

# Setting Records With Composites

This pioneer in what is still a niche industry has achieved a lot in his 25-year journey so far, but is not yet in a frame of mind to sit back and relax on his laurels.

- By Sekhar Seshan

**S**ekhar Sardessai always wanted to do something on his own. "Something driven by accomplishment, something different to make a change," says Sardessai, executive vice chairman and managing director of the Pilerne, Goa-based Kineco Ltd, a pioneer of composites for the

manufacture of a wide range of products for rail, road, air and space transport vehicles.

Having graduated in fabrication engineering at the age of 21, he spent eight years with a multinational corporation in Africa and eight years changing four jobs in various industries from

water treatment to electrochemicals, before zeroing in on composites – which he says are still a nascent industry in India even as his company celebrates its silver jubilee this year.

While in his last job in Mumbai, he had developed a small vendor who had quit a large company to set up on his own in a small 'gala' in Kandivli, a western suburb of Mumbai. This entrepreneur gave him the final push to partner with him and start his own manufacturing plant. He returned to his native Goa, applied for and got a 1,000-sq.m plot from the Goa Industrial Development Corporation, took a loan from the Goa Economic Development Corporation and acquired the technology to start Kineco.

And so, in May 1995, he began on a very low key, manufacturing Fibre Reinforced Plastic (FRP) and other composite products which, he says after 25 years in the business, is still a very niche product



Felicitation at Indian Navy Day 2019

in India. Sardessai always wanted to do something different, and innovation is still a way of life for him and his company. Though an established name in the industry now, Kineco's turnover has reached only Rs185 crore – which Sardessai ascribes to the fact that it is still so niche. "Only a handful of companies have reached our level," he says. "We missed the Rs200-crore milestone because of the Covid-19 pandemic and the subsequent lockdown, but we will cross Rs1000 crore in the next five years."

Composites as a material of construction, he says, has provided Kineco with a platform that allows him to achieve his ambition of doing something different. "I think that over the years, what Kineco has done has brought me a long way in this. We have always been an accomplishment-driven venture. This, to my mind, is the single largest differentiator between us and the competition."

A flag bearer for many initiatives under the 'Make in India' mission, Sardessai foresees that this movement will see massive growth and sustenance in the coming years. "Re-strategising and realigning to this vision of the government will help attract the capital investment that will definitely be a fallout of the Covid-19 crisis."



Defexpo 2020



Defexpo April 2018 Receiving T.O.T for Sonar Dome



Kineco had an advantage during the lockdown: it is a critical vendor to essential services including the telecom sector, so it was allowed to be partially operational during all the time. However, deliveries were at a standstill because of obstacles at every step of the supply chain, especially movement of labour and managing cash crunches, especially the fixed costs. "These restrictions are easing now, but a gloom of uncertainty pervades across all industry sectors," Sardessai says.

Right now he himself is following a five-point mantra to re-align his strategy: conserve cash and stay liquid; be innovative and refresh his product strategy to stay in line with the current scenario; find ways to generate additional revenue streams by introducing new products or re-engineering to optimise the utilisation of the existing facilities and staff; re-align cost structures and be frugal; and, most importantly, continue to build trust with stakeholders to support sustainable restructuring. And he is optimistic that Kineco's business may not be too badly affected as most of it is B2G (Business to Government).

"It is truly gratifying to witness the seed I sowed 25 years ago blossom into a massive tree," Sardessai told his 800 team members at the silver jubilee celebration. Exhorting them to keep up continue displaying the qualities of optimism, hard work, team spirit and never say-die attitude, he says the core

values of sincerity and integrity have enabled the company to create an ecosystem of loyal partners, which is very essential for any enterprise to sustain.

All along the journey since 1995, when Kineco began commercial operations with a workforce of just 10 people, its legacy of innovation has been impressive. Four years into its operations, it provided a major service to the nation by building FRP shelters for Indian troops fighting in the harsh environment of the Northern Himalayas.

In 2002, it became a global supplier of tripod bases for a \$2-billion US water treatment equipment company, which presented the company with the "Supplier of the Year" award for delivery of tripod bases for water treatment equipment for two

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**KINECO**



Kineco Leadership Team



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consecutive years after that.

