

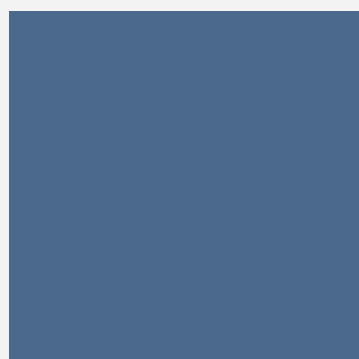
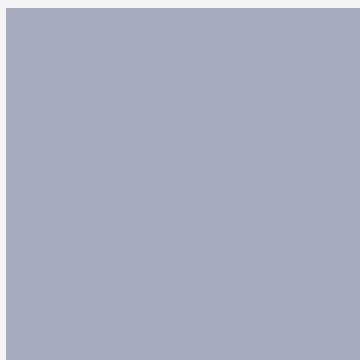
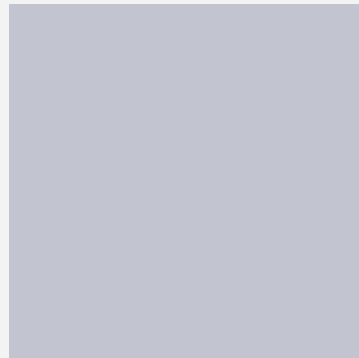


Indian Machine Tool
Manufacturers' Association

www.imtma.in

ANNUAL REPORT

2022 - 2023



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R
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T
N
O
C

Executive Committee 2022 - 2023	03
President's Foreword	05
76 th Annual General Meeting	09
Trends in Indian Machine Tool Industry	10
Association Initiatives	11
Trade Fairs	17
Mega Events	21
Technology & Training	23
Calendar of Events - 2022 - 2023	27
Activities of BIEC	41
New Products Developed by Members in 2022-2023	43
New Members Enrolled During 2022 - 2023	44



Indian Machine Tool
Manufacturers' Association

Executive Committee 2022 - 2023

President

Ravi Raghavan

Managing Director
Bharat Fritz Werner Limited

Vice President

Rajendra S. Rajamane

Managing Director
Rajamane Industries Private Limited

Members

Vikram V. Salunke

Managing Director
Accurate Gauging and Instruments Private Limited

Mohini Kelkar

Director - Business Development
Grind Master Machines Private Limited

Madhavi Chandrashekar

Executive Director
Ace Designers Limited

Vijaykrishnan Venkatesan

Managing Director
Kennametal India Limited

L. S. Umesh

Director & CEO
Ace Manufacturing Systems Limited

K. Soundhar Rajhan

Director - Operations
Lakshmi Machine Works Limited

Nisha Lobo

Director
Alex Machine Tools Private Limited

Nikhil Agrawal

Managing Director
Nagel Special Machines Private Limited

Sagar S. Bajaj

Chief Executive
Biltz Cutting Tools Company

Rajesh Bhaskar Mandlik

CEO
Setco Spindles India Private Limited

Ingrid Rasquinha

Jt. Managing Director
Electropneumatics & Hydraulics (I) Private Limited

Vijay Pratap Singh

Country Business Unit Head - Motion Control
Siemens Limited

Sonali Kulkarni

President & CEO
FANUC India Private Limited
(ceased to be a member w.e.f. March 2023)

S. Sundariya

Unit Head
Wendt (India) Limited

Past Presidents

Indradev Babu

Managing Director
UCAM Private Limited

V. S. Goindi

Chairman
Parishudh Machines Private Limited*

P. Ramadas

Managing Director
Ace Manufacturing Systems Limited

Shrinivas G. Shirgurkar

Managing Director
Ace Designers Limited

P. G. Jadeja

Chairman and Managing Director
Jyoti CNC Automation Limited

Shailesh R. Sheth

Simtools Limited*

L. Krishnan

Managing Director
TaeguTec India P. Limited

S. N. Mishra

Bharat Fritz Werner Limited*

Vikram Sirur

Executive Chairman
Miven Mayfran Conveyers Private Limited

Nirmal Bhogilal

Chairman
Batliboi Limited

M. Lokeswara Rao

Managing Director
Lokesh Machines Limited

R. Srinivasan

Widia India Limited*

N. K. Dhand

Chairman
Micromatic Grinding Technologies Private Limited

Jamshyd N. Godrej

Chairman & Managing Director
Godrej & Boyce Manufacturing Co. Limited

C. P. Rangachar

Managing Director
Yuken India Limited

(*Companies represented by Past Presidents during their tenure of Presidency)

Invitees

Achal Nath

Executive Director
Ashok Manufacturing Co. Private Limited

Dr. N. Ramesh Babu

Professor & Head
Department of Mechanical Engineering, IIT Madras

S. Tarlochan Singh

President
Association of Ludhiana Machine Tool Industries

Dr. Nagahanumaiah

Director
Central Manufacturing Technology Institute (CMTI)

Yogin Chhaniara

President
MTMA Rajkot

Sunil Taneja

Managing Director
Ind-Sphinx Precision Limited

Secretary, Director General & CEO

Jibak Dasgupta

FOREWORD



Expanding Horizons for Manufacturing

I am pleased to present the Annual Report of Indian Machine Tool Manufacturers' Association (IMTMA) for the year 2022-2023. Our performance during the year under review has been satisfactory.

India is the fifth largest economy in the world. The International Monetary Fund (IMF) has called India a 'bright' spot. Many factors are favouring India as it aspires to be a \$5 trillion economy. It has the third-largest ecosystem for startups globally with a significant number of R&D centres propelling innovation-led growth. The macroeconomic indicators showcase a stable economy and all-round growth. With G-20 Presidency and various events that India is hosting across regions, the country is positioning itself on a strong footing to be independent, futuristic, prosperous, and inclusive.

India has staged a recovery across sectors and positioned itself to get back to the pre-pandemic levels, according to the Ministry of Finance's Economic Survey 2022-23. The manufacturing Purchasing Managers' Index (PMI) which remained steady throughout the financial year 2022 - 23 closed at a satisfactory PMI of 57.8 in June 2023, according to S&P Global India, setting the tone for FY 2023-24.

The Year 2023 has brought forth renewed hopes for India's manufacturing sector. India's manufacturing industry has

seen expansion at its quickest pace in recent times driven by growth in new orders and output, signalling robust demand and an encouraging outlook.

Indian Machine Tool Industry

The Indian machine tool industry posted an increase in production growth figures in FY 2022-23. Indian machine tool production is provisionally estimated to have reached around ₹12,328 crores and the machine tool consumption is provisionally estimated to have reached around ₹24,536 crores. Production is estimated to have grown by around 32% year-on-year in 2022-23 and consumption is estimated to have increased by around 55% during the period.

Indian machine tool industry ranks 9th in Production and 7th in Consumption, globally, as per estimates from Gardner Intelligence's World Machine Tool Survey 2022.

Our Association works to widen the scope of machine tools across the entire spectrum of industries and find new avenues for growth. This includes eyeing larger space in the sunshine sectors besides the traditional auto and auto components sector. The Indian machine tool industry is tapping into defence, electronics, aerospace, medical equipment, power, railways, construction equipment, and numerous other sectors. To achieve manufacturing volume and global reach, capacity expansion is required by industries.

As the industry intensifies its R&D initiatives and manufactures products that user industries look for, the scope for exports can be widened and the Indian machine tool industry would move up the value chain.

The industry needs to look outward and find niche markets, identify the needs, build customized products and work collectively. To chart out this path, IMTMA has formed a special interest group to enhance exports to target overseas countries and scale up exports substantially in around 2 - 3 years. Exports can reinforce India's brand as a formidable nation in the field of machine tool manufacturing.



With the high level of optimism for India's economy, throwing up key sectors for FDI, and many other reforms in the pipeline, the Indian machine tool industry can look forward to further growth.

Government Initiatives

The Government of India through many policy measures in recent years has endeavoured to position India as a manufacturing hub. The PLI schemes and free trade agreements (FTAs) including the ones inked with UAE and Australia are prime examples.

Furthermore, increased government expenditure in various industry sectors such as construction, railways, electronics, agriculture, defence, and others, besides retail consumption has created a good business momentum. The establishment of designated landbanks in the form of parks and industrial areas for defence, space, medical, startup, IT, electronics, machine tools, and various other industry sectors would create business opportunities and jobs.

Also, it is important to note that Capital Goods and machine tools have a symbiotic relationship with one pushing the growth of the other. The Capital Goods sector is a major multiplier of indirect employment. Larger capex spending would drive the demand for machine tools, and this would have a cascading effect on the Indian economy.

IMTMA would continue to work closely with member companies to enable them to scale greater heights.

Policy Advocacy

I would like to place on record the industry's gratitude to the Government of India and the Government of Karnataka, as well as various industry associations such as CII, ACMA, SIAM, etc. for extending support over the years for fostering the competitiveness of the machine tool industry.

The Association had interactions with the Ministry of Commerce & Industry, Government of India, regarding relaxation of 'prior supply' / 'previous experience' criteria under tender conditionalities of Public Procurement Orders (PPOs) for Capital Goods, specifically, metalworking machine tools, and bringing equitable tender terms in PPOs.

The Association put forth its recommendations for policy

measures to be implemented in various spheres. The Association also submitted its responses to Ministry of Heavy Industries, Government of India, for the final version of the Future Actions proposed by the Capital Goods industry as part of Vision-INDIA@2047.

Technology

IMTMA worked closely with member industries, Academia, and the Ministry of Heavy Industries (MHI), Government of India, to develop products and technologies under the Technology Innovation Platform. The Government accorded approval for six projects including the development of 'industrial robots' under the Scheme for "Enhancement of Competitiveness in the Indian Capital Goods Sector" Phase - II, administered by the Ministry of Heavy Industries (MHI), Government of India.

The manufacturing industry received a major fillip in developing homegrown technologies with the setting-up of Advanced Manufacturing Technology Development Centre (AMTDC) at IIT - Madras, by the Ministry of Heavy Industries (MHI), Government of India, under the Scheme for "Enhancement of Competitiveness in Indian Capital Goods Sector". AMTDC is a Centre of Excellence for Machine Tools and Production Technology and is offering solutions for developing advanced technologies in the Capital Goods and manufacturing sector in collaboration with industry partners.

Advanced Machine Tool Testing Facility (AMTTF) located in CMTI premises, Bengaluru, established by the Government of India with support from IMTMA and its members provides testing and development support to engineering and Machine Tool industries. AMTTF with its state-of-the-art facility and experienced & skilled engineers has expanded its horizons to provide services to many industries in the manufacturing sector.

Tumakuru Machine Tool Park (TMTP) at Vasantha Narasapura Industrial Area, close to Bengaluru, set-up by the Government of Karnataka with support from the Ministry of Heavy Industries (MHI), Government of India, is expected to make the domestic machine tool industry expand its capacities and become globally competitive.

Many OEMs and allied equipment manufacturers have acquired plots in TMTP.

During the year, IMTMA through its newsletters and articles published in Modern Manufacturing India (MMI) continued to engage with its membership by keeping them abreast of various initiatives, exhibitions and events it conducted for the manufacturing community.

