

# FROM STRENGTH TO STRENGTH

Dr Jairam Varadaraj, Managing Director, Elgi Equipments Ltd, in this thoroughly insightful interview with MMI's Editor-in-Chief Soumi Mitra, shares the company's evolution, highlights its key milestones and expanding global footprint, underlines the importance of innovation, R&D, and sustainability, and applauds the technology team, helping us gain a deeper understanding of the company and its trajectory.



Source: Elgi Equipments Ltd

Dr. Jairam Varadaraj, Managing Director, Elgi Equipments Ltd

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**With 63 years of experience in manufacturing air compressors, Elgi Equipments is a global leader in providing sustainable compressed air solutions. How has the journey been so far?**

**Dr. Jairam Varadaraj:** Elgi Equip-

ments was established in 1960. Typical of companies that grew in that era, we grew horizontally. The licensing system was such that we got a license to make products only of a certain quantity. The minute we

hit that capacity, we had to make another product. Up until the 1990s, the markets in India were protected, and there were high import duties for all products. In 1990, when the whole transformation happened in

India with the dismantling of the licensing system, and when India got integrated into the rest of the world, we had to reflect on what our core business would be as we could not sustain multiple businesses. We had to rethink our strategy. So, in the early '90s, we decided to focus on air compressors and the automotive equipment business and sell or shut down the other 8 to 9 different products then.

**Kindly tell us the role Elgi plays in the joint venture with Sauer Compressors Group. What is the objective of the new manufacturing facility opened by Elgi Sauer Compressors Ltd in Coimbatore, India?**

**Dr Jairam Varadaraj:** The joint venture between Elgi and Sauer Compressors Group was established in 2008, bringing advanced technology and a wider product range to the Indian Navy, marine, and related special applications. Over the past 14 years, the partnership has established a strong presence in the high-pressure market in India and neighboring countries, offering customized solutions and

“The goal for the company is to expand its business globally, and we have already identified the markets we want to expand in, which are North America, Europe, India, Indonesia, Thailand, and Australia. These markets constitute close to 90 percent of our revenue and 70 percent of the global opportunity. We will continue to invest in these markets to reach our goal of US\$1.6 billion by 2035-36.”

**Dr Jairam Varadaraj**  
**Managing Director**  
**Elgi Equipments Ltd**

indigenization prospects that enhance competitiveness.

The new facility represents a significant milestone in Elgi Sauer Compressors' journey towards market leadership and sustainable business growth. With increased capacity and agile operations, the company aims to consolidate further the engineering, indigenization, and product support capabilities of both constituent entities, expand into new markets, and support its customers effectively by creating a solid af-

termarket network. The 50,000 sq ft facility in Kallappalayam, Coimbatore, Tamil Nadu, will manufacture state-of-the-art high-pressure compressors, pressure-reducing stations, and portable breathing air compressors for India's industrial, commercial shipping, naval, and offshore markets.

**Please provide insight into Elgi's global presence and manufacturing facilities. You began your expansion into Europe four years ago with significant investments. How is your current market penetration in Europe?**

**Dr Jairam Varadaraj:** Our strategy for growth in global markets has included both organic and inorganic initiatives. We have expanded our global footprint by acquiring Rotair in Italy, Pattons Inc, Pattons Medical, and Michigan Air Solutions in North America, Pulford Air & Gas, and Advanced Air Compressors in Australia. Today, Elgi has manufacturing operations in India, Italy, and North America, with subsidiaries and offices in Australia, Brazil, the Middle East, Europe, North America, India, Thailand, Malaysia, and Indonesia.

Elgi Equipments offers customers a complete range of compressed air solutions, from oil-lubricated and oil-free rotary screw compressors, oil-lubricated and oil-free reciprocating compressors, and centrifugal compressors, to dryers, filters, and downstream accessories.



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Since establishing our European subsidiary in 2019, we have expanded and strengthened our footprint across Europe, significantly growing our sales and service organization to support an increasingly robust network of channel partners while building strong partnerships with customers across the region. Our team has grown from just two individuals to 120 people currently. Today, our European customers face a steady rise in energy costs, regulatory and value chain demands, and lower emissions amid the continued need to improve operational costs and energy efficiency. While air compressors consume approximately 10 percent of Europe's industrial electrical energy demand, over 70 percent of a compressor's life-cycle costs comprise the energy used during operations.

