

Staying competitive during challenging times: a glimpse of a leading Aluminum-based industry in Sri Lanka and how it surfs with the waves of the pandemic

Dickshon Gange

Alumex PLC, Sri Lanka

1. Can you brief us on the history and objective behind the formation of your company “Alumex”?

Thirty years ago, we embarked on a journey with an aim to conserve our environment by introducing eco-friendly building materials. We commenced operations with a small capital base, as a private limited liability company with a five-inch extruder. Alumex PLC, a subsidiary of Hayleys PLC, is a public limited liability company, listed on the Dirisavi Board of the Colombo Stock Exchange. In 1986, Alumex (Private) Limited was initiated as a South Korean - Sri Lankan joint venture, and the first commercial operations began with the 5-inch extruder and the anodizing plant in 1988.

In 1999, the First powder coating plant was added to the production process. Thereafter, in 2000, a 7-inch extruder was installed at the Makola factory, the largest extruder in Sri Lanka. The Korean shareholding was acquired by the Sri Lankan partners in 2006, and two years after, a second anodizing plant and the first wood finish plant were installed. A second powder coating plant, for small orders, was added to the production line in 2009. In 2010, a third extruder was commissioned to manufacture component products. It was in this same year that Hayleys PLC acquired controlling ownership of Alumex.

Alumex (Private) Limited was re-registered as Alumex Limited in 2013, and a year after that, Alumex Limited made an Initial Public Offering at the Colombo Stock Exchange and registered as Alumex PLC. The third powder coating plant was added to the production line in 2015, and the residential brand "Lumin" was introduced with the first Lumin Concept Centre in Nawala. Eight Alumex-owned tested systems were launched in 2016 under the new brand “Alumex TS” together with the “AluSys” design calculation software system. In 2017, a centralized warehouse operation began, and steps were taken to develop the biggest South Asian powder coating plant in Ekala. The third and modern extrusion

plant and the high-tech vertical powder coating plant were added to the operations at the new factory in Ekala by 2018. The company was privileged to have both the powder coating and anodizing processes accredited with the internationally accepted Qualicoat and Qualanod certifications.

2. What are the Aluminum-based products manufactured by Alumex PLC?

There are seven Aluminium proprietary systems manufactured under a license that cannot be disclosed. Different types of Alumex architectural Aluminium extrusions (such as window, door, partitioning, skylights, etc.), include lift & slide, handrails, kitchen cabinet, shop fronts, partitioning, sliding doors/windows (single, double, triple, etc.), swing doors, curtain walls/facades, casement windows, and turn and tilt. Industrial Aluminium components include ladders, solar roof mounting structures, lorry/ bus bodies, rails, boat/ shipbuilding, showcases, handrails, A/C diffusers, heat sinks, clamps and connectors, tower bolts, hinges, round tubes/ bars, equal/unequal angles, channels, square/ rectangular tubes, glazing beads, brackets tiles and carpet edgings, door handles, components for pantry cupboards, and customized designs to suit individual requirements.

Alumex serves the domestic market with internally manufactured extruded Aluminium profiles in different finishes under its brands, 'Alumex', 'Lumin', and 'Alumex TS'. Further, the domestic market for accessories and composite panels are served with imported material, under the agency, in mainly two brands - Corian by DuPont and Alpolyc by Mitsubishi Plastics. In line with decorative or protective finishes, mill finish products, natural anodized products, bronze anodized products, chemical polished products, powder-coated products, and wood finish products are also produced.

3. What are your company investments related to Aluminium product development and manufacturing facilities?

Alumex has two manufacturing facilities located in Sapugaskanda, Makola, and Ekala, Ja-Ela. The Sapugaskanda facility has 7" & 6" Aluminium extrusion plants along with anodizing, powder coating, and wood effect finishing plants. The extrusions and finishing plants can produce over 800 MT per month. The Sapugaskanda plant also consists of a smelter, which is capable of producing its part of the main raw material called billets for production requirements. It is an important step related to the recycling of Aluminium to conserve environmental resources.

