

NEWS, ANALYSIS, PROJECTS & BUSINESS INTELLIGENCE FOR THE CONSTRUCTION INDUSTRY

Total number of pages 66

VOLUME 10 • ISSUE 06

FEBRUARY 2019 • MUMBAI • ₹50

CONSTRUCTION WEEK

PUBLISHED BY ITP MEDIA (INDIA)

WWW.CONSTRUCTIONWEEKONLINE.IN

TOWER CRANES ■

ROADS & HIGHWAYS ■

HARD ACT TO FOLLOW

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Corrigendum: In the January issue, the advertorial on Kohler inadvertently misspelt Puneet Garg. The error is regretted.

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HARD ACT TO FOLLOW

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BY JAYASHREE KINI MENDES

THERE'S A SENSE OF ASSURANCE THAT ANY CONTRACT GIVEN TO AFCONS WILL BE DELIVERED ON TIME WITH FULL SATISFACTION, A FACT THAT IS ACKNOWLEDGED BY THE INDUSTRY TOO.



PHOTOGRAPH: OLUMIK KAP

Infrastructure companies love milestones. Not because they occur along the roads and highways they build, but as a way to measure their successes. Any infrastructure company worth its salt cannot wait to get their hands dirty executing complex projects. The more challenging the project, the better to put its skills to the test.

S Paramasivan, MD, Afcons Infrastructure, says the story is no different with them. "We believe our work speaks for us. While we excel at engineering, within the industry we are better known as a technology company. There's a sense of assurance that any contract given to Afcons will be delivered on time with full satisfaction, a fact that is acknowledged by

the industry too. In fact, we can say with pride that Afcons is probably the one and only company who can profess delivery and operational excellence in all infrastructure segments where we operate."

It is not hubris. There's a genuine and serious sense of satisfaction underneath the affability. Paramasivan says that the company, since 1959, has worked diligently and strenuously to become a reliable construction and infrastructure company across diversified segments. "Little wonder that globally we are in many cases preferred vendors, and, in 2018, were ranked 10th amongst top marine companies in the world according to latest ENR (Engineering News Record), USA, survey. In bridges sector, we are ranked 22nd in the world and there's no other Indian contender in the top 25 in these two segments," he adds.

