



*Building Indigenous Technologies
for the World*

ANSHUMAN AGRAWAL

*Managing Director,
MINIMAC SYSTEMS PVT. LTD.*



It had been just one and a-half years with Tata Motors when Anshuman Agrawal was handed over the critical responsibility of heading a function after a JV with Daewoo in South Korea. He effortlessly coordinated activities among the various departments at three locations – Pune, Jamshedpur, and Korea. But this offered him time to reflect on his abilities and the big opportunities he brought to the organisation. However, watching the movie ‘Guru’ based on the life of Dhirubhai Ambani, gave him a clearer picture of what he can achieve in his life by leveraging his expertise.

He decided to follow his passion for mechanical equipment, and thus, Minimac Systems Pvt. Ltd. was established in 2012 with the vision to turn Anshuman’s dream of lubrication excellence and improving machinery reliability into a reality. Minimac is recognised by DPIIT, the Ministry of Commerce & Industry (GoI). He is an ICML machinery lubrication technician 1 and a Noria Corporation US trained machinery lubrication engineer. He is also a member of the Society of Tribologists and Lubrication Engineers (STLE), the International Council for Machinery Lubrication (ICML), and the Tribology Society of India (TSI). Today he leads Minimac as its CEO and MD.

TradeFlock interviewed him to learn more about his journey, lessons, innovations, and more.

What was the vision behind finding Minimac?

I founded Minimac with just one vision: to create indigenous technologies in the field of lubrication reliability for the mechanical equipment used in various industries. Hence, my focus is on the indigenisation of products and services required in this industry. This vision is in line with my aim to have zero mechanical breakdowns in the manufacturing and core sector, which includes power generation, steel manufacturing, cement manufacturing, and the oil and gas sectors. In short, anything to do with energy, whether its generation or consumption.

It’s a fact that these industries contribute a lot towards GHG emissions, and hence, having better operational efficiency is paramount for the manufacturing industries. To have better operational efficiency, they should experience no breakdowns. To achieve this, I always strive to have a higher level of technological advancements, and so I keep an eye out for better technologies and ways to achieve this dream.

Could you highlight some of your post-pandemic challenges & how did you address them?

Along with challenges, the pandemic brought a shift in opportunity. The manufacturing

sector realised that plant efficiency and reliability should be considered the topmost Priorities, as better efficiency will equip them to enable cost-cutting. A simple 1% increase in energy efficiency reduce the carbon footprint by 2.5%.

The next shift came in the form of companies cutting their capital investments in plant and machinery. Rather, they want it as a service. As a company, Minimac initially focused on product sales. As an OEM, we wanted to offer products to our clients. I realised the shift and, hence, switched from being an OEM to being a service provider. Another opportunity that India experienced post-pandemic was the rise in production capacities as the world shifted its focus from China to India.

The pandemic also grabbed attention regarding GHG emissions. The pressure to reduce GHG emissions is now quite strong. This is with all the stakeholders, including the government, climate change organisations, and various industries. Hence, many companies are focusing on improving plant efficiency. Our product has become a part of their entire planning for achieving better plant efficiencies.

In fact, for these and several other reasons, I see the pandemic as an opportunity for Minimac Systems.

How are you making a difference in the industry and team?

First and foremost, indigenisation, and second, empowerment of my team. I believe that the indigenisation of technology can happen only when our people are empowered. To do so, I put a lot of stress on young people. And it is with my own experience that I trust the abilities of young talents and, hence, give them a lot of opportunities. I also created a flat structure with very little hierarchy to allow fresh ideas to flow in. This provides a platform for all of them to build technologies and solutions for our clients from equal minds rather than hierarchical ones. This has helped us indigenise our process.

A very simple instance is that during the pandemic, we allowed our people to work from home despite being a manufacturing organisation. We assigned them tasks to develop new technologies. This entire activity

resulted in the creation of eight new indigenous technologies just during the pandemic period. In fact, we developed our capabilities during this time and are now leveraging them.

So, at Minimac, my priority is to develop more capabilities within the team and the company. This helps us move ahead of the competition, which is mostly MNCs. However, the challenge is that many times, people do not trust indigenous technologies, and we need to develop that trust while continuing to strengthen our technologies.

How are you driving innovation and R&D within the company?

The essence of R&D is finding the pain points of the industry/customers. I organise multiple site visits along with my team and conduct multiple virtual (forums and community chat platforms) and face-to-face sessions to interact directly with our clients. I also conduct webinars for users and stakeholders to discuss various industrial problems. This helps me comprehend the requirements prevalent in the market.

Once we grab them, we work on finding solutions. To do so, we either leverage our existing technology to create the product or collaborate with global technology providers. Because the prime focus is to make these technologies accessible to users in India and globally for those who cannot afford the costly ones. Affordability is the key to our industry.

At Minimac, we are developing five to six new technologies related to IoT and AI because they are the future and will drive a higher level of automation. The cycle of innovation should never stop. Hence, I always challenge myself and never stop learning.

Your word of advice for emerging engineers?

We have a strong obligation to the environment. Along with building bigger and better machines, we must also be responsible to future generations in terms of climate change. I would certainly like to call upon professionals from around the world to work towards the betterment of our environment. ◆