



INSIGHT

AFCONS

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Shapoorji Pallonji
Built to last... since 1865

CUTTING-EDGE TECHNOLOGY

Tunnel under construction for the Mumbai-Ahmedabad High Speed Rail (HSR) C-2 project in Mumbai. Seven kilometres of this 21-Km-long tunnel will be under the sea and will be the first of its kind in the country.

A strong foundation for the future

Dear Afconians,

We are on the verge of taking a significant leap forward, having meticulously laid the groundwork for the next phase of our growth. And I am filled with immense pride and optimism for what lies ahead. In the coming months, you will witness transformative changes that will shape a brighter future for our organisation.

Our strategic initiatives are designed to unlock new growth opportunities. These steps will not only strengthen our operational base but also enhance our capability to deliver complex and marquee projects. We are committed to our strategic vision of sustainable and profitable growth. The management team is dedicated to guiding this expansion with a clear and focused approach, emphasizing long-term success. Our strategy will involve strengthening our project management processes, leveraging cutting-edge technology, and maintaining a strong focus on safety and quality.

This year has already begun on a positive note, particularly in terms of order procurement. We have secured several key projects and are currently L1 on a significant number of other projects across our business units. We anticipate a substantial boost in our pending order book in the coming financial year, further solidifying our position in the market.



**KRISHNAMURTHY
SUBRAMANIAN**

The opportunities ahead are vast, filled with the potential to drive Afcons to new heights. With our dedicated team and a clear vision, I have no doubt that we will achieve new milestones and continue our success story.

Let us ensure that Afcons remains a leader in our industry for years to come.

A green alliance in Maldives

To celebrate the World Environment Day on June 5, 2024, Afconians in Greater Male Connectivity Project, in Maldives, organised a cleaning event, inaugurated by honourable Deputy Minister Mr Hassan Wissal from the Ministry of Construction and Infrastructure, Maldives. The Ministry's technical team actively participated alongside the Afcons team. Together, we reaffirmed our commitment to environmental stewardship and community engagement.



Train crosses Chenab Bridge

In a first for the Chenab Railway Bridge, a train successfully crossed the world's highest single-arch bridge as part of the first train trial run between Sangaldan and Reasi. The significant milestone was achieved on June 20, 2024, taking the Udhampur-Srinagar-Baramulla Railway Link (USBRL) project a step closer to reality. As the train entered Reasi Station area, at the end of the trial run, it was met with jubilation from locals and officials alike. The USBRL project, including the Chenab Bridge, is set to revolutionise rail connectivity in Jammu & Kashmir, and give the people of the region access to the farthest corners of India.



Jamrani Dam project deal signed



Contract for the Jamrani Dam Project in Nainital, Uttarakhand, was signed between the Uttarakhand Project Development and Construction Corporation (UPDCC) and Afcons on June 27, 2024. Shri Prashant Vishnoi, General Manager, UPDCC, and Mr Satish Paretkar, Director, BU Hydro & Underground Works, signed the contract agreement in PIU Jamrani, Haldwani, Nainital. The Jamrani dam, on completion, will be among the top five highest concrete gravity dams in India.

EDITORIAL

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CUTTING-EDGE TECHNOLOGY

Have you ever wondered how railway or metro tunnels are constructed under roads, rivers, seas, or mountains? Have you ever thought about the large, cylindrical Tunnel Boring Machines (TBMs), that often weigh thousands of tons, and how they bore through various complex

geological formations? Have you imagined how the gigantic rotating cutting wheels at the front of the TBMs cut through underground surfaces with unbelievable force? While all this may seem like mind-boggling feats, the reality is that highly-skilled engineers around the world regularly command these massive

machines to create intricate underground tunnels for transport and utilities.

TBM tunnelling is exceptionally challenging because it involves dealing with the unknown, challenging, and varying earth's sub surface, where risks are abundant. The process not only involves boring through various types



V Manivannan,
Director of
Construction Plant
and Equipment (CPE),

of geological formations but also simultaneously installing the tunnel lining to ensure stability and safety. The complexities arise from factors such as ground conditions, tunnel alignment, urban settlements, and environmental considerations, all of which must be meticulously managed.

Afcons has consistently taken on some of the most challenging TBM tunnel construction projects in India. The company's commitment to advanced engineering has earned it a reputation for successfully completing complex metro tunnelling projects on time or ahead of schedule. According to Mr V Manivannan, Director of Construction Plant and Equipment (CPE), the efficient and effective selection of technology is crucial for underground construction success. Excerpts from an interview...

