

Afcons aims to set new benchmarks



Afcons Infrastructure's in-house development of technology creates higher platform for project delivery and market recognition, explains V. Manivannan, Executive Vice President, Construction Plant and Equipment, Afcons Infrastructure

Besides talented workers and well-trained engineers, an organisation's equipment set-up plays a vital role in enhancing itself in the construction industry. Most successful organisations, today, have started building equipment (customisation), tools and methods to suit customer needs and adapt to changing market situations.

From the turn of the century, Afcons has emerged as a global EPC player, developing its strategic equipment base. Till date, the company has invested more than \$200

million to develop and procure various strategic assets. It owns a state-of-the-art workshop facility in Nagpur which undertakes building, maintaining assets as well as training and developing the workforce.

Development of indigenous equipment like mid-range self-elevating platforms "Maharaja and Maharani" and high-capacity self-elevating platform "Samrat" has boosted the company in executing complex EPC marine projects. The introduction of predictive maintenance processes has

further reduced equipment downtime and improved availability and performance levels.

Afcons Infrastructure's practice of studying micro-detailing in project execution has helped in developing and adopting new ideas and innovations. In fact, some of the innovations have put the company ahead of its competitors, e.g. linear concrete pumping for a 2.1-km stretch in Vallarpadam Rail Bridge, Kochi is a national record. Vallarpadam Rail Bridge is the longest rail bridge in India. At Afcons, embracing technology is an ongoing process. Our aim is to set new benchmarks, always.

Here are few samples of the company's strategic assets:

Marine self-elevating platforms and barges

Afcons owns seven self-elevating platforms ranging from 200-750 tonnes and nine marine barges ranging from 200-1,200 tonnes. It is by far the only Indian company to possess such a large fleet of marine construction equipment.

AF SEP Samrat

The induction of this self-elevating platform was an announcement of Afcons Infrastructure's entry into the global marine industry as a reformed EPC player. It added muscle to the company's already vast marine equipment to compete with global leaders. The vessel is certified for use in international waters and capable of undertaking complex marine facilities construction jobs.





Sahyadri Barge

This marine barge has a single lift capacity of 1,200 tonnes and has been designed and fabricated in-house. No other Indian company owns such a barge.

AF SEP Maharaja and Maharani

These Afcons-designed platforms have mid-capacity and semi-flexible hull. The unique design of modular pontoon hull coupled with rigid connections helps to take advantage of moving the platform among various continents swiftly. This platform has already been moved among India, Mauritius and Oman.

High-capacity cranes

The company possesses thirty four 20-350/600 tonne crawler cranes. It has also 89 telescopic RT and AT cranes ranging from 10-200 tonnes. Afcons was listed amongst the top 100 'Largest Crane Owning Companies' in the world by the International Cranes and Specialised Transport magazine in 2012, 2011 and 2010.

Earth pressure balance tunnel boring machine (TBM)

Afcons has taken the traditional EPB tunnelling machines to new levels of technology, reliability and production. Each EPB tunnel boring machine is specifically designed according to project conditions from soft clay to gravel to mixed ground with rock. The TBMs have unique design features that optimise them for the geology. The company has seven TBMs in total. Afcons has already set a national record for tunnelling.

Hydro mill (combination of Bauer BC40 trench cutter and Bauer MC64 foundation crane)

With the help of this equipment, the company has achieved higher production in rock strata up to strength of 130 MN per sq. metre in the Chennai metro rail project. It provides accuracy, reliability and environment compatibility during project execution. ■