The newly added manufacturing facility consists of a modern extrusion line and Sri Lanka's first Vertical Powder Coating Plant with a capacity of 12,000 MT per annum. With the completion of the expansion project in Ekala (an investment of Rs.2.0 Billion), manufacturing capacity was further increased by 1,000 MT per month. Wood finished production capacity increased to 600 MT per annum by relocating the wood finished plant with a two-sided feeding system. Alumex also carries an in-house capability to design and manufacture its dyes required for the extrusion processes. A 10 MT capacity increase was obtained in the component manufacturing section by adding automated cutting, drilling, and tapping machines. Since 1998, we have initiated and conducted free-of-charge fabricator training programs to develop the industry.

Our new product development division continues to design and introduce new products requested by customers and work towards enhancing the product quality and performance to meet customer requirements. We also conform to new and more stringent environmental and product quality standards set by regulators such as the Institute for Construction Industry Development Authority (CIDA), the Sri Lanka Standards Institution (SLS), and other relevant international organizations.

Further, we engage in process improvements while introducing environmentally friendly materials and processes. Our powder coating and anodizing processes have gained the Qualicoat and Qualanod accreditations. Furthermore, 152 new Alumex and customer-owned dyes were designed and tested. Most of the orders for

these designs were completed and delivered within the year.

4. What are the advantages that Alumex PLC has over its competitors?

Alumex has been able to retain its market leader position due to the superior quality of products manufactured as compared to competitors. Alumex products give value for money and customers as it does not compromise on product thicknesses, material compositions, and processing conditions, which could affect the overall structural strength and durability of the products. Further, Alumex products are certified with all accreditations required locally and internationally, including Qualicoat, Qualicoat Seaside, and Qualanod. Some of our systems are tested internationally and certified to compete with international brands.

5. Does your company have any expansion plan or change to product mix?

Alumex has been able to cater to export markets with customized products. Also, the Sri Lankan market is catered for through innovative door, window, curtain wall, and furniture profile ranges. Furthermore, Alumex will enhance surface finishes, and assembled products offered from current levels.

6. What are the most significant market challenges in the Aluminium industry at present, especially under the prevailing COVID-19 situation, and how is Alumex PLC addressing them?

As the global economy is gradually driven into recession, and there will be a dearth of investment in all sectors, including construction, a challenge we face is the shortage of projects. The strategy is to secure the current awarded projects while winning more projects locally and absorbing more export orders.

Secondly, the associated industries, mainly tourism, apparel, and exports, are critically affected. So, new project initiatives will be minimal. To overcome this, diversification and market penetration into other segments is necessary.

Next, traveling between countries will be restricted or minimally allowed. As a result, there will be no freely

visiting foreign buyers and investors. Therefore, improved international communications, social networking, and online marketing strategies will have to be implemented.

Further to this, the need and demand for new spaces or built environments will be at an all-time low. Clients might abandon or postpone projects. Otherwise, they might continue with what they have. New apartments, hotel rooms, and upmarket shopping malls were reported to be in excess. Once again, diversification and market penetration into other segments is required.

The inflow of foreign currency and remittance by the Sri Lankan workforce will get slashed considerably. The Rupee will get devalued, and the cost of construction will go up considerably. Therefore, we must work on cost-effective resources and business process improvements.

7. What changes can we expect to see in the future as compared to the past?

Customer focus will be on online marketing and the sustainability of the products. Additionally, project postponement by construction companies can result in lower Aluminum sales. Product requirements will get complex as customers tend to go for customized solutions.

8. Aluminium has an opportunity to play a vital role in the government-led rebuilding of economies following the Covid-19 pandemic. What are your ideas/plans in this regard?

Research & Innovation is vital to determine the total (or majority) amount of construction and building materials being locally and cost-effectively produced. Such an accomplishment will be supported by bringing in high-tech industries to Sri Lanka and incorporating them into our traditional systems and procedures.

In common buildings like schools and hospitals, where structures like windows, doors, etc. follow shared layouts and assemblies, standardization (a worldwide trending, cost-effective system) could save a great deal of money and wastage. Standardization has become a bit of a buzzword in the business world, but there's a good reason for the concept's popularity.

An increase in productivity from repeatability, reduction in mistakes, improvement in communication,

less burden on IT, better availability and access to information, scalability as your organization grows, and opportunities for continuous improvement are all advantages of standardization.

