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From ideation to final execution

Chlor Alkali Plant
Abu Dhabi



From concept to commissioning, since its inception Nuberg EPC has been successfully delivering challenging EPC projects worldwide; in the process setting up global EPC benchmark

Covid-19 has shattered almost all the industry. It was an impossible task to rise from the ruins of Covid-19 in the initial months. But, Nuberg EPC defied Covid-19 challenges bagging and executing multiple projects following all the Covid-19 protocol. At the peak of the Pandemic, Nuberg EPC successfully executed 228 TPD Chlor-Alkali Plant for Egyptian Petrochemicals Company, in the process setting up global EPC benchmark for pandemic execution. To successfully execute the projects, AK Tyagi, CMD, Nuberg Engineering, the man at the helm of the affair, hired chartered plane to ferry engineers to Egypt for timely project completion. “During the pandemic we had to hire a chartered plane to ferry our engineers to Egypt for timely project completion,” says AK Tyagi. This successful completion when Covid-19 was at its peak lead to securing more projects. On the international front, after this project, the company bagged three more projects - two sulphuric acid plant projects in Gamasa City, Egypt and Oromia, Ethiopia and 85

TPD hydrogen peroxide project in Uzbekistan. On the domestic front, the company secured two projects - 10 TPD 2nd generation bio-ethanol from Biomass plant project on an LSTK basis for Indian Oil Corporation; and 1650 TPD NPK fertilizer plant project.

Taking challenges head on

Challenges are not new for Nuberg EPC. In the initial years, the company successfully relocated Caustic Soda plant from United Kingdom to Bangladesh. This successful execution led to fifteen Greenfield projects in Bangladesh and set the ball rolling for roadmap to success for future projects. Right from the inception of Nuberg EPC in 1996, AK Tyagi has a penchant for challenges. “Executing the impossible has been in our blood from inception – our tagline Making Ideas Happen is our DNA. Our first major project was an impossible project for a newly formed company. The project involved the relocation of a plant from the UK to Bangladesh - navigating the myriad technological, legal, logistical and resource challenges. Its success

led to fifteen Greenfield projects in Bangladesh for us. It also set the ball rolling for the core set of learnings and domain expertise that went on to define Nuberg EPC and our roadmap to success,” says AK Tyagi.

The incubation center

After tasting success in its first major project, AK Tyagi never looked back. His self belief, sustained focus and determination established Nuberg EPC as the number one player in the EPC industry for Hydrogen Peroxide and Calcium Chloride. The company is the number two EPC Company for Caustic Soda / Chlor-Alkali Plants globally. “We are amongst the world’s fastest-growing EPC organizations with a specialized team of more than 300 engineers providing global competitiveness,” says AK Tyagi. Till now, Nuberg has successfully delivered over 60 turnkey projects across 32+ countries. “Our technology know-how and global experience of operating in more than 30 countries help us deal with laws, statutory requirements, and societal norms across geographical diversities,” says AK Tyagi. The company has its own R&D facility in Sweden ‘EB Nuberg’ that intends to contribute with innovative technology for specialty chemicals. The company holds patented technology for hydrogen peroxide. “We are thus amongst the very few global technological licensors of Hydrogen Peroxide technology. We are also the global technological licensor for Sulphuric Acid plants,” says AK Tyagi. The company also holds world-class certifications such as ASME U2 certification, ISO 9001:2008, ISO 14001:2004, ISO 18001:2007, and ISO 9001:2015 certification, and NSIC 9001:2008 certification to ensure quality processes and International standards.

From its manufacturing plant in Gujarat, Nuberg EPC manufactures large industrial equipment and machinery. “We own a 115,000 sq m manufacturing plant in Gujarat, which manufactures large industrial equipment and machinery that caters to EPC projects as part of Nuberg EPC. We cater to numerous international as well as large Indian clients such as big PSUs and private companies,” says AK Tyagi. In addition to this, the company provides technology & engineering services, EPC & LSTK solutions, heavy fabrication works, technology know-how, engineering, procurement, construction and



“OUR TECHNOLOGY KNOW-HOW AND GLOBAL EXPERIENCE OF OPERATING IN MORE THAN 30 COUNTRIES HELP US DEAL WITH LAWS, STATUTORY REQUIREMENTS, AND SOCIETAL NORMS ACROSS GEOGRAPHICAL DIVERSITIES,”

AK Tyagi, CMD,
Nuberg Engineering

project management. Nuberg EPC actively cater to sectors - chemicals and fertilizer; nuclear and defence; energy & infrastructure and steel – right from ideation to final commissioning.

