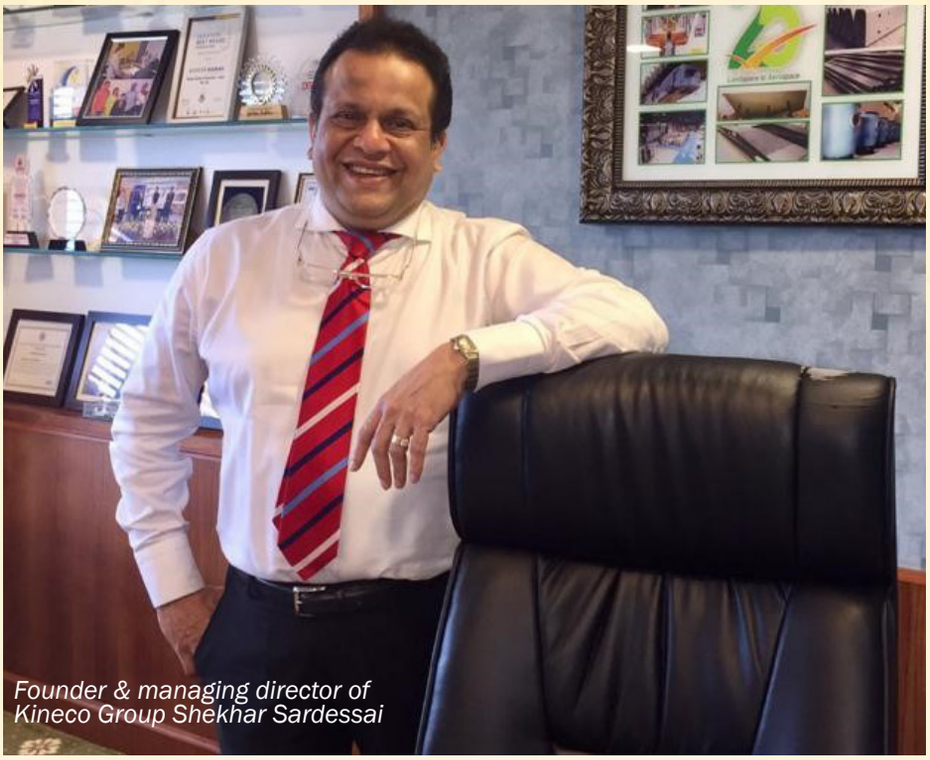
AIMING FOR THE SKY!

Kineco Group Founder & Managing Director SHEKHAR SARDESSAI recalls the company's journey over 25 years

Over just a quarter of a century, Kineco Group has built itself into a model for home-grown companies. It is among the few players in India qualified to build turnkey products for railway interiors, starting from a 200 square metre facility to a star in India's composite industry.



Founder & managing director of Kineco Group Shekhar Sardessai

Its founder and managing director Shekhar Sardessai started out working for a Pune-based company after completing a diploma in fabrication technology from Government Polytechnic College, Panaji. Aiming to reach his father's entrepreneurial goal, he founded Mass Kinematics in 1995, manufacturing chemical process equipment from composites at Pilerne Industrial Estate. As the company grew, Sardessai explored multiple opportunities of innovation and technological advancements to evolve in the industry.

Evolving meant building the company as a brand, and years later, it took shape as Kineco – short for Kinematics Composites. There was no looking back.

The pursuit of advanced composites gave Kineco a glamourous identity and uniquely positioned it as a star in the Indian composite industry. This visibility coupled with a reputation for innovation and best practices led to what has become one of Goa's finest international joint-ventures with US-based Kaman Aerospace. Kineco Kaman Composites India Private Limited became a force multiplier and gave impetus to the Kineco Group.

Kineco has also been supplying world-class composite products to Indian Railways for the last 15 years with several innovative product developments to its credit. The railway product portfolio includes rail coach interiors, toilet modules, aerodynamic front ends, driver cab interiors and hard seating systems.

The Goa-based company has also entered the segment of design to build turnkey railway interior projects for new and refurbished coaches. Its rail division is one of the few in India to achieve the IRIS (International Railway Industry Standard) Certification.

As a brand, Shekhar Sardessai has ensured it has been meticulously built on assured quality, pure innovation and hard work.

On its 25th anniversary, he opens up to VIVA GOA about Kineco's past, present and future. Excerpts:

What led you to start a company in composite structures considering your family already had a construction business?