Cluster Initiatives

IMTMA - MSME Clusters - "COBIZ" - 'Collaborative Business' in Pune region and "SAHAYOG" - 'Collaboration for Success' in Northern region have conducted various activities for SME members. 'COBIZ' has taken up implementation of Total Productivity Maintenance (TPM) as one of the key initiatives.

Training

IMTMA has been at the forefront of skill development through various facilities such as Design Institute, Productivity Institute, and Finishing School set-up in its offices in Bengaluru, Pune, and Gurugram. The short-term and long-term training programmes conducted at IMTMA Technology Centres have been benefitting the machine tool and manufacturing industries in terms of skilling and reskilling.

The Association also has a fully functional e-learning portal for self-paced learning on technical subjects related to manufacturing and machining. It also conducts various programmes on the online/digital platform. The knowledge-sharing webinars and instructor-led online training programmes were in addition to the classroom training that are imparted. IMTMA has a rich blend of physical and digital training programmes enabling learning at flexible timings.

During July 2022 to June 2023 period, IMTMA conducted a total of 240 programmes inclusive of 111 online training programmes and webinars for students and industry professionals. The Association conducted 129 physical training programmes including courses initiated by the Productivity and Design Institutes. Through offline programmes, IMTMA delivered 11060 person-days of training during 2022-23. These programmes have helped to

shape the careers of students and industry professionals and enabled them in augmenting their knowledge and skills.

IMTMA Women Empowerment initiative

IMTMA and member industry collaboration aims at empowering women engineers through imparting the necessary industry skills to create industry-ready professionals for the machine tool fraternity. With the common objective of empowering women and enhancing the footprint of women workforce in manufacturing, the programme enhances the employability of young women engineers through imparting design and manufacturing skills and ensuring their self-reliance. Apart from aiding self-reliance, the programme also aims at empowering the manufacturing industry with trained and talented women workforce.

IMTMA has successfully organised the second edition of women empowerment initiative of conducting a comprehensive training programme which was sponsored by Ace Micromatic Group in May 2023.

Mega Events

Our Association has taken up endeavours to keep up with the changing requirements of the industry. To champion the cause of productivity and enhance competitiveness in the Indian manufacturing industry, IMTMA organized 16th edition of the National Productivity Summit on 18-19 November 2022 at Bangalore International Exhibition Centre (BIEC), Bengaluru. IMTMA - AceMicromatic Productivity Championship Awards 2022 were conferred. The event showcased best practices in manufacturing through inspiring keynotes, plant visits, and live case study presentations.

Coinciding with IMTEX 2023, IMTMA organized 'International Seminar on Manufacturing Technologies' on 18th January 2023 at BIEC, Bengaluru. Latest technological developments in manufacturing and allied technologies that users could adopt in their production process were presented at the seminar. The seminar had concurrent sessions on machining, work holding and tooling, additive manufacturing, enabling technologies, emerging trends, and automation.



Indian Machine Tool
Manufacturers' Association

Trade Fairs

The year 2022-23 was an impactful one for IMTMA as it organized two IMTEX shows successfully. IMTEX FORMING 2022 along with Tooltech and Digital Manufacturing was held from 16th - 21st June 2022 in BIEC, Bengaluru. The exhibition featured 350 exhibitors from 19 countries and attracted a footfall of 25,656 visitors from 45 countries.

IMTEX 2023 along with Tooltech and Digital Manufacturing was held from 19th - 25th January 2023, in BIEC, Bengaluru. The exhibition featured 991 exhibitors from 23 countries and attracted a footfall of 96,000 visitors. Co-located events such as i2 Academia Pavilion, Jagruti, Connect and Industry 4.0 demo were well received by the exhibition visitors.

The Association will continue to deploy higher level of technology and digital enhancements for exhibitions and events, keeping in view the need to reduce adverse impacts on environment.

IMTMA - Naoroji Pirojsha Godrej International Exhibition and Conference Complex - Bangalore International Exhibition Centre (BIEC)

The Year 2022-23 was a year of recovery for BIEC. India Energy Week in February 2023 was a landmark one for BIEC as it attracted about 30,000 global energy leaders and renowned speakers from over 150 countries. India Energy Week 2023 was held under the patronage of the Ministry of Petroleum & Natural Gas, Government of India, and supported by the Federation of Indian Petroleum Industry (FIPI) under the aegis of G-20 Presidency. The event was inaugurated by the Hon'ble Prime Minister of India, Shri Narendra Modi.

Future Thrust

The Indian economy has been able to withstand the global headwinds and the manufacturing sector is seemingly poised for higher growth. The machine tool industry needs to take advantage of this by expanding its capacities and keeping pace with the rapidly changing technologies with a focus on innovation and new product development. IMTMA has always been at the forefront of supporting its members

through various initiatives in developing technology, accessing new market segments, policy advocacy, and various membership services. Towards this, the Association will continue to project the Indian machine tool industry as a key enabler of 'AatmaNirbhar Bharat' initiatives.

Felicitation

I would like to record that the two years of my Presidency has been highly satisfying. When I took over, things were uncertain as we were just about coming out from the pandemic-induced challenges. IMTMA and the industry stayed resilient and together we were able to tide over the phase with determination. The Association was able to host two IMTEX shows successfully in one financial year. I would like to acknowledge the support of all Past Presidents of IMTMA, the Executive Committee and membership, as well as IMTMA Secretariat. I am sure that all of you would continue to extend support to the future endeavours of IMTMA in the years ahead.

Ravi Raghavan
President

ANNUAL GENERAL MEETING

76th Annual General Meeting

28 September 2022: BIEC, Bengaluru

Indian Machine Tool Manufacturers' Association (IMTMA) held its 76th Annual General Meeting (AGM) on 28th September 2022 at BIEC, Bengaluru. A Special Session was organized before the Business Session of IMTMA, in which Prof. (Dr.) N.R. Bhanumurthy, Vice Chancellor, Dr. B.R. Ambedkar School of Economics University – the keynote speaker presented his views on “Effects of Global Economic Recession in Indian Economy and Likely Scenario for the Future”.



L to R: Mr. Rajendra S. Rajamane, Prof. (Dr.) N. R. Bhanumurthy, Mr. Ravi Raghavan, and Mr. Jibak Dasgupta

Dr. Bhanumurthy spoke at length about the situation of the Indian machine tool industry and how the country's rapid economic development is being fuelled by capital expenditures. The good business performance of the machine tool industry was expected to continue, he said.

Following the AGM, Mr. Ravi Raghavan in his address during the Business Session stated that there was a big indication of the positivity of the whole economic scenario. He added that the industry exhibited growth with greater resilience in Financial Year 2022 and the country which crossed \$400 billion in merchandise exports in 2021-22 was being looked upon as a great source for supply chains in different industrial verticals.

In his concluding statement, Mr. Raghavan said that IMTMA and its members must constantly seek ways to increase the manufacturing sector's contribution to about 25% of India's GDP. This is possible with a healthy and proactive machine tool industry. He also stressed that the machine tool industry should prioritize exports and IMTMA would do everything possible to facilitate this and support member companies. IMTMA Past Presidents, Executive Committee Members, and Members of the Association were among the dignitaries in attendance.

At the Executive Committee meeting following the AGM, Mr. Ravi Raghavan was elected as President of IMTMA for the year 2022-23. Mr. Rajendra S. Rajamane was elected as Vice President for the year 2022-23. The new Executive Committee for the year 2022-23 was formed. Members were also informed that Mr. Jibak Dasgupta has recently assumed charge as Secretary, Director General & CEO of IMTMA.

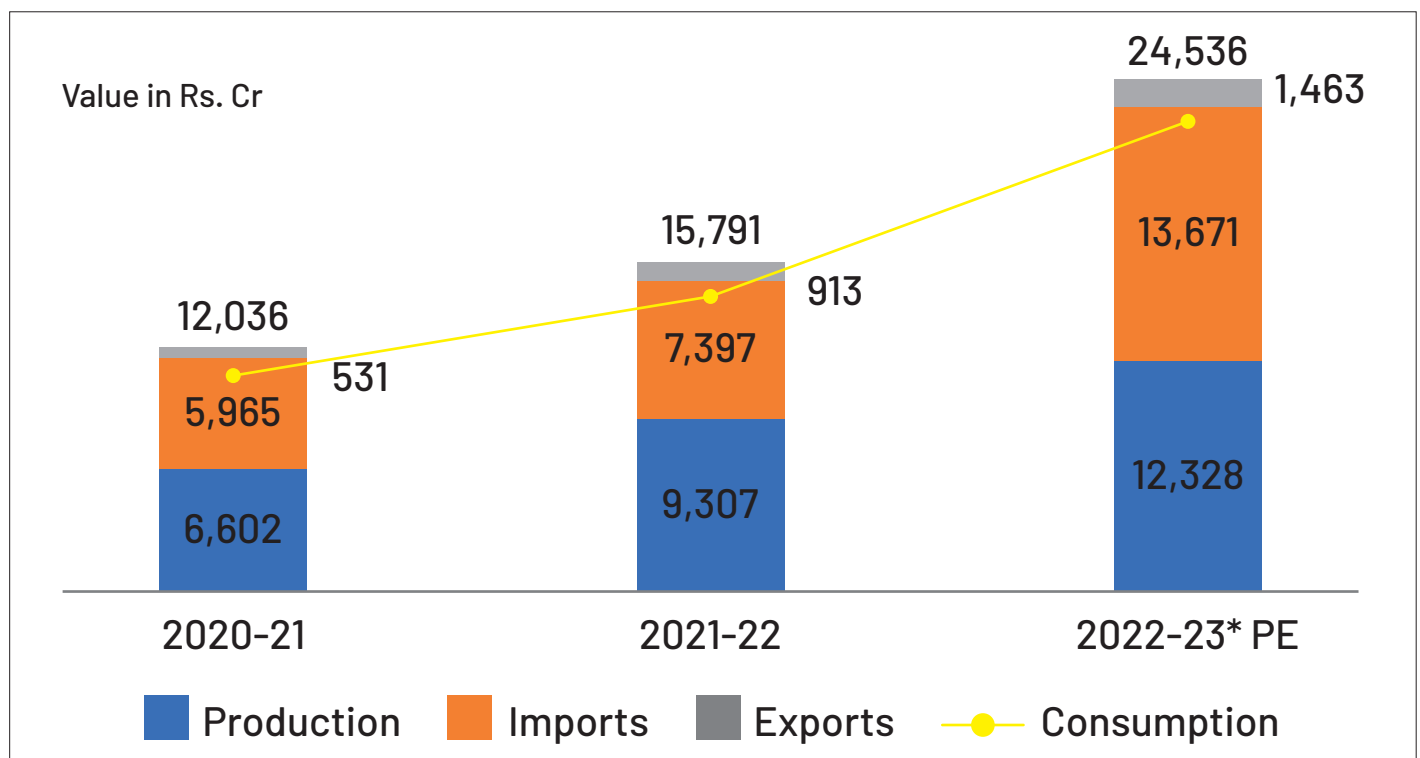


Trends in Indian Machine Tool Industry

India occupies 9th rank in production and 7th rank in consumption globally, as per the latest 'World Machine Tool Survey 2022' by Gardner Intelligence. The Indian machine tool industry improved its ranking by two spots in the global machine tool producing nations list compared to its ranking in 2021.