How does \$450 million worth of strategic assets help Afcons and what is the segment-wise breakup?

Strategic equipment base not only helps in winning projects but also helps in completing projects on time or ahead of schedule. Among all infrastructure companies in India, we are leaders in Marine and Metro equipment ownership. At present, we own 11 barges and 8 large-capacity jack-ups, which is amongst India's largest. In Urban Infrastructure, we own 16 Tunnel Boring Machines (TBMs) at present, which are amongst largest in India. These two Business Units (BUs) have almost 70% of our strategic equipment base.

What are the various kinds of TBMs owned and used by Afcons and how are they brought and assembled at site?

We believe that choosing

the right technology is fundamental to overcoming the challenges of TBM tunnelling. Our approach is to thoroughly evaluate and select the most efficient and effective equipment for each project. This not only ensures that we meet our deadlines but also enhances the overall quality and safety of our construction processes.

For our various underground tunnel projects, we have utilised Earth Pressure Balance (EPB), Slurry, and Open TBMs. The delivery process of a TBM to the job site involves around 20 trailers. Upon arrival, the TBM is lowered to the shaft bottom in a semi-assembled form using deployed gantry cranes installed at the pit and other truck or crawler cranes, depending on the dimensions and weight of the components.

It typically takes seven to ten months for the TBM to be delivered from the factory. After customs clearance and transportation to the job site, assembly takes about four to eight weeks, followed by nearly another month for testing all sub-systems and final commissioning. Only then is the TBM ready to commence boring.

How does Afcons enjoy a leadership position in the Metro segment?

We have always accepted the challenge of undertaking the first of any demanding tunnel construction projects in India. We were among the first to successfully construct metro tunnels while many others struggled to enter this segment.

We are the only Indian company to lead the way in constructing a semi high-speed tunnel for the NCRTC. We were pioneers in building the country's first underwater metro facility in Kolkata. At present, we are executing a 21-km-long tunnel out of which 7 km will be under the sea for the



Mumbai-Ahmedabad High-Speed Rail (HSR) C-2 project in Mumbai.

Our expertise spans a wide range of geological conditions. We have worked through the hardest granite with a strength of 300 MPa in Bangalore, the soft and sandy clay of Kanpur Metro, and the mixed geology of Delhi Metro. Despite these challenges, we have consistently completed these complex projects on time or ahead of schedule, achieving full client satisfaction.

What kind of TBMs will be used for the HSR C-2 project? In terms of size and capacity, will they be any different?

We will deploy Slurry TBMs to be supplied by Herrenknecht. Their excavation diameter is 13.6m. These TBMs will have all the safety features, including probe drill and will ensure steady progress.

Will the experience of underwater tunnelling at Kolkata aid in the undersea tunnelling in HSR C-2 project?

The East-West Metro, in Kolkata, taught us a lot (tunnel below 32 m from ground level). It gave us hands-on experience of handling challenges coming from unforeseen circumstances. Since the tunnelling had to be done under highly-congested areas, century-old and dilapidated buildings, railway yards, flyovers, busy roads, and, most importantly, under the mighty Hooghly

river, we always had to take preemptive mitigation measures against any kind of settlement arising due to the TBM drive in most adverse hydrogeological conditions.

Before the TBM went under the Hooghly river, various scenarios were considered for developing the under-river tunnelling protocol. It included careful consideration of tunnel flooding, leakage scenarios, geology, unforeseen events, non-stop boring, and having a self-sufficient crew. We virtually transformed our TBMs into a submarine by considering all possible leakage and water ingress scenarios, drawing from previous tunnel flooding cases globally. We also implemented contingency measures to prevent leaks and flash flooding, ensuring the safety and success of the project.

The knowledge gained in Kolkata has prepared us well for the challenges of HSR C-2 tunnelling project.

Could you mention some of the most challenging metro tunnelling works executed by Afcons?

Every project is unique and different in nature. Each project has its own significance and challenges. However, top of the mind, some projects stand out for their various complexities. They are:

Kolkata Metro: Under-river tunnelling and construction through silty clay.

Ahmedabad Metro: Geology was very complex and mixed with very sharp curves and diversion of utilities under the existing old construction.

Chennai Metro: Boring in very poor geology with mixed rock and sand.

RTTS, Delhi Metro Tunnel: Tunnelling done in nearly flowing geology and under old buildings.