I grew up with the dream to be an entrepreneur since my father Ravindra Sardessai was one and my biggest inspiration. Unfortunately, he passed away at 47. It was my ambition to fulfill his incomplete entrepreneurial journey.

I started my career in Pune as a project site engineer for Solcon Engineers, and then moved to Thermax Limited as project engineer. After acquiring some valuable experience in project management, equipment installation and commissioning, I moved to Goa to start something of my own. In the meantime, I decided to work for one of the few multinational companies in the state then, called Titanor Components Limited (now known as DeNora) as product manager. The exposure to an international corporate

culture and a sound foundation across all disciplines of a manufacturing enterprise was my biggest asset as I moved into entrepreneurship in 1995.

At Titanor, I got involved with composites and fibre-reinforced plastics as a novel material of construction in various product development initiatives. While Titanor never made composites, it was involved in integrating various electro-chemical systems which used composites. I was technically involved with various vendors in design and manufacturing techniques of composites. It was this experience that crystalised my entrepreneurial vision into an achievable venture in the field of composites. Thus, Mass Kinematics was born in 1995 as an enterprise manufacturing chemical process equipment from composites.

Can you recall the initial struggle while building the company and brand?

My former partner and an early-stage investor (my ex-boss at Titanor) started Kineco (back then Mass Kinematics) with me as a small manufacturing facility. Both Goa Industrial Development Corporation and Economic Development Corporation were supportive of this ambition by allotting a plot and extended the seed funding to start our first facility at Pilerne Industrial Estate.

The initial struggle was arduous and demanding yet very thrilling. Mass Kinematics (now Kineco) initially dealt with chemical process equipment. We tried multiple products and business models, explored a plethora of opportunities in the industry to achieve a deeper understanding of global technology evolution and trends. I also travelled around the world and spent extensive time in the US and Europe, meeting peers from the industry, equipment suppliers, and raw material suppliers. The exposure allowed me to start shaping a strategic business vision for the enterprise. Innovation, technology and pursuit of world-class quality standards drove us to our vision. We wanted a new name for it; a unique brand identity, distinct from any single product. Thus Kineco was born – derived as a short form of 'Kinematics Composites'.

Kineco started participating in global exhibitions, conferences and networking events and by 2010, the company created a strong brand identity delivering wide-ranging product portfolios in the field of composites. Under 'Landscape to Aerospace', we made equipment for multiple modes of transportation including automotive, railways, ships, aircrafts and spacecraft.

Today, all the energy that my team and I had put in, with years in innovation, technology and brand building has made the company one of India's leading and innovative enterprises, with a strong presence across multiple sectors such as defence, aerospace, railways and industrial.

Tell us about India's first carbon fibre bridge.

As a public-private partnership in the 'Make in India' mission, we undertook yet another unique project with R&D engineers (DRDO) to develop India's first indigenous carbon fibre-reinforced, light-weight, rapidly deployable, heliportable composite bridge for military and disaster management applications.

The composite carbon fibre reinforced bridge is built to Military Load Classification standards for 70 tonnes using a vacuum-assisted resin infusion process with fibre optic control technology which has been licensed to Kineco from DRDO.

The first prototype of the bridge (full length at 15 metres, modular lengths 5, 10, 12.5 metres) by Kineco was showcased at the DEFEXPO India 2020 at Lucknow creating yet another 'Make in India in Defence' success story.

Currently, we are pursuing validation of the test results by the army so that the bridge can be inducted for use by the armed forces as well as civil applications in disaster management.

How did Late Manohar Parrikar as Defence minister and Shripad Naik as Union minister of State for Defence help Kineco?

Late Manohar Parrikar's life and

With former Union Defence Minister late Manohar Parrikar

Welcoming Union Defence Minister Rajnath Singh and Minister of State for Defence Shripad Naik

contribution in the public arena remains an inspiration to all. He was an ardent supporter and guide to many industrial establishments in Goa, including Kineco. He was the foremost supporter of the 'Make in India' in defence and gave a boost to it through the landmark Defence Procurement Procedure (DPP) 2016 that aimed to promote indigenous design and development of defence equipment during his tenure at the Centre.

Kineco will continue to abide by his high principles of putting the nation above self and endeavours to make many noteworthy contributions to India's defence infrastructure and '*atma nirbhar Bharat*'. We are also proud that the coveted post of minister of State for Defence is currently held by Goan member of Parliament Shripad Naik, who we are sure will carry on Parrikar's legacy.

