

# BIG NAMES. BIG PROJECTS. BIG RESULTS.

*AltairStrickland is trusted by some of the biggest names in the world.*



With planned maintenance expected to be up significantly in 2017, La Porte, Texas-based AltairStrickland, an EMCOR Industrial Services company, is in full swing. Among the country's premier authorities in process unit upgrades, revamps and turnarounds, AltairStrickland is proud to have served some of the biggest names in refineries, petrochemical plants, chemical facilities, pulp and paper plants, gas plants, power plants and ammonia plants.

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— Jeff Webber,  
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Over the past 40 years, by listening to and collaborating with clients, the company has honed its sweet spot; AltairStrickland specializes in both scheduled and unscheduled (emergency) work on fluid catalytic cracking units (FCCUs), delayed coking units (DCUs) and ammonia units. However, the company's experience doesn't stop there. AltairStrickland is experienced in *virtually all* aspects related to turnarounds, including how to work through the many issues and challenges that stem from getting turnaround clients back on line safely and quickly.

"On every turnaround, AltairStrickland is constantly looking for ways to go above and beyond for clients," said Rick Ramirez, director of sales and marketing for

AltairStrickland. "AltairStrickland uses its depth and range of experience to innovate solutions to the many challenges that arise, and the company always looks at challenges as opportunities to showcase what it has learned and put into practice over the last 40 years. Whether AltairStrickland is seeking avenues to quicker completion or simply following up with a client after the job is finished, AltairStrickland is completely committed to customer satisfaction."

Averaging some 25 turnaround projects annually, AltairStrickland is busy and productive, many times being called upon by clients to return and engage in additional work. According to Jeff Webber, AltairStrickland's president, more than 75 percent of AltairStrickland's clients have worked with the company on more than one job.

"That percentage speaks volumes," Webber said. "It shows that AltairStrickland's goal isn't to perform one project with excellence, rather to perform *all of them* with excellence. The organization strives to work in a manner that consistently shows customers just how seriously AltairStrickland approaches quality, pre-planning, safety and budgeting. When it comes time for additional project opportunities, AltairStrickland wants to be its customers' preferred contractor. AltairStrickland wants to earn the chance to work for them over and over again."

## Answering the emergency call

On a recent project, AltairStrickland had the opportunity to showcase its diverse range of turnaround construction skills. AltairStrickland's staff knew during the planning phase the upcoming turnaround would be complex and constructability would be critical. But it wasn't until an unforeseen event occurred at the refin-

ery — one that threatened to bring down the unit prior to the scheduled turnaround — that AltairStrickland's client saw just how much value AltairStrickland brought to the project.

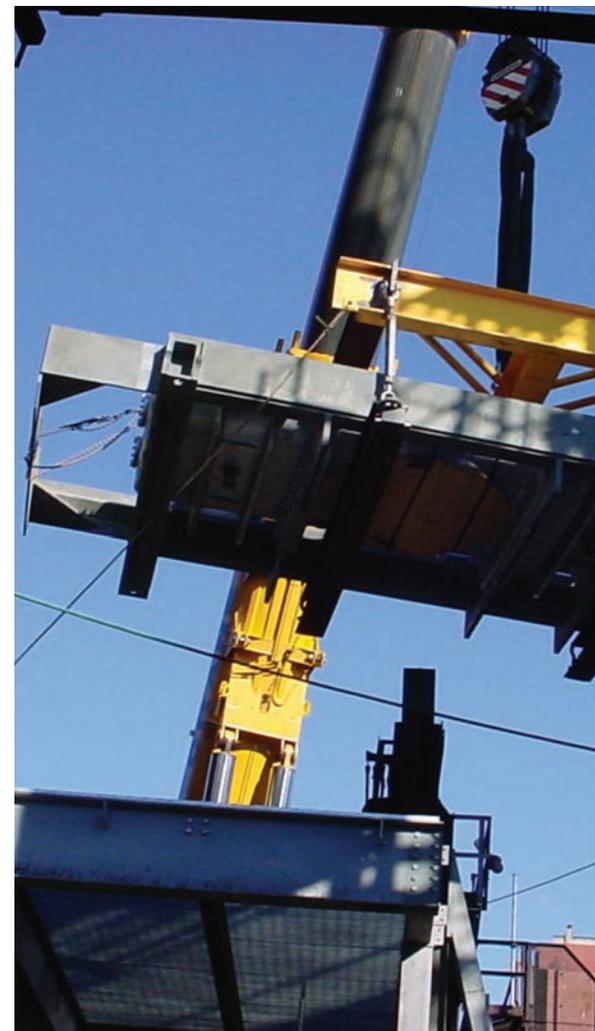
"The AltairStrickland team was in the planning phase for more than 15 months," said Ramirez, "so AltairStrickland certainly knew what it was in for. But when the client contacted the team to respond to the emergency situation, the team got a chance to show exactly how AltairStrickland performs under pressure."