HONOURING LONG-SERVING EMPLOYEES

Continuing our proud tradition, several Afconians from across the organisation and its diverse verticals were recently honoured with Long Service Awards. These awards were presented to our loyal and dedicated employees by SP Group Chairman Mr Shapoor Mistry in presence of Afcons Executive Vice Chairman Mr Krishnamurthy Subramanian, and Managing Director Mr S Paramasivan. The Long Service Awards have become a hallmark of our commitment to recognising and celebrating our people, reinforcing Afcons as a truly great place to work.



Basayya Madivalayya Hiremath

Sameer Dalvi

Linganna Saibanna Naikodi

20 YEARS

- [Arun Deore](#)
- [Ravichandran](#)
- [Jai Kumar Yadav](#)
- [Sushil T Jawalekar](#)
- [Subhash R Gite](#)
- [Tushar Kanti Deb](#)
- [Sharad Bajpai](#)
- [Vishwanath Savanur](#)
- [Channaveerappa S Shetty](#)
- [Senthil Kumar V](#)
- [Hanisha Kumar Komath](#)
- [Sunil Kumar Achary](#)
- [K Eswara Moorthy](#)
- [MV V S Srinivas](#)

15 YEARS

- [Giridhar Rajagopalan](#)
- [Gunjan Goel](#)
- [Susant Kumar Senapati](#)
- [Nelson A Fernandes](#)
- [Benjamin Jeyakumar](#)
- [Amey Ramchandra Adsule](#)
- [Sarat Kumar Raju](#)
- [Santosh G Narvekar](#)
- [Mukesh Madhukar Yeole](#)
- [Bharat S Salunkhe](#)
- [Sarita Sameer Joshi](#)
- [Prashant Bhaskar Thorat](#)
- [Amit N Malaye](#)
- [Prasad V Kaskar](#)
- [Yogesh D Utekar](#)
- [Amitej Singh](#)
- [Ravi Kumar Chandran](#)

10 YEARS

- [Amar Abrar Ahmad](#)
- [Nilesh Krishna Patil](#)
- [Sanjay Ramchandra Shirdhankar](#)
- [Shrikant Gupta](#)
- [Sadanand Subhash Modak](#)
- [Kaviyarasu](#)
- [Vikas Suresh Kale](#)
- [S K Mohanasundaram](#)
- [Samir Ramdas Suryawanshi](#)
- [Utkarsha Subhash Dhabe](#)
- [Vikash Khare](#)
- [Saurabh Patel](#)
- [Hitesh Kumar Singh](#)
- [Bhushan Ashok Deshmukh](#)

CII India-Africa Conclave 2024

The 19th CII India-Africa Conclave was held in New Delhi, on August 20-22, 2024. This year's edition focused on Africa's growth and the role of India-Africa partnership in regional and global value chains integration. Besides the regular discussion around bilateral, trilateral, and regional associations, the Conclave also focused on key areas of partnership and emerging opportunities in Agriculture Food Processing, Defence, Digital Partnership, Financial Partnership, Healthcare Pharmaceuticals, Infrastructure, Power and Energy, Quality Ecosystem, Skill Capacity Development, and others. This year, the Conclave also introduced the



option of product launches during the event to reflect upon the AAA approach - Affordable, Adaptable, and Appropriate - of Indian business towards Africa. The regular business conferences, exhibitions, and B2B meetings were conducted as usual.

Mr Shambhu Singh, VP & Head, Water Segment Business Unit, Afcons, was part of the Gambia country session which was chaired by H.E. Muhammad B.S. Jallow, Vice President, Republic of The Gambia, in the presence of other esteemed guests such as H.E. Nani Juwara, Minister of Petroleum and Energy, H.E. Ebrima Sillah, Minister for Infrastructure and Transport Works, H.E. Musa S. Drammeh, Minister of Fisheries and Water Resources, and, H.E. Abdou Jobe, Minister for Tourism and Culture, all from Republic of The Gambia. Speaking on the occasion, Mr Singh elaborated on the contribution of SP Group and Afcons in Gambia's overall infrastructure development. He also said that Afcons is actively involved in various water projects across Africa, including Gambia, and how these projects have significantly uplifted communities and socio-economic landscape. He stressed on the fact that as an EPC contractor, Afcons is ready to partner with Gambia across various sectors including Water, Port, Roads, Railways etc.

The Conclave not only helps in increasing the outreach of information on Indian enterprise in various sectors in Africa, but it also addresses specific opportunities by increasing interaction between the Indian Industry and African countries.