Indian machine tool production is provisionally estimated to have reached approximately ₹ 12,328 crores, and machine tool consumption is provisionally estimated to have reached around ₹ 24,536 crores in FY 2022-23. Production is estimated to have grown by around 32% year-on-year in FY 2022-23, and consumption is estimated to have increased by around 55% during the period.

Indian Machine Tool Industry 2020-21 to 2022-23



Source: IMTMA

Note: *PE: Provisional Estimates

Association Initiatives

Policy Advocacy

IMTMA's advocacy and outreach endeavours with key policymaking institutions during FY 2022 - 23 resulted in some key developments.

IMTMA continued its engagement with NITI Aayog, the Ministry of Micro, Small & Medium Enterprises, the Department for Promotion of Industry and Internal Trade, the Ministry of Commerce & Industry, the Railway Board, the Government of Karnataka, among others. The Association also worked closely with the Confederation of Indian Industry (CII) specifically 'CII National Committee on Capital Goods & Engineering' and the 'CII Associations Council' (CII-ASCON), besides various other industry associations. IMTMA's recommendations were also imprinted in the final draft of "Vision - India @ 2047: Capital Goods Sector", jointly framed by MHI and CII.

The other notable policy endeavour was the persistent policy advocacy on relaxation of 'prior supply' / 'previous experience' criteria under tender conditionalities of the public procurement orders for capital goods, specifically metalworking machine tools. The Ministry of Commerce acknowledged that "new indigenously developed technologies ought to be allowed in governmental tenders".

On the technology front, IMTMA initiated its member companies to undertake technology and product development under technology innovation platform (TIP) at the Advanced Manufacturing Technology Development Centre (AMTDC). New projects under Phase II of the Scheme for "Enhancement of Competitiveness in the Indian Capital

Goods Sector" by the Ministry of Heavy Industries (MHI), Government of India, were initiated for import substitution. These include the development of Production Grade Cylindrical Grinding Machine with indigenously developed Hydrostatic Systems; Thermally Efficient 5-Axis Vertical Machining Center; Bearing Superfinishing Technology and Machine Tools; Hot Cell Preparation System for Atomic Research; Optical Polishing Machine for Photonic Components; Automatic Plano Grinder for Steel Mills. Additionally, the "industrial robots" project for technology development got approval. Companies have jointly pooled resources to indigenously develop 'industrial robots' of various dimensions.

IMTMA played an active role in the allotment of plots in the Tumakuru Machine Tool Park (TMTP) at Vasanthanarasapura in Karnataka, promoted by the Government of India and the Government of Karnataka. Around 150 acres of land has been allotted to machine tool and allied manufacturing companies.

The Railways and AeroDef task force members of IMTMA visited the Integral Coach Factory (ICF), Ministry of Railways and Engine Factory of Armoured Vehicles Nigam Limited (EF-AVNL), Ministry of Defence and the Electronics task force members visited NMTronics (India) to showcase their capabilities and capture new business opportunities. IMTMA woodworking task force member industries are working to design and develop woodworking machinery with woodworking industries.



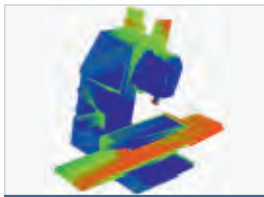
Indian Machine Tool
Manufacturers' Association

Association Initiatives

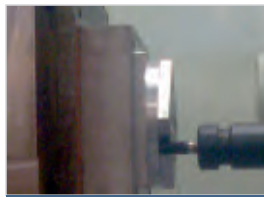


Advanced Machine Tool Testing Facility

The Advanced Machine Tool Testing Facility (AMTTF) in Bengaluru, India is a state-of-the-art facility that specializes in providing testing and calibration services for Machine Tools and other Engineering Industries pan-India.



Vibration Analysis



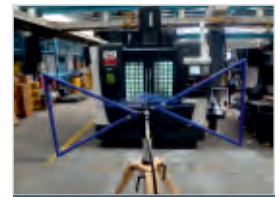
Machine Tool Testing



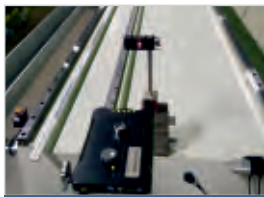
Third Party Inspection



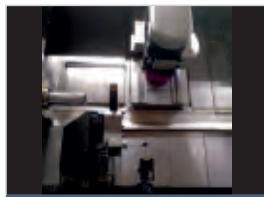
Certification of Products



EMC Testing



Calibration of Machines



Laser Services



Thermal Analysis



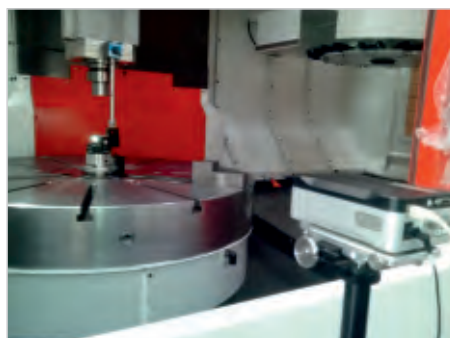
Residual Stress Analysis



Metrology Services

AMTTF offers a wide range of testing and calibration services including geometric testing, vibration analysis, thermal analysis, and accuracy testing. The facility has a variety of state-of-the-art equipment for vibration analysis, EMI/EMC testing, modal analysis, spindle error analysis, thermal analysis, residual stress and retained austenite testing (XRD), and other equipment like laser interferometer, ball bar, spindle balancer, etc.

AMTTF has carried out 400+ assignments in FY22-23 including performance evaluation and testing of several 5-axis machines, multi-tasking machines, long stroke milling machines, lathes, etc. AMTTF has offered services to machine tools, auto, aerospace and defence, woodworks, agriculture, general engineering, and many other manufacturing industries.



Association Initiatives



Advanced Manufacturing Technology Development Centre

Advanced Manufacturing Technology Development Centre (AMTDC), a centre of excellence on machine tools and production technology at IIT-Madras in Chennai is a vital facility for the development of manufacturing technologies in India. Supported by the Ministry of Heavy Industries, Government of India the center is working on various aspects including the smart manufacturing platform for production processes.

AMTDC in association with industry partners is working on six technology development projects with four industrial partners under the Capital Goods Scheme - Phase II. Chennai Metco, Grind Masters, Lokesh Machines, and Micromatic Grinding have partnered with AMTDC. The development of indigenous industrial robots with Prerana Engineering Works and m2nxt Solution were major highlights.





Association Initiatives

IMTMA - MSME Cluster Initiatives

COBIZ- 'Collaborative Business'

The Pune MSME Cluster, known as 'COBIZ,' embarked on its journey in 2021 and has remained steadfast in its mission to empower small and medium-sized enterprises (SMEs) members in the Western region of India throughout 2022-23. COBIZ has been instrumental in fostering a collaborative environment for its member companies through monthly meetings and on-site visits. These interactions have facilitated the exchange of best practices and knowledge sharing, further propelling the growth and development of businesses. Several sharing sessions and initiatives were organized with a focus on improving various aspects of business operations. This included implementation of HR management and employee engagement; awareness and assisting members to participate in the government e-marketplace (GEM) portal; guiding members to chart out vision, mission, and roadmap for strategizing business growth and enhancement; awareness to regulations and compliance standards; members implementing performance measurement systems to track and evaluate their progress and performance; adoption of tools and systems for optimizing resource utilization and enhancing production; and 5s.

TPM Journey with CII-TPM Club

In a significant step towards operational excellence and organizational transformation, four member companies of COBIZ started their Total Productive Maintenance (TPM) journey in June 2023. This initiative was made possible with the support and guidance of the CII-TPM Club. TPM is a holistic approach aimed at improving an organization's overall performance by focusing on enhancing both people and equipment through efficient TPM practices.



Association Initiatives

IMTMA Regional Council (North)

Meeting on 20 September 2022: Digital Platform

The 47th meeting of the IMTMA Regional Council (North) was held over digital platform. Mr. Sunil Taneja, Chairman of the Regional Council (North) chaired the meeting. Chairman sought members' views on business performance in the

first half of the current financial year and their views on how the next half of the financial year was expected to shape up. Ms. Meghna Joglekar, General Manager, Sustainable Enterprise and Export Development Group, Export-Import Bank of India, and her colleagues from EXIM Bank briefed members about EXIM Bank and its services to the industry.

Meeting on 22 November 2022: Ind Sphinx Precision Limited, Parwanoo



The 48th meeting of the IMTMA Regional Council (North) was held over digital platform. Mr. Sunil Taneja, Chairman of the Regional Council (North) chaired the meeting. Members discussed about the constitution of UDAAN chapter for Northern region comprising machine tool manufacturing companies in Ludhiana, Himachal Pradesh, and the National Capital Region. Bridging the technical knowledge gap in engineering institutions of Punjab and scheduling a meeting with the Government of Punjab were also discussed.

Meeting on 17 March 2023: Digital Platform

The 49th meeting of IMTMA Regional Council (North) and TPM awareness session was held over digital platform.

A session on TPM awareness by Mr. Tausif Khan from the Confederation of Indian Industry (CII) Institute of Quality was organized. Mr. Tausif's presentation covered the

history and evolution of TPM, the benefits of TPM, the journey of the TPM club in India, etc. IMTMA team briefed member companies on the current industry status and made a presentation on IMTEX 2023.

IMTMA Regional Council (West)

Meeting on 9 December 2022: Sahajanand Laser Technology Limited, Gandhinagar



A meeting of IMTMA Regional Council (West) was held at Sahajanand Laser Technology Limited in Gandhinagar, Gujarat. Members discussed the activities of the Regional Council (West), industry trends, expectations of the members from Ahmedabad and Vadodara, and formation of clusters in Gujarat (Ahmedabad and Vadodara) and nearby areas. After the meeting, members visited Tata Motors Passenger Vehicles Limited, Sanand, and held interaction with its team.



Indian Machine Tool
Manufacturers' Association

Association Initiatives

Meeting on 23 February 2023: Electropneumatics and Hydraulics (I) Private Limited, Pune



A meeting of IMTMA Regional Council (West) was held at Electropneumatics and Hydraulics (I) Private Limited. Members discussed the activities of the Regional Council (West), the COBIZ-MSME cluster, and the benefits of a collaborative approach by experience sharing in marketing, HR practices, operations, etc. presentations, on women's empowerment initiative and about Electropneumatics and Hydraulic's journey on best practices were made. Members visited the Electropneumatics and Hydraulics plant and had an interaction with their team.

IMTMA Regional Council (South)

Meeting on 9 September 2022:

ACE Manufacturing Systems Limited, Bengaluru

A meeting of the IMTMA Regional Council (South) was held on 9 September 2022, at ACE Manufacturing Systems Limited (AMSL), Bengaluru. Coinciding with this meeting, a visit to the shopfloors at AMSL and Amace Solutions was organized. Members were apprised about the business opportunities for the machine tool industry in sunrise sectors such as railways, toy manufacturing, electronics, construction equipment, etc.