Nurturing and nourishing manpower

For any organization employees are its core strength. Right from the inception of Nuberg EPC, AK Tyagi recognized the importance of employees for the growth of the organization and nurtured them. “The core engineering talent with the company is our biggest strength. We learnt the importance of engineering talent in our first Bangladesh project and have maintained a laser focus on ensuring a high skillset and capacity. Nuberg EPC thus invests more in engineers than the industry norm that can be noted with the strength of more than 300 engineers with more than 300,000 available person-hours,” says AK Tyagi. In a recent report, the attrition level across all industry is pegged at 15-20%, whereas in Nuberg EPC attrition is hardly heard of. “There is an acknowledged talent shortage and thus a higher cost outlay in the industry. However, for Nuberg EPC, it is our investment in their wellbeing (economical, mental, safety, empathy, and growth) that has helped us retain and attract the best talent. We have thus been able to expand our leadership and offerings,” says AK Tyagi.

Delivering the impossible

Under the dynamic leadership of AK Tyagi, Nuberg EPC has developed capabilities to deliver customized projects. “Our company can do EPC around any ideas and products because of our global multi product capabilities and experiences,” says AK Tyagi. True to its tagline “Making Ideas Happen”, Nuberg EPC has commissioned projects in spite of



various adversities. “For instance, you are setting up a particular plant that requires a patented technology (as in how to go from raw materials to the final product) for the execution process of establishing a plant. We could make partnerships with global technology licensors, and our engineering depth and breadth help us deliver the EPC around it and commission the plant in a turnkey manner. For illustration, executing the Sulphur Bentonite project for National Fertilisers in Panipat was unexplored territory to us. Consequently, we did the tie-up with GTC USA for the technology and then leveraged our strengths to deliver the plant to National Fertilisers,” says AK Tyagi.

The man at the helm

AK Tyagi’s acumen and foresightedness and his extensive and diverse expertise in project engineering, project installation and commissioning, process design, trouble-shooting and project management has helped him to identify emerging opportunities. “The industry dynamic however is shifting and has created opportunities for many new products that we are confident to deliver. I wish to discuss one such product (Sulfolane), which we did for a Saudi Arabian client. This product was again a new specialty chemical that was not explored by us previously. The next product is Anisole, and we have seen many such products coming into the market depending on their domestic dynamics. The Middle Eastern nations have realized that they can no longer bank on the oil economy, and they have

to develop non-oil industries. There is a huge demand for new products, especially Specialty Chemicals, and also traditional/basic chemical products (Caustic Soda, Calcium Chloride, Sulfuric Acid, Hydrogen Peroxide, etc) that were earlier imported. However, now they desire to build their own capacities,” says AK Tyagi.

Leveraging opportunities

“We believe that the opportunities in the EPC sector are huge. Some key chemicals that will be in demand and need EPC support are sulphuric acid. The market for sulphuric acid is projected to reach US\$ 11.10 billion by 2021. Growing agriculture sector and increasing metal processing activities, along with a rising consciousness about wastewater treatment would drive the sulfuric acid market in India,” says AK Tyagi. Nuberg EPC has a strong presence in GCC countries where it has successfully executed many projects. Now, the GCC countries are looking to transform their economies from oil dependent industries to non-oil dependent industries. In the light of this development, Nuberg EPC too is diversifying into various industries including manufacturing of specialty chemicals.

“There is also increased focus on exploring usage of Hydrogen as a clean fuel in existing and new projects, especially as it is also the feedstock for green chemicals. For Nuberg EPC, Hydrogen – Green, Grey and Blue; 2G & 3G Ethanol, Water Electrolysis, Water Soluble Fertilizers and Next Generation Nutrients are in focus currently,” says AK Tyagi.

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