Tree plantation for greener future

Afconians across India celebrated the annual tree-planting festival in July by conducting plantation drives at various sites in collaboration with the government agencies. The tree plantation drives were organised at various project sites such as MVS Water Project in Jabalpur, Maharashtra Samruddhi Expressway PKG-14, and Agra UG Metro Project. Glimpses from some projects.





394m adit spurs HSR C-2 project

The Mumbai-Ahmedabad High Speed Rail C-2 Project achieved a significant milestone with the completion of a 394-metre-long Additionally Driven Intermediate Tunnel (ADIT), at Ghansoli, in May

2024. The excavation work for the 26-metre-deep inclined ADIT, measuring 11m in width and 6.4m in height, was completed in less than six months.



Breakthrough for TBM Vidyarthi

The Kanpur UG Metro project celebrated a milestone on June 4, 2024, when TBM Vidyarthi achieved its first breakthrough. Present at the event were Mr Rishi Gangwar, PD Kanpur, Uttar Pradesh Metro Rail Corporation, along with GC and Afcons team members. The

TBM began its journey from the Kanpur Central Station launching shaft on December 25, 2023, tunneling 1263 m, including 842 rings, to the Naya Ganj Retrieval shaft.

A perfect 100!

The students of Matoshree Yamunabai Limaye Adivasi Ashramshala, Padsare, Raigad, have achieved an incredible feat. All 32 students (12 girls, 20 boys) from the Tribal Ashramshala passed the SSC (Class 10) batch of 2024 with a 100%

pass rate. Among them, 8 students (5 girls, 3 boys) secured first-class distinctions, 18 achieved second-class honours, and the remaining 6 passed their exams. Additionally, the school received the third prize from the Maharashtra State Government under the 'Mazhi Shala, Sundar Shala' scheme, recognising academic excellence.



GOLD MEDAL GLORY

Mr Praveen Kumar G, a Management Trainee Officer at MVS Jabalpur project, achieved an impressive All India Rank of 28 in the CMA Final exam

held by The Institute of Cost Accountants of India (ICMAI). He was bestowed with a Gold Medal by the ICMAI President at a ceremony in Kolkata on May 23, 2024. This year, only six percent of students passed this challenging exam. Joining Afcons in January 2024, Mr Praveen Kumar G has made us proud with this milestone.



AWARDS & APPRECIATIONS

HSE recognition for ten Afconians

Ten Afconians from different sites have been recognised with special appreciation certificates for their effective participation in reporting maximum HSE observations. Five each were recognised from both HSE and non-HSE departments. These observations were recorded between January and March 2024. The certificates, themed 'Ownership in Safety', were issued by Managing Director Mr S Paramasivan.



Best Sustainability Project Award

Ahmedabad Elevated Metro project (C1 2463) won the Best Sustainability Project Award at the Bharat CSR & Sustainability Summit & Awards 2024. Dr Nisanth Thulasidas Madhavan, Manager (Environment), received the award on behalf of Afcons during the award ceremony held on May 24, 2024, in New Delhi.

British Safety Council Award

The Mokama Rail Bridge project won the International Safety Award from the British Safety Council for demonstrating a strong commitment to good health and safety management during 2023. Mr Rajiv Ranjan Singh, Manager, HSE, received the award on behalf of Afcons at an award ceremony, in Mumbai, on May 30, 2024.



The Delhi-Meerut RRTS PKG-6 project also won the International Safety Award (Merit) from the British Safety Council. Mr Man Singh, Chief Safety Manager, Delhi-Meerut RRTS PKG-6, received the award on the same day.



RoSPA Gold Award

The Royal Society for the Prevention of Accidents (RoSPA) granted the Gold Award to Afcons for its Delhi-Meerut RRTS PKG-6 project. The award recognises the project team's extraordinary performance in health and safety in 2023. Mr Gururaj Parande, AGM, Purchase & Store, and Mr Yadav Poojari, Manager (Dubai Office), collected the award on behalf of Afcons in an award ceremony, in Dubai, on June 6, 2024.

5 Golden Stars Award

The National Safety Council awarded the 5 Golden Stars Award for the SMPP Project, Tokadeh, Liberia. It recognises exceptional excellence and performance in Occupational Health and Safety Management system.

11 Million Safe Man Hours

The National Capital Region Transport Corporation awarded Afcons a certificate of appreciation for successfully completing 11 million safe man hours at Delhi-Meerut RRTS PKG-6.

8.11 Million Safe Man Hours

The Bangladesh Roads & Highways Department issued a certificate of appreciation to Afcons for achieving 8.11 million injury-free man-hours at the WP-02 Road project in Bangladesh.