AMSL shared their experience on the development of "AMS SCM partner's cluster" aimed at driving performance improvement for sustainable growth. Members were also presented with the features and benefits of "Prakalpa" a project management software developed by Precitec Precision Machineries Private Limited.



Meeting on 27 December 2022:

ACE Designers Limited, Bengaluru



A meeting of the IMTMA Regional Council (South) was held on 27 December 2022 at ACE Designers Limited, Bengaluru. Coinciding with this meeting, a visit to the shop floor at Ace Designers was organized. Members deliberated on the various challenges being faced by the machine tool industry on aspects pertaining to supply chain, foreign exchange fluctuations, skilled human resource shortage, and attracting talent into the industry. AMSL shared their initiatives on "Strengthening Indian machine tool supply chain ecosystem – The way forward", aimed at enhancing supply chain management and working towards a win-win collaboration between manufacturers and suppliers.

Trade Fairs



International Machine Tool &
Manufacturing Technology Exhibition



International Exhibition of Dies & Moulds, Forming Tools,
Machine Accessories, Metrology and CAD / CAM



International Exhibition on
Digital Manufacturing Technology

19-25 January 2023

Bangalore International Exhibition Centre, Bengaluru

IMTMA organized its flagship exhibition-IMTEX 2023, Tooltech 2023 & Digital Manufacturing 2023 from 19 - 25 January 2023 at BIEC, Bengaluru.

International and domestic machine tool builders demonstrated a wide variety of machines. Exhibitors presented sector-specific solutions for auto, EV, die and mould, aerospace, medical and electronic industries, etc.

Overall, there was a shift towards multi-axis, multi-tasking, hybrid, and high-precision machines, faster tool change and clamping, inspection based on vision systems, and laser profiler resulting in achieving cycle time deduction, high throughput, and quantified high performance.

Most OEMs apart from offering sector-specific solutions incorporated IoT-enabled solutions indicating a shift toward offering customized total solutions than machines. To quote an example, for the electronics industry, domestic exhibitors offered drill tap centers with 24000 rpm, auto loading/unloading, and around one-second tool-to-tool change and matching the performance and features of global players.

Also on display were diamond turning machines capable of achieving nano level of surface finish, combination machines for 5-axis manufacturing, high precision micro 5-axis machining centre for small parts manufacturing,

spiral, and bevel gear manufacturing machines, multi-axis gear hobbing machines, camshaft grinders, polygon turning, high precision double-disc grinder, three-axis moving head surface grinder, high-speed, energy-efficient slant turret design with a removable chip tray instead of a chip conveyor (motor) for sustainability, machine, and robot-based metal additive manufacturing machines, hybrid metal additive machines, etc.

Overall, IMTEX 2023 had a significant presence of exhibitors from Europe and America and many Indian companies also presented competing products and solutions.





Trade Fairs



Facts & Figures



23 Exhibiting Countries	Australia Austria China Czech Republic France Germany India Israel Italy Japan Korea Malaysia Netherlands Poland Serbia Singapore Slovenia Spain Sweden Switzerland Taiwan UK USA
5 Country Pavilions	Germany Korea Spain Taiwan USA
Exhibition Halls	5
Number of Visitors	96,000
Visitor Countries	Visitors from 81 countries
6 International Associations	<ul style="list-style-type: none"> • Association for Manufacturing Technology (AMT), USA • German Machine Tool Builders Association (VDW), Germany • Japan Machine Tool Builders' Association (JMTBA), Japan • Korea Machine Tool Manufacturers' Association (KOMMA), Korea • Taiwan Association of Machinery Industry (TAMI), Taiwan • Italian Machine Tool, Robot and Automation Systems Manufacturers Association (UCIMU), Italy
8 Partner Associations / Institutions	<ul style="list-style-type: none"> • Automotive Component Manufacturers Association of India (ACMA) • Association of Ludhiana Machine Tool Industries (ALMTI) • Advanced Manufacturing Technology Development Centre (AMTDC, IIT Madras) • Advance Machine Tool Testing Facility (AMTTF) • Confederation of Indian Industry (CII) • Central Manufacturing Technology Institute (CMTI) • Tool & Gauge Manufacturers Association (TAGMA) • Tumakuru Machine Tool Park (TMTP)
Orders	₹ 2,200 - 2,800 crores. Business orders showed an increase of 13% as compared to IMTEX 2019
Enquiries	₹ 31,000 crores. Business enquiries showed an increase of 29 % as compared to IMTEX 2019
Trade Delegations	<p>Key trade delegations from: Auto Components Automobiles Aerospace Defence Railways Telecom Capital Goods Electrical / Electronics Agriculture Equipments</p> <p>1961 delegates from 466 companies</p> <p>186 delegations</p>

Trade Fairs

Concurrent Shows

Tooltech  <small>International Exhibition of Dies & Moulds, Forming Tools, Machine Accessories, Metrology and CAD / CAM</small>	<p>Exhibitors showcased the world of parts, accessories and systems for machine tools and manufacturing technology</p>
Digital Manufacturing  <small>International Exhibition on Digital Manufacturing Technology</small>	<p>85 Exhibitors. 3,000 square meters of gross exhibition space.</p> <p>Industry 4.0</p> <p>49 Exhibitors. An increase of 53% compared to 2019</p> <p>Products on Display: Augmented Reality; Virtual Reality; Communication & Networking; Data Acquisition Hardware; Guided Vehicles; Smart Handling & Transfer Systems; IoT Devices; Sensors & Components; Vision Systems; Artificial Intelligence; Data Analytics & Cloud Services; ERP; Smart Factory Solutions; CAD / CAM / CAE; Products and Solutions for Machines and Manufacturing</p> <p>Additive Manufacturing / 3D Printing</p> <p>36 Exhibitors. An increase of 71% compared to 2019</p> <p>Products on Display: Additive Manufacturing / 3D Printing; Scanning; Digitization; Metrology; Inspection Equipment; Metal Moulding; Tooling</p>

Co-located Events

i2 Academia Pavilion	22 Institutions
Jagruti	25 students from 12 colleges
Connect	18 companies and 125 students
Industry 4.0 Demo	400 participants
International Buyer Seller Meet	37 delegates from 17 countries



Indian Machine Tool
Manufacturers' Association

Trade Fairs

Publications & Awards



A coffee table book titled 'The Navigator' was released during IMTEX 2023. The book traces the history and evolution of the Association from 1946, the year it was formed, to the present day.



A Comprehensive Report on Indian Metalworking Machine Tool Industry 2023 and Exhibition Catalogue were released at the inauguration of IMTEX 2023.



IMTMA-BFW Lifetime Contribution Award in memory of H.R. Gupta was conferred to Mr. L. Krishnan, Managing Director, TaeguTec India (P) Limited and Past a President, IMTMA.



IMTMA-Premier Outstanding Entrepreneur Award in memory of Vinod Doshi was conferred to Mr. Rajendra S. Rajamane, Managing Director, Rajamane Industries Private Limited and Vice President, IMTMA.

IMTMA Best Design Award was conferred to Amace Solutions Private Limited and Bestek Engineering Private Limited and Bharat Fritz Werner Limited for their exemplary indigenously designed, developed, and manufactured products in metal cutting technology.

IMTMA Export Performance Award was conferred to Grind Master Machines Private Limited and Trishul Machine Tools Private Limited for their significant achievement in the export of machine tools and related products.

Mega Events

National Productivity Summit 2022

18 - 19 November 2022: Bangalore International Exhibition Centre, Bengaluru

Indian Machine Tool Manufacturers' Association (IMTMA) organized the 16th edition of its flagship National Productivity Summit (NPS) on 18-19 November 2022 at Bangalore International Exhibition Centre in Bengaluru.

Over the years, NPS has been providing a platform for manufacturing companies to showcase their breakthrough practices that have resulted in significant improvements in productivity and competitiveness.

The Summit through its insightful keynotes, live case study presentations, and plant visits, has emphasized the need to embrace an integrated approach to increase

19 November 2022. This edition continued to expand its horizon attracting an encouraging participation from sunrise industries.

Besides the inaugural keynote address, NPS 2022 featured 2 keynote presentations viz.

- "Paradigm shifts in manufacturing and supply chain in lieu of Technological Developments", Dr. S. Devarajan, Sr. Vice President, TVS Motor Company
- "Productivity – Innovating Sustainably: Perspective ANAND Group", Mr. M.S. Shankar, President – Future Mobility (Innovation & Technology), Anand Group Over 85



manufacturing productivity and ways to make it possible with efficient team processes and technology.

The summit was inaugurated by Dr. Gopichand Katragadda, CEO & Founder, Myelin Foundry. In his opening address, he spoke on 'Artificial Intelligence and IoT – The Last Mile', towards enhancing manufacturing competitiveness. Also present were Mr. Ravi Raghavan, President, IMTMA, Mr. Rajendra Rajamane, Vice President, IMTMA, and Mr. Jibak Dasgupta, Director General & CEO, IMTMA.

The latest edition witnessed the participation of over 275 delegates from close to 100 companies across a diverse cross-section of the industry and concluded on

case studies were received for the Productivity Championship Awards 2022 of which 13 were shortlisted for the finals. Bharat Electronics, Bosch, Hero MotoCorp (Haridwar), Hero MotoCorp (Alwar), Hitachi Astemo, Kasturi Foundry, Kirloskar Oil Engines, Larsen & Toubro, Mahindra & Mahindra, and Tata Motors presented their case studies over the 2 days of the Summit.

The summit also featured case study presentations from 3 SMEs viz. Associated Plasmatron, JPF Metacast, and Mekhos Technology.

Winners of the IMTMA-ACE Micromatic Productivity Championship Awards 2022:



Mega Events

- 1st Prize: Bharat Electronics Limited, Bangalore, for their case study presentation on "Manufacturing of 30,000 ICU Ventilators in 90 days"
- 2nd Prize: Tata Motors, Pune, for their case study presentation on "Progressive increase of EV capacity through Productivity Improvement and Innovation"
- 3rd Prize: Hero Motocorp, Alwar, for their case study presentation on "MTTPM reduction through Digitalization of PM activities in ASRS system by implementing IOT based CBM monitoring system"
- SME Productivity Championship Award 2022: Mekhos Technologies, Bangalore, for their case study presentation on "Productivity Improvement in Cabin Latch Unit Assembly & Testing Line"
- Jury Commendation Award (Special Award):
 - Mahindra & Mahindra, Kandivali – Large & Medium

Category, for their case study presentation on "The Key to Boosting Efficiency – 'Single piece flow', a lean manufacturing method to improve efficiency by increasing productivity, reducing waste and enhancing quality"

- Associated Plasmatron, Thane, for their case study presentation on "To enhance productivity & reduce material consumption during HVOF (High Velocity Oxy-Fuel) coating of small parts with the help of multi-spindle rotator system"

Pre-summit plant visits were organized to Ashok Leyland, TVS Motor Company, Indo-MIM, Tractors and Farm Equipment (TAFE), SEG Automotive and Continental Automotive, which provided a unique opportunity to witness some of the best productivity improvement projects being translated into action.