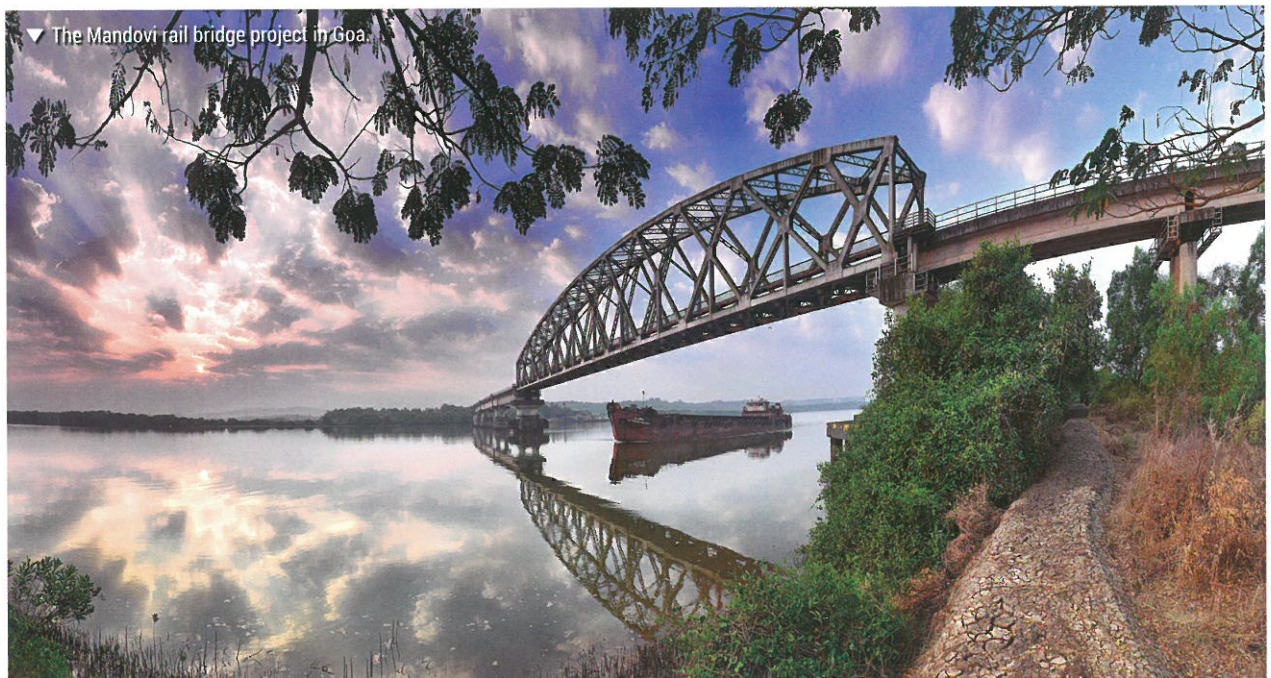
IN NEED OF HEROES

There are few infrastructure projects that Afcons might not

THE SUCCESS OF ANY PROJECT
DEPENDS ON THE RIGHT METHOD OF
CONSTRUCTION. OUR DESIGN ENGINEERS
ARE WELL-EQUIPPED TO HANDLE BOTH
DESIGN AND METHODS.



▲ Jammu Udhampur highway is the fastest hill road project in NHAI's history.



▼ The Mandovi rail bridge project in Goa.



▲ Afcons' maiden project in Guinea where it set a record of carrying out the company's heaviest lifts while putting together the stacker reclaimer.



▲ New Owendo International Port, Gabon, is one of West Africa's fastest port projects.

have fulfilled. The company has executed remarkable feats of engineering and construction across marine works, roads & highways, elevated and underground metro, bridges (also flyovers and viaducts), LNG tanks, oil & gas, tunnels & hydro works, besides general civil engineering and industrial structures. Technology plays a vital role in getting the project first time right. It's this prowess that enables the company to take on complex projects and "then spend substantial time on simplifying it to know it can be done", in the words of Paramasivan.

But there are certain rules to abide by first. Any EPC contract can be accomplished when the company integrates design and construction seamlessly. Success of a project is measured when time, cost

and quality are adhered to and met with. The Afconians have an intrepid sense of adventure to carry out construction engineering with strong in-house resources. The idea is to ensure that designs are unique and compatible with the company's resources. Considering that it plays in the global arena, the team is aware that while complex projects are the order of the day, it is core engineering skills that will give them an edge over others. And not just plain engineering and construction. "The success of any project also depends on choosing the right method of construction. We have worked out the math where design engineers are also equipped to handle both design and methods. Designs are drawn to

make them construction friendly, while keeping a sharp eye on quickness and quality," says Paramasivan. State-of-the-art software helps enhance the productivity and quality of the engineering output. Moreover, value engineering, as an organised approach in identifying unnecessary costs in design and construction, has been Afcons strength that has held them in good stead.

Most EPC projects are fraught with risks. Ask Paramasivan about this appetite for risk tolerance, and he says, "We have a strong risk management framework and a three-tier one at that. Early on, we first set a threshold limit, below which we will not bid. We have similar threshold limits for each segment and we have laid out stipulations before bidding such as unfavourable contract conditions or clients, to name a couple. The third layer is a risk committee formed for different segments, which means the idea to bid must undergo a risk committee process."

