

Manufacturing Today

DECISIVE TOOL FOR MANUFACTURING EXCELLENCE

- ARTIFICIAL INTELLIGENCE
- HEAVY ENGINEERING



The Good Company

THE TEAM OF INDRADEV BABU, RAVI RAGHAVAN, AND V ANBU, HEADING IMTMA, WORK CLOSELY TO GIVE THE MANUFACTURING INDUSTRY ITS MUCH NEEDED EDGE

L-R: V Anbu, Indradev Babu, and Ravi Raghavan



THE GOOD COMPANY

THE TEAM OF INDRADEV BABU, RAVI RAGHAVAN, AND V ANBU, HEADING IMTMA, WORK CLOSELY TO GIVE THE MANUFACTURING INDUSTRY ITS MUCH NEEDED EDGE

BY JAYASHREE KINI MENDES

Whatever anybody might say, it is manufacturing that is the mainstay of any economy. Countries who believe this and work towards this are likely to be better off in the long run. For some time now, this backbone has been a little under the weather. Economic circumstances and a bleak outlook have not been working in its favour. Nonetheless, it's only a matter of time before the wheels begin moving at speed.

Despite the settings, it feels good to know that the vibrant Indian manufacturing scenario has even compelled the government to come up with Make in India – a theme that continues to resonate through the minds of every Indian company that makes goods. The recent overtures by the government to step up Indian manufacturing for defence will mean the game has been upped for the industry.

Manufacturing has several aspects to it. But its core remains machining and machine tools. No manufacturing can happen if these are absent. As a job, this vista is invisible to most people unfamiliar with the concept of manufacturing. It's for this purpose there are associations present to educate the uninitiated. For the industry in question here, it is The Indian Machine Tool Manufacturers' Association (IMTMA).

LEADING FROM THE FRONT

Led by industry stalwarts of **Indradev Babu, president** (also MD, UCAM India); **Ravi Raghavan, vice-president** (also MD, Bharat Fritz Werner India); and **V Anbu, director general, IMTMA**, the seasoned gentlemen continuously strive to make the association a name to reckon with while all the time working wonders for its members. Each of them brings in expertise while working in tandem to benefit all under its umbrella.

From L-R: Indradev Babu, V Anbu, and Ravi Raghavan.



"The world has changed and industries need to adapt to the changing order keeping in mind the big picture, what will pay off in the medium- and long-term."
- Indradev Babu

1. The high footfalls witnessed during IMTEX FORMING 2020 and TOOLTECH 2020.

A few years ago, the machine tool industry was thriving. It's aware that it has some of the finest products and manpower that can compete globally. Today, it is struggling to find answers to questions on several fronts that seem beyond its realm. This is where the association come in.

Speaking about recent initiatives that have come from the Centre, Indradev Babu says, "We are now at the cusp of a new innings and seeing some undercurrents of positive vibes from the Government for strengthening the manufacturing sector. To serve the defence sector, IMTMA has been talking to Ordnance factories for providing products and solutions and advocated to the ministry for the inclusion of capital goods and engineering products under defence offsets which open up new opportunities. The push for defence production (including raising of FDI from 49% to 74%) is expected to be a game changer as it will help in realising India's true potential in production of weapons and military hardware. Global defence companies are likely to set up their production units in India and bring advance technologies and the Indian machine tool industry should keenly explore those opportunities."