International Seminar on Manufacturing Technologies 2023

Indian Machine Tool Manufacturers' Association organized the International Seminar on Manufacturing Technologies in conjunction with IMTEX 2023 on 18th January 2023 at BIEC, Bangalore.

The summit was inaugurated by Dr. Nandini Chakravorti, Associate Director, Manufacturing Technology Centre, UK. Dr. Chakravorti in her opening address spoke about 'Accelerating the Adoption of Industrial Digital Technologies in Manufacturing', towards enhancing manufacturing competitiveness. Mr. Ravi Raghavan,

President, IMTMA, Mr. Rajendra Rajamane, Vice President, IMTMA, and Mr. Jibak Dasgupta, Director General & CEO, IMTMA were present during the occasion.

The seminar was attended by around 300 delegates from 115 companies from across various industry sectors.

The seminar featured technology presentations by experts from Austria, Germany, India, Israel, Italy, Japan, and USA, on various topics such as Machining, Work Holding & Tooling, Additive Manufacturing, Enabling Technologies, Emerging Trends, and Industry 4.0.



Technology & Training

IMTMA Technology Centres are closely associated with skill development initiatives. During the July 2022 to June 2023 period, IMTMA conducted a total of **240 programmes** inclusive of 111 online training programmes and webinars for students and industry professionals. The Association conducted **129 programmes** training programmes including courses initiated by the Productivity, Design Institutes and Inhouse programmes. Through various programmes, IMTMA delivered 11060 person-days of training from July 2022 to June 23.



eLearn

Access - Anybody, Anytime, Anywhere

The eLearn programme is an initiative to disseminate knowledge through 10 courses with 75 hours of content from design to manufacturing which can be accessed 24x7. The courses are prepared by subject matter experts from various industry domains by providing industry examples. Through animations, videos and embedded periodical knowledge check, ease of learning is ensured. Candidates are certified after the final assessment. The initiative is recognized by industries and institutions.

Companies such as TVS Motors, Wabco India, Buhler India, Buhler Switzerland, Hindustan Aeronautics Limited, ELGI Equipment, and several IMTMA member companies are using the licensed platform.

Institutions such as KLE Technological University, Hubballi; Sri Vishnu Group of Institutions, Bhimavaram, and Narsapur; PSG College of Technology, Coimbatore; RV College of Engineering, Bengaluru; National Institute of Engineering, Mysore; Sona College of Technology, Salem; SASTRA University, Thanjavur; KLS Vishwanathrao Deshpande Institute of Technology, Haliyal; K Ramakrishnan College of Engineering, Trichy; Ajay Kumar Garg Engineering College, Ghaziabad, are using the licensed platform.

During 2022-23, 12637 IMTMA eLearning courses were subscribed.



Technology & Training

Online Training Programmes

Visual Factory for Lean Implementation

14 October 2022: Online

Visual factory is an important tool in the journey of implementation of lean management in an organization. The improvements made in lean management need to be made visually apparent in the important locations in the organization. Visual factory provides the platform and makes all the improvements made in the improvement journey visible. Implementing a visual factory provides the necessary information to customers, auditors, visitors, and so on, visually. What is lean management, the importance of a visual factory, and the steps in the implementation of a visual factory were examined in detail during the programme.

Data Analytics in Manufacturing

8 – 9 December 2022: Online

Further to data gathering and putting it in a database structure, data analytics, and reporting become vital superstructures built on it to derive and drive the actionable part which would culminate into some tangible results in terms of improvement and adaptive or predictive correction at an organizational level. To highlight the mechanism, role, and utility of data analytics, IMTMA organized an online training that focused on the types of reports and their utility, raw data-based escalation mechanism, use of artificial intelligence in data analytics, etc.

Scientific Injection Molding – Principles, Tools and Techniques

20 – 21 December 2022: Online

Scientific molding is a process whereby the fill, pack, and hold stages are treated separately to minimize fluctuations while improving overall product consistency. Separating the stages is also known as decoupled injection molding. Molders who utilize scientific injection molding equipment, software, and practices can, according to scientific molding educator John Bozzelli, reduce cycle times,

increase machine efficiency, and ultimately make more money. Keeping this in mind, IMTMA organized a six hour programme focusing on traditional and scientific molding, injection molding process stages, advanced technology in scientific molding, etc.

Implementing Toyota Production System – Why, What and How?

22 – 23 December 2022: Online

In an increasingly competitive manufacturing environment, it is imperative for organizations to adopt lean practices to achieve customer satisfaction and thrive as an organization. Toyota Production System or TPS is a tried and trusted approach for assured results. Adopting TPS will strengthen competitiveness and help India's goal of becoming a \$5 trillion economy. Keeping this in view, IMTMA organized a two day online training programme focusing on Toyota's basic values, problem-solving Toyota way, customer focus and profit concept, etc.

A3 Problem Solving Methodology – Toyota Production System

9 – 10 January 2023: Online

Complex problems arising every day from cross-functional disciplines in a work environment can wreak havoc and affect your bottom line if the root cause is not identified quickly. The problems usually persist and recur periodically failing any preventive actions or due to limitations in the problem-solving approach of the untrained individual.

The industry can benefit by using the A3 Problem Solving technique, a highly structured, problem-solving tool, used by effective managers across the world. Problems pertaining to Product/Process Quality as well as non-technical – management/marketing zones can be addressed using the 7 steps in the A3 problem-solving technique which follows the PDCA logic.

This method aims to find the root cause of the problem, develop countermeasures, take actions to prevent the recurrence of the problem and engage in horizontal deployment. Keeping this in view, IMTMA organized an online training programme focusing on A3 problem-solving process.

Technology & Training

Classroom Training Programmes - Short Term

Defects Analysis and Troubleshooting in Paint and Powder Coating Applications

25 - 26 August 2023: IMTMA, Pune



To augment the knowledge in defect analysis, especially in painting/powder coating and back passing between paint or powder suppliers versus equipment suppliers, and overcome rejection rates, IMTMA organized a short-term training programme on Defects Analysis and Troubleshooting in Paint and Powder Coating Applications. The training focused on paint film defects, root causes and remedies, basics of paints / coatings, types and importance of pre-treatment before paint / coatings and applications, etc.

Servicing, Maintenance and Troubleshooting of CNC Machine Tools - Mechanical, Electrical and Electronics Aspects

19 - 24 December 2022: IMTMA, Bengaluru

CNC machines are real mechatronic systems, having electrical and electronic circuits interacting with mechanical actuators/sub-systems. Diagnostics and root cause analysis is an important aspect of maintenance, which is most often ignored. Often the root of a mechanical problem is in the electronics area and that of an electronic problem lies elsewhere. A thorough understanding of the various sub-systems, CNC machine circuit diagram, ladder diagram, and CNC parameters is needed to find and fix the root cause to minimize the mean time to repair and effective planning of preventive maintenance before failure

towards zero downtime. Keeping this in view, IMTMA organized a 6-day workshop focusing on the anatomy of CNC machines, circuit diagram study for electrical and electronics circuits, hydraulic, lubrication, and pneumatic subsystems, CNC parameters setting, etc.

Practical Hands-on 3 Days Workshop on Electrical Switch Gears, Protections & Applications

15 - 17 February 2023: IMTMA, Bengaluru

While sufficient focus is being given to the maintenance aspects of machines and equipment, which are directly engaged in the production process, the supply and control system to the facility does not attract equal importance for the simple reason that its role is not directly visible without which operation cannot be sustained. Keeping this in view, IMTMA organized a three-day training programme that focused on the basics of electrical and construction of drawings.

Ways to Overcome Challenges in the Machining of Large Components

24 February 2023: IMTMA, Pune



Sectors such as aerospace, energy, marine engineering, railways, earth moving equipment, agro-equipment, defence, heavy engineering, die and mould, and many others use big-size machine tools. However, owing to the size of the job and machines the errors and inaccuracies get magnified. Yet the expected quality level and tolerances remain very tight. There're special challenges in ensuring quality compliance and manufacturing efficiency. To discuss, analyse and explore possibilities to improve all these, IMTMA organized a one-day classroom training focusing on specific challenges of machining large parts.



Indian Machine Tool
Manufacturers' Association

Technology & Training

Maintenance and Troubleshooting of Hydraulics and Pneumatics Systems

23 - 25 March 2023: IMTMA, Bengaluru

An in-depth understanding of hydraulics and pneumatics systems is mandatory for assembly and maintenance engineers. This will help minimize/eliminate the downtime of a machine or equipment related to hydraulic and pneumatic systems. Keeping this in view, IMTMA organized a 3-day classroom training programme focusing on an overview of elements of hydraulics / pneumatic circuits, preventive maintenance procedures, and safe troubleshooting practices. The programme helped participants understand how to read the hydraulic and pneumatic circuits, adopt preventive maintenance procedures for hydraulic systems, troubleshoot hydraulic circuits in a systematic manner, and analyze probable failures related to critical hydraulic elements.

Finishing School / Customised Programmes

4 Weeks Intensive Course on Specialization in Production Engineering - (Mechanical and Production Engineers)

1 - 30 March 2023: IMTMA, Pune

IMTMA organized an intensive 4-week course to bridge the gap between academia and the industry. Learners were provided hands-on training on Production CNC Machines, CAD/CAM, Metrology Equipment, Tooling and work holding systems and related accessories, enabling the trainees to serve the manufacturing industry.



Design Institute

IMTMA - AMG Women Empowerment Initiative - "Hands-on Training and Internship on Design and Manufacturing of SPM"

20 February - 12 May 2023: IMTMA, Bengaluru

IMTMA and member industry collaboration aims at empowering women engineers through imparting the necessary industry skills to create industry-ready professionals for the machine tool fraternity. With the common objective of empowering women and enhancing the footprint of women workforce in manufacturing, the programme enhances the employability of young women engineers through imparting design and manufacturing skills and ensuring their self-reliance.

IMTMA organized a Hands-on Training and Internship on Design and Manufacturing of SPM under IMTMA women empowerment initiative sponsored by ACE Micromatic Group. There were 25 women mechanical engineers across pan India who were shortlisted through online test and interview for the programme. After two months of intensive training at Design Institute, they were provided one month internship across AMG companies MMT, ACE and AMS.

After the programme, all were placed across the member companies as design engineers."



A valedictory function was conducted on 12th May 2023 at the IMTMA office in Bengaluru. Mr. Rajendra Rajamane, Vice President, IMTMA was the Chief Guest. Ms. Madhavi, Chandrashekar, President UDAAN, Mr. Harish B, CEO, MMT and Mr. T.P. Sridhar, CEO, ACE attended the function.

