

Digital Manufacturing

Digital manufacturing had already been a trendsetter by the time the global pandemic struck in March 2020. The pandemic however did speed up the process which was underway in stages in the manufacturing industry. Business enterprises across the globe now recognize digital manufacturing as a part and parcel of everyday manufacturing activities.

Companies which were early in jumping the bandwagon are already manufacturing products by deploying digitization tools like computer-aided design, modelling and simulation, computer aided engineering, digital twin, data capture and data analytics, artificial intelligence, virtual reality, and so on. These tools enable manufacturers to bring out quality products, reduce product development lifecycle, increase efficiency and performance, etc. It improves decision making and brings down the cost of the product.

The trend changed during the pandemic when industries began exploring digital concepts and kept their factory assets working through digitally interlinking new generation hardware and software systems at lesser costs. This helped them to function remotely with lesser manpower and deploying new-age technologies.

Digital transformations that are real-time, intuitive, automated, secure and open are imperative for businesses to have an edge in the global marketplace. MSMEs by adopting digital manufacturing in their manufacturing processes can become key enablers in driving adoption of Industry 4.0 and play a pivotal role in transforming the Indian manufacturing sector.

Manufacturing industries will have a lot to unearth more on additive manufacturing and evolutionary Industry 4.0 concepts when the Indian Machine Tool Manufacturers' Association (IMTMA) organizes its flagship IMTEX, IMTEX FORMING, Tooltech & Digital Manufacturing 2022 at Bangalore International Exhibition Centre (BIEC) in Bengaluru from January 20 - 26, 2022.