Afcons has empowered its people to think of out-performing even the simplest tasks. But simple is not what we are talking about here. For this reason, it relies heavily on the decision of the risk committee to suggest the bidding price, and in certain cases takes it up with the client if conditions are not encouraging. "It's the decision of the three-tier framework that makes us believe we are reasonably better off in terms of selection of projects and process," adds Paramasivan. Caution is exercised at every stage because engineering and infrastructure companies cannot afford to jeopardise its reputation and lose money. In spite of such precautions, Paramasivan says that there have been times when the company has made a wrong call, but nevertheless



▲ Afcons built India's longest jetty and largest container terminal in just 24 months at Jawaharlal Nehru Port.



▲ The Vallarpadam Rail Bridge, Kerala, is India's longest railway bridge.



▲ The HRD Process Platform, Mumbai High, used float over methodology on Indian waters for the first time.



▲ The Sohar Bulk Jetty in Oman is one of the world's deepest ports and is used to import iron ore.

went with the project and completed it.

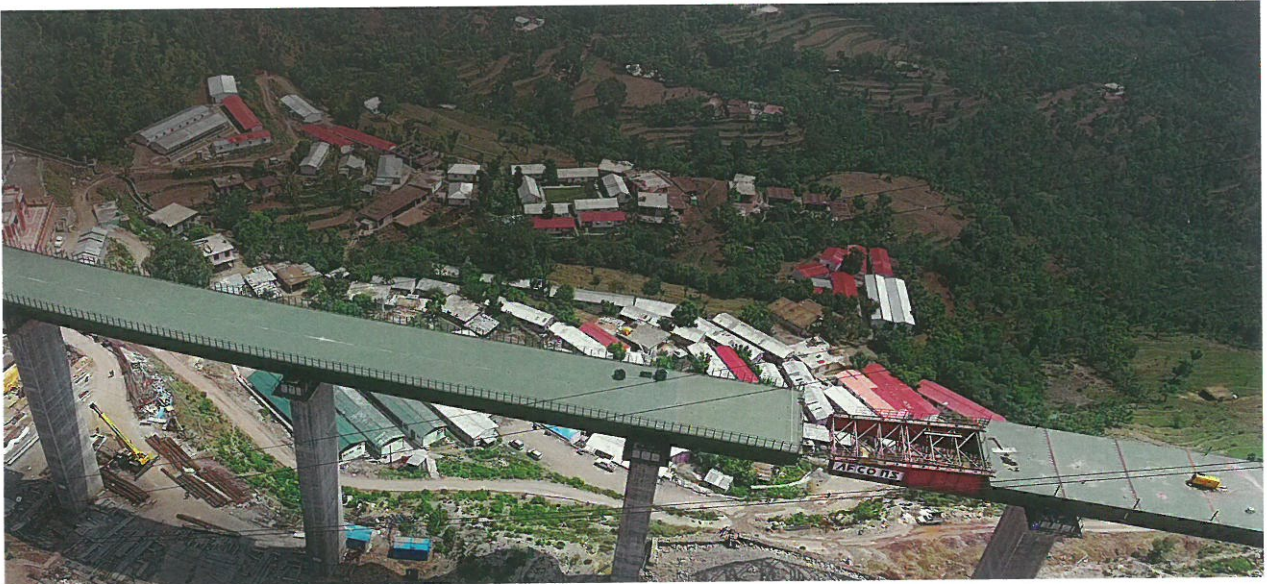
It is probably the reason the company has placed a strong sense of responsibility on every Afconian for a particular task. "We know that one person cannot deliver everything, so we adopt a collaborative approach. For example, executive director (technical) Giridhar Rajagopalan's word is final on adoption of technology for a project, while director (CPE) Manivannan oversees equipment, and so on. Each one plays a top management role with positions of responsibility and as MD my job is to coordinate with them, drive volumes and profitability," adds Paramasivan.