Calendar of Events - 2022 - 2023

July 2022

Online Training Programmes

4 - 5	Defects Analysis and Troubleshooting of Castings
5 - 6	How to become an effective FMEA Practitioner as per combined AIAG & VDA Version
6 - 8	Advanced Concepts of GD&T
12 - 13	Cost of Quality - How to Reduce Cost of Poor Quality (COPQ)
12 - 13	Defects Analysis and Troubleshooting of Diecast (PDC) parts
19 - 21	Value Engineering & Value Analysis (VA/VE)
20 - 22	Tolerance Stack-up Analysis
21 - 22	Metallurgy for Non Metallurgists
25 - 29	Design, Integration, Maintenance & Troubleshooting of Hydraulic Systems
26 - 27	Design of Experiments (DOE) for Problem Solving
28 - 29	Selection and Sizing of Motors for Industrial applications
29	Cleaning of Machined Parts - Need, Process, Do's and Dont's

Classroom Training Programmes

11 - 15	Hands-on training in Operation and Programming of CNC Co-ordinate Measuring Machines (CMMs) - Bengaluru
18 - 22	Hands-on Training in Spindle Assembly and Maintenance - Bengaluru

Finishing School / Customized Programmes

13 - 15	Customized Training - Train the Trainer (TOT) for CGSC - Bengaluru
18 July - 30 August	Finishing School in Production Engineering - Making Engineers Industry Ready - Bengaluru



Indian Machine Tool
Manufacturers' Association

Calendar of Events - 2022 - 2023

July 2022

Finishing School / Customized Programmes

4	Customized Programme on Fundamentals of Machining (Batch -2) - SIGMA Electric Manufacturing Corporation Private Limited (4 hrs Session) - Pune
11 - 12	Customized Training Programme on Maintenance, Troubleshooting & Innovation of Hydraulics & Pneumatics - Sigma Electric Manufacturing Corporation Private Limited - Pune
26	Customized Training Programme on Statistical Process Control (SPC) -SIGMA (4 Hrs)

In-House Programmes for Various Companies

4 - 8	DFMA for Philips Medical Systems
11 - 12	Design for Welding
11 - 12	Stamping Technology
14 - 15	How to become an Effective FMEA Practitioner as per combined AIAG & VDA Version
20 - 22	Advanced Concepts in Injection Moulding
22	Customized Training on Fanuc and Siemens controllers

August 2022

Online Training Programmes

1 - 2	Quick Change Over Techniques in Manufacturing through SMED Principles
3 - 5	Geometric Dimensioning and Tolerancing (GD&T) in Design through Manufacturing
3 - 5	Fundamentals of Advanced Product Quality Planning (APQP) & Implementation of the Production Part Approval Process (PPAP)
8 - 17	Certified Specialist in Root Cause Analysis
22 - 26	FEA / FEM using ANSYS - A Practical Approach
22 - 26	Design For Manufacturing and Assembly (DFMA) - Plastics, Sheetmetal, Castings, Forgings and Machined parts
22 - 24	Servo Technology - The Future of Industrial Motion Control
22 - 25	Problem Solving Tools & Techniques

Calendar of Events - 2022 - 2023

August 2022

Classroom Training Programme - Short Term

25 - 26	Defects Analysis and Trouble Shooting in Paint and Powder Coating Applications - Pune
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Finishing School / Customized Programmes

11	Customized Programme On Design of Stamping Dies and Overcoming Stamping Defects - Refresher Training - Pune
29 August - 16 September	Customized Training Program for TITAN DET's and GET's - Bengaluru

Design Institute Programmes - Long Term

17 August - 15 October	Hands-on Training on "Machine Tool Design - Special Purpose Machine (SPM)"
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In-House Programmes for Various Companies

1 - 3	Lean Practitioner Certification
10 - 12	Customized Training Programme on Advanced concepts of GD&T
10 - 18	Surface Finishing Processes
10	Six Sigma Yellow Belt Awareness
10 - 19	Training Programme on Casting and Forging
11 - 12	Training Programme on APQP and PPAP
23 - 24	Geometric Dimensioning and Tolerancing (GD & T)

September 2022

Online Training Programmes

13 - 14	Effective New Product Development (NPD) Process
13 - 14	Industrial Sensors - Types, Selection & Applications for process Control
15	Business Planning and Budgeting for Sustained Profitability
15 - 16	LM Guideways and Ball Screws - Types, Applications, Selection, Assembly and Troubleshooting
16 September - 13 October	Certified Specialist in Core Tools of Quality -As per IATF 16949:2016
16 September - 13 October	Advanced Product Quality Planning (APQP) & Production Part Approval Process (PPAP)



Indian Machine Tool
Manufacturers' Association

Calendar of Events - 2022 - 2023

September 2022

Online Training Programmes

16	How to improve OEE and achieve Manufacturing Excellence
19 - 23	Development of Machining Fixtures - A Practical Workshop with Project
20 - 22	Failure Mode and Effects Analysis (FMEA)
20 - 21	Selection of Cutting Tools for Improving Productivity and Cost Reduction in CNC Machining Centres
27 - 29	Measurement System Analysis (MSA)

Classroom Training Programmes

19 - 23	Hands-on Training in Programming & Operation of CNC Machining Centres - Bengaluru
27 - 30	Advanced Programming for CNC Machining Centres - Bengaluru

Finishing School / Customized Programmes

13 - 14	Customized Programme on Geometric Dimensioning and Tolerancing (GD&T) in Design through Manufacturing for Lechler (India) Private Limited - Pune
12 September - 22 October	Finishing School in Production Engineering - Pune

In-House Programmes for Various Companies

3 - 10	Training Programme on Grinding technology
5 - 6	Training Programme on FMEA
17 - 24	Training Programme on Grinding Technology
19 - 20	Training on Stamping Technology
20	Handholding Support for Ather Energy
22 - 23	Training Programme on APQP and PPAP (TVS Motor)

Calendar of Events - 2022 - 2023

October 2022

Online Training Programmes

10 - 14	Design of Gearbox for Industrial Machinery
11 - 12	Statistical Process Control (SPC)
11 - 12	Advancements in Heat Treatment Processes
12 - 13	Electrical Engineering Fundamentals for Non-Electrical Engineers
13 - 14	Enhance Productivity in Grinding Operations
14	Implementing Industry 4.0 in the Indian Context
14	Visual Factory for Lean Implementation
17 - 21	ASME Y14.5 Geometric Dimensioning and Tolerancing in Design through Manufacturing, 2.25 CEUs, 22.5 PDHs (including preparatory for GDTP-Technologist Level Examination)
18 - 19	Testing, Calibration, and Accuracy Measurement of CNC Machine Tools
19 - 20	Cost and Cycle time reduction in CNC Machining applications

Classroom Training Programmes - Short Term

17 - 21	Hands-on Training Program in PLC Programming and Networking - Bengaluru
17 - 19	Dimensional Metrology and Inspection - Pune
18 - 20	Care for Machine Tool Spindles - Systematic Approach for Spindle Maintenance - Pune

Finishing School / Customized Programmes

27 October - 2 November, 2022	Customized Training Program on CNC Programming for Yuken Employees - Bengaluru
10	Customized Training Programme on Statistical Process Control (SPC) -SIGMA (4 hrs) - Pune

In-House Programmes for Various Companies

7 - 25	Hand-holding Support for Ather Energy
13 - 14	Training Programme on Machining Aerospace materials - Honeywell Tech Solutions
20 - 21	Supply Chain Management (for SFL Chennai)



Indian Machine Tool
Manufacturers' Association

Calendar of Events - 2022 - 2023

November 2022

Online Training Programmes

9 - 10	Surface Plating and Protection Technology
14 - 23	Value Stream Mapping - Real Time Implementation - Hands-on Workshop
15 - 16	Defects Analysis and Troubleshooting of Castings
16 - 17	CE Marking for Export Markets - Europe, North America & GCC countries
16 - 17	Design for Welding - A Scientific Approach for Strength and Cost Optimization
21 - 23	Advanced Concepts of GD&T
21 - 23	Best Practices for Manufacturing Cost Reduction
21 - 25	Die Casting Die Design - Basics, Design Considerations, Diecast Parts, Process, Manufacturing and Troubleshooting
23 - 24	Gear Manufacturing - Hobbing and Shaping Processes
24 - 25	Cold Forging Technology - Process, DFM and Quality Considerations
29 - 30	8D Problem Solving Methodology
30	Interviewing Skills - The Key to Build Brand and Hire the Right Talent

Classroom Training Programme - Short Term

29 - 30	Geometric Dimensioning and Tolerancing (GD&T) in Design through Manufacturing
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Finishing School / Customized Programmes

7 November - 17 December	Finishing School in Production Engineering - Making Engineers Industry Ready - Bengaluru
22	Customized Programme on GD&T Fundamentals - SIGMA Electric Manufacturing Corporation Private Limited - Pune

Design Institute Programmes - Long Term

24 November 2022 - 18 January 2023	Hands-on Training on "Machine Tool Design - Special Purpose Machine (SPM)"
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In-House Programmes for Various Companies

1 - 28	Hand-holding Support for Ather Energy
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Calendar of Events - 2022 - 2023

November 2022

In-House Programmes for Various Companies

2 - 3	Consulting Service on Bearing Selection for SPX Flow
5	Training Programme on Grinding Operations
14 - 19	Effective Maintenance of CNC Machines - Mechanical & Electrical aspects for Eastern Railway
14 - 16	Design of Fixtures - for Boeing
24 - 25	Customized Training Programme on GD&T for GE Healthcare
29 - 30	Customized Training Programme on Tolerance Stackup Analysis - Daimler Trucks

Mega Events

18 - 19	National Productivity Summit 2022 - Bengaluru
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December 2022

Online Training Programmes

2	Good Earthing Practices
6 - 7	Cost of Quality - How to Reduce Cost of Poor Quality (COPQ)
8 - 9	Data Analytics in Manufacturing
12 - 17	Effective Sales and Marketing of Machine Tools and Accessories
12	Module 1: Sales Process and Major Roles of a Sales Engineer
13 - 15	Tolerance Stack-Up Analysis
13	Module 2: Soft Skills for Sales and Marketing Engineers
14 - 15	How to bring in energy efficiency at Plant level?
14	Module 3: CNC Technology & Applications Sales and Marketing Perspective
15	Module 4: Fundamentals of SPC - Sales and Marketing Perspective
16	Module 5: Value Based Selling Approach
17	Module 6: Commercial Aspects for Sales and Marketing Engineers



Indian Machine Tool
Manufacturers' Association

Calendar of Events - 2022 - 2023

December 2022

Online Training Programmes

20 - 21	Scientific Injection Molding - Principles, Tools and Techniques
21 - 22	Heat Treatment - Metallurgy and Processes
22 - 23	Implementing Toyota Production System - Why, What and How?

