



TechnipFMC's Dahej Yard – A Commitment to Make in India



As the government has launched one of the most powerful initiatives, Make in India which aims to make India a global manufacturing power has been cheered by many organisation. TechnipFMC have shown their commitment towards the initiative by establishing Modular Manufacturing Yard at Dahej; **Mr Bhaskar Patel, Managing Director, Technip India (a subsidiary of TechnipFMC Group)** talks about the significance of their new yard, challenges during the journey the future of Oil and Gas Industry with **Namrata Nikale Tanna, Editorial Manager, Oil Asia Journal.**

Prime Minister Narendra Modi's Make in India is one of the biggest initiatives to help the Indian manufacturing sector, what is your opinion on the same and how will it boost the oil and gas industry?

Ans: Prime Minister Narendra Modi's vision to reduce the country's crude imports through higher domestic oil & gas production is indeed expected to revive investors' interest in the nation's exploration and production sector. We believe 'Make in India' campaign will promote international and domestic companies manufacturing in India, also involves the oil and gas sector and is likely to lead to increased investments in shipyards and other fabrication facilities over the next few years. Reforms introduced by the Govt. will hopefully revive stranded deep-water projects, ramp up exploration and production activities in addition to fresh investments in Oil & Gas sector.

How did 'Make in India' initiative inspired you to establish new Modular Manufacturing Yard at Dahej and also could you brief us on selecting Dahej as the location for the project?

Ans: We have recently inaugurated first TechnipFMC Modular Manufacturing Yard in India at Dahej, Gujarat on 20th January, 2017 with an aim to reinforce our fabrication and supply capabilities in India. Our investment in this sprawling approx. 150,000 sq. meter waterfront yard at the west coast of India combines the company's strengths in process technology, modularized engineering, and manufacturing and construction. The yard is a testament to our commitment to Make in India initiative to address bigger market with Fab Yard products with an aim to serve towards import

substitution as well as contribute to exports, thus taking a step towards building energy, self-reliant India in Energy Sector.

We chose to build waterfront Modular Manufacturing Yard (MMY) at Dahej, Gujarat at west coast of India since the place is well connected by water to Mumbai, Middle East in particular, and thru these gateways, to the rest of the world. We are in the middle of an industrial belt that will provide us the required ancillary support and help develop strategic partnerships with key suppliers. Lastly, most important is the fact that the area is industry friendly with a responsive administration.

Request you to brief us about the Modular Manufacturing Yard of Dahej?

Ans: Since 1975, India operating centre had a Workshop at Okhla in New Delhi to manufacture critical equipment for Hydrogen Reformers, Proprietary Burners etc. managed by an expert team of approx. 45 people. With the growing business demand, we decided to scale up its offering and eventually, build a state-of-the-art yard to expand product portfolio to serve all 3 segments, Onshore, Offshore and Subsea in India and Worldwide. We initiated making of the yard in 2015. This is first yard of TechnipFMC Group in India with an aim to build extensive product line: Modular Plants, Fired Heaters, Reformers, Ethylene Furnaces, Components & assembles and large scale vortex burners. One of the key advantages of having a water front is to develop our own jetty in future and hence leverage on the capability of large over-sized Plant Modules.

The Safety of operations has been one of the key criteria in design of the Yard.

The shop has an integrated management system for Quality, Health and Safety, with accreditation of ISO 9001, ISO 14001 and OHSAS 18001 in place. The workshop has been approved by ASME for “U”, “U2” and “S” Stamp Code fabrication of Pressure Equipment.

Here is a quick glance at technical aspects of the yard.

- 2 medium fabrication sheds, each with a lifting capacity of up to 100 MT by Overhead cranes
- One light shed is dedicated to Process Technology Proprietary products such as burners and transfer line exchangers whereas the second light fabrication shed is a steel structure fabrication shop
- The major machinery includes a plate bending roll with a capacity of up to 4”(100 mm) thick plates, CNC Profile cutting machine, EDM Wire Cut machine, NC pipe bending machine and Welding automation equipment
- A state of the art CNC Beam Line is being added which will have integrated beam drilling and sawing in our steel structure fabrication shop
- The yard has a Radiography enclosure, an in-house non-destructive test equipment and fully equipped mechanical testing laboratory

Could you throw light on how the subsidiary of Technip established at Dahej will boost the domestic production and reduce the import burden?

Ans: Ownership of the yard enables us to become cost-efficient, provide quality delivery on time to our clients satisfaction. We are targeting domestic and Global market with Fired heaters and Reformers; supplying Package units and piping spools for group EPC projects; Technology Proprietary equipment for Process Technology; Fabrication piping spools, Package units - Gas dehydration unit and MEG with Prosernet Technology can also be done at the Dahej yard.