The global opportunity for air compressors was significant; thus, we invested in the backend, focusing on technology and processes to build world-class products. This also helped us remain relevant in India. It took us almost 20 years to do this. We started to build markets outside India. We looked at highly focused markets in North America, Europe, Australia, India, Indonesia, and Thailand and gained confidence that the markets accepted our products and that the value propositions we gave to our distributors and customers were quite compelling. From 2012 onwards, we started expanding globally.

Today, we are doing business in over 120 countries worldwide with over 2,000 employees and manufacturing facilities spread over India, Italy, and the USA. We offer customers a complete range of compressed air solutions, from oil-lubricated and oil-free rotary screw compres-



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"Today, 50 percent of the students in our vocational school are women. Over the next three years, 35 percent of the employees on the shop floor will be women. We anticipate welcoming more women to our shop floor as we recognize their immense potential and the value they bring to their roles."

**Dr Jairam Varadaraj**  
Managing Director  
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sors, oil-lubricated and oil-free reciprocating compressors, and centrifugal compressors, to dryers, filters, and downstream accessories. India contributes approximately 40 percent of our business, and the remaining comes from the rest of the world. To strengthen our position in markets worldwide, including India, we continue to focus on developing compressed air solutions that drive down the total cost of ownership with class-leading energy efficiency, process improvements, new products, and processes.

**How does Elgi prioritize innovation and R&D to stay ahead of competitors in the industry?**

**Dr Jairam Varadaraj:** Innovation and Research and Development (R&D) form one of the fundamental strategic pillars of Elgi. We have focused on innovation and forging fruitful research and business partnerships that

have resulted in the development of indigenous compressors and related components. Over the years, we have remained committed to delivering on the evolving needs of our customers across different business segments and countries.

Today, our technology team, comprising over 130 highly skilled specialists and engineers, is the driving force behind our advancements. They possess expertise in diverse subsystems and specialized technical skills, through which we deliver products of high efficiency and reliability.

We have further invested in R&D by establishing our state-of-the-art research center in Bangalore, India. Equipped with cutting-edge technology and utilizing simulation as a foundation for design thinking, this center serves as the hub for creating innovative products that cater to future needs.

**Many companies are committed to reducing their carbon footprint and mitigating the impact of their operations on the environment. Can you explain the energy-saving solutions offered by Elgi? Also, please update us on your focus on resource-neutral operations and circularity.**

**Dr Jairam Varadaraj:** We are committed to addressing our customers' needs for a step change in energy efficiency. In the journey towards net-zero operations, customer requirements are evolving from lower energy consumption to thorough life cycle cost assessments. One of the biggest portions of the life cycle costs of a compressor is electricity consumption. If we can keep improving the efficiency of our product, then we reduce the energy footprint for the customer and, in turn, contribute



to a greener environment. We have continuously improved our compressor's energy efficiency over the last 20 years. The second goal is the elimination of oil. A compressor is more environmentally friendly when you don't have oil in the system. We developed and introduced a water-injected compressor four years ago. Today, a significant portion of our air compressors have been certified as Green Products, demonstrating that environment-friendly processes have been followed at every stage of the product lifecycle, from sourcing raw materials to designing and manufacturing and ending with disposal. Besides, our screw compressors have large premium efficiency air-ends equipped with in-house developed  $\eta$ V profile rotors. These air-ends are designed to run at slow speeds with re-

**“At Elgi, we firmly believe that innovation and R&D are the keys to staying at the forefront of our industry. We remain committed to pushing the boundaries of technology, delivering exceptional products, and providing solutions that help our customers achieve their productivity goals.”**


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duced pressure losses, offering high volumetric efficiency and lower energy consumption.

Some of Elgi's energy-efficient compressed air solutions that ensure efficient energy consumption and lower our customers' energy costs are:  
**EG Series Oil-Lubricated Screw Air Compressor**

- AB Series Oil-Free Screw Air Compressor**
- Elgi's Heat Recovery System (HRS)**
- OF Series Oil Free Screw Air Compressor**
- EG Premium Oil Lubricated Screw Air Compressors**
- The Elgi LD Series**

**Please share the blueprint of the company's strategies for future growth and expansion.**

**Dr Jairam Varadaraj:** The goal for the company is to expand its business globally, and we have already identified the markets we want to expand in, which are North America, Europe, India, Indonesia, Thailand, and Australia. These markets constitute close to 90 percent of our revenue and 70 percent of the global opportunity. We will continue to invest in these markets to reach our goal of US\$1.6 billion by 2035-36. 

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ELGI Sauer New Plant Inauguration