Your company has been credited for making indigenous sonar domes for Indian Navy warships. How did the collaboration come about?

In 2012, Kineco was selected as an industry partner by DRDO on a competitive basis and was awarded a prestigious development contract of its first indigenous sonar dome. That same year, we also won, on a competitive basis, a prestigious order for design and manufacture of a glass-reinforced mould to manufacture sonar domes. This first-of-its-kind mould is also a milestone achievement given its complexities.

Both these victories initiated our onward journey with DRDO for the manufacture of sonar domes. The first prototype was built by Kineco after four years of rigorous R&D and unveiled by former Defence minister Late Manohar Parrikar at the DefExpo India 2016 in Goa. The prototype was subject to stringent validation tests, including acoustic transparency, followed by extensive sea trials onboard the P15 Alpha Destroyer warship.

The Sonar Dome, jointly developed by Kineco and DRDO, successfully qualified for usage, not only on P15 Alpha but also P-15 Bravo warships. Kineco was awarded a 'Transfer of Technology' agreement for manufacturing composite sonar domes by the VARTM process by former Defence minister Nirmala Sitharaman at DefExpo in 2018, which enabled it to become a qualified supplier to the Indian Navy. Thereafter, Kineco bagged a large and prestigious commercial order of seven sonar domes from Mazagon Dock Shipbuilders Limited, Mumbai, to be installed on P15A class and P15B class Navy warships.

What other products is Kineco developing under the DRDO?

Kineco has successfully collaborated with DRDO not only for India's first indigenous sonar domes project and full carbon fibre light-weight rapidly deployable heliportable bridge, but also to develop composite Radome for Airborne Early Warning and Control System aircrafts. Kineco has also bagged a DRDO order for fabrication and supply of submarine models.

Tell us about your venture with US-based Kaman Aerospace Group to manufacture structures for polar satellite launch vehicles and geosynchronous satellite launch vehicles.

Kineco Kaman is one of India's leading composites manufacturers in structural components and assemblies of air and space vehicles. Our engagement with India's space establishments, namely Vikram Sarabhai Space Centre (VSSC), has been long and rewarding since our association with them in early 2000 through Kineco Limited, which is the parent company. VSSC is potentially a large and long-term customer for Kineco Kaman. So, every opportunity from this establishment is looked upon

strategically for three reasons besides the commercials:

a) VSSC is the only Indian space agency with a composite Centre of Excellence and it is our endeavour to get ourselves associated with it to work together on long-term programmes which are of national strategic interest.

b) In the growing Indian space market, polar satellite launch vehicles (PSLV) and geosynchronous satellite launch vehicles (GSLV) are the only credible platforms by ISRO which allow us to be a significant contributor to the creation of an Indian space and aerospace ecosystem.

c) The Indian government is keen on increasing private participation in the space sector, especially beyond just suppliers of components and sub-systems. It is supporting Indian industries with resources, technology and platforms to undertake independent space projects of the kind that US companies, such as SpaceX, have been doing and thereby provide space-based services.

Kineco Kaman, being a significant player in India's space ecosystem, will certainly have the edge among the competition to move up the value chain and collaborate with Indian space agencies on technology programmes.

What are your plans for expansion?

I would like to see Kineco become India's largest enterprise in composites and Goa's largest first-generation enterprise in any field. Inevitably, fully utilising our export potential is a key towards fulfilling this vision. We look to expand our operations in Goa to support our organic growth and we will also be looking at green field investments and acquisitions / joint ventures in other strategic locations in India and globally, as we grow and expand the scale and reach of our business.

Tell us more about some of your ongoing projects?

Apart from the aforesaid projects, we are currently engaged in the manufacture and supply of filtration vessels for a US-based company engaged in water purification solutions. Other projects under Make in India include developing VSSC's high pressure pyrogen ignitor cases for GSLV and PSLVs. In our Pultrusion Vertical, we are also engaged in manufacturing radomes for mobile tower antennae for the telecom sector.

Since the lockdown, we experienced a slowdown and our growth is expected to be affected during the current year on account of COVID-19. However, given that majority of the company's revenues are derived from government and other sectors, such as railways, defence and telecom, the company expects to recuperate any major impact on its business on an annual basis. While growth may be muted temporarily due to COVID-19, Kineco expects to recover its revenues faster than companies in other sectors.

Describe the last 25 years at the helm of Kineco Group...

In 25 years, we have travelled miles to reach this base camp and are excited to take a leap of faith and embark upon Mission Everest. ■