And in 2004, the company established an advanced composite division (ACD) with know-how from Kaman Aerospace Group of the US. The same year, it collaborated with the Indian Institute of Technology-Bombay and the Technology Information, Forecasting and Assessment Council (TIFAC) of the Department of Science and Technology to build the world's first Sky Bus made entirely from composites. The ACD was transformed eight years later into a joint-venture company, Kineco Kaman Composites India Pvt. Ltd, which now has a galaxy of big-name customers including BAE Systems, Safran Nacelle, RAFAEL Advanced Defence Systems and Hindustan Aeronautics Ltd.

Sardessai and his company did not rest on these laurels. The very next year, Kineco acquired a new autoclave which incorporated the latest technology into its manufacturing processes. Three years later, in 2008,







Unit 2

came the "JEC Innovation Award" for the development of underslung water tanks for air-conditioned coaches of the Indian Railways.

This was followed in 2010 by a joint venture (JV) with ALTE Transportation, Spain for rail car interiors and exteriors as well as toilet modules and systems, and in 2013 by another JV, this time with Kaman Aerospace Group Inc, US, for advanced composites for defence and aerospace applications.

Along the way, Kineco was the first to manufacture a dorsal unit for an airborne

composite radar system, the AEWAC (airborne early warning and control). Its series of other firsts included being the only Indian company to manufacture composite formula racing cars, when it was selected to manufacture body panels for A1 Grand Prix vehicles in its brand-new Advanced Composites Division; and composite bow-and-hull-mounted Sonar domes for the Indian Navy's warships, as well as India's first fully-carbon-fibre lightweight rapid deployable, heliportable bridge for military and disaster management applications.

It also used its own concept to execute the best-in-class project for the Indian Railways' EMU (electric multiple unit) coaches.

Other key programmes included a Mission Crew Workstation (MCW) console structure installed on board Boeing's P8 Poseidon multi-mission maritime aircraft, a long-term contract for



Unit 3- Pultrusion

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the supply of over 1900 shipsets to Safran Nacelle, UK, composite parts for Israel aerospace industries and the successful indigenisation of over 400 unique parts on HAL's Advanced Light Helicopter (ALH) platform of over 25,000 parts it has supplied to be rated its largest proven supplier. With all the work it does for the defence department, Kineco was also honoured on December 4, 2019, Navy Day, for its 'Make in India' programme in defence.

Kineco's 16,000-sq.m manufacturing facilities allow the manufacture of railway products to meet the large market. Its range of products includes modular toilets, front end cabs, hard seating systems and rail car interiors. It also does mass manufacturing of different types of driver's consoles for train applications, hard seating systems for suburban and metro trains using glass fibre composites or polycarbonate material with a metallic support structure toilet modules and under-carriage water tanks, which is a innovative and unique development.

Kineco is involved in design, design validation, tooling, prototyping and serial manufacturing of composite skins for automotive markets. Most of its products



Inside Shekhar's Office



are custom-designed to customer requirements. The product range includes truck and bus interiors and exteriors, tractor hoods and car body parts.

It also offers built-to-print manufacturing capabilities as a supplier to branded boat manufacturers in India. "Kineco's expertise of over a decade in composite manufacturing ensures that our customers get high-quality decks and hulls for their leisure yachts," Sardesai says. "Our in-house tooling/mould making facilities make it easier for us to cater to varying design requirement of our customers and and with an eye for aesthetics which is the main requirement in the leisure boat category of the boat industry."

Going forward, Sardesai wants to make Kineco a globally-recognised composite solution provider to high-performance markets in the aerospace and Defence sectors. To achieve this, the company set up a full-fledged design and development centre 10 years ago, equipped with world-class infrastructure and the best available human talent. "With this centre in place, any customer can come up to us and say, 'Here is our problem - give us a composite solution,' and we should be able to go to customers anywhere in the world and say, 'Challenge us - we are ready to compete with the best in the world.'", he says.

Companies that deal with Kineco, from the French Entegris INC, to India's Defence Research and Development Organisation (DRDO), are a satisfied lot. The company's strategic objectives include being recognised as the market leader in supply of composite-based interiors to the Indian Railways in its modernisation mission in terms of better interiors; a key supply-chain partner in the indigenous defence



manufacturing ecosystem; and an integrated supplier of aircraft components and sub-assemblies to tier-1 suppliers for the aerospace industry.

It continues to reinvent itself by leveraging its current process capabilities to create new business verticals, make strategic acquisitions and set up new SBUs (strategic business units) which will be growth drivers.

Sardesai, having taken the past quarter century of constant trials and tribulations to reach what he calls the base camp for the climb to Mount Everest, has his eyes now are firmly set on scaling the summit. **E**