According to Ramirez, the unplanned emergency event could have caused a number of additional problems for the client since all the components that were needed to address the emergency event weren't ready or still hadn't been delivered to the site.

"The team knew the stakes were high from that first phone call," Ramirez said. "But they also knew that AltairStrickland was awarded the project based on exemplary past performance on similarly complex FCCU projects. Since AltairStrickland personnel were already on-site and in the process of administering and managing workers for the upcoming planned outage," he continued, "AltairStrickland's turnaround teams were able to respond immediately — within hours, actually — to make the necessary repairs to the unit and keep the planned turnaround on schedule."

"We work hard to make this type of critical thinking and on-the-job solution development that keeps AltairStrickland at the forefront of clients' minds — and make the company one of the first phone calls a client makes when it's time for additional work," stated Webber.

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## Completing a major FCCU turnaround

After AltairStrickland had completed its required emergency work, it was time for the AltairStrickland team to do what it does best: perform critical, scheduled turnaround work.

This particular project was a major FCCU turnaround, which is not always the case on catalytic units. A major FCCU turnaround is typically completed every five to seven years in order to address wear and tear on components such as cyclones, plenums, flue gas lines, etc. As part of this project, AltairStrickland once again performed a task it specializes in: the field erection of large vessels, complete with their associated internals.

“In this project,” Ramirez said, “the customer decided to erect the fabricated components at the OEM shop to ensure proper fit-up. During shop erection, templates were generated to facilitate field fabrication. These templates, which were used later, resulted in a sizable time and resource savings when it came time to field-erect each respective vessel.”

Performing safe, quality turnaround events that meet or exceed clients’ goals is the No. 1 goal at AltairStrickland, according to Webber. Innovation plays a significant role in helping AltairStrickland to realize these goals.

“AltairStrickland has created a culture of innovation,” said Webber, “one where everyone gets a voice. AltairStrickland team members are encouraged to think outside the box and create solutions to challenges that arise. It’s this type of innovative thinking that has clients repeatedly bringing AltairStrickland back.”

A good example of this innovative thinking came during AltairStrickland’s recent scheduled turnaround when it needed to replace two large side-by-side heat exchangers that measured 50 feet long and weighed approximately 200,000 pounds. The heat exchangers needed to be pulled whole, which added a degree of difficulty to the task, and the exchangers were located in a small, confined area preventing the use of an overhead structure for rigging purposes.

Ultimately, AltairStrickland was able to complete the difficult task by designing and utilizing a track-and-jacking system. Each heat exchanger had to be raised high enough to clear its respective anchor bolts, at which time the first heat exchanger needed to be moved laterally in order to make room for the extraction of the second heat exchanger. This sequence was repeated several times to account for the needed clearances. The jack-and-tracking system solution allowed for the complex heat exchanger work to be completed safely, efficiently and per the tight parameters of the turnaround schedule.

Another challenge AltairStrickland needed to address came during the design of the vessel’s lifting lugs. Ramirez said designing lifting attachments is a fairly



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routine activity, but this time the task posed some serious complications.

“The vessel head was refractory-lined, so very specific design considerations needed to be met during each of the lifting activities,” he explained. “The challenge AltairStrickland’s crew faced was trying to maintain minimal deflection — less than 1/16 of an inch — on the vessel’s base metal during the lift so the refractory was not damaged. With the use of finite element analysis tools, we were able to design lifting attachments for the 1-million-pound vessel, meeting all of the criteria required. It was a huge success.”

Rising to these types of turnaround challenges has helped AltairStrickland become a recognized industry name in turnaround construction. According to Webber, by continuing its long tradition of customer satisfaction and innovative problem solving, AltairStrickland looks forward to the future with confidence.

“By applying the same specialized, dedicated focus on planning, safety and quality to everything the company does, AltairStrickland plans to continue helping clients manage turnarounds from concept to completion,” he said.

**For more information, visit [www.altairstrickland.com](http://www.altairstrickland.com) or call (281) 478-6200. ●**

