Complete Spectrum of Service

INSPEC GROUP DELIVERS QUALITY PROJECTS WHILE WATCHING COSTS. BY BARBARA MCHATTON

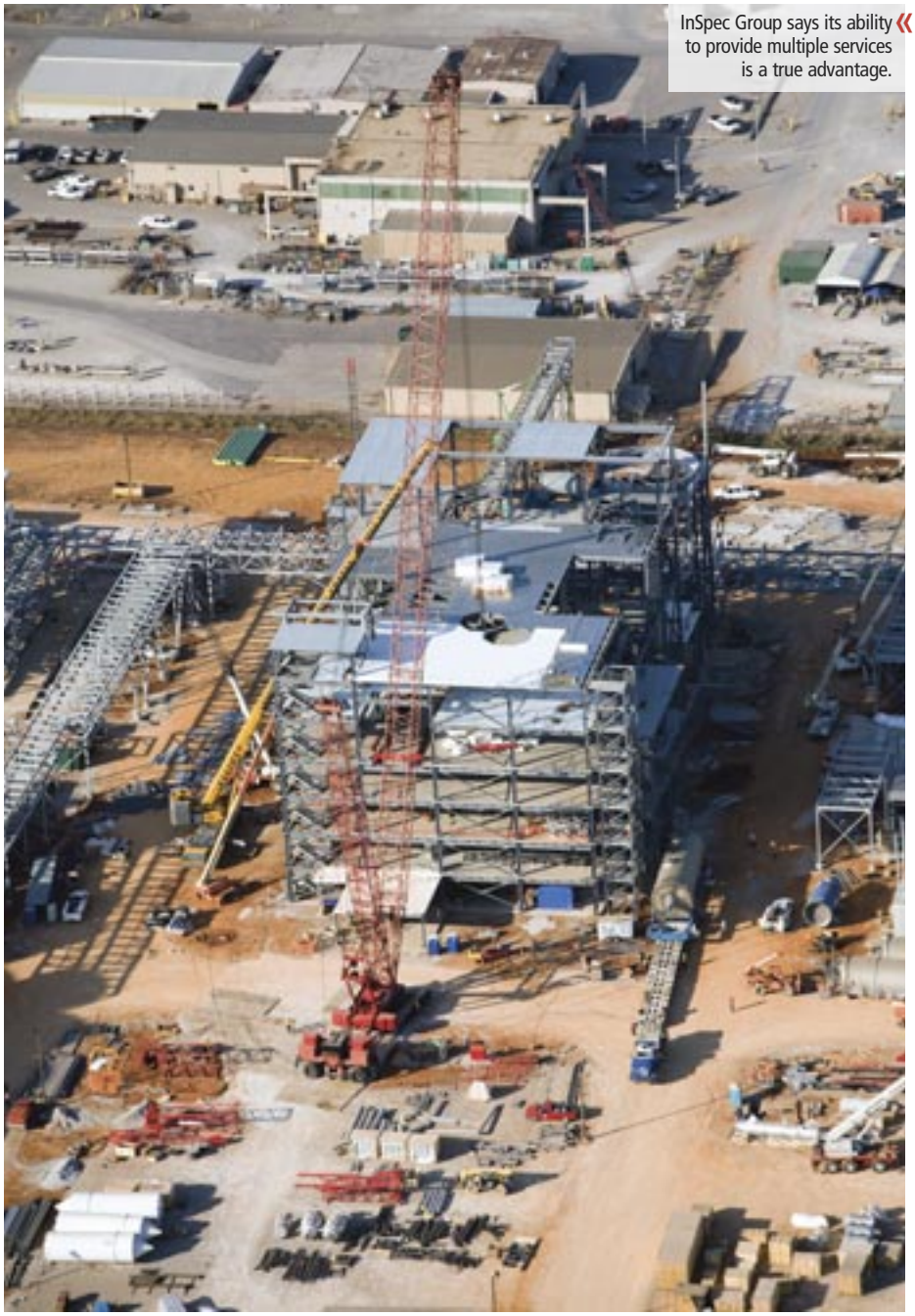
As if providing project management services for manufacturing companies across a diverse range of industries weren't enough, InSpec Group offers its clients an entire parcel of facility conception services.

CEO Taro Toyoda emphasizes that InSpec Group's uniqueness lies in the firm's ability to offer a "a full breadth of disciplines," including project planning, site selection, and facility design and engineering services, in addition to construction which includes architectural, structural, mechanical, electrical, instrumentation and control, and procurement.