The association works very closely with its members and is always ready to solve the challenges they face, while helping them grow in their sphere by showing them new avenues. For instance, the automotive industry which is the largest user of machine tools for

machining hundreds of parts has been caught in a cyclical wave that refuses to ebb. With talk of electric vehicles gaining momentum, there is a growing concern about the future. However, V Anbu is ready to take on even this challenge. In his words, "Traditionally, the machine tool industry has been serving the auto and auto components industries and although business is expected to reduce as a result of electric vehicles, it will happen gradually. The industry is honing its expertise to serve new user segments like aerospace, railways, agriculture, medical equipment, and energy. It is also exploring export opportunities in traditional and new

THE ASSOCIATION
WORKS VERY CLOSELY
WITH ITS MEMBERS
AND IS ALWAYS
READY TO SOLVE THE
CHALLENGES THEY
FACE.



user segments, besides capturing import market share of some of the products. The market is upbeat about the slew of measures announced by the government such as Rs 200cr global tenders will be disallowed for government procurement, support for Make in India, Vocal for Local, and Self-Reliant India."

The above measures are much needed considering that currently around 50% of the machine tools are imported in the country. Ravi Raghavan says, "Of these machines, we believe that the Indian machine tool industry has the potential and capability to produce 20-30% or may be more within. We should maintain the quality, performance, delivery and, of course, cost to achieve this. With this initiative, we can move up the value chain by addressing technology related issues which will enable us to look at exports which is not optional in the current and future scenario. We are hopeful that some of the stimulus measures announced by the government will aid us in this process."

THE ART OF SURVIVAL

Vision is an important factor among leaders. The right vision and leadership can play an important role in steering individuals and the manufacturing industry out of this downturn. "The world has changed and industries need to adapt to the changing order keeping in mind the big picture, what will pay off in the medium- and long-term. Industries need to venture into new ar-

reas which were hitherto unexplored, make best use of technology, and take up R&D for product and process innovations. In simple terms, it will not be just sufficient to master the art of survival but also excel in widening horizons, and decisions must be taken now. The machine tool industry is looking at new user sectors in addition to automotive including aerospace, health-care and medical equipment, agriculture, and so on which hold immense promise," says Babu.

He believes that the pandemic has brought in a change of mindset for survival and growth. "Lockdown has given us time to introspect and plan. The government's thrust for local products will assist the domestic industry. The slew of measures provided by the Union government is expected to provide opportunities for MSMEs and the machine tool sector," he adds.

Since most of the members of IMTMA are MSMEs, the policy advocacy of the association is always focused towards their development and enhance their capabilities in terms of technology and growth. To this effect IMTMA works closely with the government, specifically with the Department of Heavy Industries, Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Micro, Small & Medium Enterprises, NITI Aayog, CII, etc. Similarly, it offers customised training programmes in machine tools and manufacturing for SMEs for skilling and upskilling workforce.

Raghavan says, "We support the export efforts of



"We can move up the value chain by addressing technology related issues which will enable us to look at exports."
- Ravi Raghavan

2. Exhibitors have always taken a keen interest in the workings of the Indian machine tool industry.

members through initiatives such as group participation in overseas fairs, trade missions, etc. IMTMA encourages members' participation in recognised international exhibitions in target markets and invite leading trade journals and magazines to visit IMTEX for promotion of Indian machine tools. IMTMA has an established Export Development Cell and the association has formed a group of companies interested in exporting overseas. Then there are International Buyer Seller Meets during IMTEX to provide a platform for Indian machine tool manufacturers to interact with international buyers."

The association known for its strong connections in Indian circles and global ones has been working steadily to offer top-of-the-class programmes that can catapult them to new heights. Anbu says, "An experiential learning-cum-demo centre, training programmes on Industry 4.0 and associated topics covering industrial automation, robotics, artificial intelligence and machine learning for practical deployments in industries have already been set up. During IMTEX 2019,



"The industry is honing its expertise to serve new user segments like aerospace, railways, agriculture, medical equipment, and energy."
- V. Anbu

3. An aerial view of the BIEC.

THE MEASURES PROVIDED BY THE GOVERNMENT IS EXPECTED TO PROVIDE OPPORTUNITIES FOR MSMES AND THE MACHINE TOOL SECTOR.

we introduced a special pavilion and held a seminar on 'Factory of the Future: Industry 4.0'. The goal was to increase awareness on the opportunities and challenges of Industry 4.0 in manufacturing. The seminar offered a holistic understanding of the importance of IT infrastructure, Data Security, and IoT. A 'Live Demo' on Industry 4.0 at the Technology Centre at Bangalore International Exhibition Centre (BIEC) was also held. IMTMA has also supported CMTI, Bangalore, in the Samarth Udyog Bharat project of Department of Heavy Industry to develop Industry 4.0 deployable technology solutions for industries."