Classroom Training Programme - Short Term

15 - 16	Defects Analysis and Troubleshooting in Paint and Powder Coating Applications - Bengaluru
27 - 29	Hands-on Training Programme in Robot Programming & Operation - Bengaluru
5 - 9	Hands-on Training in Programming & Operation of CNC Machining Centres - Pune
19 - 22	Advanced Programming for CNC Machining Centres - Pune

Finishing School / Customized Programmes

19 - 21	Programming and Operation of CNC Machining Centres - Bengaluru
19 - 24	Servicing, Maintenance and Troubleshooting of CNC Machine Tools - Mechanical, Electrical and Electronics Aspects - Bengaluru
26 December 2022 - 6 February 2023	Finishing School in Production Engineering - Pune
12 - 15	Industry Expert Sessions @ IMTMA - CNC Training Programme (ToT- ASDC) - Pune

In-House Programmes for Various Companies

5 - 6	Customized Training Programme on Tolerance Stackup Analysis - Daimler Trucks
13 - 14	Customized Training Programme on GD&T - Schneider Electric
19 - 21	Lean Implementation and 5S for Uniabex
19 - 20	Training Programme on APQP and PPAP (TVS Motors)

Calendar of Events - 2022 - 2023

January 2023

Online Training Programmes

4 - 5	Metallurgy for Non-Metallurgists - Ferrous Materials
5	Lean Daily Management System
5 - 6	Manufacturing Automation Using Robots
9 - 10	A3 Problem Solving Methodology - As Per Toyota Production System
12 - 13	Gear Metrology and Measurement Methods
17 - 18	VFD Technology for Industrial Automation / Energy Saving
19 - 20	Design and Processing of Plastic Parts

Classroom Training Programmes - Short Term

9 - 13	Hands-on Training in Operation and Programming of CNC Co-ordinate Measuring Machines (CMMs) - Bengaluru
9 - 13	Hands-on Training in Spindle Assembly and Maintenance - Bengaluru
10 - 11	Geometric Dimensioning and Tolerancing (GD&T) in Design through Manufacturing - Bengaluru
16 - 19	Hands-on Training: Optimise CNC Machining Centre through Right Programming and Selection of Cutting Parameters - Pune
18 - 19	IDR Approach - Trouble Shooting Component Defects in a Press Shop - Bengaluru
24 - 25	Surface Plating and Protection Technology - Bengaluru

Finishing School / Customized Programmes

10	Customized Programme on Machining Batch 2 - SIGMA Electric Manufacturing Corporation Private Limited - Pune
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In-House Programmes for Various Companies

9 - 13	Train the Trainer Programme for Pakka Skills
16 - 17	Value Stream Mapping
23 - 24	Value Stream Mapping



Indian Machine Tool
Manufacturers' Association

Calendar of Events - 2022 - 2023

January 2023

Mega Events

18	International Seminar on Manufacturing Technologies - Bengaluru
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Exhibition

19 - 25	IMTEX, Tooltech, & Digital Manufacturing - Bengaluru
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February 2023

Online Training Programmes

14 - 15	Programmable Logic Controller (PLC) - A Key Technology for Industrial Automation
16 - 17	Selection and Sizing of Motors for Industrial Applications
21 - 22	Industrial Safety - Shopfloor Perspective
22 - 24	Value Engineering & Value Analysis (VA/VE)

Classroom Training Programmes - Short Term

15 - 17	Practical Hands-on 3 Day Workshop on Electrical Switch Gears, Protections & Applications - Bengaluru
23 - 24	Tolerance Stack-Up Analysis - Bengaluru
15 - 17	Practical Hands-on 3 Day Workshop on Electrical Switch Gears, Protections & Applications - Bengaluru
23 - 24	Tolerance Stack-Up Analysis - Bengaluru
24	Ways to Overcome Challenges in the Machining of Large Components - Pune

Finishing School / Customized Programmes

13 February - 17 March	Customized Training Programme on Metal cutting CL2 for TVS Motors - Bengaluru
16 - 17	Customised Training Programme for ZF India - Casting Processes - Pune

Design Institute Programme - Long Term

20 February - 12 May	IMTMA - AMG Women Empowerment Initiative - "Hands-on Training and Internship on Design and Manufacturing of SPM"
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Calendar of Events - 2022 - 2023

February 2023

In-House Programmes for Various Companies

1 - 3	Training Process on Casting Process for MRV
2 - 3	Value Stream Mapping for Alstom India
7 - 10	Training Programme on Welding process for MRV
8	Handholding Support for Ather Energy - Feb 2023
9 - 10	Plastic Moulding Technology for Maruti Suzuki
15 - 16	Line Automation and Point Automation
21 - 22	Training Programme on Sheet Metal Process for MRV
21 - 22	Training Programme on APQP and PPAP (TVS Motor)
22	Implementing Industry 4.0

March 2023

Online Training Programmes

2 - 3	Engineering Materials and their Selection - Key to Successful Design
9 - 10	Quick Changeover Techniques in Manufacturing through SMED Principles
16 - 17	How to get the best out of CMMs
20 - 21	Geometric Dimensioning and Tolerancing (GD&T) - ISO Standards

Classroom Training Programmes - Short Term

15 - 17	Maintenance and Troubleshooting of Hydraulics and Pneumatics Systems - Bengaluru
23 - 25	Maintenance and Troubleshooting of Hydraulics and Pneumatics Systems - Bengaluru

Finishing School / Customised Programme

27 - 29	Programming and operation of CNC Machining Centres - Bengaluru
1 - 30	4 Weeks Intensive Course on Specialization in Production Engineering - (Mechanical and Production Engineers) - Pune



Indian Machine Tool
Manufacturers' Association

Calendar of Events - 2022 - 2023

March 2023

In-House Programmes for Various Companies

6 - 7	Design and Processing of Sheet Metal Parts for Dover India
9 - 11	Training Programme on VA VE for Dover India
14 - 16	Training Program on Painting process for MRV
16 - 17	Plastic Moulding Technology
16 - 17	Line Automation and Point Automation
20 - 21	Hot Forging Technology
22	Implementing Industry 4.0
27 - 28	Cold Forging Technology
2 - 3	Customised Training Programme for KHS Machinery Private Limited - GD&T as per ISO Standard

April 2023

Online Training Programmes

13	Laser Cladding Emerging Technology
17 - 21	Development of Machining fixtures - A practical Workshop with project
18 - 19	Servo Technology -The Future of Industrial Motion Control
18 - 19	Effective New Product Development (NPD) Process
19 - 21	Failure Mode & Effects Analysis (FMEA) Mitigating Risks Through FMEA: With Case Studies and Exercises
20 - 21	Process Capability - The Quality Route to Sustained Growth in Manufacturing (Cp, Cpk)
25 - 26	Creating Differentiation and Cost Competitiveness through Efficient Supply Chain Management: Strategies, Best Practices, and Optimization Techniques
28	CE Marking for Export Markets - Europe, North America & GCC Countries
28	How to Improve OEE and Achieve Manufacturing Excellence

Calendar of Events - 2022 - 2023

April 2023

Classroom Training Programmes - Short Term

10 - 15	Servicing, Maintenance and Troubleshooting of CNC Machine Tools - Mechanical, Electrical and Electronics Aspects - Bengaluru
17 - 21	Hands-on training in PLC Programming and Networking - Bengaluru
25 - 28	Championship Program on Industry 4.0 - Bengaluru
27 - 29	Gear Manufacturing Processes - Bengaluru
20 - 21	Selection & Maintenance of Sheet Forming Presses - Pune
28	Unlocking the Hidden Costs of Poor Quality: A Training Programme on Cost of Quality for Driving Efficiency and Profitability on Cost of Quality - Pune

Finishing School / Customised Programme

10 April - 23 May	Finishing School in Production Engineering - Making Engineers Industry Ready
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In-House Programmes for Various Companies

17 - 21	Customized Training Programme on Design For Manufacturing and Assembly (DFMA) - Emerson
25	Customised Training Programme for Advik Hi-Tech Pvt Ltd - Tolerance Stack-up Analysis

May 2023

Online Training Programmes

11 - 19	Value Stream Mapping - Real Time Implementation
16 - 17	Metallurgy for Non Metallurgists - Ferrous Materials
18 - 19	Grinding Technology to Enhance Productivity
22 - 26	Design For Manufacturing and Assembly (DFMA) -Plastics, Sheet Metal, Castings, Forgings, Machined Parts and Welded parts
23 - 24	Implementing Toyota Production System - Why, What and How?
29 - 31	Tolerance Stack-Up Analysis
30	8D Problem Solving Methodology



Indian Machine Tool
Manufacturers' Association

Calendar of Events - 2022 - 2023

May 2023

Classroom Training Programmes - Short Term

17 - 19	Data Analytics for Smart Manufacturing: Hands-on Workshop - Bengaluru
24 - 26	Hands-on Training Program in Robot Programming & Operation - Bengaluru
24 - 25	Maintenance, Troubleshooting & Innovation of Hydraulics & Pneumatics - Pune
29 - 31	Defect Analysis and Trouble Shooting in Painting and Powder Coating Applications - Pune

Design Institute Programme - Long Term

22 May - 15 July 2023	Hands-on Training on "Machine Tool Design - Special Purpose Machine (SPM)
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June 2023

Online Training Programmes

6 - 7	Powder Coating Technology - Process, Applications, Defects Analysis and Prevention
14 - 15	Design for Welding - A Scientific approach for Strength and cost optimization
21 - 23	Advanced Product Quality Planning (APQP) & Production Part Approval Process (PPAP)
22 - 23	Industrial Sensors - Types, Selection & Applications for Process Control
26 - 28	Geometric Dimensioning & Tolerancing in Design through Manufacturing
	LM Guideways and Ballscrews - Types, Applications, Selection, Assembly and Trouble Shooting

Classroom Training Programmes - Short Term

12 - 16	Hands-on Training in Spindle Assembly and Maintenance: Turning and Milling Applications - Bengaluru
12 - 16	Hands-on training in Operation and Programming of CNC Co-ordinate Measuring Machines (CMMs) - Bengaluru
15 - 16	Geometric Dimensioning and Tolerancing (GD&T) in Design through Manufacturing - Bengaluru
8 - 9	Towards Zero Defects in Welding Applications - Pune
14	Finishing of Edges-Burr Management - Pune

Finishing School / Customised Programme

3	Customized Training Programme on Geometric Dimensioning and Tolerancing (GD&T) in Design through Manufacturing - Bengaluru
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Activities of BIEC

India Energy Week 2023



It was a historic occasion for Bangalore International Exhibition Centre (BIEC) as Shri Narendra Modi, the Hon'ble Prime Minister of India inaugurated the India Energy Week on 6th February 2023. Shri Hardeep Singh Puri, Union Minister of Petroleum & Natural Gas also graced the event with his presence. India Energy Week 2023 was the first significant exhibition following India occupying the presidency of G 20 in December 2022.



The exhibition was organized under the patronage of the Ministry of Petroleum & Natural Gas, Government of India, and supported by the FIPI, (Federation of Indian Petroleum Industry).

India Energy Week 2023 attracted over energy professionals, 650+ companies, representatives from 127 countries, and 500+ global speakers.

IIJS Tritiya



IIJS Tritiya, exhibition under the India International Jewellery Show by the Gem and Jewellery Export Promotion Council (GJEPC) made its debut at BIEC from 17th to 20th March 2023. The show enabled exhibitors to tap the full potential of the South Indian market. This was the second exhibition hosted by BIEC following the highly successful IIJS Premiere in 2021.