THE ALPHABET OF SUCCESS

In May last year, the company organised its Afcons Strategy Conclave, which serves as a platform for the team to share its strategic goals with the SP Group and the leadership team of

Afcons. It made a note of some of the notable achievements of the previous year, which included: daylighting of world's longest motorable tunnel at 13,000 feet (Rohtang Tunnel); fastest completion of a multi-facility port in West Africa (New Owendo International Terminal, Gabon); successful completion of India's longest jetty and largest container terminal (BMCT, Mumbai); record 1-plus lakh cum concreting per month for four consecutive months (Annaram Barrage); entered new market (Mozambique); and entered new segments (earthen dam and underground powerhouse). The company has also set its sights to become a \$2 billion company by 2021-22! At the core of strategy is to become a 'Knowledge enterprise', which entails organisation building, managing large overseas operations, and procuring orders worth Rs 15,000 crore every year. "The core of our strategy is to become a Knowledge enterprise. We have made significant investment in this regard, and, we have already started yielding results. Afcons is also the recipient of MAKE (Most Admired Knowledge Enterprise) award for two consecutive years in all three categories (India, Asia and Global). In 2016, our co-recipient of the MAKE awards was Alphabet, Airbus (France) and NASA. This reflects our level of achievement in managing our knowledge," says Paramasivan.

Were it not for several remarkable feats of civil engineering, projects like India's longest rail bridge in Kerala, world's tallest single-arch railway bridge in Jammu & Kashmir, deepest port at Sohar-Oman for handling bulk carriers, and several such projects would not have seen the light of day. Record time completion is also another trait the company has developed. Notable achievements that add a feather in its cap is being the first Indian company to construct an underground Metro station and tunnelling works without a foreign JV; install an offshore process platform using float-



▲ The Chenab Rail Bridge in J&K is the world's highest rail bridge standing at 359m and the first blast-resistant bridge in India.



▲ Afcons built the Chennai Central Metro station, one of the largest underground Metro stations in Asia.

over technology, on time; create record for fastest completion of a hill-road project (Jammu-Udhampur highway) in NHAI's history; build India's longest jetty and largest container terminal in just two years; and complete India's first underwater Metro tunnels in just 67 days.

WHAT LIES BENEATH

In all this, Paramasivan makes it a point to mention that minimising risks also involves the environment and safety of its people. "Classrooms are held to educate the project management team on primers such as executing a delicate aspect of construction. This could involve both environment and people safety. Urban infrastructure projects bring with them their own kinds of problems as compared to projects in remote locations. For instance, tunnelling under Hooghly river for the Kolkata East-West Metro meant passing several dilapidated buildings, but we ensured minimal impact on the surface," he adds.

But to achieve all this means equipping itself with the best and recent equipment. "We are the only company in the

world to own seven jack-up barges, which is a significant asset base for us. We also have something called the Sahyadri Barge that is designed and fabricated in-house and has a lifting capacity of 1,200 tonnes single lift. With our expertise in marine and underground Metro, we also own seven tunnel boring machines (TBMs). With an order book of roughly Rs 35,000 crore, about one-third of the projects are ongoing overseas," says Paramasivan with a smile.

Considering that mobilisation of resources is a pertinent part in an overseas project or even a complex one on home ground, not to forget the tight deadline challenges, Afcons has time and again preferred to hire local talent so as to create employment. It also prefers to source global manpower when executing intricate projects in India. At one point of time when the Chennai Metro was under construction, Afcons had about 50 nationalities working there and all experts in their field. Explaining the difference between working on Indian soil and overseas, Paramasivan says, "The difference between other Indian contractors approaching the global market and Afcons is in the execution philosophy. Overseas environment can be harsh and punishing; delays are imminent, but that is no reason for us to delay the project. Indian companies have not adopted to that. Typically, India offers extensions to the contractor if the delays are from the client's side. It's with this mindset that Indian companies venture overseas only to find that such rules do not prevail."

Any last words? "I would say Afcons is moving from an EPC company into a technological one and further as a knowledge enterprise. We are strongly focussed on innovation and technology. On an average, we have grown at a CAGR of 18-20% and that speaks for itself, he says.

But Paramasivan is not resting on his laurels. There are milestones to be crossed and the race has to be run. In spirit, he says: Once an Afconian, always an Afconian. **ENR**