INTERVIEWS

Mr. AK Tyagi, CMD, Nuberg Engineering Limited in Conversation with Business Upturn

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1. What is the case for foreign EPC contractors in the Indian market? How do you see the market evolve over a period?

The Indian infrastructure market is one of the most attractive in the world, with a projected value of $1.5 trillion by 2025. It is boosted by the government's focus on Make in India, Make for the World, and the launch of PLI schemes. The government's encouragement of FDI is also catalysing the growth of industrial activity, thus furthering the EPC requirements.

The Hydrogen push of the government, along with the technology transfer clause in most global contracts, is another factor for enhanced EPC spend.

The highest GDP growth of India, amongst the world's largest economies, is also pushing consumption in India and, thus, a larger need for inputs that require expansion of the sector.

EPC organisations, including Nuberg EPC, are encouraged by the availability of competent and trained engineering talent at lower than global costs. However, there is always a major need for retraining and skill degradation.

I see the Indian EPC market as being a very promising market with a lot of potential for growth.

2. How do the EPC service providers plan to minimize the impact on project delivery?

Delivering projects successfully is a complex and demanding task for EPC service providers, who battle continuous challenges of exceeding budget, failing to meet deadlines, compromising quality, resolving contractual disputes, and handling supply chain issues.

Supply chain logistics and talent resourcing at project sites also need to adapt to and follow new procedures to comply with regulations and ensure safety.
We at Nuberg EPC have super specialised in delivery skills and have managed to complete most projects on time. Even in the times of pandemic lockdown, we completed projects to the satisfaction of the organisation while taking drastic steps of hiring chartered planes for our engineers. Our global experience of operating in more than 30 countries has allowed us to ensure that the supply chain remains robust, mistakes are avoided, and local regulations are followed to ensure quality and timely commissioning of the infrastructure.

3. What are the major trends in costs and technology globally? How is it impacting Indian installations?

Green energy has become of paramount importance, and there is constant pressure to reduce Capex to meet lower price expectations. Government and private entities are investing in green energy projects like hydrogen, biofuel, ethanol, and methanol, and the EPC companies are developing cost-efficient processes to build the infrastructure.

We at Nuberg EPC have the honour of building India's first commercial-scale Hydrogen Purification (fuel cell grade), Compression, Storage & Dispensing Facility. It produces ultra-pure hydrogen and stores it at very high pressure. The success of the plant has enabled a revolution in public transport in Gujarat.

An Indian firm is also developing the technology to extract hydrogen, and this will further reduce the cost of hydrogen production in India.

The other aspect is the realisation that while the energy infrastructure matures to enable 100% green hydrogen, the greys and the blues (when made as an industrial byproduct) are viable in-between alternatives.

4. How important is a design to a project? How are the EPC organisations ensuring competitiveness?

Engineering design is a key component of the EPC-LSTK industry. Design and construction services need to be integrated seamlessly for efficient construction and project delivery. The design also helps in creating a competitive bid. A detailed initial design that matches the final design can enable a realistic estimation of engineering resources, materials, and labour. This also helps the EPC company to focus on construction execution and supply chain much earlier, therefore reducing timelines and costs. For the client, our design capability also determines the maintenance, repair, and upgrade costs of the plant during its lifecycle.

To ensure our global competitiveness, we are investing heavily in engineering talent, recruiting the best, training and retraining them, and providing them with the latest digital tools.

5. What are the latest advancements in technology adoption over a project lifecycle? Its role in improving design and monitoring?

We at Nuberg EPC are fast incorporating the latest in digital technologies and work processes. This includes IoT-enabled monitoring and maintenance of projects and commissioned plants. We have also incorporated Big Data for smarter design and inspections, AI-driven intelligent automation, AR and VR for superior safety, communication, and training, and 3D software for accuracy in delivery and reduction in commissioning times.

Nuberg EPC has moved towards skid-mounted plants that drastically compress the time required to build plants and reduce workforce requirements at the project site, especially for small-size plants.

The combination of digital technologies, work process automation, and skid-mounted plants helps in reducing the workforce required for nearly every project that we undertake.