The training programmes are an effort towards knowledge upgradation and skill development. It is a mix of classroom theory and practical hands-on experience needed to work in manufacturing industries. It has five days, four- and eight-weeks comprehensive training programs for mechanical and electrical engineers in metal cutting, metal forming, design of machine tools and its sub-systems. An array of scheduled and customised training programmes meets the training needs of industries. Then there are need based, customised courses to meet sectoral requirements.

In November 2019, the association organised its CEO programme 'Vision Conclave', where it set the agenda for the growth of machine tool. "Focus points of the agenda being to primarily focus on increasing exports, revenue from non-auto sector, develop globally competitive products and solutions, build operational excellence through digitalisation and develop people's strength. These themes are gaining momentum amid the pandemic now. The objectives have not altered but strategies are dynamic and change depending on the situation," says Babu.

Raghavan points out some of the other initiatives that has made the association stronger and beloved in the eyes of its members. He says, "The National Productivity Summit provides a platform to showcase breakthrough practices that have resulted in improve-



ments in productivity and competitiveness. The Summit, through its live case study presentations, plant visits, and success stories, has emphasised the need to embrace an integrated approach to increase productivity and adopt better processes and technology. The IMTMA-Ace Micromatic Productivity Championship Awards recognise and reward outstanding efforts."

The Advanced Machine Tool Testing Facility (AM-TTF) offers testing and support for qualifying performance of machine tools apart from offering technology solutions. Advanced Manufacturing Technology Development Centre (AMTDC), Chennai, offers solutions for developing advanced technologies in capital goods manufacturing with collaboration of industrial partners. Currently 11 technology development projects are under various stages of development at AM-TDC. The Tumkuru Machine Tool Park set up by the government of India and Karnataka is expected to make the domestic capital goods and machine tools sectors globally competitive. Indian companies using these facilities can enhance their potential and growth by several notches.

Babu says, "Keeping global competitiveness in mind, a new approach being steered is to help machine tool companies improve the perceived quality of offerings from member companies. This is called 'Build Quality Development Programme' and would be rolled out post the lockdown."

MAKING STRONG HEADWAY

IMTMA has not shirked from spending on setting up extensive training facilities for its members. Its Productivity Institute is equipped with state-of-the-art training facilities including CNC machines; metrology equipment such as CMM, CAD/CAM systems; cutting tools, and work holding accessories, robots and other industrial automation accessories. The Design Institute



has set up CAD Laboratory & Digital Classroom, Autocad, Inventor, Solidworks, CREO & ANSYS, Eplan, Camworks, etc.

Anbu says, "The existing training facility offers design, productivity and automation related training. The shop floor and automation infrastructure is moderately configured for Industry 4.0 demo and hands on exposure. Training facility is equipped with CAD/CAM tools for offering machine tool design courses - covering machine and sub-system design, mechanical, fluid power, electrical, and control system design for engineers. Training facility offers courses for making 'fresh graduate engineers' job ready by conducting 8-12 weeks programmes and finding them placements."

Overall, the leadership team feels that with the government giving a thrust on indigenisation and MSME development, IMTEX will provide them better opportunities. The outbreak of coronavirus has presented challenges for everyone, however, industries have restarted their operations and look forward for innovative technology and partnerships to prosper. ■

4. The association has always been a fervent supporter of modern technologies and encourages members and the manufacturing industry to use them as frequently as possible.

5. IMTMA has rightly discerned that excellence in products begins with getting the design right.