people. We create sustainable solutions that connect people, data and technology to design, deliver and operate the most complex projects.

Our values are the essence of our identity. They play a key part in the success of every project we undertake, enabling us to handle major developments and interact with various communities, businesses, governments and other stakeholders.

They guide us in the way we act, speak and work together.

Safety

We put safety at the heart of everything we do, to safeguard people, assets and the environment.

Integrity

We do the right thing, no matter what, and are accountable for our actions.

Collaboration

We work together and embrace each other's unique contribution to deliver amazing results for all.

Innovation

We redefine engineering by thinking boldly, proudly and differently.

Excellence

We are proud to do our best, achieve high standards, creating environments where all can thrive.





**READ ALL ABOUT OUR
BEYOND ENGINEERING
PERSPECTIVES**



Thoughts, opinions,
reports, data, videos,
podcasts, webinars
brought together to help
inform and enlighten.