Indian Machine Tool
Manufacturers' Association

Activities of BIEC

PIA Award Function

PIA MSME Excellence Awards was organized by Peenya Industries Association (PIA) on 9th December 2022 at BIEC with a record turnout of 1000+ visitors. Dr. C.N. Ashwathnarayan, Hon'ble Minister of Skill Development, Entrepreneurship and Livelihood, Government of Karnataka and Shri S.T. Somashekar, Hon'ble Minister of State for Co-operation, Government of Karnataka, and other prominent personalities including Sri Sri Sri Nirmalanandanatha Swamiji and Sadhguru Sri Madhusudan Sai graced the event with their presence.



STONA 2023

STONA 2023, the 15th international granite and stone fair was organized by the Federation of Indian Granite & Stone Industry (FIGSI) at BIEC from 16th to 19th February 2023. At the show, exhibitors showcased a unique range of the country's colourful, eye-catching natural stones demonstrating their capabilities and capacities and the most modern and latest techniques in the craft of stone working.



New Products Developed by Members in 2022-2023

BESTEK ENGINEERING PRIVATE LIMITED

1. CBN Universal Cylindrical Grinding Machine with new technical developments to ensure high precision, productivity and flexibility to grind complex work pieces in a single clamping.

CARBTOOLS (INDIA) PRIVATE LIMITED

1. Special3 Groove Gang Mill, for cost and cycle time reduction.
2. Carbide Special Broach Tool for profile broaching in Aluminum body

ELSCINT INDIA PRIVATE LIMITED

1. Double disc Centrifugal / Rotary Feeder for feeding of bearing rollers
2. Feeding system for PPC and Flat drippers, with easy and fast changeover

GISHNU GEARS (P) LIMITED

1. 1:1 Spiral Bevel Gearboxes for Synchronous drive application - Efficient Power & Robust Performance.

HINDUSTAN HYDRAULICS PRIVATE LIMITED

1. CNC Fiber Laser cutting machine with solis series

INDO SERVICES

1. Metrology styli for critical applications such as Surface Roughness measurement and Contour measurement.

JYOTI CNC AUTOMATION LIMITED

1. MX 16: 5 Axis CNC Multifunctional Machining Center, which can perform 5 axis milling and turning operations of heavy parts on a single platform.
2. VST 160: CNC Vertical Shaft Turning Center, designed to perform high speed shaft turning operation by two turrets simultaneously, for batch as well as mass production.

MESSER CUTTING SYSTEMS INDIA PRIVATE LIMITED

1. FiberLight: Standard entry level CNC Laser cutting machine with table sizes 3015 & 4020.
2. FiberBlade6: Standard high end Laser machine which can interface up to 15KW Laser and runs at a position speed of max. 200 m/min & at 2g acceleration.
3. Element 400: Gantry type CNC cutting machine with capability to integrate Automated Plasma Bevel Tools Bevel-S, Laser straight cutting tool head and Laser bevel tool Bevel-U.
4. Material handling solutions: Material handling solution for automated plate handling in cutting machines.

PLUS-ONE MACHINE FABRIK PRIVATE LIMITED

1. 4000 Tonnes FRP/SMC sheet moulding Press, to facilitate manufacture FRP sheets up to 2100 mm X 1800 mm for anti-mine blast protection sheet, which can also be used in bullet proof jackets.

SHUBHLINE AUTOMATION PRIVATE LIMITED

1. Fixed Double Column Moving Crossrail Machining Center SHFW 2872 - Heavy duty double column machining center, incorporating the "W" axis and an automatic 90-degree milling head, to enable versatile and precise machining operations.

VPS TECHNOLOGY INDIA PRIVATE LIMITED

1. Automated REEL to REEL Plating Plant, with 18 mtr/min. production rate of plating line.



New Members Enrolled in 2022 – 2023

As on 30 June 2023

ACE ROBOTICS PRIVATE LIMITED No.47 A, ARR Building North Phase, Thiruvika Industrial Estate SIDCO, Ekkattu Thangal Chennai – 600 032 Tamil Nadu	ADEPT PROSIGN PRIVATE LIMITED CTS No.5/3, Flat No.7, Manohar Apts. Off Karre Road Near Ingle Hospital, Erandawane Pune – 411 004 Maharashtra
ATQ METRO PRIVATE LIMITED Shop No.51, First Floor, Mahasainik Industrial Estate, Plot No T-153/1, MIDC, Bhosari, Pune – 411 026 Maharashtra	BHAVYA MACHINE TOOLS LLP A-601, 6th Floor, Shapath - IV, Opp. Karnavati Club S G Highway Road Ahmedabad – 380 051 Gujarat
BRIGHT BURNISHING TOOLS PRIVATE LIMITED No.42, N.G.Ramaswamy Road, Pappanaickenpalayam Coimbatore – 641 037 Tamil Nadu	BROTHER MACHINERY INDIA PRIVATE LIMITED No.SB 111 & SB 112, Peenya Industrial Estate, 2nd Cross 1st Stage Bengaluru – 560 058 Karnataka
DN SOLUTIONS INDIA PRIVATE LIMITED No.82, Jakkur Village Yelanka Hobli Bengaluru – 560 064 Karnataka	FLEDON ENGINEERING WORKS Plot No. 44, Vasai Municipal Industries Estate Umela Phata, Papdi Vasai (W) Palghar – 401 207 Maharashtra
GISHNU GEARS (P) LIMITED Unit I – SF No. 156/3, Sulur Pirivu, Avinashi Road Neelambur Village, Sulur Taluk, Coimbatore – 641 407 Tamil Nadu	HALTEN TOOLS INDIA PRIVATE LIMITED Plot. No. A-77, H-Block, Morwadi Road, MIDC- Pimpri, Pune – 411 018 Maharashtra
IGNITE INC Road No. L-26, Plot No.1915, Phase IV, GIDC Wadhwan City, Surendranagar – 363 035 Gujarat	KTM TECHNO SOLUTIONS Plot No. 2512, Road H – 1 Opp.Nebula Surgical, Gate- 2, Metoda Rajkot – 360 021 Gujarat
MAXBYTE TECHNOLOGIES PRIVATE LIMITED No.218, Cowley Brown Road, Forest College Campus, R. S. Puram Coimbatore – 641 002 Tamil Nadu	MEHTA CAD CAM SYSTEMS PRIVATE LIMITED Plot. No. 3, Road No. 1 Kuthwudu, GIDC, Ahmedabad – 382 430 Gujarat
METAFOLD ENGINEERING PRIVATE LIMITED Sr. No. 27/5/2, Kondhwa (Bk.) Punyadham Ashram Road Pune – 411 048 Maharashtra	MICRO PRODUCTS Plot No. – 216/A, Near Laxmi Rolling Mill G.I.D.C Main Road, Chitra G.I.D.C Bhavnagar – 364 004 Gujarat
NEXCO AUTOMATION TECHNOLOGIES PRIVATE LIMITED Cosmos House, 85/2, Atladra, Padra Road Vadodara – 390 012 Gujarat	NIKO TOOLS 2nd Floor, No.51 New Timber Yard Layout Bengaluru – 560 026 Karnataka

New Members Enrolled in 2022 - 2023

As on 30 June 2023

NIPPON OIL PUMP INDIA PRIVATE LIMITED Building #3, Plots 175-176, 11th Main, 3rd Phase Industrial Area, Peenya, Bengaluru - 560 058 Karnataka	OKAMOTO INDIA PRIVATE LIMITED 4th Floor (410), Regus Pune Metropolitan Business Center Pvt. Ltd., Office No.7 & 8 Prabhavate Tech Park Sr. No.125/2 34/2/2 34/1, 1/2/2. Baner Pune - 411 045 Maharashtra
PREM BROTHER INTERNATIONAL PRIVATE LIMITED 73, Shardashanand Marg Ajmeri Gate, New Delhi Railway Station Delhi - 110 006 Delhi	R S MACHINES 2647, Dashmesh Nagar Gill Road, Street No.13 Ludhiana - 141 003 Punjab
RADCAM TECHNOLOGIES PRIVATE LIMITED Flat No. 406, No.2, Patel Muniyappa Layout Cholanayakanahalli, R T Nagar Bengaluru - 560 032 Karnataka	RAPICUT CARBIDES LIMITED 119, GIDC Industrial Area, On National Highway BOM-AHM, Ankleshwar - 393 002 Gujarat
SANDSTORM EQUIPMENT CO. 18/8, Cambridge Road, 2nd Cross, Ulsoor Bangalore - 560 008 Karnataka	SARABSUKH ENTERPRISES Plot No. 16, Industrial Focal Point, Batala, Gurdaspur - 143 505 Punjab
SHUBHLINE AUTOMATION PRIVATE LIMITED Plot No. 357, 16/3, Waghjai Nagar, Ambethan Road, Kharabwadi, Khed, Chakan Pune - 410 501 Maharashtra	SPECTRA TECH Plot No.4, Building A Xpanz Society, Spine Road Plot No.6, Moshi, Bhosari, Pune - 411 026 Maharashtra
STRUB INDIA PRIVATE LIMITED Gat No.139, Vill - Kuruli MOI Road Chimbli Phata, Taluka Khed Dist. Pune - 410 501 Maharashtra	UNISON CONTROLS PRIVATE LIMITED 165 A-D, Devraj Industrial Park Piplaj - Pirana Road, Piplaj Near 200 ft. S.P. Ring Road, Kamod Circle Ahmedabad - 382 405 Gujarat
VPS TECHNOLOGY INDIA PRIVATE LIMITED Plot No. 263, Of-Dobaspet, 4th Phase, KIADB Avverahalli Industrial Area, Sompura Hobli, Nelamangala Taluk, Bengaluru Rural - 562 111 Karnataka	WAVE TOOLS & TECHNOLOGIES 415/30, Plot No.-33 I Park, Opp. BWSSB KIADB Main Road 2nd Phase Peenya Industrial Area Bengaluru - 560 058 Karnataka
YAMAZAKI MAZAK MACHINE TOOLS PRIVATE LIMITED Plot No.115 & 116, B.U.Bhandari Industrial Estate, Sanaswadi, Tal Shirur Pune - 412 208, Maharashtra	

Total Membership of IMTMA as on 30 June 2023: 484 Members



Indian Machine Tool
Manufacturers' Association

Enhancing Machine Tool Industry's Competitiveness

IMTMA Initiatives

TRADE FAIRS



TECHNOLOGY



MEGA EVENTS



ASSOCIATION INITIATIVES



TRAINING



Manufacturing Technology
Training

INFRASTRUCTURE



PUBLICATION



Glimpses





Indian Machine Tool
Manufacturers' Association

Notes

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**Indian Machine Tool
Manufacturers' Association**

www.imtma.in

Head Office

Bangalore International Exhibition Centre (BIEC)
10th Mile, Tumkur Road, Bengaluru - 562 123, Karnataka (India)
T: +91 80 6624 6600 ; E: imtma@imtma.in

Regional Office (West)
12/5, D-1 Block, MIDC, Chinchwad,
Pune - 411 019, Maharashtra (India)
T: +91 70660 30531 / 532
E: imtma.pune@imtma.in

Regional Office (North)
Plot No. 249 F, Udyog Vihar Sector - 18,
Gurugram - 122 015, Haryana (India)
T: +91 124 4014101
E: imtma.ggn@imtma.in