The "National Policy Framework, Vistas of Prosperity and Splendor" brought forth by the New Government, stipulates many positive steps towards better governance. Policy plans on education and implementation will provide a positive impact to kick start the construction industry with more construction projects. Examples include new aviation, Ayurvedic, and sports universities; upgrading of stadiums; new housing schemes and initiatives to have trained human resources.

9. How mature is Sri Lanka when it comes to environmental conservation and practices? Is there any room for improvement when considering the Aluminium industry?

Initiatives can be taken to increase local billet production to over 2000 MT, with a foreign exchange saving of USD 7 million. Since the recycling process saves 95% energy as compared to virgin material, reduced emissions from the process will make a positive impact on air pollution. Moreover, this will be supported further by the government ban on exporting Aluminium waste to other countries, which will ensure material availability for local recyclers.

The new production facility of Alumex uses cutting edge technology which significantly reduces wastewater discharge through a purification system.

At Alumex, we are committed to ensuring conservation of nature by adopting precautionary action plans and continuous improvements to our systems and procedures, while educating employees on conservation and sustainable use of biodiversity and development. We also conduct training programs to impart due diligence to our employees to safeguard species of plants and animals in danger of extinction. Systems and procedures are periodically reviewed to ascertain the impact of our operational activities on conservation. If required, revisions are made to our policies, and actions are implemented accordingly. Our research and development team, as a part of their responsibilities, are continuously engaged in the process of monitoring conservation obligations, and improving

and maintaining conformity with global requirements, while ensuring statutory requirements are complied with.

10. What is your view on Aluminium as a sustainable metal?

Nearly all branches of the global industry consume Aluminium, such as mechanical engineering, defense industry, aircraft engineering, shipbuilding, power production industry, and fabrication of construction materials. Therefore, we can identify Aluminium as a "strategic metal" with endless possibilities to meet the needs of everyday life. For most Aluminium products, the metal is not consumed during the product's lifetime but simply used, with the potential to be recycled without any loss of its inherent properties. This property of infinite recyclability, which requires up to 95% less energy than primary Aluminium production, has led to a situation where today, around 75% of the almost one billion tons of Aluminium ever produced is still in productive use. Today, more Aluminium is produced each year than all other non-ferrous metals combined. By using various combinations of its advantageous properties such as strength, lightness, corrosion resistance, and durability, Aluminium has become rooted in our lifestyles, with no other replacement for this strategic metal.

The demand for Aluminium would increase in tandem with increased budgetary allocations for infrastructure development in schools, universities, and other high-rise buildings. The usage of Aluminium is gaining popularity as a sustainable construction material endorsed by leading Architects. It has created a demand for Aluminium fabrications for the construction of houses, which is expected to drive business volumes in the domestic housing sector as well. A good 75% of the global demand for Aluminium is met with recycled metal.

11. Are there any community initiatives at Alumex PLC? If any, what drives this keen interest?

Our objective is to make a positive impact on the community through sustainable initiatives that bring about long-term benefits. This translates into three action areas.

Firstly, Supporting the Technical and Vocational Education (Alumex Training School, VTA Training, Government Institutions, Dealers & Fabricators Training, Professional and Private Institutions, Technical Colleges, and NVQ Certification).

Secondly, we focus on developing the social and physical infrastructure of the community (Ethical Business & Alumex Values, Regulatory Compliance, Environment Protection Licenses, Tax, and Other Statutory Payments, and Engaging with the Community around the Factory).

Finally, we have dedicated ourselves to enhancing the quality of life of the local community.

In keeping with our commitment to the community, Alumex initiated several CSR programs. Every year since 2012, the company donates 3,000 foldable white canes to the blind community. Starting from 2018, Alumex distributed school bags, books, and other stationery items to the pupils in the Meegaswewa School in Anuradhapura District annually. We also contributed to the construction of a house for a long-service employee, when his house collapsed due to rain.

Questionnaire by: Dr. Samith Rathnayake, Rajarata University of Sri Lanka

Final draft by: Samadhi Nawalage, Institute of Chemistry Ceylon

Mr. Dickshon Gange obtained his MBA from the University of Colombo, Sri Lanka, MEng from the University of Moratuwa, Sri Lanka, B.E from the National Institute of Technology Durgapur and the Professional Diploma in IT from the National Institute of Information Technology. He currently serves as the Deputy General Manager – R&D/ Engineering at Alumex PLC.