Established in 2001, the company has provided its services to advanced material manufacturers, chemical plants, food processors and general manufacturing firms. InSpec Group has completed projects throughout the United States including in Portland, Ore., Atlanta and Decatur, Ala. "We can build anywhere in the U.S. from coast to coast," Toyoda says.

One of its largest projects was completed for a carbon fiber plant that produces advanced composite materials for large aircraft components. The $200 million project entailed construction management which included assisting in selecting equipment vendors, contractors, safety, scheduling, budget and site management. InSpec Group was also responsible for administering contracts, field management, inventory control, test and inspections, contract buy-out and facility start-up support. Toyoda indicates that not only was the 300,000-square-foot facility with multi-level platform and chemical vessels and equipment completed on budget to the client's specifications, but the project was delivered three months ahead of schedule.

Toyoda says using 3-D modeling was one of the tools that helped speed the project along. "On the engineering side, we designed the entire facility with 3-D modeling software to avoid any system clashes during the engineering stage, rather than after construction had begun," he explains. "[Using these systems] shortens the scheduling of field installation and minimizes change-orders.



InSpec Group says its ability to provide multiple services is a true advantage.

"We also provide our clients with the 3-D models after the facility is in operation to simplify maintenance tasks," Toyoda says.

Three-Prong Approach

Offering what Toyoda calls the company's three pivot points – engineering, procurement and construction – he notes that InSpec Group balances these three components together to provide clients with a complete spectrum of services that work together to contain costs.

"Whereas other companies offer engineering or procurement or construction, we offer a one-stop shop that combines all of these disciplines," Toyoda says. Each of these facets works in tandem to ensure each aspect of the project is considered during the design process, rather than as the project is built, which can add to the project's cost.

InSpec Group's planning services offer feasibility studies and extensive site research to enable its clients to make informed decisions regarding where to locate a new facility.

Researchers compile data such as facility layout requirements, utility demands and incentive comparisons. "In addition, we try to match the local workforce's talent that is best suited for that industry," Toyoda says."We recently selected a site for a project outside of Chapel Hill, N.C., for a food-processing company because there are several food-processing plants in the vicinity." He adds that InSpec Group also infuses money into local economies by using local subcontractors to complete a project.

"Because InSpec Group's planners, engineers and designers work together, it reduces the need for the client to consult with different firms," Toyoda says. "Customers need only to communicate with us instead of relaying information between separate architectural, engineering and construction firms." He notes that this method not only eliminates any costly surprises that may arise, but it also allows the company to provide transparency of project costs to its clients.

"Until the engineering phase of a project is completed, the budget cannot be determined," Toyoda notes. "From the beginning of a project, our design and engineering teams work together to preset the budget accordingly so there is no need for redesign."

Using value-engineering techniques enables the firm to offer lower-cost alternatives to save money. "We listen to what our customers want," Toyoda says. "Although our clients may want to include expensive features, we'll offer less-expensive alternatives to save costs." As an example, he says InSpec Group may use alternative finishes, such as less-expensive paint or carpeting.

InSpec Group

www.inspecgroup.com

- Headquarters: Portland
- Offices: Portland, Ore.; Atlanta; Alabama; and Tokyo
- Employees: 120
- Specialty: Complex industrial facility planning, engineering and construction

"We offer a one-stop shop that combines [multiple] disciplines."

–Taro Toyoda, CEO

Energy Solutions

InSpec Group seeks ways to contain operational costs, as well. Factors such as energy-efficient HVAC systems (VRVs), waste heat recovery systems and other cost-saving features are also considered in the design. "Although many companies mainly worry about the capital costs of the project, InSpec Group also determines the costs from an operational standpoint," Toyoda says. "We find that adding energy-efficient systems and recycling programs, even though they may cost more initially, can save in operational costs."

InSpec Group is also turning to alternative energy solutions as a means to conserve its clients' costs. The company oversaw a solar panel installation project at Safeco Field, home of the Seattle Mariners. The project entailed the mounting of 168 solar panels on the elevator canopy of the park's parking garage as well as the sky bridge roof that extends over Edgar Martinez Drive. The system reportedly will generate 40,000-kilowatt hours of power each year.

Toyoda says InSpec Group's vision is to plan all aspects of a project – from site selection all the way through construction – to contain engineering costs and scheduling. "We try to take the guesswork out of the entire process," he says. ◆