7 Million Safe Man Hours

The IRCON International Limited issued a certificate of appreciation to Afcons for achieving 7 million safe man hours at the Mokama Rail Bridge project. The certificate also recognises outstanding efforts of the team and continual improvement of safe work practices.

Environment Day & Yoga Day

Afconians at various sites, globally, celebrated World Environment Day on June 5, 2024, and International Day of Yoga on June 21, 2024. The occasion was marked with various activities, including tree plantation drives, online quiz contests, slogan competitions, and yoga sessions.



Farewell to our beloved stalwarts



We bid a heartfelt farewell to two cherished members of the Admin Department at Afcons Head office. Ms Sumedha Shirwalkar, with her warmth and grace, has been the heart of our organisation for 30 years, leaving a legacy of kindness and efficiency.

Mr Dattaram V Chougule, affectionately known as "Datta", superannuated after 42 years of dedicated service. His quiet demeanour and positive attitude made every challenge manageable, leaving a lasting impact.

We are deeply grateful for their dedication and wish them joy and success in their next chapters.

HR CORNER

- Project Management Training Module, Project Coordinators' Development Programme were conducted at HO, and, Contract Managers' Development Programme was conducted at NICMAR, Hyderabad, under the Central Development Council initiative.
- CPE and Electrical Trainings on Asphalt Paving Equipment, Electrical System Installation at sites, Electrical Control System of Batching Plants, Equipment Management for Civil Engineers, Bearing Failure Causes, Operation & Maintenance of engines, Material Handling Equipment & Cranes, Crushing Equipment, Operation & Maintenance of Hydraulic Excavators, and Lubricants were held at HO, Butibori Workshop and at various sites.
- General Management Training programme on Statutory Compliance under Labour Laws was conducted at HO.
- Soft Skills Trainings on Personal Effectiveness, and Personal Motivation & Interpersonal skills were held at GCPL, Dahej site, and, Planning and Organising soft skills training was held at DC-07 Delhi Metro site.
- Contract Management training programme was conducted at HO.

EMPLOYEE CHOICE AWARD



Afcons has won the AmbitionBox Employee Choice Award (ABECA) 2024, ranking among the top 3 construction companies in the 'Mid-Sized Companies' category. The award was presented to Executive Vice Chairman Mr Krishnamurthy Subramanian, in the presence of Managing Director Mr S Paramasivan and Director, HR, Ms Bhakti Prasad. Ms Prasad also received a certificate of appreciation for her leadership in creating an exceptional workplace. ABECA recognizes companies that prioritise employee well-being and supportive workplace culture.

NEW PROJECTS

Dam Project at Uttarakhand

The Uttarakhand Project Development and Construction Corporation Ltd, Govt of Uttarakhand, has awarded Afcons a civil and HM works project for the construction of 150.6m concrete gravity dam and appurtenant works across Gola river for Jamrani dam project in Nainital, Uttarakhand.

Metro project at Kochi

Afcons has been awarded a project to design and construct elevated viaduct, including 10 stations, for phase II of Kochi Metro Rail Project.

NEW JOINEES

Mr Baskaran Thirumurthy has joined as Joint General Manager (Projects) for SMPP Project, Liberia.

Mr Nirmalya Deb has joined as Joint General Manager (Operations) in Water Supply Segment.

Awards



Afcons wins NDTV InfraShakti Award

Afcons received the NDTV InfraShakti Award 2024 in the 'Transport Trailblazer' category for the construction of the Chenab Railway Bridge in Jammu and Kashmir. Mr Nitin Gadkari, the Honourable Union Minister for Road Transport and Highways, presented the award to Mr Giridhar Rajagopalan, Deputy Managing Director, Afcons, at a ceremony, in New Delhi, on July 2, 2024. The award acknowledges Afcons' phenomenal achievement in constructing the bridge in one of the most isolated, challenging, and sensitive areas of the country, providing a critical link to the Udhampur-Srinagar-Baramulla Rail Link (USBRL) project.



S Paramasivan
Afcons

MD honoured as India's Impactful Infra Leader

Mr S Paramasivan, Managing Director of Afcons, has been honoured with India's Impactful Infra Leader Award at the Times Now India Infra Transformation Summit 2024. The summit, themed "Future-Ready Infrastructure: Roadmap to India 2047," took place on June 27, 2024, in New Delhi. Mr Paramasivan also participated in a panel discussion on 'Policy Dynamics: Navigating Challenges in India's Infrastructure Realm' during the event.



ALERTS

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