In summary, the yard is designed to manufacture all components and assemblies to build a Modular Plant of all complexities.

May we request you to address the challenges you came across while building the modular manufacturing yard and how did Technip overcame the challenges?

Ans-Initially we had to have the confidence of local communities through dialogue and demonstration of our intent to develop and support local communities. In order to complete the construction work within one year, we had to follow an immaculate planning so that the civil work for foundation and sheds was completed before onset of monsoons to adhere to timeline.

Also under our CSR programme, TechnipFMC in India has selected Vagra Block at Suva Village for integrated development of the village. Vagra Block is closely located to TechnipFMC Modular Manufacturing Yard at GIDC area, Dahej in Gujarat.

We have collaborated with SEED, a leading CSR implementation agency to undertake sustainable initiatives to improve 4 fundamental areas for a better tomorrow.

- Improve **education infrastructure** and promote eLearning amongst students
- Encourage **financial literacy** and promote **micro-enterprising**
- Enhance awareness on **health care**, hygiene and sanitation, especially for pregnant women, lactating mothers and children
- Raise awareness on **disaster management**

While the Government of India is pushing the industrial sectors towards sustainability, we request you to share how Technip's project will pitch towards sustainability?

Ans: In this context, I would like to mention our involvement in India 2022 Leading Out – a long term initiative organised by international consultancy firm Xynteo. India 2022 provides a perfect platform for a business-led coalition committed to leverage the power of collaboration to unlock future-fit growth opportunities in India. To this purpose, Thierry Pilenko, TechnipFMC Group Executive Chairman recently had a high level discussion with the President of India, Mr. Pranab Mukherjee, along with other CEOs from industry.

Four key impact tracks have been identified in line with the initiatives promoted by the Government of India:

- Energise India
- Skill India
- Connecting India
- Sanitation & Waste Management

Each of above areas will be driven by leading corporate brands.

We are partnering with our client Shell to 'Energise India' through three pilot projects. These projects are:

- IH2 Technology – Turning India's waste challenge into a clean fuel opportunity
- Powering rural growth
- Building the future of India

Follow #India 2022 on twitter for more details.

Where do you think we will see key growth areas in the oil and gas industry in the next few years?

Ans: Oil and gas will play a pivotal role in the energy mix for India. If we do a SWOT for energy sector in India, it clearly highlights:

- High dependency on imports due to large deficits in feed stocks/building blocks
- Although refining capacity is good, it is regional and infrastructure needed to make available Naphtha at a single location to setup world-scale Naphtha Crackers
- Large opportunities for revamp of several existing refineries particularly due to implementation of Bharat Stage VI fuel emission
- Continuously increasing demand
- Large investments expected in the next 5years in the Oil & Gas Sector

Here are some quick wins to highlight significant opportunities exist across the oil and gas value chain.

Upstream exploration and production:

- Enhanced oil recovery
- Deepwater– In addition to exploring new areas, there is immediate opportunity to develop already discovered reserves. Two world class gas hydrate reservoirs have been discovered in ultra-deep waters of KG basin under national gas hydrate programme-2, which has opened up new avenues for alternative resources.
- Strategic partnerships- The growth of several successful hydrocarbon provinces in countries like Angola, Azerbaijan and Iraq has resulted from strategic partnerships. In India also, there is a large opportunity to create such 'win-win' partnerships in Enhanced Oil Recovery, and difficult High Pressure High Temperature and deep water projects.

Refining

India should endeavor to develop more world scale plants that can compete in all seasons – providing advantaged fuel and feedstock in terms of cost, quality and formulation so that our industries can be the most competitive globally.

Petrochemicals

Advantaged feedstock to this industry to support development of smart cities and related industrial, residential, and infrastructure investments.

Natural Gas Pipelines

Completion of national gas grid by construction of another 15,000 km of gas pipeline network, which is currently under various stages of implementation. Several industries are increasing consumption of natural gas in operations.

Growing economy and population growth are the main drivers for oil & gas demand. India is the third largest consumer of oil in the world, after the United States & China. A number of policy reforms have been taken by the Government to remove obstacles to investment and incentivize oil

and gas sector in line of ease of doing business, minimum government, maximum governance and promote Make in India initiative.



530, Laxmi Plaza, Laxmi Industrial Estate, New Link Road, Andheri (W), Mumbai 400053. **Tel/Direct:** +91 (22) 42863813 | **Mobile:** +91 9920398737 **Email:** namrata.n@oilasia.com |